APPENDIX 4.1

City of Irvine Noise Element



ELEMENT F NOISE

GOAL: Contribute to a healthy and safe environment by minimizing noise impacts.

Description of Noise Element

Noise, as defined in this element, is generally unwanted sound which is considered unpleasant and bothersome. Unwanted noise can affect people both physically and psychologically. People are usually more sensitive to noise during the evening and nighttime than during the day because of reduced activities, fewer noise emitting sources, and the need for rest. Land uses in which people are especially sensitive to noise include residential, convalescent and rest homes, hospitals, libraries, churches, and schools. This element provides guidelines for minimizing noise impacts from various sources.

The Community Noise Equivalent Level (CNEL), commonly used by California local governments, is used by Irvine to quantify community noise levels and standards. The CNEL is an average of noise levels over a twenty-four hour period. Refer to technical definitions on Page F-3.

The City's interior and exterior noise standards are shown on Table F-1. Table F-2 shows each land use category and the CNEL which is compatible with the uses in the category.

Existing Conditions

The most pervasive noise in Irvine comes from mobile noise sources such as motor vehicles, railroads, and aircraft. Three major freeways, one railroad line, and three airports expose the City to significant noise impacts. Aircraft flight tracks also impact particular areas of the City significantly. The City is also exposed to noise emanating from sources such as industrial, commercial, and construction activities.

Unwanted noise is divided into two major categories of noise sources - mobile and stationary.

1. Mobile Noise Sources.

Mobile sources are transportation-related (non-fixed) including motor vehicles, railroad, and aircraft. Motor vehicle noise is characterized by a high frequency of events, short duration, and proximity to areas sensitive to noise exposure. Rail transit and aircraft operations frequently generate extremely high noise levels which are disruptive to human activity.

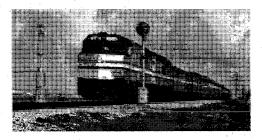
a. Motor Vehicles.

Sources of vehicular traffic noise are automobiles, buses, trucks, and motorcycles. Noise is generated by engines, exhaust systems, transmissions, fans, tires, and air movement. The noise level is relatively constant on major roads where traffic is heavy and intermittent on neighborhood streets where traffic is lighter.

Table F-3 describes vehicular noise impacts for both the existing and buildout condition

b. Railroads.

Railroad noise is the result of the mechanical processes of the engine, the interaction of the wheels with the track, and use of the whistle. The amount of noise generated is dependent upon the speed of the train and the number of cars.



Railway lines that pass through the central part of the City in an east/west direction are located on right-of-way that is owned and managed by the Orange County Transportation Authority. The railroad operation includes commuter trains and freight trains. The number of freight trains depends on economic demand. There are also spur lines located IBC (Planning Area 36), and Irvine Industrial Complex-East (Planning Area 35). The noise generated by these spur lines is insufficient to provide CNEL contours in excess of 60 dB outside the right-of-way.

c. Aircraft.

Aircraft noise generally affects areas within the airport vicinity during takeoffs and landings, and areas located around the flight tracks. Airborne noise sources in Irvine included aircraft operations at MCAS El Toro and helicopter

Definitions

Community Noise Equivalent Level (CNEL): The CNEL is an average of noise levels over a twenty-four (24) hour period. The measured energy equivalent level (Leq) is weighted for the hours when there is a greater sensitivity to noise. A weighting factor of 5 decibels is applied to the evening period (7 to 10 p.m.) and a weighting factor of 10 decibels is applied to the night time period (10 p.m. to 7 a.m.). The daytime Leqs between 7 a.m. and 7 p.m. are not weighted.

Decibel: dB, a numerical expression of the relative intensity of a sound as it is heard by the human ear.

dBA: The "A-weighted" scale for measuring sound in decibels, it weighs or reduces the effects of low and high frequencies in order to simulate human hearing. Every increase of 10 dBA doubles the perceived loudness although the noise is actually ten times more intense.

Leq: The energy equivalent level, defined as the average sound level on the basis of sound energy. The Leq is a "dosage" type measure and is the basis for the descriptors used in current standards, such as the 24- hour Community Noise Equivalent Level (CNEL) used by the State of California.

Standards

Interior and Exterior Noise Standards: Table F-1 identifies the maximum interior and exterior noise levels for each land uses category. The standards assume the incorporation of California State Law requirements into all projects.

Land Use Noise Compatibility Table F-2 identifies the compatibility of proposed projects and future noise levels. The diagram is used in evaluating new development projects, including General Plan amendments, zone changes, tentative maps, conditional use permits and master plans.

Single Event Noise Standard: The maximum interior noise levels of the loudest 10% of single noise events [Lmax(10)] for noise sensitive land uses within the 60 CNEL of aircraft and railroad noise sources shall not exceed 65 dBA between 7 a.m. and 7 p.m nor 55 dBA between 7 p.m. and 7 a.m. for typical occupancy. (Note: The samples for single event noise measurement must include representative aircraft operation.)

operations at MCAS Tustin; and, currently include civil air operations at John Wayne Airport.

MCAS El Toro: The major aircraft noise source in Irvine was MCAS El Toro, which was located in Planning



Area 51. The most recent noise study for MCAS El Toro was adopted in 1981 by the Marine Corps as part of the Air Installation Compatible Use Zone (AICUZ) Study.

The noise levels were based on noise characteristics of aircraft as measured by the military, and annual operations data (number and type of aircraft movements, and flight tracks), according to the Marine Corps' records. The final position of the computed CNEL contours was verified by several site specific studies outside of Irvine. Field measurements will occur in conjunction with sensitive land uses to assess impacts of aircraft noise together with other noise sources (e.g. vehicular).

MCAS El Toro was closed in July, 1999. In its place, the County of Orange has proposed a commercial airport, which will likely have an impact on aircraft noise as well as vehicular noise. The City of Irvine actively opposes a commercial airport.

The El Toro Reuse Planning
Authority which consists of the cities of Irvine, Mission Viejo, Laguna
Hills, Lake Forest, Laguna Beach,
Dana Point and Laguna Niguel, has prepared the Millennium Plan for the reuse of El Toro. The Millennium
Plan consists of a mix of nonaviation land uses which may have different vehicular and stationary noise levels than currently associated with military activities at MCAS El Toro.

MCAS Tustin: The noise from helicopter operations at MCAS Tustin also affected the City. The City formerly used the AICUZ noise contour map as depicted in the 1983 Master Plan, for MCAS Tustin, for the assessment of the helicopter noise impacts.

MCAS Tustin was closed in 1999. This eliminated aircraft noise but the land uses that could be developed in its place may increase vehicular and stationary noise.

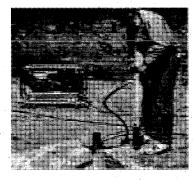
John Wayne Airport: The John Wayne Airport noise contour map, prepared annually by the Noise Abatement Center of John Wayne Airport, is used for the assessment of aircraft noise impacts. Annual updates of the original 1980 John Wayne Airport noise contour map, are used for planning analysis.

Figure F- 1 illustrates the former noise contours for the now closed MCAS Tustin and the existing noise contours for John Wayne Airport.

2. Stationary Noise Sources.

Stationary noise sources are the noise sources in the community such as industrial and mechanical equipment, which are often referred to as "fixed sources." Industrial noise generated by

processing and operation is usually of long duration at relatively low frequencie



Construction sources generate high noise levels for extended periods of time. Examples include: rock crushers; mechanical electric equipment such as air conditioners or refrigeration units; various power tools such as lawn mowers or leaf blowers; construction activities; commercial or industrial activities such as car wash facilities; animal noise; and human-related activities such as loud parties, loud music, radio, T.V., or children playing.

The City's Noise Ordinance establishes the maximum permissible noise level which may intrude into a neighbor's property. The Ordinance (adopted in 1975 and revised in 1984) establishes noise level standards for various land use categories being affected by stationary noise sources. The ordinance regulates the timing of construction activities and

includes special provisions for sensitive land uses.

Trends

1. Mobile Noise Sources.

a. Motor Vehicles.

Motor vehicle noise will continue to be significant. Irvine will also be impacted by through traffic from yet-to-be-developed areas to the south, east and west. An increased use of convenient mass transit systems may contribute to noise reduction. Future motor vehicle noise is shown in Figure F- 3.

b. Railroads.

It is expected that over the years there will be an increase in railroad traffic especially as commuter trains are added along the Los Angeles-San Diego (LOSSAN) corridor. Future railroad noise is shown in Table F-3.

c. Aircraft.

It is expected that over the years noise impacts to the City from aircraft operations at John Wayne Airport will not increase because of agreements restricting the number of flights, hours of noise, and aggregate noise. Based on the State Airport Noise Regulation (Title 21), John Wayne Airport (as a civil airport) is required to reduce the airport noise impact on existing communities.

2. Stationary Noise Sources.

As the City develops further, it is expected that stationary noise levels will increase. However, noise impacts can be mitigated by use of control measures and enforcement of the Noise Ordinance in the development process.

Identification of Issues

- 1. How can the City ensure that residents are not exposed to excess mobile noise levels?
- 2. How can the City ensure that residents are not exposed to excess stationary noise levels?
- 3. How can these regulations be coordinated to provide a healthy noise environment?
- 4. How can public awareness in this area be increased?

Response to Issues

The following objectives and policies have been formulated as a policy response to the identified noise issues.

OBJECTIVE F-1: MOBILE NOISE

Ensure that City residents are not exposed to mobile noise levels in excess of the CNEL Interior and Exterior Noise Standards (Table F-1), and Single Event Noise Standard.

The following policies support Objective F-1:

- **Policy** (a): Require all plans submitted for development review to show the Noise Element existing noise contours, future noise contours and aircraft noise contours.
- **Policy (b):** Prohibit residential development within the 65 CNEL of aircraft noise contours.
- Policy (c): Ensure that all proposed development projects are compatible with the existing and projected noise level by using the Land Use Noise Compatibility Matrix (Table F-2).
- **Policy** (d): Require noise studies to be prepared in accordance with the City's environmental review procedure for all projects that are not "clearly compatible" with the future noise level at the site.

- **Policy (e):** Require noise studies to use the future motor vehicle noise reduction of 1.9 dBA in identifying future noise levels of streets.
- Policy (f): Require noise studies to identify all the mitigation measures necessary to reduce noise levels to meet the CNEL standard (Table F-1) and Single Event Noise Standard.
- **Policy** (g): Require compliance with Single Event Noise Standard for noise sensitive land uses within the 60 CNEL of aircraft and railroad noise contours.
- **Policy** (h): Require conditional use permits for noise sensitive land uses such as hospitals, libraries, churches, and schools to mitigate noise-related impacts.
- Policy (i): Update highway/railroad noise levels (Table F-3) every five years and/or whenever the City's Irvine Traffic Analysis Model (ITAM) has been significantly changed.
- **Policy** (j): Ensure that any proposal to update aircraft noise contours used by the City of Irvine for planing analysis is submitted, prior to adoption by the City, to the Airport Land Use Commission
- **Policy** (k): Incorporate the following types of noise mitigation measures in the design of new highways and streets: alignment, barriers, lateral separation, and vertical profile.
- **Policy** (1): Examine the existing and projected future noise environment when considering amendments to the City's circulation system.
- **Policy** (m): Reduce noise impacts from mobile sources by encouraging use of alternative modes of transportation

Policy (n): Reduce railroad noise impacts to new development by incorporating measures for mitigating noise levels to meet the City's noise standards.

Policy (o): Participate in cooperative efforts

with Orange County Transit Authority to fund and construct grade separations, where feasible,



through residential areas of the City, giving consideration to all potential funding sources.

OBJECTIVE F-2: STATIONARY NOISE

Ensure that City residents are not exposed to stationary noise levels in excess of the City Noise Ordinance standards.

The following policies support Objective F-2:

Policy (a): Require any new construction to meet the City Noise Ordinance standards as a condition of building permit approval.

Policy (b): Require developers to depict, on any appropriate development application review (zone change, subdivisions, conditional use permit, site plan, and building plans), any potential noise sources known at the time of submittal and mitigation measures that ensure these noise sources meet the City Noise

Ordinance standards. Such sources include, but are not limited to, the following:

- Truck pickup and loading areas.
- Mechanical and electrical equipment such as air conditioning, swimming pool pumps and filters, and spa pumps.
- Exterior nuisances such as speaker boxes and outdoor public address systems.



Policy (c): Condition subdivision approval of the projects adjacent to any developed/occupied uses by requiring the developer to submit a construction-related noise mitigation plan to the Director of Community Development for review and approval prior to issuance of grading permits. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of the project, through the use of such methods as following:

- Temporary noise attenuation fences.
- Preferential location of equipment.
- Use of current technology and noise suppression equipment.

OBJECTIVE F-3: NOISE ABATEMENT

Achieve maximum efficiency in noise abatement efforts through intergovernmental coordination and public information programs.

The following policies support Objective F-3:

- **Policy (a):** Coordinate efforts to reduce noise impacts with appropriate public and government agencies.
- **Policy (b):** Monitor federal and state legislation and programs which will reduce noise in Irvine.
- **Policy (c):** Use police power to enforce the appropriate noise standards in the state's motor vehicle code and other state and federal legislation for mobile noise sources.
- **Policy** (d): Encourage appropriate agencies to maximize the use of noise reducing equipment in the City.
- Policy (e): Seek the cooperation of aircraft regulatory agencies in the modification and selection of flight paths which will reduce noise impacts on residential and other noise sensitive areas.
- **Policy** (f): Monitor and update, as needed, the City Noise Ordinance so that it will continue to be effective in restricting noise from stationary sources.

Policy (g): Disseminate public information regarding City noise regulations and programs, the health effects of high noise levels, and means of mitigating such levels.

TABLE F-1

INTERIOR AND EXTERIOR NOISE STANDARDS ENERGY AVERAGE (CNEL)

LAND USE CATE	GORIES	ENERGY AV	ERAGE (CNEL)
CATEGORIES	USES	INTERIOR ⁽¹⁾	EXTERIOR ⁽²⁾
RESIDENTIAL	Single-Family Multiple-Family	45 ⁽³⁾ 55 ⁽⁴⁾	65 ⁽⁷⁾
,	Mobile Home		65 ⁽⁵⁾
COMMERCIAL/ INDUSTRIAL	Hotel, motel, transient lodging	45	65 ⁽⁶⁾
Hybosium	Commercial, retail, bank, restaurant	55	
¥	Office building, professional office, research & development	50	
	Amphitheater, concert hall, auditorium, meeting hall	45	
	Gymnasium (Multipurpose)	50	
	Health clubs	55	
	Manufacturing, warehousing, wholesale, utilities	65	
	Movie theater	45	
INSTITUTIONAL	Hospital, school classroom	45	65
	Church, library	45	
OPEN SPACE	Parks		65

Interpretation:

- 1. Interior environment excludes bathrooms, toilets, closets, and corridors.
- 2. Outdoor environment limited to private yard of single-family or multi-family residences private patio which is accessed by a means of exit from inside the unit; mobile home park; hospital patio; park picnic area; school playground; and hotel and motel recreation area.
- 3. Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided pursuant to Appendix Chapter 12, Section 1208 of UBC.
- 4. Noise level requirement with open windows, if they are used to meet natural ventilation requirement.
- 5. Exterior noise level shall be such that interior noise level will not exceed 45 CNEL.
- 6. Except those areas affected by aircraft noise.
- 7. Multi-family developments with balconies that do not meet the 65 CNEL are required to provide occupancy disclosure notices to all future tenants regarding potential noise impacts.

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Noise Element

Supplement No. 3 February 2005

TABLE F-2 LAND USE NOISE COMPATIBILITY

								
LAND I	JSE CATEGORIES		EN	ERGY_	VERA	GE (CN	EL)	
Categories	Uses	≤	<u>55</u> "	60	65	7 0	75	80≥
RESIDENTIAL	Single-Family	Α	\mathbf{A}^{-1}	В	В	Ċ	D	D
RESIDENTIAL	Mobile Home	Α	A	В	C .	С	D	D
COMMERCIAL	Hotel, Motel,						, in	
Regional	Transient Lodging	A	A	В	В	C	<u>C</u>	D
COMMERCIAL	Commercial retail,							
Regional	Bank, Restaurant,							
Community	Movie theater	A	A	<u>A</u>	A	В	В	<u>C</u>
COMMERCIAL	Office building,							
Community	Research & development			,				
INDUSTRIAL &	Professional office,				2		~	<u> </u>
INSTITUTIONAL	City office building	A	A	A	В	В	<u>C</u>	D
COMMERCIAL	Amphitheater,							
Recreation	Concert hall							
INSTITUTIONAL	Auditorium, Meeting	_	1					ъ.
General	hall	В	В	<u>C</u>	C	D	D	D_
COMMERCIAL	Children's amusement				•			
Recreation	park, Miniature golf,					*		
	Go-cart track, Health				,			
	club, Equestrian				В	В	D	D
	center	A	A	<u>A</u>	В	В	<u> </u>	<u> </u>
COMMERCIAL	Automobile service							
Community	station, Auto dealer,							
INDUSTRIAL	Manufacturing,							,
General	Warehousing,	A.	, A	٨	A	В	В	В
AN AGENTAL PRINCIPLE OF LATE	Wholesale, Utilities	<u>A</u>	<u> </u>			<u>P</u>		
INSTITUTIONAL	Hospital, Church,							
General	Library, School	Α	Α	В	C	C	D	; D
ODEN CDACE	classrooms Parks	A A	A	A	В		D	D
OPEN SPACE		Α		· A				
OPEN SPACE	Golf courses, Nature centers, Cemeteries,							
•	Wildlife reserves,	4.2		V				
	Wildlife habitat	А	Α	Α	A	В	С	С
AGRICULTURAL	Agriculture	A	A	A	A	A	A	A
Interpretation	Agriculture	Λ		- 73		4.3.		

Interpretation Zone A

Clearly Compatible

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Zone B

Normally Compatible

New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Zone C Normally Incompatible New construction or development should normally be discouraged. If new construction or development does proceed, a detailed analysis or noise reduction requirements must be made and needed noise insulation features must be included in the design

Zone D Clearly Incompatible New construction or development should generally not be undertaken.

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Noise Element

Noise Mitigation Measure Definitions

Alignment: In the context of highway noise assessment, the three-dimensional position of the road.

Barriers: Any solid material that shields a receiver from a given source of noise. Types of barriers include walls, berms, hills and intervening structures. Most often, the term "noise barrier" refers specifically to sound walls or berms intentionally placed in such a way as to re-direct noise away from receiver locations (e.g., sound walls along a highway).

Lateral separation: The horizontal distance between the road and a receiver. With new roadway construction, there is sometimes the flexibility to position the alignment within the right of way in such a way as to maximize the lateral separation (or buffer) between the road (noise source) and the nearest receivers (e.g., residences).

Vertical Profile: The path of a roadway in the vertical direction. Roadways can be designed to be below-grade (depressed), above grade (elevated), or at-grade relative to areas adjacent to the road. Generally, traffic noise levels along depressed roadways are substantially lower than those along roadways that are at grade. Elevated roadways also reduce traffic noise (relative to at-grade conditions) but only within the first few hundred feet of the road.

RELATED OBJECTIVE NUMBERS

The following objectives are related to the Noise Element:

Land Use Element - A-6
Circulation Element - B-2, B-7
Housing Element - C-2
Public Facilities and Services Element - G-1
Integrated Waste Management Element - H-2
Conservation and Open Space Element - L-6
Growth Management Element - M-3

Table F-3
VEHICULAR TRAFFIC NOISE LEVEL AND NOISE CONTOUR COMPARISON

Roadway Segment	CNEL Noise Level (@ 100 ft from ctrline)	Distance to 65 CNEL Noise Contour (in feet)	CNEL Noise Level (@ 100 ft from ctrline)	Distance to 65 CNEL Noise Contour (in feet)
Alton Parkway				
Barranca/Muirlands Blvd. to Jeronimo Rd.	71.4	267	72.0	293
Jeronimo Road/Toledo Way	70.7	240	70.5	233
Foledo Way/Irvine Boulevard	66.9	134	70.0	215
rvine Boulevard/North City Limits		- <u>-</u>	71.0	251
SR 55/Red Hill Avenue	61.3	57	69.3	193
Red Hill Avenue/Von Karman Avenue	66.8	132	70.2	222
Von Karman Avenue/Jamboree Road	66.3	122	70.7	240
amboree Road/Harvard Avenue	67.4	145	71.5	271
Harvard Avenue/Culver Drive	68.9	182	69.6	203
Culver Drive/West Yale Loop	67.7	151	69.0	185
West Yale Loop/Lake Road	68.0	158	68.7	176
Lake Road/Creek Road	69.0	185	69.4	196
Creek Road/East Yale Loop	68.3	166	69.5	200
East Yale Loop/Jeffrey Road	68.2	163	69.6	203
effrey Road/Sand Canyon Avenue	68.9	182	72.3	307
Sand Canyon/Future Laguna Canyon Rd.	69.4	196	71.9	288
Future (Link)/SR 133	69.4	196	71.0	251
SR 133/Irvine Center Drive	68.6	174	70.2	222
-5/West Technology Drive	69.1	188	72.2	302
Future Rockfield to Barranca/Muirlands	72.8	331	70.9	247
Barranca Parkway/Muirlands Boulevard				
Red Hill Avenue/Von Karman Avenue	69.6	203	72.4	311
Von Karman Avenue/Jamboree Road	69.2	191	73.1	347
amboree Road/Harvard Avenue	67.8	154	70,9	247
Harvard Avenue/Culver Drive	68.9	182	69.5	200
Culver Drive/West Yale Loop	67.7	151	68.3	166
West Yale Loop/Lake Road	67.3	142	68.2	163
Lake Road/Creek Road	67.3	142	68.0	158
Creek Road/East Yale Loop	66.7	130	67.6	149
East Yale Loop/Jeffrey Road	66.5	126	68.8	179
leffrey Road/Future			69.5	200
Future/Sand Canyon Avenue			69.2	191
Sand Canyon/Future Laguna Canyon Rd.	61.7	60	71.0	251
Future (Link)/SR 133	61.7	60	69.7	206
SR 133/Irvine Center Drive	66.3	122	69.7	206
Irvine Center Drive/I-5	67.2	140	70.7	240
I-5 Freeway/Alton Parkway	69.4	196	69.8	209
1-5 Freeway/Alton Parkway Alton Parkway/Bake Parkway	69.2	191	66.4	124

Table F-3
VEHICULAR TRAFFIC NOISE LEVEL AND NOISE CONTOUR COMPARISON

Bison Avenue				
MacArthur Boulevard/Newport Coast Drive			69.1	188
Newport Coast Drive/California Avenue	59.0	40	65.8	113
Bonita Canyon Drive				
Newport Coast Drive/Culver Drive	65.5	108	71.1	255
Culver Drive/Sunnyhill	60.2	48	66.6	128
Bryan Avenue				
Culver Drive/Westwood	65.4	106	66.0	117
Westwood/Yale Avenue	63.0	74	66.0	117
Yale Avenue/Eastwood	62.1	64	65.5	108
Eastwood/Jeffrey Road	62.1	- 64	65.5	108
California Avenue				
University Drive/Bison Avenue	62.7	70	66.8	132
Bison Avenue/Palo Verde Road	 , , , ,	·	62.3	66
Palo Verde Road/Campus Drive			65.8	113
Campus Drive/Harvard Avenue	61.1	55	65.7	111
Campus Drive				
MacArthur Blvd./Von Karman Ave.	65.5	108	67.6	149
Von Karman Ave./Jamboree Road	65.1	102	66.6	128
amboree Road/University Drive	68.4	169	69.2	191
University Drive/Culver Drive	67.3	142	70.3	226
Culver Drive/Turtle Rock Drive	66.9	134	68.9	182
Creek Road				
Barranca Parkway/Alton Parkway	58.2	35	68.3	166
Culver Drive				
Irvine Boulevard/Bryan Avenue	65.3	105	70.3	226
Bryan Avenue to I-5/Trabuco Road	70.3	226	71.4	267
1-5/Trabuco Road to Walnut Avenue	69.2	191	72.0	293
Walnut Avenue/Irvine Center Drive	71.4	267	71.5	271
rvine Center Drive/Warner Avenue	71.9	288	72.7	326
Warner Avenue/Barranca Parkway	71.6	275	72.2	302
Barranca Parkway/Alton Parkway	70.9	247	72.1	297
Alton Parkway/Main Street	71.5 71.6	271 275	72.2 71.9	302 288
Main Street/San Diego Freeway (I-405) San Diego Freeway (I-405)/Michelson Dr.	70.5	275 233	72.0	293
Michelson Drive/University Drive	70.3 70.1	219	72.0	284
University Drive/Harvard Avenue	68.8	179	71.3	263
Harvard Avenue/Campus Drive	67.5	147	70.2	222
Campus Drive/Bonita Canyon Drive	62.9	72	70.2	226

Table F-3
VEHICULAR TRAFFIC NOISE LEVEL AND NOISE CONTOUR COMPARISON

Alton Parkway/West Yale Loop 65.8 113 66.1 118 Ford Road MacArthur Boulevard/San Miguel Drive 66.5 126 65.5 108 San Miguel Drive/Newport Coast Drive 68.2 163 Harvard Avenue Walnut Avenue/Irvine Center Drive 64.2 88 66.1 118 Irvine Center Drive/Warner Avenue 66.9 134 65.2 103 Warner Avenue/Barranca Parkway 66.8 132 65.9 115 Barranca Parkway/Alton Parkway 66.5 126 64.4 91 Alton Parkway/Main Street 66.7 130 69.7 206 Main Street/Michelson Drive 66.7 130 70.4 229 Michelson Drive/University Drive 67.0 136 67.5 147 University Drive/California Avenue 65.1 102 68.0 158 Irvine Center Drive Harvard Avenue/Infrey Road 68.1 161 71.4 267 Jeffrey Road/Future 69.6 203 71.2 259 Culver Drive/Yale Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway Tunive Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway Tyle Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway Tyle Avenue/Jeffrey Road West of Alton Parkway Tyle Avenue/Jeffrey Road West of Alton Parkway Tol.5 233 71.2 259					
Sarranca Parkway/Alton Parkway 64.6 94 64.2 88 Alton Parkway/West Yale Loop 65.8 113 66.1 118 Ford Road AscArthur Boulevard/San Miguel Drive 66.5 126 65.5 108 an Miguel Drive/Newport Coast Drive 68.2 163 Barvard Avenue Barvard Avenue/Irvine Center Drive 64.2 88 66.1 118 Fording Center Drive/Warner Avenue 66.9 134 65.2 103 Fording Parkway/Alton Parkway 66.8 132 65.9 115 Fording Parkway/Alton Parkway 66.5 126 64.4 91 Michor Parkway/Main Street 66.7 130 69.7 206 Adain Street/Michelson Drive 66.7 130 69.7 206 Adain Street/Michelson Drive 66.7 130 67.5 147 Driversity Drive/California Avenue 65.1 102 68.0 158 Fording Avenue/Lufver Drive Barvard Avenue/Lufver Drive Calver Drive/Yale Avenue 69.4 196 71.6 275 275 275 275 275 276 277 277	ast Yale Loop				
Sara Archive Farkway/West Yale Loop 65.8 113 66.1 118	Yale Avenue/Barranca Parkway	65.4	106	63.4	78
MacArthur Boulevard/San Miguel Drive 66.5 126 65.5 108 San Miguel Drive/Newport Coast Drive 68.2 163	Barranca Parkway/Alton Parkway	64.6	94		
MacArthur Boulevard/San Miguel Drive 66.5 126 65.5 108 San Miguel Drive/Newport Coast Drive 68.2 163 Harvard Avenue 68.2 163 Walnut Avenue/Irvine Center Drive 64.2 88 66.1 118 Irvine Center Drive/Warner Avenue 66.9 134 65.2 103 Warner Avenue/Barranca Parkway 66.8 132 65.9 115 Barranca Parkway/Alton Parkway 66.5 126 64.4 91 Alton Parkway/Main Street 66.7 130 69.7 206 Main Street/Michelson Drive 66.7 130 70.4 229 Michelson Drive/University Drive 67.0 136 67.5 147 University Drive/California Avenue 65.1 102 68.0 158 Irvine Center Drive 66.5 174 71.2 259 Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Jeffrey Road 68.1	Alton Parkway/West Yale Loop	65.8	113	66.1	118
Sam Miguel Drive/Newport Coast Drive 68.2 163	Ford Road				
Harvard Avenue Walnut Avenue/Irvine Center Drive 64.2 88 66.1 118 Irvine Center Drive/Warner Avenue 66.9 134 65.2 103 Warner Avenue/Barranca Parkway 66.8 132 65.9 115 Barranca Parkway/Alton Parkway 66.5 126 64.4 91 Alton Parkway/Main Street 66.7 130 69.7 206 Main Street/Michelson Drive 66.7 130 70.4 229 Michelson Drive/University Drive 67.0 136 67.5 147 University Drive/California Avenue 65.1 102 68.0 158 Irvine Center Drive Harvard Avenue/Culver Drive 68.6 174 71.2 259 Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Jeffrey Road 68.1 161 71.4 267 Ieffrey Road/Future 69.6 203 71.2 259 Future/Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.1 219 68.8 179 Jamboree Road West of Alton Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-405)/Walnut Avenue 72.0 293 73.4 363	MacArthur Boulevard/San Miguel Drive	66.5	126	65.5	108
Walnut Avenue/Irvine Center Drive 64.2 88 66.1 118 Irvine Center Drive/Warner Avenue 66.9 134 65.2 103 Warner Avenue/Barranca Parkway 66.8 132 65.9 115 Barranca Parkway/Alton Parkway 66.5 126 64.4 91 Alton Parkway/Main Street 66.7 130 69.7 206 Main Street/Michelson Drive 66.7 130 70.4 229 Michelson Drive/University Drive 67.0 136 67.5 147 University Drive/California Avenue 65.1 102 68.0 158 Irvine Center Drive 86.6 174 71.2 259 Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Jeffrey Road 68.1 161 71.4 267 Jeffrey Road/Future 69.6 203 71.2 259 Fotuter/Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway	San Miguel Drive/Newport Coast Drive	·	* 	68.2	163
Frvine Center Drive/Warner Avenue 66.9 134 65.2 103 Warner Avenue/Barranca Parkway 66.8 132 65.9 115 Barranca Parkway/Alton Parkway 66.8 132 65.9 115 Barranca Parkway/Alton Parkway 66.5 126 64.4 91 Alton Parkway/Main Street 66.7 130 69.7 206 Main Street/Michelson Drive 66.7 130 70.4 229 Michelson Drive/University Drive 67.0 136 67.5 147 University Drive/California Avenue 65.1 102 68.0 158 Irvine Center Drive Harvard Avenue/Culver Drive 68.6 174 71.2 259 Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Jeffrey Road 68.1 161 71.4 267 Jeffrey Road/Future 69.6 203 71.2 259 Future/Sand Canyon Avenue 69.8 209 71.1 255 Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.5 233 71.2 259 Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.5 233 73.4 363	Harvard Avenue				
Warner Avenue/Barranca Parkway Barranca Parkway/Alton Parkway 66.8 132 65.9 115 Barranca Parkway/Alton Parkway 66.5 126 64.4 91 Alton Parkway/Main Street 66.7 130 69.7 206 Main Street/Michelson Drive 66.7 130 70.4 229 Michelson Drive/University Drive 67.0 136 67.5 147 University Drive/California Avenue 65.1 102 68.0 158 Irvine Center Drive Harvard Avenue/Culver Drive Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Jeffrey Road 68.1 161 71.4 267 Jeffrey Road/Future 69.6 203 71.2 259 Future/Sand Canyon Avenue 69.8 209 71.1 255 Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 233 72.4 311 Yale Avenue/Jeffrey Road 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.7 240 70.6 380 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.7 240 70.6 236 Alton Parkway/Bake Parkway 70.5 237 71.7 280 Alton Parkway/Bake Parkway 70.7 380 Michelson Drive/Campus Drive 72.6 316 Santa Ana Freeway (I-5)/Walnut Avenue	Walnut Avenue/Irvine Center Drive	64.2	88	66.1	118
Barranca Parkway/Alton Parkway 66.5 126 64.4 91 Alton Parkway/Main Street 66.7 130 69.7 206 Main Street/Michelson Drive 66.7 130 70.4 229 Michelson Drive/University Drive 67.0 136 67.5 147 University Drive/California Avenue 65.1 102 68.0 158 Irvine Center Drive Harvard Avenue/Culver Drive Harvard Avenue/Culver Drive 68.6 174 71.2 259 Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Jeffrey Road 68.1 161 71.4 267 Jeffrey Road/Future 69.6 203 71.2 259 Evuture/Sand Canyon Avenue 69.8 209 71.1 255 Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.5 26, 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue	Irvine Center Drive/Warner Avenue	66.9	134	65.2	103
Alton Parkway/Main Street	Warner Avenue/Barranca Parkway	66.8	132	65.9	115
Alton Parkway/Main Street 66.7 130 69.7 206 Main Street/Michelson Drive 66.7 130 70.4 229 Michelson Drive/University Drive 67.0 136 67.5 147 University Drive/California Avenue 65.1 102 68.0 158 Irvine Center Drive Harvard Avenue/Culver Drive 68.6 174 71.2 259 Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Ieffrey Road 68.1 161 71.4 267 Jeffrey Road/Future 69.6 203 71.2 259 Estutre/Sand Canyon Avenue 69.8 209 71.1 255 Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Ieffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	Barranca Parkway/Alton Parkway	66.5	126	64.4	91
Main Street/Michelson Drive 66.7 130 70.4 229 Michelson Drive/University Drive 67.0 136 67.5 147 University Drive/California Avenue 65.1 102 68.0 158 Irvine Center Drive Harvard Avenue/Culver Drive Harvard Avenue/Culver Drive 68.6 174 71.2 259 Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Jeffrey Road 68.1 161 71.4 267 Jeffrey Road/Future 69.6 203 71.2 259 Future/Sand Canyon Avenue 69.8 209 71.1 255 Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 <td>Alton Parkway/Main Street</td> <td>66.7</td> <td>130</td> <td>69.7</td> <td>206</td>	Alton Parkway/Main Street	66.7	130	69.7	206
University Drive/California Avenue 65.1 102 68.0 158 Irvine Center Drive Harvard Avenue/Culver Drive 68.6 174 71.2 259 Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Jeffrey Road 68.1 161 71.4 267 Yale Avenue/Jeffrey Road/Future 69.6 203 71.2 259 Future/Sand Canyon Avenue 69.8 209 71.1 255 Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	Main Street/Michelson Drive	66.7	. 130	70.4	229
University Drive/California Avenue 65.1 102 68.0 158 Irvine Center Drive Harvard Avenue/Culver Drive 68.6 174 71.2 259 Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Jeffrey Road 68.1 161 71.4 267 Jeffrey Road/Future 69.6 203 71.2 259 Future/Sand Canyon Avenue 69.8 209 71.1 255 Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway Alton Parkway/Bake Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	Michelson Drive/University Drive	67.0	136	67.5	147
Harvard Avenue/Culver Drive 68.6 174 71.2 259 Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Jeffrey Road 68.1 161 71.4 267 Jeffrey Road/Future 69.6 203 71.2 259 Future/Sand Canyon Avenue 69.8 209 71.1 255 Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	University Drive/California Avenue	65.1	102	68.0	158
Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Jeffrey Road 68.1 161 71.4 267 Jeffrey Road/Future 69.6 203 71.2 259 Future/Sand Canyon Avenue 69.8 209 71.1 255 Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway/Bake Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5	Irvine Center Drive				· · · · · · · · · · · · · · · · · · ·
Culver Drive/Yale Avenue 69.4 196 71.6 275 Yale Avenue/Jeffrey Road 68.1 161 71.4 267 Jeffrey Road/Future 69.6 203 71.2 259 Future/Sand Canyon Avenue 69.8 209 71.1 255 Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	Harvard Avenue/Culver Drive	68.6	174	71.2	259
Seffrey Road/Future		69.4	196	71.6	275
Jeffrey Road/Future 69.6 203 71.2 259 Future/Sand Canyon Avenue 69.8 209 71.1 255 Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	Yale Avenue/Jeffrey Road	68.1	161	71.4	267
Future/Sand Canyon Avenue 69.8 209 71.1 255 Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363		69.6	203	71.2	259
Sand Canyon Avenue/Barranca Parkway 69.1 188 73.5 369 Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363		69.8	209	71.1	255
Barranca Parkway/Alton Parkway 67.2 140 71.9 288 Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	•	69.1	188	73.5	369
Alton Parkway/San Diego Freeway (I-405) 70.7 240 70.6 236 Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363		67.2	140	71.9	288
Future/Bake Parkway 73.3 358 74.4 423 Irvine Boulevard Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363			240	70.6	236
Culver Drive/Yale Avenue 70.5 233 72.4 311 Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	Future/Bake Parkway				
Yale Avenue/Jeffrey Road 70.3 226 71.7 280 West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	Irvine Boulevard	-/	N	<u> </u>	
West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	Culver Drive/Yale Avenue	70.5	233	72.4	311
West of Alton Parkway 70.5 233 71.2 259 Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	Yale Avenue/Jeffrey Road	70.3	226	71.7	280
Alton Parkway/Bake Parkway 70.1 219 68.8 179 Jamboree Road San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363			233	71.2	259
San Diego Freeway (I-405)/Michelson Dr. 72.6 321 73.7 380 Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	Alton Parkway/Bake Parkway		219	68.8	179
Michelson Drive/Campus Drive 72.1 297 72.5 316 Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	Jamboree Road				
Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363	San Diego Freeway (I-405)/Michelson Dr.	72.6,	321	73.7	380
Santa Ana Freeway (I-5)/Walnut Avenue 72.0 293 73.4 363		72.1	297	72.5	316
			293	73.4	363
					612

Table F-3
VEHICULAR TRAFFIC NOISE LEVEL AND NOISE CONTOUR COMPARISON

amboree Road (Continued)				/
Warner Avenue/Barranca Parkway	71.5	271	76.9	621
Barranca Parkway/Alton Parkway	69.6	203	73.9	392
Alton Parkway/Main Street	71.4	267	73.2	352
Main Street/San Diego Freeway (I-405)	72.4	311	73.1	347
effrey Road/University Drive				
rvine Boulevard/Bryan Avenue	68.6	174	69.5	200
Frabuco Road/Santa Ana Freeway (I-5)	69.4	196	69.7	206
Santa Ana Freeway (I-5)/Walnut Avenue	69.4	196	70.1	219
Walnut Avenue/Irvine Center Drive	70.1	219	72.1	297
rvine Center Drive/Barranca Parkway	70.7	240	71.9	288
Barranca Parkway/Alton Parkway	69.3	193	71.5	271
Alton Parkway/San Diego Freeway (I-405)	71.7	280	73.2	352
San Diego Freeway (I-405)/Michelson Dr.	71.3	263	70.7	240
Michelson Drive/Ridgeline Drive	69.7	206	71.7	280
Ridgeline Drive/Yale Avenue	68.4	169	68.7	176
Yale Avenue/Culver Drive	70.0	215	70.1	219
Culver Drive/Harvard Avenue	69.0	185	71.3	263
Harvard Avenue/Campus Drive	69.3	193	72.8	331
Campus Drive/MacArthur Boulevard	68.5	171	72.7	326
feronimo Road				
Alton Parkway/Bake Parkway	66.1	118	67.7	151
Laguna Canyon Road				
Barranca Parkway/Alton Parkway	62.7	70	69.0	185
Alton Parkway/Laguna Freeway (SR 133)	62.7	70	71.5	271
Laguna Freeway (SR 133)/Lake Forest Dr.	· - -		69.0	185
Laguna Freeway (SR 133)/Bake Parkway	. 		74.2	411
aguna Freeway (SR 133)				
Santa Ana Freeway (I-5)/Barranca Parkway	69.6	203	77.9	724
San Diego Fwy (I-405)/Laguna Canyon Rd.	71.2	259	76.0	541
ake Forest Drive	-			
Laguna Canyon Road/Future Bake Parkway		·	70.6	236
Future Bake Parkway/East City Limits			71.8	284
_ake Road				
Barranca Parkway/Alton Parkway	61.9	62	71.5	271
	······································			
MacArthur Boulevard Costa Mesa Freeway (SR 55)/Red Hill Ave.	70.4	229	72.2	302
MacArthur Boulevard	70.4 68.9	229 182	72.2 73.2	302 352

Table F-3
VEHICULAR TRAFFIC NOISE LEVEL AND NOISE CONTOUR COMPARISON

MacArthur Boulevard (Continued)				
Main Street/San Diego Freeway (I-405)	71.6	275	74.4	423
San Diego Freeway (I-405)/Michelson Dr.	70.1	219	71.7	280
Michelson Drive/Campus Drive	69.8	209	75.1	471
Jamboree Road/University Drive	68.4	169	75.1	471
University Drive/Newport Coast Drive	73.9	392	72.8	331
Newport Coast Drive/Bison Avenue	74.4	423	73.9	392
Bison Avenue/Ford Road	74.5	430	74.0	398
Main Street				· .
SR 55/Red Hill Avenue	67.0	136	71.5	271
Red Hill Avenue/MacArthur Boulevard	67.7	151	71.5	271
MacArthur Blvd./Von Karman Avenue	69.2	191	71.6	275
Von Karman Avenue/Jamboree Road	68.1	161	71.7	280
Jamboree Road/Harvard Avenue	67.1	138	69.2	191
Harvard Avenue/Culver Drive	66.1	118	67.5	147
Culver Drive/West Yale Loop	65.0	100	64.4	91
Michelson Drive				
MacArthur Blvd./Von Karman Avenue	66.3	122	65.1	102
Von Karman Avenue/Jamboree Road	65.4	106	68.0	158
Jamboree Road/Harvard Avenue	66.7	130	71.8	284
Harvard Avenue/Culver Drive	66.1	118	69.1	188
Culver Drive/West Yale Loop	63.1	75	63.1	75
Yale Avenue/University Drive	62.3	66	63.2	76
Sand Canyon Ave./Laguna Canyon Road		<u> </u>	63.1	75
Red Hill Avenue				
Barrança Parkway/Alton Parkway	69.5	200	72.6	321
Alton Parkway/MacArthur Boulevard	70.7	240	72.8	331
MacArthur Boulevard/Main Street	66.8	132	69.2	, 191
Main Street/San Diego Freeway (I-405)	67.4	145	72.0	293
Ridgeline Drive				
University Drive/Turtle Rock Drive	66.9	134	66.6	128
Rockfield Boulevard			4	
Alton Parkway/Thomas	**	- -	65.4	106
Thomas/Bake Parkway	60.9	53	65.4	106
Bake Parkway/East City Limits	68.7	176	70.7	240
Sand Canyon Avenue				
North of Marine Way	66.9	134	68.6	174
Prop. Laguna Canyon Fwy/Irvine Center Dr.	65.0	100	68.5	171
Irvine Center Drive/Barranca Parkway	66.4	124	68.6	174
Barranca Parkway/Alton Parkway	66.2	120	68.8	179
Alton Parkway/San Diego Freeway (I-405)	66.8	132	72.0	293
San Diego Fwy (I-405)/Fut. Michelson Dr.			67.4	145
	<u> </u>			

Table F-3
VEHICULAR TRAFFIC NOISE LEVEL AND NOISE CONTOUR COMPARISON

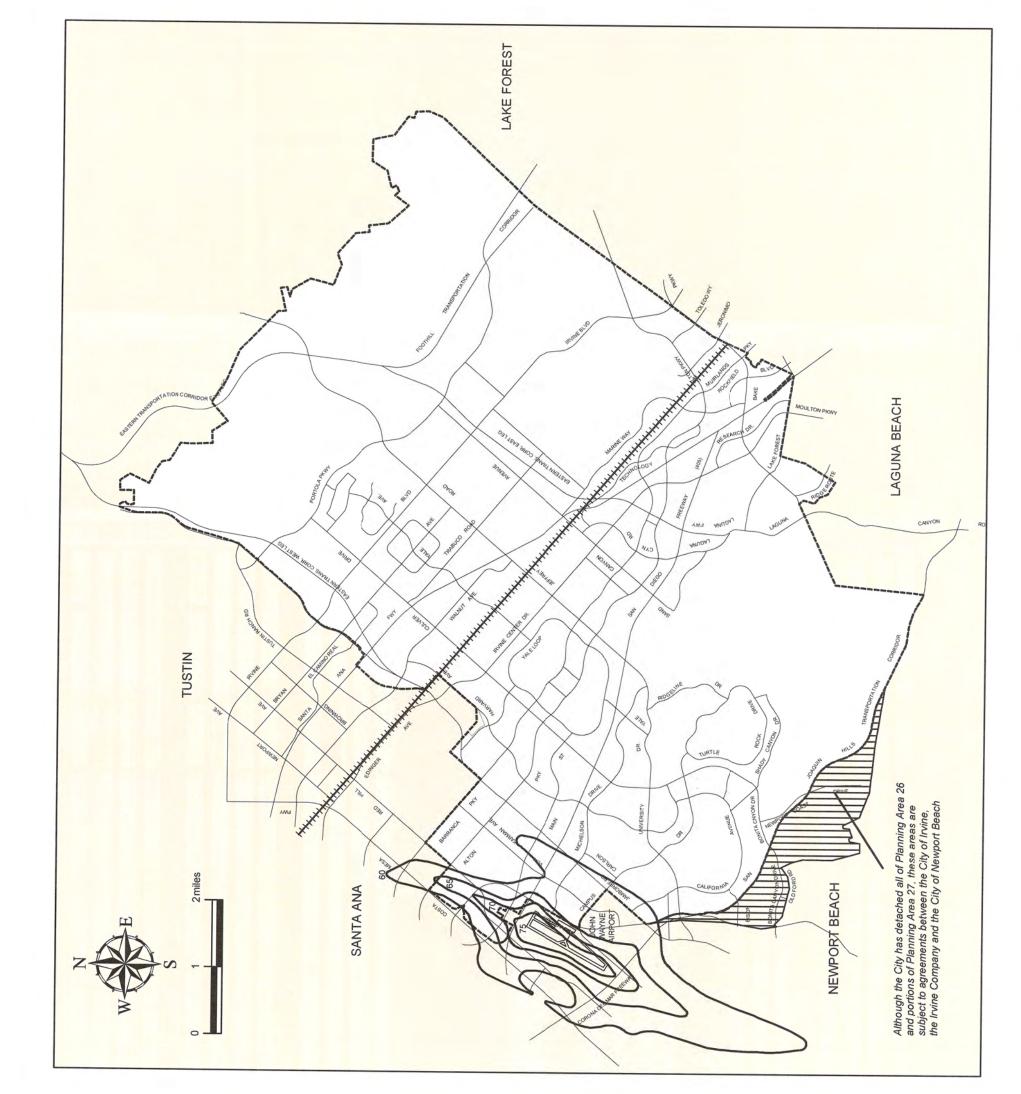
Trabuco Road				
Culver Drive/Yale Avenue	67.8	154	68.1	161
Yale East to City Limit	64.0	86	67.9	156
Γoledo Way				
Alton Parkway/Bake Parkway	66.1	118	65.0	100
Turtle Rock Drive				
Campus Drive/Ridgeline Drive	63.2	76	62.6	69
Ridgeline Drive/Sunnyhill	63.2	76	61.1	55
Sunnyhill/California Avenue	64.6	94	65.3	105
Von Karman Avenue				
Barranca Parkway/Alton Parkway	66.0	117	72.4	311
Alton Parkway/Main Street	66.9	134	69.0	185
Main Street/Michelson Drive	66.5	126	71.8	284
Michelson Drive/Campus Drive	66.0	117	68.9	182
Walnut Avenue			3	
Myford Road/Jamboree Road	66.6	128	71.4	267
amboree Road/Harvard Avenue	65.6	110	70.8	244
Harvard Avenue/Culver Drive	66.0	117	68.2	163
Culver Drive/Yale Avenue	66.6	128	68.4	169
Yale Avenue/Jeffrey Road	64.9	98	67.1	138
Warner Avenue			\$, ·
Jamboree Road/Harvard Avenue	58.2	35	64.3	90
Harvard Avenue/Culver Drive	*	·	63.9	84
Culver Drive/Yale Avenue	61.7	60	64.5	93
West Yale Loop				
East Yale Loop/Main Street	66.4	124	66.9	134
Main Street/Alton Parkway	64.4	91	65.8	113
Alton Parkway/Barranca Parkway	62.5	68	63.0	74
Barranca Parkway/Warner Avenue	63.7	82	62.7	70
Warner Avenue/Yale Avenue	64.5	93	62.7	70
Yale Avenue				
North of Irvine Boulevard	64.8	97	65.2	103
rvine Boulevard/Bryan Avenue	64.0	86	64.0	86
Bryan Avenue to I-5/Trabuco Road	65.1	102	65.1	102
-5/Trabuco Road to Walnut Avenue	64.1	87	64.1	87
Walnut Avenue/Irvine Center Drive	66.1	118	64.4	91
rvine Center Drive/Yale Loop	63.4	78	64.1	87
		The second secon	62.9	72
Yale Loop/Michelson Drive Michelson Drive/University Drive	55.6	24	59.5	43

Table F-3
VEHICULAR TRAFFIC NOISE LEVEL AND NOISE CONTOUR COMPARISON

I-405 (San Diego Freeway)						
SR-55/MacArthur Boulevard	74.8	450	76.1		550	
MacArthur Boulevard/Jamboree Road	74.8	450	76.3		567	
Jamboree Road/Culver Drive	74.8	450	76.0		541	
Culver Drive/Jeffrey Road	74.3	417	76.0		541	
Jeffrey Road/Sand Canyon Avenue	73.8	386	75.9	,	533	
Sand Canyon Avenue/SR-133	73.8	386	75.6		509	
SR-133/Irvine Center Drive	73.2	352	73.7		380	
Irvine Center Drive/I-5	72.5	316	72.9		336	
I-5 (Santa Ana Freeway)						
Jamboree Road/Culver Drive	72.7	326	77.1		641	
Culver Drive/Jeffrey Road	72.7	326	76.8		612	
Jeffrey Road/Sand Canyon Avenue	72.8	331	76.9		621	
Sand Canyon Avenue/SR-133	72.8	331	76.3		567	
SR-133/Alton Parkway	72.6	321	76.1		550	
Alton Parkway/I-405	72.1	297	75.8		525	
I-405/Lake Forest Drive	75.0	464	76.2	• • • • • • • • • • • • • • • • • • • •	558	
SR-55 (Costa Mesa Freeway)			, v			
I-405/MacArthur Boulevard	73.9	392	not available			

Note: (--) denotes undeveloped roadway. Traffic estimates from City of Irvine were used as inputs to the model.

SOURCE: Environmental Science Associates, 1996.



City of Irvine General Plan



AIRCRAFT NOISE

LEGEND

City Sphere of Influence

Aircraft Noise
Contours
expressed as CNEL
(Community Noise Equivalent Level)

* This exhibit depicts the former noise contours for the now closed MCAS Tustin for historical purposes; and, the existing noise contours for John Wayne airport

APPENDIX 4.2

City of Irvine Noise Ordinance



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<u>Irvine, California, Code of Ordinances</u> >> <u>TITLE 6 - PUBLIC WORKS</u> >> <u>Division 8 - POLLUTION</u> >> <u>CHAPTER 2. - NOISE</u> >>

CHAPTER 2. - NOISE

[77]

Sec. 6-8-201. - Declaration of policy.

Sec. 6-8-202. - Definitions.

Sec. 6-8-203. - Noise level measurement criteria.

Sec. 6-8-204. - General provision.

Sec. 6-8-205. - Special provisions.

Sec. 6-8-206. - Reserved.

Sec. 6-8-207. - Enforcement.

Sec. 6-8-208. - Waiver procedure.

Sec. 6-8-209. - Appeals.

Sec. 6-8-201. - Declaration of policy.

The City Council has adopted the following regulations in order to control unnecessary, excessive and annoying noise in the City of Irvine. The provisions of this chapter are applicable to nontransportation-related stationary noise sources.

(Code 1976, § VI.K-301; Ord. No. 84-18, 9-11-84)

Sec. 6-8-202. - Definitions.

The following definitions are provided to clarify words, phrases and terms used in this chapter.

Ambient noise level: The all-encompassing noise level associated with a given environment, being a composite of sounds from all sources, excluding the alleged offensive noise, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

Cumulative period: An additive period of time composed of individual time segments which may be continuous or interrupted.

Decibel (dB): A unit of noise measurement indicating the loudness of sound, based on logarithmic (base 10) scale.

Emergency work: Any mechanical device, apparatus or equipment which is used, employed or performed in an effort to protect, provide or restore safe conditions in the community or for the citizenry, or work by private or public utilities when restoring utility service.

Grading: Any excavating or filling of earth material or any combination thereof conducted to prepare a site for construction or the placement of the improvements thereon.

Impact noises: The noise produced by the collision of one mass in motion with a second mass which may be either in motion or at rest.

Noise level: The "A" weighted sound pressure level in decibels obtained by using a sound level meter. The "A" weighted discriminates against the lower and higher frequencies according to a relationship with the sensitivity of the human ear. The unit of measurement is designated as dB(A).

Predominant tone noise: A noise characterized by a predominant frequency or frequencies so that other frequencies cannot be readily distinguished.

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Stationary noise source: The source which is often referred to as "fixed source" (non-transportation-related) including but not limited to mechanical electric equipment, various power tools construction, commercial, industrial and agricultural activity and animal noise.

(Code 1976, § VI.K-302; Ord. No. 84-18, 9-11-84)

Sec. 6-8-203. - Noise level measurement criteria.

Any noise level measurements made pursuant to the provisions of this chapter shall be performed using a sound level meter. The location selected for measuring exterior noise levels shall be anywhere on the affected property. The interior noise measurement shall be made at a point in the affected unit at least four feet from the wall, ceiling or floor nearest the noise source.

(Code 1976, § VI.K-303; Ord. No. 84-18, 9-11-84)

Sec. 6-8-204. - General provision.

- A. Designated noise zones. The properties hereinafter described, whether within or without the City, are hereby assigned to the following noise zones:
 - 1. Noise zone 1: All hospitals, libraries, churches, schools and residential properties.
 - 2. Noise zone 2: All professional office and public institutional properties.
 - 3. Noise zone 3: All commercial properties excluding professional office properties.
 - Noise zone 4: All industrial properties.
- **B.** Exterior and interior noise standards.
 - 1. The following noise standards, unless otherwise specifically indicated, shall apply to all property within a designated noise zone.

NOISE STANDARDS dB(A)

Noise Levels for a Period Not Exceeding (minutes/hour)

Noise Zone	Time Period	30	15	5	1	0 (anytime)
1Exterior	7:00 a.m.— 10:00 p.m.	55	60	65 ¹	70	75
	10:00 p.m.— 7:00 a.m.	50	55	60	65 ¹	70
Interior	7:00 a.m.— 10:00 p.m.		_	55	60	65
	10:00 p.m.— 7:00 a.m.	_	_	45	50	55
2Exterior	Any time	55	60	65	70	75
Interior	Any time	_	_	55	60	65
3Exterior	Any time	60	65	70	7 5	80
	Any time	_	_	55	60	65
4Exterior	Any time	70	75	80	85	90
Interior	Any time	_	_	55	60	65

- This standard does not apply to multi-family residence private balconies. Multi-family developments with balconies that do not meet the 65 CNEL are required to provide occupancy disclosure notices to all future tenants regarding potential noise impacts.
 - 2. It shall be unlawful for any person at any location within the City to create any noise or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the noise level when measured on any property within designated noise zones either within or without the City to exceed the applicable noise standard.

3.

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- Each of the noise standards specified above shall be reduced by five dB(A) for impact, or predominant tone noise or for noises consisting of speech or music.
- **4.** In the event that the noise source and the affected property are within different noise zones, the noise standards of the affected property shall apply.

(Code 1976, § VI.K-304; Ord. No. 84-18, 9-11-84; Ord. No. 05-06, § 2, 2-22-05)

Sec. 6-8-205. - Special provisions.

A. Construction activities and agricultural operations may occur between 7:00 a.m. and 7:00 p.m. Mondays through Fridays, and 9:00 a.m. and 6:00 p.m. on Saturdays. No construction activities shall be permitted outside of these hours or on Sundays and federal holidays unless a temporary waiver is granted by the Chief Building Official or his or her authorized representative. Trucks, vehicles, and equipment that are making or are involved with material deliveries, loading, or transfer of materials, equipment service, maintenance of any devices or appurtenances for or within any construction project in the City shall not be operated or driven on City streets outside of these hours or on Sundays and federal holidays unless a temporary waiver is granted by the City. Any waiver granted shall take impact upon the community into consideration. No construction activity and agricultural will be permitted outside of these hours except in emergencies including maintenance work on the City rights-of-way that might be required.

Deliveries to or pickups from any commercial property sharing a property line with any residential property may occur between 7:00 a.m. and 10:00 p.m. daily. No deliveries to or pickups from any such properties shall occur outside of these hours.

- **B.** Maintenance of real property operations may exceed the noise standards between 7:00 a.m. and 7:00 p.m. on any day except Sundays, or between 9:00 a.m. and 6:00 p.m. on Sundays or a federal holiday.
- **C.** The use of leaf blowers shall be regulated as follows:
 - Definition of leaf blower. Leaf blowers are defined as portable power equipment that is powered
 by fuel or electricity and used in any landscape maintenance, construction, property repair, or
 property maintenance for the purpose of blowing, dispersing or redistributing dust, dirt, leaves,
 grass clippings, cuttings and trimmings from trees and shrubs or other debris.
 - 2. Limitations on use.
 - a. All leaf blowers shall be equipped with a permanently installed limiter that restricts the individual equipment motor performance to half throttle speed or less, and will produce not more than 70 decibels db(A) measured at the midpoint of a wall area 20 feet long and ten feet high and at a horizontal distance 50 feet away from the midpoint of the wall, or not more than 76 db(A) at a horizontal distance of 25 feet using a sound level meter set at level A
 - b. Each individual leaf blower shall be tested and certified for use by the City of Irvine or its designated representative. Each individual leaf blower shall bear the label of required approval in a visible location on the equipment prior to use and at all times during use. A fee for the City to recover all costs connected with equipment approvals shall be charged in an amount set by City resolution.
 - **c.** The use of leaf blowers is prohibited except between the hours of 8:00 a.m. and 5:00 p.m. Monday through Friday and between 9:00 a.m. and 5:00 p.m. on Saturday.
 - d. Leaf blower operations shall not cause dirt, dust, debris, leaves, grass clippings, cuttings or trimmings from trees or shrubs to be blown or deposited on any adjacent or other parcel of land, lot, or public right-of-way/property other than the parcel, land, or lot upon which the leaf blower is being operated. Deposits of dirt, dust, leaves, grass clippings, debris, cuttings or trimmings from trees or shrubs shall be removed and disposed of in a sanitary manner which will prevent dispersement by wind, vandalism or similar means within six hours of deposit by the user or property occupant.
 - **e.** Leaf blowers shall not be operated within a horizontal distance of ten feet of any operable window, door, or mechanical air intake opening or duct.
 - f. No person using leaf blowers shall exceed noise limitations set by section 6-8-204 of the City Code of Ordinances.

3. Education.

- a. Each person operating an individual leaf blower is required to complete not less than one training session of content and time approved by the City of Irvine Administrative Authority prior to operation of leaf blower equipment. Training and qualification shall be required for certification at least every two years for each individual equipment user.
- **b.** The equipment operator shall carry certification of the training and qualification at all times during equipment use and make it available upon demand. Failure to abide by the use requirements contained in this Code and/or the certification training provided will be cause for the City of Irvine to revoke such certification.

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- **c.** Exception: An individual residential property occupant operating a single leaf blower himself or herself in a manner confined to his or her own property shall be excepted from the education requirements set forth by this subsection.
- **4.** Fees. A fee for the City to recover all costs connected with training, testing, certification and enforcement shall be charged in an amount set by City Council resolution.
- **D.** The following activities shall be exempted from the provision of this chapter:
 - School bands, school athletic and school entertainment events, provided said events are conducted on school property or authorized by special permit from the City.
 - Activities otherwise lawfully conducted on public parks, public playgrounds and public or private school grounds.
 - **3.** Any mechanical device, apparatus or equipment which is utilized for emergency work, pest control, and protection or harvest of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions.
 - **4.** Any activity or equipment to the extent that design regulation thereby has been preempted by State or federal law.

The Chief Building Official or his or her duly authorized representative and City police shall enforce where necessary the provisions of this chapter. No person shall interfere with, oppose or resist any authorized person charged with the enforcement of this chapter which such person is engaged in the performance of his or her duty.

(Code 1976, § VI.K-305; Ord. No. 84-18, 9-11-84; Ord. No. 88-11, §§ 1, 2, 5-24-88; Ord. No. 90-2, § 1, 2-13-90; Ord. No. 90-7, § 1, 4 -10-90; Ord. No. 05-16, § 2, 7-12-05)

Sec. 6-8-206. - Reserved.

Sec. 6-8-207. - Enforcement.

The Chief Building Official or his or her duly authorized representative shall enforce the provisions of this chapter. No person shall interfere with, oppose or resist any authorized person charged with the enforcement of this chapter while such person is engaged in the performance of his or her duty.

(Code 1976, § VI.K-306; Ord. No. 84-18, 9-11-84)

Sec. 6-8-208. - Waiver procedure.

- A. The owner or operator of a noise source which violates any of the provisions of this chapter may apply for temporary waiver with the Chief Building Official. Any waiver granted shall take impact upon the community into consideration and state why immediate compliance cannot be achieved, a proposed method of achieving compliance, and a proposed time schedule for its accomplishment. Said application shall be accompanied by a fee as listed in the City Council resolution for variances where deemed appropriate and necessary by the City administrative authority.
- **B.** A separate application shall be filed for each noise source; provided, however, that several sources under common ownership or several sources on a single property may be combined into one application.
- **C.** An applicant for a waiver shall remain subject to prosecution under the terms of this chapter until a waiver is granted.
- **D.** Within 60 days of receipt of an appeal, the City Council shall either affirm, modify or reverse the decision of the Chief Building Official at a duly notified public hearing.

(Code 1976, § VI.K-307; Ord. No. 84-18, 9-11-84; Ord. No. 90-7, § 2, 4-10-90)

Sec. 6-8-209. - Appeals.

- A. The decision of the Chief Building Official on waiver applications may be appealed to the City Council. Appeals shall be filed with the City Clerk and shall be accompanied by a letter stating the reason for the appeal.
- **B.** An appeal shall be accompanied by a deposit/fee of \$150 to be updated on an annual basis by City Council resolution.
- C. An appeal shall be filed within 15 days of the decision of the Chief Building Official.

D.

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Within 60 days of receipt of an appeal, the City Council shall either affirm, modify or reverse the decision of the Chief Building Official at a duly notified public hearing.

(Code 1976, § VI.K-308; Ord. No. 84-18, 9-11-84)

FOOTNOTE(S):

⁽⁷⁷⁾ **Editor's note**— Prior to amendment by Ord. No. 84-18, adopted Sept. 11, 1984, the provisions of this chapter derived from Ord. No. 136, §§ 2—13, adopted March 25, 1975. (Back)

APPENDIX 7.1

2011 Approved Project
Off-Site Transportation Noise Model Printouts



Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Ada Job Number: 8141
Road Segment: s/o Barranca Pkwy. Analyst: B. Lawson

SITE SPECIFIC II		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (F	Hard = 1	10, Sc	oft = 15)		
Average Daily Traffic (Adt):	2,200 vehicles	S			Α	utos:	15		
Peak Hour Percentage:	10%		Me	dium Truc	ks (2 A	xles):	15		
Peak Hour Volume:	220 vehicles	S	He	avy Truck	s (3+ A	xles):	15		
Vehicle Speed:	55 mph		Vehicle I	Miv					
Near/Far Lane Distance:	52 feet			icleType		Day	Evening	Night	Daily
Site Data			Veri			7.5%		9.6%	
			1.11	مر edium Tru		7.5% 34.8%		10.3%	1.84%
Barrier Height:	0.0 feet			Heavy Tru		36.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm):	0.0		'	leavy ITu	UNG. C	0.570	2.1 /0	10.070	0.7470
Centerline Dist. to Barrier:	100.0 feet		Noise So	ource Elev	vations	(in fe	eet)		
Centerline Dist. to Observer:	100.0 feet			Autos:	2.0	00			
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks:	4.0	00			
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.0	06	Grade Adj	iustment:	0.0
Pad Elevation:	0.0 feet		I ana Ea	uivalent E	listana	o (in i	foot)		
	Road Elevation: 0.0 feet						eet)		
Road Grade:	0.0%		Madiu	Autos:		_			
Left View:	-90.0 degree			m Trucks:	96.5				
Right View:	90.0 degree	es	Heav	y Trucks:	96.6	08			
FHWA Noise Model Calculation	าร								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresne	e/	Barrier Att	en Ber	m Atten
Autos: 71.78	-9.40	-4.3	39	-1.20	-	4.87	0.0	000	0.000
Medium Trucks: 82.40	-26.64	-4.3	39	-1.20	-	4.97	0.0	000	0.000
Heavy Trucks: 86.40	-30.59	-4.3	39	-1.20	-	5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier atte	nuation)						
VehicleType Leq Peak Ho	ur Leq Day	Leq I	Evening	Leq N	ight		Ldn	CI	VEL
Autos: 5	6.8	54.9	53.1		47.1		55.7	7	56.3
Medium Trucks: 5	0.2	48.7	42.3		40.8		49.2	2	49.5
Heavy Trucks: 5	0.2	48.8	39.8		41.0		49.4	1	49.5
Vehicle Noise: 5	8.4	56.6	53.6		48.8		57.3	3	57.8
Centerline Distance to Noise C									

70 dBA

14

15

Ldn:

CNEL:

65 dBA

31

33

60 dBA

66

71

55 dBA 143

154

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				NOISE	MODE	L INPUT	S	
Highway Data				Si	ite Condit	tions (Hard	= 10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	38,700 vehicle 10% 3,870 vehicle				ım Trucks (2 y Trucks (3-	,			
Near/Far La	ehicle Speed: ane Distance:	55 mph 88 feet		Ve	ehicle Mix Vehicle	Туре	Day	Evening	Night	Daily
Site Data Barrier Type (0-V	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0				Autos: um Trucks: avy Trucks:	77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height F	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 90.0 degree		Lá	Medium T Heavy T ane Equiv	Trucks: Trucks: ralent Dista Autos: 8 Trucks: 8	2.000 4.000 8.006	Grade Ad	justment:	0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	71.78 82.40	Traffic Flow 3.05 -14.18	3 -:	3.92 3.92 3.92	-	pad Fre 1.20 1.20 1.20	-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Nois VehicleType	Leq Peak Ho	ur Leq Da	y Led		ening	Leq Night		Ldn		NEL
Autos: Medium Trucks: Heavy Trucks:	63	9.7 3.1 3.1	67.8 61.6 61.7		66.0 55.2 52.7	50 50	0.0 3.7 3.9	68.6 62.7 62.3	1 3	69.2 62.4 62.4
Vehicle Noise:	7	1.3	69.5		66.6	6	1.7	70.3	3	70.7

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	104	224	483	1,040						
CNEL:	112	241	519	1,119						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

	SPECIFIC II	NPUT DA	ATA		NOISE MODEL INPUTS							
Highway Data					Site Cor	ditions (H	ard = 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	42,800 ve	ehicles				Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Truck	ks (2 Axles):	15				
Peak F	lour Volume:	4,280 ve	ehicles		Heavy Trucks (3+ Axles): 15							
Ve	hicle Speed:	55 m	nph		Vehicle	Mix						
Near/Far La	ne Distance:	88 fe	eet			icleType	Day	Evening	Night	Daily		
Site Data						Aut		-	9.6%	-		
Ra	rrier Height:	0.0 1	foot		M	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0	CCL		ı	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Di		100.0 f	eet	·								
Centerline Dist.		100.0 f			Noise S		ations (in f	eet)				
Barrier Distance		0.0 f				Autos:	2.000					
Observer Height		5.0 f				m Trucks:	4.000					
,	ad Elevation:		0.0 feet		Heav	y Trucks:	8.006	Grade Adj	iustment.	0.0		
	ad Elevation:		0.0 feet			uivalent D	istance (in	feet)				
	Road Grade:	0.0%			<u>-</u>	Autos:	89.850					
	Left View:		degrees		Mediu	m Trucks:	89.805					
	Right View:		degrees		Heav	y Trucks:	89.850					
FHWA Noise Mod	el Calculatio	าร										
VehicleType	REMEL	Traffic F	-low	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	3	3.49	-3.9	92	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40) -	13.75	-3.9	92	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40) -	17.70	-3.9	92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo	and b	arrier atte	nuation)							
VehicleType	Leq Peak Ho	our Le	q Day	Leq E	vening	Leq Nig	ght	Ldn	CI	VEL		
Autos:	7	0.2	68	3.3	66.5		60.4	69.1	1	69.7		
Medium Trucks:	6	3.5	62	2.0	55.7		54.1	54.1 62.6		62.8		
Heavy Trucks:	6	3.6	62	2.2	53.1		54.4	4.4 62.7		62.8		
Vehicle Noise:	7	1.7	70	0.0	67.0		62.1	70.7	7	71.2		
Cantarlina Diatan	1- N-: C		- f()									

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	111	240	516	1,112						
CNEL:	120	258	555	1,196						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Har	d = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	59,300 vehicles	S			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles).	15				
Peak H	lour Volume:	5,930 vehicles	S	He	avy Trucks (3	3+ Axles).	15				
Ve	hicle Speed:	55 mph		Vehicle i	Mix						
Near/Far La	ne Distance:	88 feet			icleType	Day	Evening	Night	Daily		
Site Data					Autos	-		9.6%	_		
	rrier Height:	0.0 feet		Me	edium Trucks			10.3%	1.84%		
Barrier Type (0-W	•	0.0 1661			leavy Trucks			10.8%	0.74%		
Centerline Dis	•	100.0 feet									
Centerline Dist.		100.0 feet	•	Noise So	ource Elevat	•	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
Observer Height (Above Pad): 5.0 feet					m Trucks:	4.000		_			
,	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Adj	ustment.	: 0.0		
Road Elevation: 0.0 feet				Lane Eq	uivalent Dis	tance (in	feet)				
	Road Grade:	0.0%	•	<u> </u>	Autos:	89.850					
	Left View:	-90.0 degree	es	Medium Trucks: 89.805							
	Right View:	90.0 degree		Heav	y Trucks:	89.850					
					•						
FHWA Noise Mode						T.					
VehicleType	REMEL	Traffic Flow	Distance			resnel	Barrier Att		m Atten		
Autos:	71.78		-3.9	92	-1.20	-4.87		000	0.000		
Medium Trucks:	82.40		-3.9		-1.20	-4.97	0.0		0.000		
Heavy Trucks:	86.40	-16.29	-3.9	92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	hout Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	NEL		
Autos:	7	1.6	69.7	67.9	- (61.8	70.5	5	71.1		
Medium Trucks:	6	5.0	63.4	57.1	į	55.5 64.0)	64.2		
Heavy Trucks:	6	5.0	63.6	54.5	į	55.8	64.1		64.3		

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	138	298	641	1,382						
CNEL:	149	320	690	1,487						

68.4

72.1

63.6

72.6

71.4

73.1

Vehicle Noise:

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: n/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I		NOISE MODEL INPUTS								
Highway Data			Site Con	ditions (Ha	rd = 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	59,800 vehicles	S			Autos:	15				
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15				
Peak Hour Volume:	5,980 vehicles	S	Hea	avy Trucks ((3+ <i>Axles</i>):	15				
Vehicle Speed:	55 mph		Vehicle I	Vix						
Near/Far Lane Distance:	88 feet			cleType	Day	Evening	Night	Daily		
Site Data				Auto		_	9.6%	-		
Barrier Height:	0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet				· · · · · · · · · · · · · · · · · · ·	4)				
Centerline Dist. to Observer:	100.0 feet		Noise Sc	urce Eleva		eet)				
Barrier Distance to Observer:	0.0 feet		1.4 - P	Autos:	2.000					
Observer Height (Above Pad):	5.0 feet			n Trucks:	4.000	Crada Ad				
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment.	0.0		
Road Elevation:	0.0 feet		Lane Equ	uivalent Dis	stance (in	feet)				
Road Grade:	0.0%		Autos: 89.850							
Left View:	-90.0 degree	es	Medium Trucks: 89.805							
Right View:	90.0 degree	es	Heavy Trucks: 89.850							
FHWA Noise Model Calculatio	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos: 71.7	8 4.94	-3.9)2	-1.20	<i>-4.</i> 87	0.0	000	0.000		
Medium Trucks: 82.4	0 -12.29	-3.9	2	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	0 -16.25	-3.9)2	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)							
VehicleType Leq Peak Ho	our Leq Day	/ Leq E	vening	Leq Nigl	ht	Ldn	CI	VEL		
Autos: 7	1.6	69.7	67.9		61.9	70.5	5	71.1		
Medium Trucks: 6	5.0	63.5	57.1		55.6	64.0)	64.3		
Heavy Trucks:6	55.0	63.6	54.6		55.8	64.2	2	64.3		
Vehicle Noise: 7	3.2	71.4	68.5		63.6	72.	1	72.6		

70 dBA

139

150

Ldn:

CNEL:

65 dBA

299

322

60 dBA

645

694

55 dBA

1,390

1,495

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: b/w I-5 NB Ramps and Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT [DATA				N	OISE	MODE	L INPUT	S	
Highway Data					S	ite Con	ditions (Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	65,800	vehicles	6					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Tru	cks (2	Axles):	15		
Peak H	Hour Volume:	6,580	vehicles	5		He	avy Truci	ks (3+	Axles):	15		
Ve	ehicle Speed:	55	mph		V	ehicle l	Miy					
Near/Far La	ne Distance:	88	feet				icleType		Day	Evening	Night	Daily
Site Data								utos:	77.5%		9.6%	
Ra	rrier Height:	0.0	feet			Ме	edium Tru	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0				F	leavy Tru	ucks:	86.5%		10.8%	0.74%
• • •	ist. to Barrier:	100.0										
Centerline Dist.		100.0			N	oise Sc	ource Ele			eet)		
Barrier Distance			feet				Autos	: 2	2.000			
						Mediur	n Trucks	: 4	.000			
Observer Height	. ,		feet			Heav	y Trucks	: 8	3.006	Grade Ad	ljustment	: 0.0
	ad Elevation:) feet					D' - 1		C ()		
Road Elevation: 0.0 feet				L	ane ⊑q	uivalent			reet)			
	Road Grade:	0.0)%				Autos		9.850			
	Left View:	-90.0) degree	es		Mediur	n Trucks	: 89	9.805			
	Right View:	90.0) degree	es		Heav	y Trucks	: 89	9.850			
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traffic	Flow	Distar	псе	Finite	Road	Fres	snel	Barrier Att	ten Bei	m Atten
Autos:	71.78		5.36		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40		-11.88		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40		-15.83		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and l	barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	ur L	Leq Day	L	eq Eve	ening	Leq N	light		Ldn	C	NEL
Autos:	72	2.0	7	70.1		68.4		62	.3	70.9	9	71.5
Medium Trucks:	65	5.4	6	63.9		57.5		56.	.0	64.	5	64.7
Heavy Trucks:	65	5.4	6	64.0		55.0 56.2			64.	64.7		
Vehicle Noise:	73	3.6	7	71.8		68.9		64	.0	72.	6	73.0
Contorlino Distan	ce to Noise C	ontour	(in fact)	1								

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	148	319	688	1,481						
CNEL:	159	343	740	1,594						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o I-5 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT [DATA				N	OISE	MODE	L INPUT	s	
Highway Data					S	ite Con	ditions (Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	53,300	vehicles	3					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Tru	cks (2	Axles):	15		
Peak H	lour Volume:	5,330	vehicles	6		He	avy Truci	ks (3+	Axles):	15		
Ve	ehicle Speed:	55	mph		V	ehicle l	Wix					
Near/Far La	ne Distance:	88	feet				icleType		Day	Evening	Night	Daily
Site Data							A	utos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0	feet			Ме	edium Tru	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0				F	leavy Tru	ucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0			N	oico Sa	ource Ele	watio	ns (in f	201		
Centerline Dist.	to Observer:	100.0	feet		/\	orse sc				eu)		
Barrier Distance	to Observer:	0.0	feet			A 4 - 1'	Autos		.000			
Observer Height	(Above Pad):		feet				n Trucks		.000	0 / 4		0.0
•	ad Elevation:		feet			Heav	y Trucks	: 8	.006	Grade Ad	justment	. 0.0
	Road Elevation: 0.0 feet				L	ane Equ	uivalent	Distar	ice (in	feet)		
Road Grade: 0.0%						Autos	: 89	.850				
	Left View:		degree	es		Mediur	n Trucks	: 89	.805			
	Right View:		degree			Heav	y Trucks	: 89	.850			
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic	Flow	Distan	ce	Finite	Road	Fres	nel	Barrier Att	ten Ber	m Atten
Autos:	71.78		4.44		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40		-12.79	-	-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40		-16.75	-	-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and i	barrier a	ttenu	ation)						
VehicleType	Leq Peak Ho	ur L	Leq Day	Le	q Eve	ening	Leq N	light		Ldn	C	NEL
Autos:	71	.1	(69.2		67.4		61.	4	70.0	0	70.6
Medium Trucks:	64	ł.5	6	63.0		56.6		55.	1	63.	5	63.8
Heavy Trucks:	64	ł.5	6	63.1		54.1		55.	3	63.	63.8	
Vehicle Noise:	72	2.7	-	70.9		68.0		63.	1	71.0	6	72.1
Contorlino Distan	co to Noisa C	ontour	(in foot)	1								

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	129	277	597	1,287						
CNEL:	138	298	643	1,385						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o Paseo de Valencia

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S			
Highway Data			Site Con	ditions (Har	d = 10, S	oft = 15)				
Average Daily Traffic (Adt)	: 46,000 vehicle	es			Autos:	15				
Peak Hour Percentage	•		Me	dium Trucks	(2 Axles).	15				
Peak Hour Volume	: 4,600 vehicle	es	He	avy Trucks (3	3+ Axles).	15				
Vehicle Speed	: 55 mph		Vehicle I	Mix						
Near/Far Lane Distance	: 88 feet				Day	Evening	Night	Doily		
Site Data			ven	icleType Autos		Evening 12.9%	9.6%	<i>Daily</i> 97.42%		
			Λ.4.	Autos edium Trucks			10.3%	1.84%		
Barrier Height							10.3%	0.74%		
Barrier Type (0-Wall, 1-Berm)			<i>'</i>	Heavy Trucks	: 86.5%	0 2.1%	10.6%	0.74%		
Centerline Dist. to Barrier			Noise So	ource Elevat	ions (in f	eet)				
Centerline Dist. to Observer				Autos:	2.000					
Barrier Distance to Observer			Mediui	m Trucks:	4.000					
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
Pad Elevation						•				
Road Elevation			Lane Eq	uivalent Dis		feet)				
Road Grade					89.850					
Left View	3 -	es	Medium Trucks: 89.805							
Right View	: 90.0 degre	es	Heav	y Trucks:	89.850					
FHWA Noise Model Calculation										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	resnel	Barrier Att	en Ber	m Atten		
Autos: 71.7	78 3.81	-3.	.92	-1.20	<i>-4.</i> 87	0.0	000	0.000		
Medium Trucks: 82.4	40 -13.43	-3.	.92	-1.20	<i>-4</i> .97		000	0.000		
Heavy Trucks: 86.4	40 -17.39	-3.	.92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	ithout Topo and	l barrier atte	enuation)							
VehicleType Leq Peak F	lour Leq Da	y Leq	Evening	Leq Nigh	t	Ldn	CI	VEL		
Autos:	70.5	68.6	66.8	(60.7	69.4	4	70.0		
Medium Trucks:	63.9	62.3	56.0	į	54.4	62.9	9	63.1		
Heavy Trucks:	63.9	62.5	53.4	ţ	54.7	63.0		63.2		
Vehicle Noise:	72.0	70.3	67.3		62.5	71.0)	71.5		
Centerline Distance to Noise	Contour (in fee	t)								

70 dBA

117

126

Ldn:

CNEL:

65 dBA

251

270

60 dBA

542

583

55 dBA

1,167

1,255

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Job Number: 8141

Road Segment: s/o Moulton Pkwy.

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT I	DATA			NOIS	SE MODE	L INPUT	S		
Highway Data					Site Cor	nditions (Ha	rd = 10, S	oft = 15)			
,	Traffic (Adt): r Percentage:	44,600 10°			Ме	edium Trucks	Autos: (2 Axles):				
Peak I	Hour Volume:	4,460	vehicles		He	avy Trucks	(3+ <i>Axles</i>):	15			
	ehicle Speed: ane Distance:		mph feet		Vehicle						
	ario Biotarioo.				Veh	icleType	Day	Evening	Night	Daily	
Site Data						Auto			9.6%		
Barrier Type (0-V	arrier Height: Vall, 1-Berm):	0.0 0.0) feet			edium Truck Heavy Truck			10.3% 10.8%	1.84% 0.74%	
Centerline D	ist. to Barrier:) feet		Noise S	ource Eleva	tions (in f	eet)			
Centerline Dist Barrier Distance Observer Height	to Observer:	0.0 5.0) feet) feet) feet) feet			Autos: m Trucks: yy Trucks:	2.000 4.000 8.006	Grade Ad	ijustment:	0.0	
	ad Elevation:) feet		Lane Equivalent Distance (in feet)						
	Road Grade:	0.0				Autos:	89.850	<u> </u>			
	Left View:	-90.0	degrees	3	Mediu	m Trucks:	89.805				
	Right View:	90.0) degrees	3	Heav	y Trucks:	89.850				
FHWA Noise Mod	1										
VehicleType	REMEL		c Flow	Distance			resnel	Barrier Att		m Atten	
Autos			3.67	-3.		-1.20	-4.87		000	0.000	
Medium Trucks	_	-	-13.57	-3.		-1.20	-4.97		000	0.000	
Heavy Trucks			-17.52	-3.		-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (wit	hout To	po and b	arrier atte	nuation)						
VehicleType	Leq Peak Ho		Leq Day		Evening	Leq Nigl		Ldn		VEL	
Autos		0.3		8.4	66.7		60.6	69.2		69.8	
Medium Trucks		3.7		2.2	55.8		54.3	62.8		63.0	
Heavy Trucks	:6	3.8	62	2.3	53.3		54.5	62.9	9	63.0	
Vehicle Noise	: 7	1.9	7	0.1	67.2		62.3	70.9	9	71.3	
Centerline Distar	ice to Noise C	Contour	(in feet)								

70 dBA

114

123

Ldn:

CNEL:

65 dBA

246

265

60 dBA

531

571

55 dBA 1,143

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Aliso Creek Rd.

Road Segment: e/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA				ſ	VOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	18,500 vehicles	S					Autos:	15		
•	Percentage:	10%			Me	dium Tr	rucks (2	2 Axles):	15		
Peak H	lour Volume:	1,850 vehicles	S		He	avy Tru	cks (3+	- Axles):	15		
Ve	hicle Speed:	50 mph		1/	ehicle l	Wiv					
Near/Far La	ne Distance:	70 feet		•		icleType	۵	Day	Evening	Night	Daily
Site Data					VOIT		Autos:	77.5%	•	9.6%	
	rrior Hoimbt.	0.0 feet			Ме	edium T		84.8%		10.3%	
Barrier Type (0-W	rrier Height:	0.0 teet 0.0				leavy T		86.5%		10.8%	
Centerline Dis		0.0 100.0 feet									
Centerline Dist.		100.0 feet		N	Noise Source Elevations (in feet)						
Barrier Distance		0.0 feet			Autos: 2.000						
Observer Height (5.0 feet			Medium Trucks: 4.000						
• ,	ad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Adj	iustment	± 0.0
- 1	ad Elevation: ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in	feet)		
		-	Auto		3.723						
	Road Grade: Left View:	0.0% -90.0 degree	es		Mediui	n Truck		3.680			
	Right View:	90.0 degree			Heav	y Truck	rs: 9	3.723			
FHWA Noise Mode	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fre	snel	Barrier Att	en Bei	rm Atten
Autos:	70.20	0.26		-4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-16.98		-4.19		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-20.93		-4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er attenu	ation)						
VehicleType	Leq Peak Ho			Leq Eve	ening	Leq	Night		Ldn	С	NEL
Autos:	65	5.1	63.2		61.4		55	5.4	64.0)	64.6
Medium Trucks:			57.1							57.9	
Heavy Trucks:	59	9.1	57.6		48.6		49	9.8	58.2	2	58.3
Vehicle Noise:			65.0		62.0		57	7.2	65.7	7	66.2
Centerline Distant	ce to Noise C	ontour (in feet)	70 dl	RΛ	6E	dBA		60 dBA	55	dBA
			Ldn:	70 di 52			12		241		519
			Luii.	52		ı	14		∠ + I		פוע

CNEL:

56

120

259

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: w/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data			S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt).	26,900 vehicle	s					Autos:	15		
Peak Hour Percentage.	*			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume.	2,690 vehicle	s		He	avy Trud	cks (3+	Axles):	15		
Vehicle Speed.	60 mph		1/	ehicle l	Mix					
Near/Far Lane Distance.	76 feet		V			,	Dov	Evening	Night	Doily
Site Date				ven	icleType		<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	Daily
Site Data				N 4.	ر edium Ti	Autos:				
Barrier Height							84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)				,	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier			Ν	oise Sc	ource E	levatio	ns (in fe	eet)		
Centerline Dist. to Observer					Auto	s: 2	.000	· ·		
Barrier Distance to Observer				Mediui	n Truck	s: 4	.000			
Observer Height (Above Pad)					y Truck		.006	Grade Ad	iustment.	0.0
Pad Elevation			Lane Equivalent Distance (in feet)							
Road Elevation			L	ane Eq				feet)		
Road Grade	0.0%				Auto		2.547			
Left View	-90.0 degre	es		Mediui	n Truck	s: 92	2.504			
Right View	90.0 degre	es		Heav	y Truck	s: 92	2.547			
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distan	ice	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos: 73.2	22 1.10		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 83.6	68 -16.14		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87.3	-20.10		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier a	ttenu	ation)						
VehicleType Leq Peak F	lour Leq Day	/ Le	eq Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	69.0	67.1	65.3 59.3 67.9					68.5		
Medium Trucks:	62.2	60.7		54.4		52	.8	61.3	3	61.5
Heavy Trucks:	61.9	60.5		51.5		52.	.7	61.1	1	61.2
Vehicle Noise:	70.5	68.7		65.8		60	.9	69.4	4	69.9
Centerline Distance to Noise	Contour (in feet	!)								

70 dBA

92

99

Ldn:

CNEL:

65 dBA

198

213

60 dBA

426

459

55 dBA

918

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPI	ECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Tra	ffic (Adt): 2	8,900 vehicle	S					Autos:	15		
Peak Hour Per	. ,	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak Hour	· Volume:	2,890 vehicle	S		He	avy Truc	cks (3+	Axles):	15		
Vehicl	e Speed:	55 mph		V	'ehicle l	Miv					
Near/Far Lane I	Distance:	52 feet				icleType		Day	Evening	Night	Daily
Site Data					V 011		Autos:	77.5%		9.6%	-
		0.0 foot			Me	, edium Tr		84.8%		10.3%	1.84%
	r Height:	0.0 feet 0.0				Heavy Tr		86.5%		10.8%	0.74%
Barrier Type (0-Wall,	,						GONO.		2,0	10.070	0.1 170
Centerline Dist. to		100.0 feet		٨	loise Sc	ource El	evatio	ns (in fe	eet)		
Centerline Dist. to C		100.0 feet				Autos	s: 2	2.000			
Barrier Distance to 0		0.0 feet			Mediui	m Trucks	s: 4	.000			
Observer Height (Abo		5.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0							0.0
	Elevation:	0.0 feet			Lane Equivalent Distance (in feet)						
	Elevation:	0.0 feet		L	ane Eq				reet)		
	nd Grade:	0.0%				Autos		6.607			
	.eft View:	-90.0 degre				m Trucks		6.566			
Ri	ght View:	90.0 degre	es		Heav	y Trucks	s: 96	8.608			
FHWA Noise Model C	Calculations	;									
VehicleType I	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.79		-4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.45		-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.41		-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Le	evels (witho	out Topo and	barrie	r attenu	ation)						
VehicleType Led	q Peak Hou	r Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	68.	0	66.1		64.3		58	.3	66.9)	67.5
Medium Trucks:	61.	4	59.9	53.5 51.9 60.4					60.6		
Heavy Trucks:	61.	4	60.0		50.9		52	.2	60.5	5	60.7
Vehicle Noise:	69.	6	67.8		64.8		60	.0	68.5	5	69.0
Centerline Distance t	o Noise Co	ntour (in feet)								

70 dBA

80

86

Ldn:

CNEL:

65 dBA

171

184

60 dBA

369

397

55 dBA

796

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o W. Yale Loop

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Ha	ard = 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	27,900 vehicles	3			Autos:	15				
Peak Hour Percentage:	10%		Me	dium Truck	s (2 Axles):	15				
Peak Hour Volume:	2,790 vehicles	S	He	avy Trucks	(3+ Axles):	15				
Vehicle Speed:	55 mph		Vehicle I	Miy						
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data				Auto		-	9.6%	97.42%		
Barrier Height:	0.0 feet		Ме	edium Truci	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Truck	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet									
Centerline Dist. to Observer:	100.0 feet		Noise So		ations (in f	eet)				
Barrier Distance to Observer:	0.0 feet			Autos:	2.000					
Observer Height (Above Pad):	5.0 feet			n Trucks:	4.000					
Pad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Road Elevation:	0.0 feet		Lane Eg	uivalent Di	stance (in	feet)				
Road Grade:	0.0%			Autos:	96.607	,				
Left View:	-90.0 degree	25	Mediui	n Trucks:	96.566					
Right View:	90.0 degree			y Trucks:	96.608					
				,						
FHWA Noise Model Calculation										
VehicleType REMEL	Traffic Flow	Distance	Finite			Barrier Att		m Atten		
Autos: 71.7		-4.3	9	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -15.60	-4.3	9	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	0 -19.56	-4.3	9	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)							
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nig	ıht	Ldn	CI	VEL		
Autos: 6	57.8	65.9	9 64.2 58.1 66.7					67.3		
Medium Trucks: 6	31.2	59.7	53.3		51.8	60.3	3	60.5		
Heavy Trucks:6	31.2	59.8	50.8		52.0	60.4	1	60.5		
Vehicle Noise:	69.4	67.6	64.7 59.8 68.4							

70 dBA

78

84

Ldn:

CNEL:

65 dBA

168

180

60 dBA

361

388

55 dBA

778

836

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Lake Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	ATA		NOISE MODEL INPUTS					
Highway Data					Site Cor	nditions (F	Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	26,200 v	ehicles/				Autos	: 15		
Peak Hour	Percentage:	10%)		Мє	edium Truc	ks (2 Axles)	: 15		
Peak H	lour Volume:	2,620 \	ehicles/		He	eavy Truck	s (3+ Axles)	: 15		
Ve	ehicle Speed:	55 r	mph		Vehicle	Mix				
Near/Far La	ne Distance:	52 f	eet			nicleType	Day	Evening	Night	Daily
Site Data							itos: 77.5%	J	9.6%	
Ra	rrier Height:	0.0	feet		М	ledium Tru	cks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	icci			Heavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%
• • • •	ist. to Barrier:	100.0	feet					•		
Centerline Dist.		100.0			Noise S		vations (in f	eet)		
Barrier Distance			feet			Autos:	2.000			
Observer Height			feet			m Trucks:	4.000			
-	ad Elevation:		feet		Hear	vy Trucks:	8.006	Grade Ad	justment:	0.0
	ad Elevation:		feet		Lane Fo	uivalent l	Distance (in	feet)		
	Road Grade:	0.09				Autos:	96.607			
	Left View:			•	Modiu	m Trucks:	96.566			
			degree				96.608			
	Right View:	90.0	degree	S	пеа	vy Trucks:	90.000			
FHWA Noise Mod	lel Calculation	s								
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78		1.36	-4.3	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40		-15.88	-4.3	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40		-19.83	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	o and k	parrier atte	nuation)					
VehicleType	Leq Peak Ho	ur L	eq Day	Leq E	vening	Leq N	ight	Ldn	CI	VEL
Autos:	67	'.5	6	55.6	63.9		57.8	66.4	4	67.1
Medium Trucks:	60).9	5	59.4	53.1		51.5	60.0)	60.2
Heavy Trucks:	61	.0	5	9.5	50.5	;	51.8	60.1	1	60.2
Vehicle Noise:	69).1	6	67.4	64.4		59.5	68.	1	68.6
Contorlino Distan	co to Noisa C	ontour (in foot)							

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	75	161	346	746
CNEL:	80	173	372	802

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Creek Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC			NOISE MODEL INPUTS							
Highway Data				Site Con	ditions ((Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	25,300 vehicle	es					Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tru	icks (2	Axles):	15		
Peak Hour Volume:	2,530 vehicle	es		He	avy Truc	ks (3+	Axles):	15		
Vehicle Speed:	55 mph		-	Vehicle I	Mix					
Near/Far Lane Distance:	52 feet		_		icleType		Day	Evening	Night	Daily
Site Data						utos:	77.5%		9.6%	-
Barrier Height:	0.0 feet			Me	edium Tri		84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):					leavy Tr		86.5%		10.8%	0.74%
Centerline Dist. to Barrier:										
Centerline Dist. to Observer:			1	Noise So	ource Ele			eet)		
Barrier Distance to Observer:					Autos		.000			
Observer Height (Above Pad):					n Trucks		.000			
Pad Elevation:				Heav	y Trucks	s: 8	.006	Grade Ad	justment	0.0
Road Elevation:			1	Lane Eg	uivalent	Distar	nce (in f	feet)		
Road Grade:					Autos		5.607			
Left View:		es		Mediui	n Trucks		5.566			
Right View:				Heav	y Trucks	s: 96	.608			
FHWA Noise Model Calculation				1						
VehicleType REMEL	Traffic Flow		stance	Finite		Fres		Barrier Att		m Atten
Autos: 71.7			-4.39		-1.20		<i>-4.87</i>		000	0.000
Medium Trucks: 82.4			-4.39		-1.20		-4.97		000	0.000
Heavy Trucks: 86.4	0 -19.99)	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barri	ier atten	uation)						
VehicleType Leq Peak H	our Leq Da	У	Leq Ev	/ening	Leq l	Vight		Ldn	C	VEL
Autos:	67.4	65.5		63.7		57.	.7	66.3	3	66.9
Medium Trucks:	80.8	59.3		52.9		51.	.4	59.8	3	60.1
Heavy Trucks:	8.06	59.4		50.4		51.	.6	60.0)	60.1
Vehicle Noise:	69.0	67.2		64.3		59.	.4	67.9	9	68.4
Centerline Distance to Noise	Contour (in fee	t)								
			70 c	BA	65 c	dBA	6	60 dBA	55	dBA

73

78

157

169

Ldn:

CNEL:

728

784

338

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: w/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions ((Hard	= 10, Sc	oft = 15)		
Peak H	Traffic (Adt): Percentage: Hour Volume: hicle Speed:	30,200 vehic 10% 3,020 vehic 55 mph		V		dium Tru avy Truc	•	,			
Near/Far La	ne Distance:	52 feet			Vehi	icleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	_	9.6%	97.42%
Barrier Type (0-W Centerline Dis Centerline Dist.	st. to Barrier:	0.0 feet 0.0 100.0 feet 100.0 feet		٨	F	Heavy Tru	ucks: evatio	•	2.7%	10.3% 10.8%	1.84% 0.74%
	(Above Pad): ad Elevation:	0.0 feet 5.0 feet 0.0 feet			Heav	Autos n Trucks ry Trucks	o: 4 o: 8	2.000 4.000 3.006	Grade Ad	justment.	0.0
	ad Elevation:	0.0 feet		L	ane Equ	uivalent			feet)		
,	Road Grade: Left View: Right View:	0.0% -90.0 degr 90.0 degr				Autos n Trucks ry Trucks	s: 96	6.607 6.566 6.608			
FHWA Noise Mod	el Calculation	ns									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.9	8	-4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.2	6	-4.39		-1.20		-4.97		000	0.000
Heavy Trucks:	86.40	-19.2	2	-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo an	d barrie	r attenu	ation)						
VehicleType	Leq Peak Ho	our Leq Da	ay	Leq Ev	ening	Leq N	Vight		Ldn	CI	VEL
Autos:	6	8.2	66.3		64.5		58	.4	67.	1	67.7
Medium Trucks:	6	1.6	60.0	0 53.7 52.1 60.6					60.8		
Heavy Trucks:	6	1.6	60.2		51.1		52	.4	60.7	7	60.9
Vehicle Noise:	6	9.7	68.0		65.0		60	.2	68.7	7	69.2
Centerline Distant	ce to Noise C	Contour (in fee	et)								

70 dBA	65 dBA	60 dBA	55 dBA
82	177	380	820
88	190	409	882
	82	82 177	82 177 380

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: b/w Jeffrey Rd. and Royal Oak

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT I	DATA		NOISE MODEL INPUTS							
Highway Data					S	ite Con	ditions (Hard = 1	0, Sc	oft = 15)		
Average Daily	Traffic (Adt):	23,600	vehicles	3				Α	utos:	15		
Peak Hour	Percentage:	109	%			Me	dium Trud	cks (2 Ax	des):	15		
Peak H	lour Volume:	2,360	vehicles	3		He	avy Truck	ks (3+ A)	des):	15		
	ehicle Speed:		mph		V	ehicle l	Mix					
Near/Far La	ane Distance:	52	feet			Vehi	cleType	L)ay	Evening	Night	Daily
Site Data							A	utos: 7	7.5%	12.9%	9.6%	97.42%
Ва	rrier Height:	0.0) feet			Me	edium Tru	ıcks: 8	4.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0				F	leavy Tru	ıcks: 8	6.5%	2.7%	10.8%	0.74%
	ist. to Barrier:) feet			laisa Sa	urce Ele	vations	(in f	not)		
Centerline Dist.	to Observer:	100.0) feet			orse sc	Autos:		-	<i></i>		
Barrier Distance	to Observer:	0.0) feet			Modium	n Trucks:					
Observer Height	(Above Pad):	5.0) feet							Grada Ad	iustmant	
P	ad Elevation:	0.0) feet		Heavy Trucks: 8.006 Grade Adjustment:							0.0
Ro	ad Elevation:	0.0) feet		L	Lane Equivalent Distance (in feet)						
	Road Grade:	0.0)%				Autos:	96.60	07			
	Left View:	-90.0	degree	es		Mediur	n Trucks:	96.50	66			
	Right View:) degree			Heav	y Trucks:	96.60	08			
FHWA Noise Mod	lel Calculation	16										
VehicleType	REMEL		c Flow	Dis	tance	Finite	Road	Fresne	I	Barrier Att	en Ber	m Atten
Autos:	71.78	3	0.91		-4.39		-1.20	-4	4.87	0.0	000	0.000
Medium Trucks:	82.40)	-16.33		-4.39		-1.20	-4	4.97	0.0	000	0.000
Heavy Trucks:	86.40)	-20.29		-4.39		-1.20		5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout To	po and	barrie	er attenu	ıation)						
VehicleType	Leq Peak Ho	ur I	Leq Day	,	Leq Ev	ening	Leq N	light		Ldn	CI	VEL
Autos:	6	7.1	(65.2		63.4		57.4		66.0)	66.6
Medium Trucks:	60	0.5	į	59.0		52.6		51.1		59.5	5	59.8
Heavy Trucks:	60	0.5	į	59.1		50.1		51.3		59.7	7	59.8
Vehicle Noise:	68	8.7	(66.9		64.0		59.1		67.6	6	68.1

70 dBA

70

75

Ldn:

CNEL:

65 dBA

150

161

60 dBA

323

347

55 dBA

695

748

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: Alton Pkwy. Job Number: 8141 Road Segment: b/w Royal Oak and Valley Oak Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (Ha	rd = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	21,100 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak F	lour Volume:	2,110 vehicles	S	He	avy Trucks (3+ <i>Axles):</i>	15		
Ve	ehicle Speed:	55 mph		Vehicle I	Mix				
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data					Auto	_	_		97.42%
Ra	rrier Height:	0.0 feet		М	edium Truck	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0		ŀ	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%
• • • •	ist. to Barrier:	100.0 feet		Noise Sa	ource Eleva	tions (in f	oot)		
Centerline Dist.	to Observer:	100.0 feet		NOISE SC		2.000	eei)		
Barrier Distance	to Observer:	0.0 feet		Modiu	Autos: m Trucks:				
Observer Height	(Above Pad):	5.0 feet				4.000	Crada Ad	livotmont	
•	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment:					
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)		
	Road Grade:	0.0%			Autos:	96.607			
	Left View:	-90.0 degree	es	Mediu	m Trucks:	96.566			
	Right View:	90.0 degree	es	Heav	y Trucks:	96.608			
FHWA Noise Mod	lel Calculation	15							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	ten Ber	m Atten
Autos:	71.78	0.42	-4.	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.82	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.77	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	Leq I	Evening	Leq Nigh	nt	Ldn	CI	VEL
Autos:	60	6.6	64.7	62.9		56.9	65.	5	66.1
Medium Trucks:	60	0.0	58.5	52.1		50.6	59.0	0	59.3
Heavy Trucks:	60	0.0	58.6	49.6		50.8	59.2	2	59.3

<u></u>					
Vehicle Noise:	68.2 66	6.4 6	3.5 58	3.6 67.1	67.6
Centerline Distance to	Noise Contour (in feet)				
		70 dBA	65 dBA	60 dBA	55 dBA
	Lo	dn: 65	139	300	645
	CNE	EL: 69	150	322	694

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: w/o Sand Canyon Av.

Job Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC INF	PUT DATA			NOIS	E MODE	L INPUT	S		
Highway Data				Site Con	ditions (Har	d=10, Se	oft = 15)			
Average Daily 7	Traffic (Adt): 21	1,000 vehicles				Autos:	15			
Peak Hour I	Percentage:	10%		Me	dium Trucks	(2 Axles):	15			
Peak Ho	our Volume: 2	2,100 vehicles		He	avy Trucks (3	3+ Axles):	15			
Veh	nicle Speed:	60 mph		Vehicle I	Vix					
Near/Far Lar	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily	
Site Data					Autos	-		9.6%	_	
Bar	rier Height:	0.0 feet		Me	edium Trucks	: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wa		0.0		F	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%	
Centerline Dis	t. to Barrier:	100.0 feet		Noise Source Elevations (in feet)						
Centerline Dist. t	o Observer:	100.0 feet		Autos: 2.000						
Barrier Distance t	o Observer:	0.0 feet		Medium Trucks: 4.000						
Observer Height (A	Above Pad):	5.0 feet			y Trucks:	8.006	Grade Ad	iustment		
Pa	d Elevation:	0.0 feet		i icav	y Trucks.	0.000	Orado riaj	jadii iloi it.	0.0	
Roa	d Elevation:	0.0 feet		Lane Eq	uivalent Dist	ance (in	feet)			
F	Road Grade:	0.0%			Autos:	92.547				
	Left View:	-90.0 degrees	i	Mediur	n Trucks:	92.504				
	Right View:	90.0 degrees	i	Heav	y Trucks:	92.547				
FHWA Noise Mode	l Calculations									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten	
Autos:	73.22	0.02	-4.1	1	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-17.22	-4.1	1	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-21.17	-4.1	1	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (witho	ut Topo and ba	arrier atter	nuation)						
VehicleType	Leq Peak Hour	Leq Day	Leq E	vening	Leq Night	4	Ldn	CI	VEL	
Autos:	67.9	66	6.0	64.3	Ę	58.2	66.8	3	67.4	
Medium Trucks:	61.2	2 59	9.6	53.3	5	51.7	60.2	2	60.4	

	_ •	•	,			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	67.9	66.0	64.3	58.2	66.8	67.4
Medium Trucks:	61.2	59.6	53.3	51.7	60.2	60.4
Heavy Trucks:	60.8	59.4	50.4	51.6	60.0	60.1
Vehicle Noise:	69.4	67.6	64.8	59.8	68.4	68.8

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	78	168	361	778
CNEL:	84	181	389	838

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: e/o Sand Canyon. Av.

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DA	ATA		NOISE MODEL INPUTS					
Highway Data			-		Site Con	ditions (l	Hard = 10, 3	Soft = 15)		
Average Daily	Traffic (Adt):	31,900 v	ehicles				Auto	s: 15		
	Percentage:	10%			Med	dium Truc	ks (2 Axles): 15		
Peak H	lour Volume:	3,190 v	ehicles		Hea	avy Truck	s (3+ Axles): 15		
Ve	ehicle Speed:	60 m	nph		Vehicle I	Mix				
Near/Far La	ne Distance:	76 fe	eet			cleType	Day	Evening	Night	Daily
Site Data						Αι	itos: 77.5	_	9.6%	97.42%
Ba	rrier Height:	0.0	feet		Мє	edium Tru	cks: 84.8	% 4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0	.001		F	leavy Tru	cks: 86.5	% 2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0	feet		Naina Ca	············· Fla		factl		
Centerline Dist.		100.0			Noise So		vations (in	reet)		
Barrier Distance	to Observer:	0.0			A 4 1'	Autos:				
Observer Height	(Above Pad):	5.0	feet			n Trucks:		Crada Aa	li a 4 ma a m 4	
•	ad Elevation:	0.0			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
Ro	ad Elevation:	0.0			Lane Equ	uivalent l	Distance (ii	ı feet)		
	Road Grade:	0.0%	, 0			Autos:	92.547			
	Left View:		degrees	,	Mediur	n Trucks:	92.504			
	Right View:		degrees		Heav	y Trucks:	92.547			
FHWA Noise Mod	lel Calculatio	ns								
VehicleType	REMEL	Traffic I	Flow	Distance	Finite	Road	Fresnel	Barrier At	ten Ber	m Atten
Autos:	73.22	2	1.84	-4.1	1	-1.20	-4.8	7 0.	000	0.000
Medium Trucks:	83.68	3 -	15.40	-4.1	1	-1.20	-4.9	7 0.0	000	0.000
Heavy Trucks:	87.33	3 -	19.36	-4.1	1	-1.20	-5.10	6 0.	000	0.000
Unmitigated Nois	e Levels (wit	hout Topo	and b	arrier atter	nuation)					
VehicleType	Leq Peak Ho	our Le	eq Day	Leq E	vening	Leq N	light	Ldn	CI	VEL
Autos:	6	9.7	67	7.8	66.1		60.0	68.	6	69.3
Medium Trucks:	6	3.0	61	1.5	55.1		53.6	62.	0	62.3
Heavy Trucks:	6	2.7	61	1.2	52.2		53.4	61.	8	61.9
Vehicle Noise:	7	1.2	69	9.5	66.6		61.6	70.	2	70.7

70 dBA

103

111

Ldn: CNEL: 65 dBA

222

239

60 dBA

477

514

55 dBA

1,028

1,108

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Laguna Canyon Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				NC	ISE MODE	L INPUT	S				
Highway Data				S	ite Con	ditions (F	lard = 10, S	oft = 15)					
Average Daily	Traffic (Adt):	19,100 vehicle	s				Autos	: 15					
Peak Hour	Percentage:	10%			Med	dium Truc	ks (2 Axles)	: 15					
Peak H	lour Volume:	1,910 vehicle	s		Heavy Trucks (3+ Axles): 15								
Ve	ehicle Speed:	55 mph		V	ehicle N	Vix							
Near/Far La	ne Distance:	52 feet				cleType	Day	Evening	Night	Daily			
Site Data							tos: 77.5%	J	9.6%	,			
Ra	rrier Height:	0.0 feet			Me	edium Tru	cks: 84.8%	6 4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0			H	leavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%			
• • • •	ist. to Barrier:	100.0 feet						•					
Centerline Dist.		100.0 feet		N	oise So		vations (in f	eet)					
Barrier Distance		0.0 feet				Autos:	2.000						
Observer Height		5.0 feet				n Trucks:	4.000						
-	ad Elevation:	0.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0			
	ad Elevation: ad Elevation:	0.0 feet		Li	ane Eau	uivalent E	Distance (in	feet)					
	Road Grade:	0.0%				Autos:	96.607	,					
	Left View:	-90.0 degre	Δ C		Mediun	n Trucks:	96.566						
	Right View:	90.0 degre				y Trucks:	96.608						
	ragni view.	50.0 degre	03		r.our	y Trache.	00.000						
FHWA Noise Mod	el Calculation	s		<u> </u>									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	71.78	-0.01		-4.39		-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-17.25		-4.39		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-21.21		-4.39		-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Topo and	barrie	r attenu	ation)]			
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Eve	ening	Leq N	ight	Ldn	CI	VEL			
Autos:	66	.2	64.3		62.5		56.5	65.	1	65.7			
Medium Trucks:	59	.6	58.1		51.7		50.1	58.6	6	58.8			
Heavy Trucks:	59	.6	58.2		49.1		50.4	58.7	7	58.9			
Vehicle Noise:	67	.8	66.0		63.0		58.2	66.7	7	67.2			
Contorlino Distan	co to Noisa Co	antour (in foot	٠)										

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	60	130	280	604
CNEL:	65	140	302	650

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: b/w Pacifica and Banting

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	SE MODE	L INPUT	S	
Highway Data			Site Cor	ditions (Ha	rd = 10, S	oft = 15)		
Average Daily Traffic (Adt).	20,100 vehicle	es			Autos	: 15		
Peak Hour Percentage.	· ·		Ме	dium Trucks	(2 Axles)	: 15		
Peak Hour Volume:	2,010 vehicle	es	He	avy Trucks (3+ Axles)	: 15		
Vehicle Speed:	55 mph		Vehicle	Mix				
Near/Far Lane Distance.	52 feet				Day	Evening	Night	Doily
Site Data			ven	icleType Auto		Evening 12.9%	9.6%	<i>Daily</i> 97.42%
				Auto edium Truck			10.3%	1.84%
Barrier Height							10.3%	0.74%
Barrier Type (0-Wall, 1-Berm).			,	Heavy Truck	s: 86.5%	0 2.1%	10.6%	0.74%
Centerline Dist. to Barrier			Noise So	ource Eleva	tions (in f	eet)		
Centerline Dist. to Observer				Autos:	2.000	-		
Barrier Distance to Observer			Mediu	m Trucks:	4.000			
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation							•	
Road Elevation.			Lane Eq	uivalent Dis		feet)		
Road Grade.	0.0%			Autos:	96.607			
Left View	-90.0 degre	es	Mediu	m Trucks:	96.566			
Right View	90.0 degre	es	Heav	y Trucks:	96.608			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos: 71.7	78 0.21	-4.	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	10 -17.03	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	-20.98	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	lour Leq Day	y Leq	Evening	Leq Nigh	nt	Ldn	CI	VEL
Autos:	66.4	64.5	62.7		56.7	65.3	3	65.9
Medium Trucks:	59.8	58.3	51.9		50.4	58.8	3	59.1
Heavy Trucks:	59.8	58.4	49.4		50.6	59.0)	59.1
Vehicle Noise:	68.0	66.2	63.3		58.4	66.9	9	67.4
Centerline Distance to Noise	Contour (in fee	t)						

70 dBA

62

67

Ldn:

CNEL:

65 dBA

135

145

60 dBA

290

312

55 dBA

625

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: w/o Meridian

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data				5	Site Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	17,700 vehicle	s					Autos:	15		
Peak Hou	r Percentage:	10%			Me	dium Tru	icks (2	Axles):	15		
Peak I	Hour Volume:	1,770 vehicle	s		He	avy Truc	ks (3+	Axles):	15		
V	ehicle Speed:	55 mph		1	/ehicle l	Wiy					
Near/Far La	ane Distance:	52 feet		-		icleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%		9.6%	,
	arrier Height:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0			F	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet									
Centerline Dist		100.0 feet		^	Noise Sc	ource Ele			eet)		
Barrier Distance		0.0 feet				Autos		.000			
Observer Height		5.0 feet				n Trucks		.000	0 , 4 ,		
•	Pad Elevation:	0.0 feet			Heav	y Trucks	s: 8	.006	Grade Ad	justment.	0.0
Ro	oad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	nce (in f	feet)		
	Road Grade:	0.0%				Autos	s: 96	5.607			
	Left View:	-90.0 degre	es		Mediui	n Trucks	s: 96	5.566			
	Right View:	90.0 degre	es		Heav	y Trucks	s: 96	5.608			
FHWA Noise Mod	del Calculation	18									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos	: 71.78	-0.34		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks	: 82.40	-17.58		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks	: 86.40	-21.54		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	nout Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Ev	rening	Leq I	Night		Ldn	CI	VEL
Autos	: 65	5.8	63.9		62.2		56.	.1	64.7		65.4
Medium Trucks	: 59	9.2	57.7		51.4		49.	.8	58.3	3	58.5
Heavy Trucks	: 59	9.3	57.8		48.8		50.	.1	58.4	1	58.5
Vehicle Noise	: 67	7.4	65.7		62.7		57.	.8	66.4	4	66.9
Centerline Distar	nce to Noise C	ontour (in feet)								
				70 d	IBA	65 d	dBA	6	60 dBA	55	dBA

57

62

Ldn:

CNEL:

124

133

266

287

574

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Meridian and ICD

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DA	ΙΤΑ		NOISE MODEL INPUTS						
Highway Data					Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	18,000 ve	ehicles				A	ıtos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ucks (2 Ax	les):	15		
Peak H	lour Volume:	1,800 ve	ehicles		He	avy Truc	cks (3+ Ax	les):	15		
Ve	hicle Speed:	60 m	ph	-	Vehicle	Mix					
Near/Far La	ne Distance:	76 fe	et			icleType	, D	ay	Evening	Night	Daily
Site Data								~, 7.5%			97.42%
Ra	rrier Height:	0.0 fe	oot		M	edium Tr	rucks: 8	4.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	CCI		I	Heavy Tr	rucks: 8	6.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 fe	eet	-				<i>.</i> . •			
Centerline Dist.		100.0 fe		_	Noise So		evations	•	eet)		
Barrier Distance		0.0 fe				Autos					
Observer Height (5.0 fe				m Trucks	-				
	ad Elevation:	0.0 fe			Heav	y Trucks	s: 8.00	6	Grade Ad	iustment:	0.0
	ad Elevation: ad Elevation:	0.0 fe			Lane Eq	uivalent	t Distance	(in	feet)		
	Road Grade:	0.0%		-	<u> </u>	Autos			,		
,	Left View:	-90.0 d			Mediu	m Trucks					
	Right View:		degrees		Heav	y Trucks	s: 92.54	17			
FHWA Noise Mod	al Calaulation										
VehicleType	REMEL	Traffic F	low	Distance	Finite	Road	Fresne	1	Barrier Att	en Ber	m Atten
Autos:	73.22		-0.65	-4.1		-1.20		1.87		000	0.000
Medium Trucks:	83.68		7.89	-4.1		-1.20		1.97		000	0.000
Heavy Trucks:	87.33	-2	21.84	-4.1	11	-1.20	-4	5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo	and ba	rrier atte	nuation)						
VehicleType	Leg Peak Ho		q Day	1	vening	Leg	Night		Ldn	CI	VEL
Autos:	•	7.3	65.		63.6	·	57.5		66.2	2	66.8
Medium Trucks:	60).5	59.	0	52.6		51.1		59.5	5	59.8
Heavy Trucks:	60).2	58.	7	49.7		51.0		59.3	3	59.4
Vehicle Noise:	68	3.7	67.	0	64.1		59.1		67.7	7	68.2

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	70	151	326	702
CNEL:	76	163	351	756

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: b/w Enterprise and Gateway Bl.

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	37,200 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Ме	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	3,720 vehicles	S	He	avy Trucks (3+ Axles):	15		
Vehicle Speed:	60 mph		Vehicle I	Mix				
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data			Veri	Autos		J	9.6%	97.42%
				Autos edium Trucks			10.3%	1.84%
Barrier Height:				Heavy Trucks			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm):			'	leavy Trucks	5. 00.57	2.1 /0	10.076	0.7476
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:			Mediui	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:			I ano Ea	uivalent Dis	tanco (in	foot)		
Road Elevation:			Laile Ly		92.547	ieei)		
Road Grade:			Modiu		92.547			
Left View:					92.504			
Right View:	90.0 degree	es	пеач	y Trucks.	92.547			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 2.51	-4	.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	8 -14.73	-4	.11	-1.20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks: 87.3	3 -18.69	-4	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier att	enuation)					
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos:	70.4	68.5	66.7		60.7	69.3	3	69.9
Medium Trucks:	63.6	62.1	55.8	;	54.2	62.7	7	62.9
Heavy Trucks:	63.3	61.9	52.9	;	54.1	62.5	5	62.6
Vehicle Noise:	71.9	70.1	67.2		62.3	70.8	3	71.3
Centerline Distance to Noise	Contour (in feet)						

70 dBA

114

123

Ldn:

CNEL:

65 dBA

245

264

60 dBA

529

570

55 dBA

1,139

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: b/w Enterprise and I-5 NB Ramps

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOI	SE MOD	EL INPUT	S	
Highway Data			Site Cor	nditions (Ha	rd = 10, S	Soft = 15)		
Average Daily Traffic (Adt).	51,700 vehicle	S			Autos	s: 15		
Peak Hour Percentage.			Me	edium Trucks	s (2 Axles) <i>:</i> 15		
Peak Hour Volume.	5,170 vehicle	S	He	eavy Trucks	(3+ Axles) <i>:</i> 15		
Vehicle Speed.	60 mph		Vehicle	Miy				
Near/Far Lane Distance.	76 feet			nicleType	Day	Evening	Night	Daily
Site Data			101	Auto	_	•	9.6%	-
Barrier Height	0.0 feet		M	ledium Truck			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)				Heavy Truck			10.8%	0.74%
Centerline Dist. to Barrier								
Centerline Dist. to Observer			Noise S	ource Eleva	•	feet)		
Barrier Distance to Observer				Autos:	2.000			
			Mediu	m Trucks:	4.000			
Observer Height (Above Pad) Pad Elevation			Hea	vy Trucks:	8.006	Grade Ad	ljustment.	0.0
Road Elevation			Lane Equivalent Distance (in feet)					
Road Grade				Autos:	92.547	. 1001)		
Left View		00	Mediu	m Trucks:	92.504			
Right View	3 -			vy Trucks:	92.547			
Night view	90.0 degre	65	1164	vy Trucks.	32.541			
FHWA Noise Model Calculation	ons		1					
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road F	resnel	Barrier Att	ten Ber	m Atten
Autos: 73.2	22 3.93	-4	1.11	-1.20	-4.87	7 0.0	000	0.000
Medium Trucks: 83.6	68 -13.30	-4	1.11	-1.20	-4.97	7 0.0	000	0.000
Heavy Trucks: 87.3	-17.26	-4	1.11	-1.20	-5.16	6 0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier att	tenuation)					
VehicleType Leq Peak F	lour Leq Day	/ Leq	Evening	Leq Nigi	ht	Ldn	CI	VEL
Autos:	71.8	69.9	68.2		62.1	70.	7	71.3
Medium Trucks:	65.1	63.6	57.2 55.7 64.1				1	64.3
Heavy Trucks:	64.8	63.3	54.3 55.5 63.9					64.0
Vehicle Noise:	73.3	71.6	68.7	•	63.7	72.	3	72.8
Centerline Distance to Noise	Contour (in feet)						

70 dBA

142

153

Ldn:

CNEL:

65 dBA

306

329

60 dBA

659

709

55 dBA

1,419

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w I-5 NB Ramps and Technology Dr. W

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	ATA			N	IOISE	MODE	L INPUT	S	
Highway Data					Site	Conditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	53,500 v	vehicles	;				Autos:	15		
Peak Hour	Percentage:	10%	, D			Medium Tr	ucks (2	? Axles):	15		
Peak H	lour Volume:	5,350 \	vehicles	;		Heavy Tru	cks (3+	- Axles):	15		
Ve	hicle Speed:	60 ı	mph		Vehi	cle Mix					
Near/Far La	ne Distance:	76 f	eet			VehicleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.6%	,
Ra	rrier Height:	0.0	feet			Medium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	ICCL			Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0	feet								
Centerline Dist.		100.0			Nois	e Source E			eet)		
Barrier Distance			feet			Auto		2.000			
Observer Height			feet			edium Truck	_	4.000			
-	ad Elevation:		feet		F	leavy Truck	s: 8	3.006	Grade Ad	justment.	0.0
	ad Elevation: ad Elevation:		feet		Lane Equivalent Distance (in feet)						
	Road Grade:	0.0				Auto		2.547	,		
	Left View:		degree	ie.	lΛe	edium Truck		2.504			
	Right View:		degree			Heavy Truck		2.547			
	ragin view.	30.0	degree	:3	,	reavy rrack	o. o.	2.047			
FHWA Noise Mod	el Calculation	s			ı						
VehicleType	REMEL	Traffic	Flow	Distance	Fi	inite Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos:	73.22		4.08	-4.	11	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	•	-13.16	-4.	11	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33		-17.11	-4.	11	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	o and l	barrier atte	nuatio	on)]
VehicleType	Leq Peak Hou	ır L	eq Day	Leq	Evenir	ng Leq	Night		Ldn	CI	VEL
Autos:	72	2.0	7	70.1	6	68.3	62	2.3	70.9	9	71.5
Medium Trucks:	65	5.2	6	3.7	5	57.3	55	5.8	64.3	3	64.5
Heavy Trucks:	64	.9	6	3.5	5	54.4	55	5.7	64.0)	64.2
Vehicle Noise:	73	3.5	7	71.7	6	8.8	63	3.9	72.4	4	72.9
Contorlino Distan	co to Noiso C	ontour (in foot)								

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	145	313	674	1,452
CNEL:	156	337	726	1,563

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Techonology Dr. W and Ada

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (Ha	ard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	39,800 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Truck	s (2 Axles):	15		
Peak H	lour Volume:	3,980 vehicles	3	He	avy Trucks	(3+ Axles):	15		
Ve	ehicle Speed:	60 mph		Vehicle l	Mix				
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data					Auto		-	9.6%	-
Ra	rrier Height:	0.0 feet		Me	edium Truci	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0		H	leavy Truci	ks: 86.5%	2.7%	10.8%	0.74%
, ,	ist. to Barrier:	100.0 feet		Naine Or		-4: /: £	4)		
Centerline Dist.		100.0 feet		Noise Sc		ations (in fe	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height	(Above Pad):	5.0 feet			n Trucks:	4.000	0		
_	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Di	istance (in	feet)		
	Road Grade:	0.0%			Autos:	92.547			
	Left View:	-90.0 degree	es	Mediui	n Trucks:	92.504			
	Right View:	90.0 degree		Heav	y Trucks:	92.547			
FHWA Noise Mod			D'- (- · · ·	F '''.	D/	-	Davida A		
VehicleType	REMEL	Traffic Flow	Distance	Finite			Barrier Att		m Atten
Autos:	_		-4.1		-1.20	-4.87		000	0.000
Medium Trucks:			-4.1		-1.20	-4.97		000	0.000
Heavy Trucks:	87.33	-18.40	-4.1	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier atter	nuation)					
VehicleType	Leq Peak Ho	, ,		vening	Leq Nig	ght	Ldn		VEL
Autos:).7	68.8	67.0		61.0	69.6	3	70.2
Medium Trucks:			62.4	56.1		54.5	63.0		63.2
Heavy Trucks:	63	3.6	62.2	53.2		54.4	62.8	3	62.9
Vehicle Noise:	72	2.2	70.4	67.5		62.6	71.1	1	71.6

70 dBA

119

128

Ldn:

CNEL:

65 dBA

257

277

60 dBA

553

596

55 dBA

1,192

1,284

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Ada

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				NOISE	MODE	L INPUT	S	
Highway Data				S	ite Condition	s (Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	35,300 vehicle	s				Autos:	15		
Peak Hour	Percentage:	10%			Medium 7	Trucks (2	2 Axles):	15		
Peak H	lour Volume:	3,530 vehicle	s		Heavy Tr	rucks (3+	- Axles):	15		
Ve	hicle Speed:	60 mph		V	ehicle Mix					
Near/Far La	ne Distance:	76 feet			VehicleTy	ne	Day	Evening	Night	Daily
Site Data					V OT HOTO T Y	Autos:	77.5%	•		97.42%
Ra	rrier Height:	0.0 feet			Medium	Trucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			Heavy	Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	,	100.0 feet								
Centerline Dist.		100.0 feet		N	oise Source		•	eet)		
Barrier Distance		0.0 feet					2.000			
Observer Height		5.0 feet			Medium Truc	cks:	4.000			
_	ad Elevation:	0.0 feet			Heavy Truc	cks:	8.006	Grade Adj	ustment	: 0.0
	ad Elevation: ad Elevation:	0.0 feet		1.	ane Equivale	nt Dista	nce (in	feet)		
	Road Grade:	0.0%					2.547			
	Left View:				Medium Truc		2.504			
		-90.0 degre			Heavy Truc		2.547			
	Right View:	90.0 degre	es		Heavy Huc	ns. 3	2.547			
FHWA Noise Mod	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.28		-4.11	-1.20)	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.96		-4.11	-1.20)	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.92		-4.11	-1.20)	<i>-5.</i> 16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r attenu	ation)					
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Eve	ening Le	q Night		Ldn	CI	NEL
Autos:	70).2	68.3		66.5	60).5	69.1		69.7
Medium Trucks:	63	3.4	61.9		55.5	54	1.0	62.5	5	62.7
Heavy Trucks:	63	3.1	61.7		52.6	53	3.9	62.2	<u> </u>	62.4

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	110	237	511	1,100
CNEL:	118	255	550	1,185

67.0

62.1

69.9

70.6

71.1

Vehicle Noise:

71.7

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: w/o Marine Wy.

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				Г	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	36,700 vehicle	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak I	Hour Volume:	3,670 vehicle	S		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		V	ehicle l	Miy					
Near/Far La	ane Distance:	76 feet		-		icleType	e	Day	Evening	Night	Daily
Site Data					70		Autos:	77.5%		9.6%	-
	rrier Height:	0.0 feet			М	edium 7		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0 feet				leavy 7		86.5%		10.8%	0.74%
- ' '	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		۸	loise So			ns (in fe	et)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	-	.000	0 1- 4-1		0.0
•	Pad Elevation:	0.0 feet			Heav	y Truck	rs: E	3.006	Grade Ad	justment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	s: 92	2.547			
	Left View:	-90.0 degre	es		Mediu	m Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547			
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.45		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.79		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.75		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	ıation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	_		68.5		66.7		60		69.3		69.9
Medium Trucks:			62.1		55.7		54		62.6		62.9
Heavy Trucks:			61.8		52.8		54		62.4		62.5
Vehicle Noise:	71	.8	70.1		67.2		62	.2	70.8	3	71.3
Centerline Distant	ce to Noise Co	ontour (in feet)		,			,			
				70 d	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

113

122

243

262

524

564

1,129

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Technology

Job Number: 8141

Analyst: B. Lawson

SITE SI	PECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data				3	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Tr	affic (Adt):	36,900 vehicle	s					Autos:	15		
Peak Hour Po	. ,	10%			Me	dium Tru	ıcks (2	Axles):	15		
	ır Volume:	3,690 vehicle	S		He	avy Truc	ks (3+	Axles):	15		
Vehic	cle Speed:	60 mph		,	/ehicle l	l <i>ilis</i>					
Near/Far Lane	Distance:	76 feet		,				Day	Funning	Niaht	Doilu
Cita Data					ven	icleType		Day 50/	Evening	Night	Daily
Site Data					A 4.		Autos:	77.5%		9.6%	
	er Height:	0.0 feet								10.3%	1.84%
Barrier Type (0-Wal	•	0.0			,	l eavy ir	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist.		100.0 feet		^	loise Sc	ource El	evatio	ns (in fe	eet)		
Centerline Dist. to	Observer:	100.0 feet				Autos		.000			
Barrier Distance to	Observer:	0.0 feet			Mediui	n Trucks		.000			
Observer Height (Al	bove Pad):	5.0 feet				y Trucks		.006	Grade Ad	iustment:	0.0
Pad	Elevation:	0.0 feet			,						
Road	Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	nce (in	feet)		
Ro	oad Grade:	0.0%				Autos		2.547			
	Left View:	-90.0 degre	es		Mediui	n Trucks	s: 92	2.504			
F	Right View:	90.0 degre	es		Heav	y Trucks	s: 92	2.547			
FHWA Noise Model	Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.47		-4.11		-1.20		<i>-4.</i> 87	0.0	000	0.000
Medium Trucks:	83.68	-14.77		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.72		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise L	Levels (with	out Topo and	barrie	er atteni	uation)						
VehicleType L	eq Peak Ho	ur Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	70	0.4	68.5		66.7		60.	.7	69.3	3	69.9
Medium Trucks:	63	3.6	62.1		55.7		54.	.2	62.7	7	62.9
Heavy Trucks:	63	3.3	61.9	52.8 54.1 62.4					62.6		
Vehicle Noise:	71	.9	70.1		67.2		62.	.3	70.8	3	71.3
Centerline Distance	to Noise C	ontour (in feet)								

70 dBA

113

122

Ldn: CNEL: 65 dBA

244

263

60 dBA

526

567

55 dBA

1,133

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: s/o Barranca Pkwy./Muirlands Bl.

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS					
Highway Data			Site Cond	itions (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	35,900 vehicles	3			Autos:	15		
Peak Hour Percentage:	10%		Medi	um Trucks (2	2 Axles):	15		
Peak Hour Volume:	3,590 vehicles	S	Heav	vy Trucks (3-	+ Axles):	15		
Vehicle Speed:	60 mph		Vehicle Mi	iy				
Near/Far Lane Distance:	76 feet			leType	Day	Evening	Night	Daily
Site Data				Autos:	77.5%		9.6%	97.42%
Barrier Height:	0.0 feet		Med	lium Trucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		He	eavy Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		M-' 0		· · · · · · · · · · · · · · · · · · ·	4)		
Centerline Dist. to Observer:	100.0 feet		Noise Sou	rce Elevatio		eet)		
Barrier Distance to Observer:	0.0 feet				2.000			
Observer Height (Above Pad):	5.0 feet		Medium		4.000	Orodo Ad		0.0
Pad Elevation:	0.0 feet		Heavy	Trucks:	8.006	Grade Ad	justment.	0.0
Road Elevation:	0.0 feet		Lane Equi	ivalent Dista	nce (in	feet)		
Road Grade:	0.0%			Autos: 9	2.547			
Left View:	-90.0 degree	es	Medium	Trucks: 9	2.504			
Right View:	90.0 degree	es	Heavy	Trucks: 9	2.547			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite R	Road Fre	snel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 2.35	-4.1	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6		-4.1		-1.20	<i>-4.97</i>		000	0.000
Heavy Trucks: 87.3	3 -18.84	-4.1	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atten	uation)					
VehicleType Leq Peak He	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL
Autos: 7	0.3	68.4	66.6	60).5	69.2	2	69.8
		62.0	55.6	54	1.1	62.5		62.8
Heavy Trucks:	33.2	61.7	52.7	54	1.0	62.3	3	62.4
Vehicle Noise:	' 1.7	70.0	67.1	62	2.1	70.7	7	71.2

70 dBA

111

120

Ldn:

CNEL:

65 dBA

240

258

60 dBA

516

556

55 dBA

1,113

1,198

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: n/o Barranca Pkwy./Muirlands Bl.

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)		
Average Daily Traffic (Adt):	42,700 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Ме	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	4,270 vehicles	S	He	avy Trucks (3+ Axles):	15		
Vehicle Speed:	60 mph		Vehicle	Mix				
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data			Ven	Autos			9.6%	-
			1.4	edium Trucks			10.3%	1.84%
Barrier Height:								0.74%
Barrier Type (0-Wall, 1-Berm):			'	leavy Trucks	. 00.5 /c	2.1 /0	10.8%	0.7476
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:			Mediu	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:			Lane Equivalent Distance (in feet)					
Road Elevation:			Lane Eq			reet)		
Road Grade:					92.547			
Left View:					92.504			
Right View:	90.0 degree	es	Heav	y Trucks:	92.547			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 3.10	-4	l.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	8 -14.13	-4	l.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.3	3 -18.09	-2	l.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier att	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos:	71.0	69.1	67.3		61.3	69.9	9	70.5
Medium Trucks:	64.2	62.7	56.4 54.8 63.3					63.5
Heavy Trucks:	3.9	62.5	53.5 54.7 63.1					
Vehicle Noise:	72.5	70.7	67.8		62.9	71.4	4	71.9
Centerline Distance to Noise	Contour (in feet)						

70 dBA

125

135

Ldn:

CNEL:

65 dBA

269

290

60 dBA

580

624

55 dBA

1,249

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: s/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				1	VOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	42,700 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	4,270 vehicle	es		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		1	/ehicle l	Viix					
Near/Far La	ne Distance:	76 feet				icleType	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		_	Voice Co		lovotio	no (in fo			
Centerline Dist.	to Observer:	100.0 feet			Voise So			•	et)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auto n Truck		2.000 1.000			
Observer Height	(Above Pad):	5.0 feet					_		Grade Ad	iustmont:	0.0
P	ad Elevation:	0.0 feet			пеач	y Truck	(S. C	3.006	Grade Auj	usim o ni.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediui	n Truck	rs: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	rs: 92	2.547			
FHWA Noise Mod	lel Calculatior	1S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	3.10		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.13		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.09		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout Topo and	barri	ier atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	7′	1.0	69.1		67.3		61	.3	69.9)	70.5
Medium Trucks:	64	4.2	62.7		56.4		54	.8	63.3	3	63.5
Heavy Trucks:	60	3.9	62.5		53.5		54	.7	63.1		63.2
Vehicle Noise:	72	2.5	70.7		67.8		62	.9	71.4	1	71.9
Centerline Distan	ce to Noise C	ontour (in fee	t)								
				70 a	IBA .	65	dBA	6	0 dBA	55	dBA

125

135

269

290

Ldn:

CNEL:

1,249

1,345

580

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	l = 10, Sc	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	10%			dium Trucks (avy Trucks (3	•			
Vehicle Speed: Near/Far Lane Distance:	60 mph	-	Vehicle l		Day	Evening	Night	Daily
Site Data				Autos:			-	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer:	0.0 100.0 feet		F	edium Trucks: Heavy Trucks: Durce Elevation	86.5% ons (in fe	2.7%	10.3% 10.8%	1.84% 0.74%
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	0.0 feet 5.0 feet			m Trucks:	2.000 4.000 8.006	Grade Adj	iustment:	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent Dista	ance (in	feet)		
Road Grade: Left View: Right View:	-90.0 degree			m Trucks: 9	92.547 92.504 92.547			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 2.71	-4.1	11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6 Heavy Trucks: 87.3		-4.1 -4.1		-1.20 -1.20	-4.97 -5.16		000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	nuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq E	vening	Leq Night		Ldn	CI	VEL
Autos:	70.6	68.7	67.0	6	0.9	69.5	5	70.1
		62.3	56.0 54.4 62.9				63.1	
		62.1	53.1 54.3 62.7					62.8
Vehicle Noise:	72.1	70.3	67.4	6	2.5	71.1	1	71.5
Centerline Distance to Noise	Contour (in feet)						

70 dBA

118

127

Ldn:

CNEL:

65 dBA

253

273

60 dBA

546

588

55 dBA 1,176

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: s/o Toledo Wy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA				NOISE	MODE	L INPUT	S	
Highway Data			Site	Conditio	ns (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	31,500 vehicles	S				Autos:	15		
Peak Hour Percentage:	10%			Medium	Trucks (2	Axles):	15		
Peak Hour Volume:	3,150 vehicles	3		Heavy 7	Trucks (3+	- Axles):	15		
Vehicle Speed:	60 mph		Voh	nicle Mix					
Near/Far Lane Distance:	76 feet		ver	VehicleT	ivno	Day	Evening	Night	Daily
Site Data				veriicie i	Autos:	77.5%		9.6%	-
				Modium	n Trucks:	84.8%		10.3%	1.84%
Barrier Height:					y Trucks:	86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm):				i icav	y Trucks.	00.576	2.1 /0	10.076	0.7476
Centerline Dist. to Barrier:			Noi	se Source	e Elevatio	ns (in fe	eet)		
Centerline Dist. to Observer:				Α	utos: 2	2.000			
Barrier Distance to Observer:			Λ	/ledium Tru	ucks: 4	4.000			
Observer Height (Above Pad):				Heavy Tru	ucks: 8	3.006	Grade Adj	iustment:	0.0
Pad Elevation:			Lane Equivalent Distance (in feet)						
Road Elevation:			Autos: 92.547						
Road Grade:				A Medium Tru		2.54 <i>1</i> 2.504			
Left View:	3			Heavy Tru	-	2.504 2.547			
Right View:	90.0 degree	es		пеаvy III	JCKS. 91	2.547			
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distanc	e l	Finite Road	d Fres	snel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 1.78		4.11	-1.2	20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	8 -15.46		4.11	-1.2	20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks: 87.3	3 -19.41		4.11	-1.2	20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier at	tenuat	tion)					
VehicleType Leq Peak H	our Leq Day	Led	q Even	ing L	.eq Night		Ldn	CI	VEL
Autos:	69.7	67.8		66.0	60	0.0	68.6	6	69.2
Medium Trucks:	62.9	61.4		55.0	53	3.5	62.0)	62.2
Heavy Trucks:	62.6	61.2		52.1	53	3.4	61.7	7 <u> </u>	61.9
Vehicle Noise:	71.2	69.4		66.5	61	.6	70.1		70.6
Centerline Distance to Noise	Contour (in feet,)		T					

70 dBA

102

110

Ldn: CNEL: 65 dBA

220

237

60 dBA

473

510

55 dBA

1,020

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: n/o Toledo Wy.

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOISE	MODE	L INPUT	S		
Highway Data			Site Condi	tions (Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume: Vehicle Speed:	31,400 vehicles 10% 3,140 vehicles 60 mph		Mediu Heav						
Near/Far Lane Distance:	76 feet		Vehicle		Day	Evening	Night	Daily	
Site Data			70711010	Autos:	77.5%		9.6%		
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad):	0.0 feet 0.0 100.0 feet 100.0 feet 0.0 feet 5.0 feet		Hea		84.8% 86.5% ns (in fe 2.000 4.000	2.7%	10.3% 10.8%	1.84% 0.74%	
Pad Elevation: Pad Elevation: Road Elevation: Road Grade: Left View: Right View:	0.0 feet 0.0 feet 0.0% -90.0 degree		Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547						
FHWA Noise Model Calculation	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite Ro	oad Fres	snel	Barrier Atte	en Ber	m Atten	
Autos: 73.2 Medium Trucks: 83.6 Heavy Trucks: 87.3	8 -15.47	-4. -4. -4.	11 -	1.20 1.20 1.20	-4.87 -4.97 -5.16	0.0 0.0 0.0	000	0.000 0.000 0.000	
Unmitigated Noise Levels (wit	hout Topo and I	barrier atte	nuation)						
VehicleType Leq Peak He	our Leq Day	Leq	Evening	Leq Night		Ldn	CI	VEL	
Medium Trucks: 6	62.9	67.8 61.4 61.2	66.0 55.0 52.1	60 53 53	.5	68.6 62.0 61.7)	69.2 62.2 61.9	
	71.2	69.4	66.5	61		70.1		70.6	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	102	219	472	1,018
CNEL:	110	236	509	1,096

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: s/o Irvine Bl. / Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DA	ATA			NC	ISE MODE	L INPUT	S			
Highway Data					Site Con	ditions (F	lard = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	33,100 v	ehicles				Autos	: 15				
Peak Hour	Percentage:	10%			Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15							
Peak H	Hour Volume:	3,310 v	ehicles									
Ve	ehicle Speed:	60 m	nph		Vehicle I	Mix						
Near/Far La	ne Distance:	76 fe	eet			icleType	Day	Evening	Night	Daily		
Site Data							tos: 77.5%	J	9.6%			
Ra	rrier Height:	0.0	foot		Me	edium Tru	cks: 84.8%	6 4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0	icci		ŀ	Heavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%		
• • • •	ist. to Barrier:	100.0	feet									
Centerline Dist.		100.0			Noise So		vations (in f	eet)				
Barrier Distance		0.0				Autos:	2.000					
Observer Height		5.0				m Trucks:	4.000					
-	ad Elevation:	0.0			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
	ad Elevation:	0.0			Lane Eq	uivalent [Distance (in	feet)				
	Road Grade:	0.0%			Autos: 92.547							
	Left View:		degree:	•	Mediu	m Trucks:	92.504					
	Right View:		degree			y Trucks:	92.547					
	ragin view.	30.0	uegree	5	77047	y Truono.	02.0+1					
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic I	Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	73.22		2.00	-4.1	1	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-	15.24	-4.1	1	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-	19.20	-4.1	1	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo	o and b	arrier atter	nuation)							
VehicleType	Leg Peak Hou		eq Day		vening	Leg N	ight	Ldn	CI	VEL		
Autos:	69	.9	6	8.0	66.2	·	60.2	68.8	3	69.4		
Medium Trucks:	63	3.1	6	1.6	55.3		53.7	62.2	2	62.4		
Heavy Trucks:	62	8	6	1.4	52.4		53.6	62.0)	62.1		
Vehicle Noise:		.4	6	9.6	66.7		61.8	70.3	3	70.8		
Contorlino Distan	co to Noiso C	ontour (i	n foot)									

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	105	227	489	1,054
CNEL:	114	245	527	1,135

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	DATA				r	NOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	40,000	vehicles	6					Autos:	15		
Peak Hour	Percentage:	10%	6			Me	dium Tr	ucks (2	? Axles):	15		
Peak F	lour Volume:	4,000	vehicles	6		He	avy Tru	cks (3+	- Axles):	15		
Ve	ehicle Speed:	60	mph			Vehicle l	Mix					
Near/Far La	ne Distance:	76	feet				icleType	Э	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	_
Ba	rrier Height:	0.0	feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0	1001			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0	feet			Noise So	ouroo E	lovatio	ns (in f	201		
Centerline Dist.	to Observer:	100.0	feet		-	NOISE SC	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0	feet			Madiu	Auto m Truck		4.000			
Observer Height	(Above Pad):	5.0	feet					_		Grade Ad	liustmont	. 00
P	ad Elevation:	0.0	feet			пеач	y Truck	is. (3.006	Grade Auj	justin o ni	. 0.0
Ro	ad Elevation:	0.0	feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0	%				Auto	s: 92	2.547			
	Left View:	-90.0	degree	s		Mediu	m Truck	s: 92	2.504			
	Right View:	90.0	degree	s		Heav	y Truck	rs: 92	2.547			
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic	Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	rm Atten
Autos:	73.22		2.82		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		-14.42		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33		-18.37		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	o and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	ur L	.eq Day		Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	70).7	(8.8		67.1		61	.0	69.6	6	70.2
Medium Trucks:	64	1.0		52.4		56.1		54	.5	63.0)	63.2
Heavy Trucks:	63	3.6	(52.2		53.2		54	.4	62.8	3	62.9
Vehicle Noise:	72	2.2	-	70.4		67.6		62	2.6	71.2	2	71.6
Centerline Distan	ce to Noise C	ontour ((in feet))								
					70 (dBA	65	dBA	6	60 dBA	55	dBA

120

129

258

277

555

598

Ldn:

CNEL:

1,196

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy. Job Number: 8141 Road Segment: n/o Commercentre Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DAT	4			N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	53,000 vehic	cles					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	5,300 vehic	cles		Hea	avy Trud	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		V	ehicle I	Иiy					
Near/Far La	ne Distance:	88 feet		•		cleType	ė	Day	Evening	Night	Daily
Site Data					• • • • • • • • • • • • • • • • • • • •		Autos:	77.5%		9.6%	-
	uuiau Haiadat.	0.0 foo	<u> </u>		Ме	edium Ti		84.8%		10.3%	1.84%
	rrier Height:	0.0 fee 0.0				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-W Centerline Di	•	100.0 feet									
Centerline Dist.		100.0 feet		۸	loise So	urce E	levatio	ns (in fe	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet			Mediur	n Truck	s: 4	.000			
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment.	0.0
	ad Elevation: ad Elevation:	0.0 feet		1	ane Equ	uivalen	t Distai	nce (in t	feet)		
	Road Grade:	0.0%			u = 4	Auto).850			
	Left View:		rooo		Mediur	n Truck	-	9.805			
	Right View:	-90.0 deg 90.0 deg				y Truck		9.850			
	Night view.	90.0 deg	1662		ricav _.	y Truck	o. oc	7.000			
FHWA Noise Mod	el Calculation	ns									
VehicleType	REMEL	Traffic Flov	v Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3 4.4	12	-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-12.8	32	-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-16.	77	-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo ai	nd barr	ier attenu	ıation)						
VehicleType	Leq Peak Ho	our Leq E)ay	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	7	1.1	69.2		67.4		61	.4	70.0)	70.6
Medium Trucks:	6	4.5	63.0		56.6		55	.1	63.5	5	63.7
Heavy Trucks:	6	4.5	63.1		54.0		55	.3	63.6	6	63.8
Vehicle Noise:	7.	2.7	70.9		67.9		63	.1	71.6	3	72.1

Centerline Distance to Noise Contour (in feet)		70 dBA 65 dBA 60 dBA 55 dBA 128 276 595 1,282 138 207 640 1,380							
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	128	276	595	1,282					
CNEL:	138	297	640	1,380					

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: s/o SR-241 Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	ATA		NOISE MODEL INPUTS								
Highway Data					Site Con	ditions (F	Hard = 10, Se	oft = 15)					
Average Daily	Traffic (Adt):	31,000 ve	ehicles				Autos:	15					
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Axles):	15					
Peak H	lour Volume:	3,100 ve	ehicles		He	avy Truck	s (3+ Axles):	15					
Ve	ehicle Speed:	50 m	ıph	1	Vehicle Mix								
Near/Far La	ne Distance:	70 fe	eet	_		icleType	Day	Evening	Night	Daily			
Site Data							itos: 77.5%		9.6%	_			
Ra	rrier Height:	0.0 f	- - - -		Me	edium Tru	cks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0	CCI		ŀ	leavy Tru	cks: 86.5%	2.7%	10.8%	0.74%			
Centerline Di	•	100.0 f	eet	_				1					
Centerline Dist.		100.0 f			voise Sc		vations (in f	eet)					
Barrier Distance		0.0 f				Autos:							
Observer Height		5.0 f			Mediui	n Trucks:	4.000						
	ad Elevation:	0.0 f			Heav	justment:	0.0						
	ad Elevation:	0.0 i		1	ane Fo	uivalent l	Distance (in	feet)					
	Road Grade:	0.0 1			Autos: 93.723								
	Left View:				Modiuu	n Trucks:							
			degrees			ry Trucks:							
	Right View:	90.0 (degrees		Heav	y Trucks.	93.723						
FHWA Noise Mod	el Calculation	15											
VehicleType	REMEL	Traffic F	Flow [Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	70.20)	2.51	-4.20)	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	81.00) -1	14.73	-4.19)	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	85.38	3 -1	18.69	-4.20)	-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	nout Topo	and bar	rier atteni	uation)								
VehicleType	Leq Peak Ho	ur Le	q Day	Leq Ev	rening	Leq N	ight	Ldn	CI	VEL			
Autos:	67	7.3	65.4	4	63.6		57.6	66.2	2	66.8			
Medium Trucks:	60	0.9	59.4	4	53.0		51.5	59.9	9	60.2			
Heavy Trucks:	6′	1.3	59.9	9	50.8		52.1	60.4	4	60.6			
Vehicle Noise:	69	9.0	67.3	3	64.2		59.4	68.0)	68.4			

70 dBA

73

79

65 dBA

158

170

60 dBA

340

365

55 dBA

733

787

Ldn: CNEL:

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o SR-241 Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA		NOISE MODEL INPUTS						
Highway Data					S	ite Con	ditions (H	lard = 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	28,000	vehicles	3				Autos:	15		
Peak Hour	Percentage:	109	%			Med	dium Truci	ks (2 Axles):	15		
Peak F	lour Volume:	2,800	vehicles	3		Hea	avy Trucks	s (3+ Axles):	15		
	hicle Speed:		mph		V	ehicle I	Vix				
Near/Far La	ne Distance:	88	feet			Vehi	icleType	Day	Evening	Night	Daily
Site Data							Au	tos: 77.5%	12.9%	9.6%	97.42%
Ва	rrier Height:	0.0) feet			Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0				F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0) feet		N	oise So	ource Flev	ations (in f	eet)		
Centerline Dist.	to Observer:	100.0) feet			0,00 00	Autos:	2.000			
Barrier Distance	to Observer:	0.0) feet			Modiur	n Trucks:	4.000			
Observer Height	(Above Pad):	5.0) feet				y Trucks:	8.006	Grade Ad	iustmant:	0.0
P	ad Elevation:	0.0) feet			neav	y Trucks.	0.000	Orace Au	justinent.	0.0
Ro	ad Elevation:	0.0) feet		Lane Equivalent Distance (in feet)						
	Road Grade:	0.0)%				Autos:	89.850			
	Left View:	-90.0) degree	es		Mediur	n Trucks:	89.805			
	Right View:	90.0) degree	es		Heav	y Trucks:	89.850			
FHWA Noise Mod	el Calculatio	ns									
VehicleType	REMEL	Traffi	c Flow	Dista	ance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	3	1.65		-3.92		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40)	-15.59		-3.92		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40)	-19.55		-3.92		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (wit	hout To	po and	barrier	attenu	ation)					
VehicleType	Leq Peak Ho	our	Leq Day	· I	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	6	8.3	(66.4		64.6		58.6	67.2	2	67.8
Medium Trucks:	6	1.7	(60.2		53.8		52.3	60.7	7	61.0
Heavy Trucks:	6	1.7	(60.3		51.3		52.5	60.9	9	61.0
Vehicle Noise:	6	9.9	(68.1		65.2		60.3	68.8	3	69.3

70 dBA

84

90

Ldn:

CNEL:

65 dBA

181

194

60 dBA

389

418

55 dBA 838

902

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Avenida Carlota

Job Number: 8141

Road Segment: w/o Ridge Route Dr.

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOIS	E MODE	L INPUT	S		
Highway Data			Site Con	ditions (Har	d=10, So	oft = 15)			
Average Daily Traffic (Adt):	10,200 vehicles	S			Autos:	15			
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15			
Peak Hour Volume:	1,020 vehicles	S	Heavy Trucks (3+ Axles): 15						
Vehicle Speed:	50 mph		Vehicle I	Vix					
Near/Far Lane Distance:	70 feet			cleType	Day	Evening	Night	Daily	
Site Data				Autos			9.6%	_	
Barrier Height:	0.0 feet		Me	edium Trucks	: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:	100.0 feet		M-1 0-	-	·	4)			
Centerline Dist. to Observer:	100.0 feet		Noise Sc	urce Elevat		eet)			
Barrier Distance to Observer:	0.0 feet			Autos:	2.000				
Observer Height (Above Pad):	5.0 feet		Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.						
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0	
Road Elevation:	0.0 feet		Lane Equ	uivalent Dist	ance (in	feet)			
Road Grade:	0.0%			Autos:	93.723				
Left View:	-90.0 degree	es	Mediur	n Trucks:	93.680				
Right View:	90.0 degree	es	Heav	y Trucks:	93.723				
FHWA Noise Model Calculation	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten	
Autos: 70.2	0 -2.32	-4.2	20	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 81.0	0 -19.56	-4.1	9	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 85.3	8 -23.52	-4.2	20	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wit	hout Topo and	barrier attei	nuation)						
VehicleType Leq Peak He	our Leq Day	Leq E	vening	Leq Nigh	<u> </u>	Ldn	CI	VEL	
Autos:	2.5	60.6	58.8		52.8	61.4	4	62.0	
Medium Trucks: 5	6.0	54.5	48.2	4	16.6	55.′	1	55.3	
Heavy Trucks: 5	6.5	55.0	46.0	4	17.3	55.6	5	55.7	
Vehicle Noise:	34.2	62.4	59.4	Ę	54.6	63.	1	63.6	

70 dBA

35

38

Ldn:

CNEL:

65 dBA

75

81

60 dBA

162

174

55 dBA

349

375

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Avenida Carlota

Job Number: 8141

Road Segment: w/o Paseo de Valencia

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic ((Adt): 17	,300 vehicles	6					Autos:	15			
Peak Hour Percen	centage: 10%				Medium Trucks (2 Axles): 15							
Peak Hour Volume:		1,730 vehicles			Heavy Trucks (3+ Axles): 15							
Vehicle Speed: Near/Far Lane Distance:		50 mph 70 feet		V	Vehicle Mix							
					VehicleType Day			Evening	Night	Daily		
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%	
Barrier Height:		0.0 feet 0.0			Medium Trucks: 84.8%				4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):					ŀ	Heavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:		100.0 feet 100.0 feet 0.0 feet			Noise Source Elevations (in feet)							
Centerline Dist. to Observer:					Autos: 2.000 Medium Trucks: 4.000							
Barrier Distance to Observer:												
Observer Height (Above Pad):		5.0 feet				y Trucks		3.006	Grade Ad	iustment:	0.0	
Pad Elevation:		0.0 feet			, i							
Road Elevation:		0.0 feet			Lane Equivalent Distance (in feet)							
Road Grade:		0.0%			Autos: 93.723							
Left View:		-90.0 degrees			Medium Trucks: 93.680							
Right View:		90.0 degrees			Heavy Trucks: 93.723							
FHWA Noise Model Calc	ulations											
VehicleType REN	1EL :	Traffic Flow	Dist	tance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	70.20	-0.03		-4.20	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-17.27		-4.19	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	eavy Trucks: 85.38		-21.22 -4		0 -1.20		<i>-5.16</i> 0.0		000	0.000		
Unmitigated Noise Level	s (withou	ıt Topo and I	barrie	r attenu	ation)							
VehicleType Leq Pe	eak Hour	ur Leq Day		Leq Evenin		Leq	Night		Ldn	CI	VEL	
Autos:	64.8	6	62.9		61.1		55.1		63.7	7	64.3	
Medium Trucks:	ocks: 58.3		56.8		50.5		48.9		57.4		57.6	
Heavy Trucks: 58		8 57.3		48.3			49.6		57.9		58.0	
Vehicle Noise: 66		64.7			61.7		56.9		65.4		65.9	
Centerline Distance to Noise Contour (in feet)												

70 dBA

50

53

Ldn:

CNEL:

65 dBA

107

115

60 dBA

231

248

55 dBA

497

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Avenida Carlota

Job Number: 8141

Road Segment: b/w Paseo de Valencia and El Toro Rd.

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily	Traffic (Adt):	36,300 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Trucks	s (2 Axles):	15		
Peak F	lour Volume:	3,630 vehicles	3	He	avy Trucks	(3+ <i>Axles</i>):	15		
Ve	ehicle Speed:	50 mph		Vehicle I	Mix				
Near/Far La	ane Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data					Auto		-	9.6%	-
	rrier Height:	0.0 feet		Ме	edium Truck	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0		F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%
, ,	ist. to Barrier:	100.0 feet		Noise Sc	ource Eleva	tions (in f	eet)		
Centerline Dist.	to Observer:	100.0 feet		110/30 00	Autos:	2.000			
Barrier Distance	to Observer:	0.0 feet		Mediu	n Trucks:	4.000			
Observer Height	(Above Pad):	5.0 feet				8.006	Grade Ad	iustment	. 0.0
P	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment.					0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	stance (in	feet)		
	Road Grade:	0.0%			Autos:	93.723			
	Left View:	-90.0 degree	es	Mediur	n Trucks:	93.680			
	Right View:	90.0 degree	es	Heav	y Trucks:	93.723			
FHWA Noise Mod	lel Calculation	าร							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	70.20	3.19	-4.2	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-14.05	-4.	19	-1.20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks:	85.38	-18.00	-4.2	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Nigi	ht	Ldn	CI	VEL
Autos:	6	8.0	66.1	64.3 58.3			66.9	9	67.5
Medium Trucks:	6	1.6	30.1	53.7 52.1 60.6				60.8	
Heavy Trucks:	62	2.0	60.6	51.5		52.8	61.1	1	61.3

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn: ¯	81	175	378	814						
CNEL:	87	188	406	875						

64.9

60.1

68.7

69.1

67.9

Vehicle Noise:

69.7

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Avenida Carlota

Road Segment: e/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT I	DATA				NO	DISE	MODE	L INPUT	S	
Highway Data					S	ite Con	ditions (Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	23,400	vehicles	6					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Trud	cks (2	Axles):	15		
Peak H	Hour Volume:	2,340	vehicles	6		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	50	mph		V	ehicle l	Miy					
Near/Far La	ne Distance:	70	feet				icleType		Day	Evening	Night	Daily
Site Data								utos:	77.5%	Ū	9.6%	
	rrior Unioht	0.0	feet			Ме	edium Tru	ıcks:	84.8%		10.3%	
Barrier Type (0-W	rrier Height:	0.0					leavy Tru		86.5%		10.8%	
• • •	ist. to Barrier:) feet									
Centerline Dist.					N	oise Sc	ource Ele	vatio	ns (in fe	eet)		
			feet				Autos:	: 2	.000			
Barrier Distance			feet			Mediur	n Trucks:	: 4	.000			
Observer Height	. ,		feet			Heav	y Trucks:	: 8	.006	Grade Ad	ljustment	: 0.0
	ad Elevation:) feet		Lane Equivalent Distance (in feet)							
Ro	ad Elevation:) feet		L	ane Eq	uivalent		-	feet)		
	Road Grade:	0.0)%				Autos.	93	.723			
	Left View:	-90.0	degree	es		Mediur	n Trucks.	: 93	.680			
	Right View:	90.0) degree	es		Heav	y Trucks:	93	.723			
FHWA Noise Mod	lel Calculation	15										
VehicleType	REMEL	Traffic	Flow	Distar	ice	Finite	Road	Fres	nel	Barrier At	ten Bei	m Atten
Autos:	70.20)	1.28		-4.20		-1.20		-4.87	0.	000	0.000
Medium Trucks:	81.00)	-15.95		-4.19		-1.20		-4.97	0.	000	0.000
Heavy Trucks:	85.38		-19.91		-4.20		-1.20		-5.16	0.	000	0.000
Unmitigated Nois	e Levels (with	out To	po and	barrier a	ttenu	ation)						
VehicleType	Leq Peak Ho	ur I	Leq Day	Le	eq Eve	ening	Leq N	light		Ldn	С	NEL
Autos:	66	5.1	(64.2		62.4		56.	4	65.	0	65.6
Medium Trucks:	59	9.7	į	58.1		51.8		50.	2	58.	7	58.9
Heavy Trucks:	60	0.1	į	58.6	6 49.6 50.9 59.2					59.3		
Vehicle Noise:	67	7.8	(66.0		63.0		58.	2	66.	8	67.2
Contorlino Distan	ce to Noise C	ontour	(in fact)	1								

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	61	131	282	607
CNEL:	65	141	303	653

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPE	CIFIC IN	PUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffi	ic (Adt): 2	0,000 vehicles	3					Autos:	15		
Peak Hour Perc		10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak Hour V	/olume:	2,000 vehicles	3		Heavy Trucks (3+ Axles): 15						
Vehicle	Speed:	50 mph		V	ehicle i	Mix					
Near/Far Lane Di	istance:	70 feet				icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
Barrier I	Heiaht.	0.0 feet			М	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1	•	0.0			I	Heavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to	,	100.0 feet			loisa Si	ource El	ovatio	ne (in fa	not)		
Centerline Dist. to Ob	bserver:	100.0 feet			0/36 30	Autos		2.000			
Barrier Distance to Ob	bserver:	0.0 feet			Modiu	Autos m Trucks		1.000			
Observer Height (Abov	∕e Pad):	5.0 feet				y Trucks		3.006	Grade Ad	iustmant:	
Pad Ele	evation:	0.0 feet			Heav	y Trucks	s. (5.000	Grade Adj	ustinont.	0.0
Road Ele	evation:	0.0 feet		L	ane Eq	uivalent	Dista	nce (in i	feet)		
Road	Grade:	0.0%				Autos	s: 90	3.723			
Le	eft View:	-90.0 degree	es		Mediu	m Trucks	s: 90	3.680			
Rigl	ht View:	90.0 degree	es		Heav	y Trucks	s: 90	3.723			
FHWA Noise Model Ca	lculations	<u> </u>									
VehicleType Ri	EMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	70.20	0.60		-4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-16.64		-4.19		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-20.59		-4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Lev	els (witho	out Topo and	barrie	r attenu	ation)						
VehicleType Leq	Peak Hou	r Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	65.	4	63.5		61.7		55	.7	64.3	3	64.9
Medium Trucks:	59.	0	57.5		51.1		49	.6	58.0)	58.2
Heavy Trucks:	59.	4	58.0	0 48.9 50.2 58.5 5					58.7		
Vehicle Noise:	67.	1	65.4		62.3		57	.5	66.′	1	66.5
Centerline Distance to	Noise Co	ntour (in feet)								

70 dBA

55

59

Ldn: CNEL: 65 dBA

118

127

60 dBA

254

273

55 dBA

547

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Job Number: 8141

Road Segment: n/o Commercentre Dr.

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily	Traffic (Adt):	33,000 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak H	lour Volume:	3,300 vehicles	S	He	avy Trucks (3+ <i>Axles):</i>	15		
Ve	ehicle Speed:	50 mph		Vehicle I	Miy				
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data					Auto		-	9.6%	,
	rrier Height:	0.0 feet		М	edium Truck			10.3%	1.84%
Barrier Type (0-W	•	0.0		ŀ	Heavy Truck	s: 86.5%		10.8%	0.74%
Centerline Di	,	100.0 feet		Noise Co	ourse Eleve	iono (in f	0041		
Centerline Dist.	to Observer:	100.0 feet		Noise St	ource Eleva		eei)		
Barrier Distance	to Observer:	0.0 feet		M = =!:	Autos:	2.000			
Observer Height ((Above Pad):	5.0 feet			m Trucks:	4.000	Crada Ad	iatmant	
•	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justrient	. 0.0
Roa	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)		
	Road Grade:	0.0%			Autos:	93.723			
	Left View:	-90.0 degree	es	Mediu	m Trucks:	93.680			
	Right View:	90.0 degree	es	Heav	y Trucks:	93.723			
FHWA Noise Mod	lel Calculation	าร							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	70.20	2.78	-4.	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-14.46	-4.	19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-18.42	-4.:	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	our Leq Day	Leq I	Evening	Leq Nigh	nt	Ldn	CI	NEL
Autos:	6	7.6	65.7	63.9		57.9	66.5	5	67.1
Medium Trucks:	6	1.1	59.6	53.3		51.7	60.2	2	60.4
Heavy Trucks:	6	1.6	60.1	51.1		52.4	60.7	7	60.8

Vehicle Noise:	69.3	67.5	64.5	59.7	68.2	68.7
Centerline Distance to	Noise Contour (in feet)					
			70 dBA	65 dBA	60 dBA	55 dBA
	L	_dn:	76	165	355	764
	CN	IEL:	82	177	381	821

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: n/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NO	ISE MODE	L INPUT	S	
Highway Data				Site Con	nditions (H	ard = 10, S	oft = 15)		
Average Daily	Traffic (Adt): 3	8,000 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Truci	ks (2 Axles):	15		
Peak H	lour Volume:	3,800 vehicles	3	He	avy Trucks	s (3+ Axles):	15		
Ve	hicle Speed:	50 mph	-	Vehicle	Mix				
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data					Au	tos: 77.5%	6 12.9%	9.6%	97.42%
Ва	rrier Height:	0.0 feet		M	edium Trud	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0		I	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet	-	Noisa Sa	ource Elev	ations (in f	oot)		
Centerline Dist.	to Observer:	100.0 feet	-	140/36 30	Autos:	2.000	ceij		
Barrier Distance	to Observer:	0.0 feet		Mediu	m Trucks:	4.000			
Observer Height	(Above Pad):	5.0 feet			y Trucks:	8.006	Grade Adj	iustment:	0.0
P	ad Elevation:	0.0 feet	-						
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)		
	Road Grade:	0.0%			Autos:	93.723			
	Left View:	-90.0 degree	S		m Trucks:	93.680			
	Right View:	90.0 degree	es	Heav	y Trucks:	93.723			
FHWA Noise Mod	el Calculations	3							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	70.20	3.39	-4.2	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-13.85	-4.1	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-17.80	-4.2	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (witho	out Topo and I	barrier atte	nuation)					
VehicleType	Leq Peak Hou	r Leq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL
Autos:	68.	2 6	66.3	64.5		58.5	67.1		67.7

Unmitigated Noise	e Levels (withou	t Topo and barri	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	68.2	66.3	64.5	58.5	67.1	67.7
Medium Trucks:	61.8	60.2	53.9	52.3	60.8	61.0
Heavy Trucks:	62.2	60.8	51.7	53.0	61.3	61.5
Vehicle Noise:	69.9	68.1	65.1	60.3	68.9	69.3

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	84	181	390	839
CNEL:	90	194	418	902

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	48,700 vehicle 10% 4,870 vehicle				dium Tru avy Truc	•	,			
	ehicle Speed: ane Distance:	60 mph 76 feet		V	ehicle I Vehi	cleType	Autos:	<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
Barrier Type (0-V	•	0.0 feet 0.0				edium Tr leavy Tr	ucks:	84.8% 86.5%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree			Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Gi Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547				Grade Ad	justment	: 0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	73.22 83.68	Traffic Flow 2 3.67 3 -13.56	5	e 4.11 4.11 4.11	Finite	Road -1.20 -1.20 -1.20	Fres	-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Nois VehicleType	e Levels (with Leq Peak Ho	_			ening	Leq	Night		Ldn	C	NEL
Autos: Medium Trucks: Heavy Trucks:	64	1.6 4.8 4.5	69.7 63.3 63.1		67.9 56.9 54.0		61. 55. 55.	4	70.5 63.9 63.6	9	71.1 64.1 63.8
Vehicle Noise:	73	3.1	71.3		68.4		63.	5	72.0)	72.5

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	136	294	633	1,363						
CNEL:	147	316	682	1,468						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Job Number: 8141

Road Segment: b/w Toledo Wy. and Jeronimo Rd.

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	56,200 vehicle	es				Aut	os:	15				
Peak Hour	Percentage:	10%			Med	dium Tru	cks (2 Axle	es):	15				
Peak H	Hour Volume:	5,620 vehicle	es		Hea	avy Truci	ks (3+ Axle	es):	15				
Ve	ehicle Speed:	60 mph		V	'ehicle I	Miy							
Near/Far La	ane Distance:	76 feet		_		cleType	Da	V	Evening	Night	Daily		
Site Data								.5%	12.9%		97.42%		
	rrier Height:	0.0 feet			Мє	edium Tru		.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0			H	leavy Tru	ıcks: 86	.5%	2.7%	10.8%	0.74%		
• • • •	ist. to Barrier:	100.0 feet											
Centerline Dist.		100.0 feet		٨	Noise Source Elevations (in feet)								
Barrier Distance		0.0 feet				Autos.							
Observer Height		5.0 feet				n Trucks.							
•	ad Elevation:	0.0 feet			Heav	y Trucks.	8.006	; (Grade Adj	iustment	0.0		
	0.0 feet		L	ane Equ	uivalent	Distance ((in fe	eet)					
	ad Elevation: Road Grade:	0.0%			-4-	Autos.	·	-					
	Left View:	-90.0 degre	200		Mediur	n Trucks.							
	Right View:	90.0 degre				y Trucks.							
	rugine view.	50.0 degre	,03		77007	y Tracke.	02.01.						
FHWA Noise Mod	lel Calculatio	ns											
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresnel	E	Barrier Att	en Ber	m Atten		
Autos:	73.22	2 4.30)	-4.11		-1.20	-4.	87	0.0	000	0.000		
Medium Trucks:	83.68	3 -12.94	ļ	-4.11		-1.20	-4.	97	0.0	000	0.000		
Heavy Trucks:	87.33	3 -16.90)	-4.11		-1.20	-5.	16	0.0	000	0.000		
Unmitigated Nois	e Levels (wit	hout Topo and	l barri	ier attenu	ıation)								
VehicleType	Leq Peak Ho	our Leq Da	У	Leq Ev	ening	Leq N	light		Ldn	CI	VEL		
Autos:	7	2.2	70.3		68.5		62.5		71.1		71.7		
Medium Trucks:	6	5.4	63.9		57.6		56.0		64.5	5	64.7		
Heavy Trucks:	6	5.1	63.7		54.7		55.9		64.3	3	64.4		

69.0

70 dBA

150

162

64.1

65 dBA

323

348

72.6

60 dBA

696

750

73.1

55 dBA

1,500

1,616

Vehicle Noise:

73.7

Centerline Distance to Noise Contour (in feet)

71.9

Ldn: CNEL:

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: n/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily Tr	affic (Adt): (32,400 vehicle	S					Autos:	15			
Peak Hour Pe	, ,	10%			Me	dium Tru	ıcks (2	Axles):	15			
Peak Hou	ır Volume:	6,240 vehicle	S		He	avy Truc	ks (3+	Axles):	15			
Vehic	cle Speed:	60 mph		V	'ehicle l	Miv						
Near/Far Lane	Distance:	76 feet				icleType		Day	Evening	Night	Daily	
Site Data					Vern		Autos:	77.5%		9.6%		
					1/1	edium Tr		84.8%		10.3%	1.84%	
	er Height:	0.0 feet				leavy Tr		86.5%		10.8%	0.74%	
Barrier Type (0-Wall	•	0.0			<u>'</u>	icavy 11	uons.	00.570	2.1 /0	10.070	0.7 4 70	
Centerline Dist.		100.0 feet		٨	loise Sc	ource Ele	evatio	ns (in fe	eet)			
Centerline Dist. to		100.0 feet				Autos	s: 2	.000				
Barrier Distance to		0.0 feet			Mediui	n Trucks	s: 4	.000				
Observer Height (Al		5.0 feet			Heav	y Trucks	s: 8	.006	Grade Ad	iustment:	0.0	
	Elevation:	0.0 feet	,	one Fa	ui ralant	Diotor	ann (in	foot)				
	Elevation:	0.0 feet			arie Eq	uivalent		•	reet)			
Ro	ad Grade:	0.0%				Autos		2.547				
_	Left View:	-90.0 degre				n Trucks		2.504				
F	Right View:	90.0 degree	es		Heav	y Trucks	s: 92	2.547				
FHWA Noise Model	Calculation	S										
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	73.22	4.75		-4.11		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-12.49		-4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-16.44		-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise L	evels (with	out Topo and	barrie	r attenu	ıation)							
VehicleType Le	eq Peak Hοι	ır Leq Day	/	Leq Ev	ening	Leq I	Night		Ldn	CI	VEL	
Autos:	72	.7	70.8		69.0		62.	.9	71.6	6	72.2	
Medium Trucks:	65	.9	64.4		58.0		56.	.5	64.9	9	65.2	
Heavy Trucks:	65	.6	64.1		55.1		56.	.4	64.7	7	64.8	
Vehicle Noise:	74	.1	72.4		69.5		64.	.5	73.′	1	73.6	
Centerline Distance	to Noise Co	ontour (in feet)									

70 dBA

161

173

Ldn:

CNEL:

65 dBA

347

373

60 dBA

747

804

55 dBA

1,608

1,732

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				,	Site Con	ditions	(Hard	= 10, So	ft = 15)				
Average Daily	Traffic (Adt):	62,000 vehicle	es					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15				
Peak H	lour Volume:	6,200 vehicle	es		He	avy Tru	cks (3+	Axles):	15				
Ve	ehicle Speed:	65 mph			Vehicle l	Miy							
Near/Far La	ne Distance:	175 feet				icleType	Э	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%	•	•	97.42%		
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
• • •	ist. to Barrier:	100.0 feet						<i>(*</i>	- 4)				
Centerline Dist.		100.0 feet		-	Noise So			•	et)				
Barrier Distance	to Observer:	0.0 feet			1 4 a alii	Auto		2.000					
Observer Height	(Above Pad):	5.0 feet				n Truck	_	1.000	Crado Ad	iuotmont			
•	ad Elevation:	0.0 feet			неач	y Truck	(S.)	3.006	Grade Adj	justinent.	0.0		
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in t	eet)				
	Road Grade:	0.0%				Auto	s: 48	3.505					
	Left View:	-90.0 degre	ees		Mediui	n Truck	rs: 48	3.423					
	Right View:	90.0 degre	ees		Heav	y Truck	rs: 48	3.506					
FHWA Noise Mod	lel Calculation	18											
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	74.55	4.38	3	0.0	9	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	84.86	-12.86	3	0.1	1	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	88.18	-16.82	2	0.0	9	-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	nout Topo and	l barr	ier atten	uation)								
VehicleType	Leq Peak Ho	ur Leq Da	ıy	Leq E	vening	Leq	Night		Ldn	CI	VEL		
Autos:	7	7.8	75.9		74.2		68	.1	76.7	7	77.3		
Medium Trucks:	70	0.9	69.4		63.0		61	.5	70.0)	70.2		
Heavy Trucks:	70	0.3	68.8		59.8		61	.0	69.4	4	69.5		
Vehicle Noise:	79	9.2	77.4		74.6		69	.6	78.2	2	78.7		
Centerline Distan	ce to Noise C	ontour (in fee	t)										
				70 d	dBA	65	dBA	6	0 dBA	55	dBA		

Ldn:

CNEL:

350

378

755

814

1,626

1,753

3,503

3,777

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/o Rockfield Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)									
Peak Hou	Traffic (Adt): Percentage: Hour Volume:	76,600 vehicle 10% 7,660 vehicle				dium Tro avy Truo	•	,						
Near/Far La	ehicle Speed: ane Distance:	60 mph 76 feet		V	Vehicle Mix VehicleType Day Evening Night Autos: 77.5% 12.0% 0.6%									
Site Data						-	Autos:	77.5%		9.6%				
Barrier Type (0-V	•	0.0 feet 0.0				edium Ti Heavy Ti		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%			
	ist. to Barrier:	100.0 feet		N	oise Sc	ource El	levatio	ns (in fe	eet)					
Centerline Dist. Barrier Distance Observer Height F	L	Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0. Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547												
FHWA Noise Mod	Right View:	90.0 degre												
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten			
Autos:	73.22	5.64	ļ	-4.11		-1.20		-4.87	0.0	000	0.000			
Medium Trucks:	83.68	-11.60)	-4.11		-1.20		-4.97	0.0	000	0.000			
Heavy Trucks:	87.33	-15.55	j	-4.11		-1.20		-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	hout Topo and	l barrier	attenu	ation)									
VehicleType	Leq Peak Ho	ur Leq Da	y	Leq Eve	ening	Leq	Night		Ldn	Ci	VEL			
Autos:		3.5	71.6		69.9		63.	.8	72.5		73.1			
Medium Trucks:		6.8	65.3		58.9		57.	4	65.8		66.1			
Heavy Trucks:	60	6.5	65.0		56.0		57	.3	65.6	6	65.7			
Vehicle Noise:	7	5.0	73.3		70.4		65	.4	74.0)	74.5			

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	184	397	856	1,844
CNEL:	199	428	922	1,986

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: n/o I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)		
Average Daily Traffic (Adt):	83,200 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	8,320 vehicles	S	He	avy Trucks (3+ <i>Axles):</i>	15		
Vehicle Speed:	60 mph		Vehicle I	Miss				
Near/Far Lane Distance:	76 feet				Dov	- Cyoning	Nicht	Doily
Cita Data			ven	icleType	Day	Evening	Night	Daily
Site Data				Autos Autos Trustas			9.6%	
Barrier Height:				edium Trucks			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			, r	Heavy Trucks	s: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:			Mediui	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:								
Road Elevation:			Lane Eq	uivalent Dis		feet)		
Road Grade:					92.547			
Left View:	-90.0 degree	es			92.504			
Right View:	90.0 degree	es	Heav	y Trucks:	92.547			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 6.00	-4.	11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	8 -11.24	-4.	11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.3	3 -15.19	-4.	11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos:	73.9	72.0	70.2	(64.2	72.8	3	73.4
Medium Trucks:	67.1	65.6	59.3	;	57.7	66.2	2	66.4
Heavy Trucks:	66.8	65.4	56.4	;	57.6	66.0)	66.1
Vehicle Noise:	75.4	73.6	70.7		65.8	74.3	3	74.8
Centerline Distance to Noise	Contour (in feet,)	,					

70 dBA

195

210

Ldn:

CNEL:

65 dBA

420

452

60 dBA

904

974

55 dBA

1,949

2,099

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy. Job Number: 8141 Road Segment: b/w I-5 SB Ramps and Research Dr. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions (l	Hard = 10, S	oft = 15)	-			
Average Daily	Traffic (Adt):	35,500 vehicle	es				Autos	: 15				
Peak Hour	Percentage:	10%			Me	dium Truc	cks (2 Axles)	: 15				
Peak I	Hour Volume:	3,550 vehicle	es		He	avy Truck	rs (3+ Axles)	: 15				
Ve	ehicle Speed:	60 mph		V	ehicle i	Mix						
Near/Far La	ane Distance:	76 feet				icleType	Day	Evening	Night	Daily		
Site Data							utos: 77.5%	_	9.6%	-		
Ra	rrier Height:	0.0 feet			М	edium Tru	icks: 84.8%	6 4.9%	10.3%	1.84%		
Barrier Type (0-V	_	0.0 1661			I	Heavy Tru	icks: 86.5%	6 2.7%	10.8%	0.74%		
	ist. to Barrier:	100.0 feet						•				
Centerline Dist.		100.0 feet		N	oise So		vations (in t	eet)				
Barrier Distance		0.0 feet				Autos:						
Observer Height		5.0 feet				m Trucks:			_			
_	Pad Elevation:	0.0 feet			Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0		
	Pad Elevation: 0.0 feet Road Elevation: 0.0 feet				ane Eq	uivalent l	Distance (in	feet)				
710	Road Grade:	0.0%			•	Autos:	•	,				
	Left View:	-90.0 degre	200		Mediu	m Trucks:						
	Right View:	90.0 degre				vy Trucks:						
	rugin viewi	oo.o dogre	,00			,						
FHWA Noise Mod	lel Calculatio	ns										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	73.22	2 2.30)	-4.11		-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	3 -14.94		-4.11		-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	3 -18.89)	-4.11		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	l barrie	er attenu	ation)							
VehicleType	Leq Peak Ho	our Leq Da	У	Leq Eve	ening	Leq N	light	Ldn	CI	VEL		
Autos:	7	0.2	68.3		66.5		60.5	69.1	İ	69.7		
Medium Trucks:	6	3.4	61.9		55.6		54.0	62.5	5	62.7		
Heavy Trucks:	6	3.1	61.7		52.7		53.9	62.3	3	62.4		
Vehicle Noise:	7	1.7	69.9		67.0		62.1	70.6	3	71.1		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	110	238	513	1,104
CNEL:	119	256	552	1,189

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: b/w Research Dr. and ICD

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DAT		NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions (H	lard = 10, So	oft = 15)			
Average Daily	Traffic (Adt):	17,300 veh	icles				Autos:	15			
Peak Hour	Percentage:	10%			Med	dium Truc	ks (2 Axles):	15			
Peak F	lour Volume:	1,730 veh	icles		Hea	avy Truck	s (3+ <i>Axles</i>):	15			
	hicle Speed:	60 mpl		V	'ehicle I	/lix					
Near/Far La	ne Distance:	76 feet	t		Vehi	cleType	Day	Evening	Night	Daily	
Site Data						Au	tos: 77.5%	12.9%	9.6%	97.42%	
Ва	rrier Height:	0.0 fee	et		Me	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			H	leavy Trud	cks: 86.5%	2.7%	10.8%	0.74%	
Centerline Di	,	100.0 fee	et	٨	loise So	urce Flev	ations (in f	20t)			
Centerline Dist.	to Observer:	100.0 fee	et		10/30 00	Autos:	2.000				
Barrier Distance	to Observer:	0.0 fee	et		Modiur	n Trucks:	4.000				
Observer Height	(Above Pad):	5.0 fee	et					Grade Ad	iustmont:		
P	ad Elevation:	0.0 fee	et		Heav.	y Trucks:	8.006	Grade Auj	justinent.	0.0	
Ro	Road Elevation: 0.0 feet						Distance (in	feet)			
	Road Grade:	0.0%				Autos:	92.547				
	Left View:	-90.0 de	arees		Mediur	n Trucks:	92.504				
	Right View:	90.0 de	-		Heav	y Trucks:	92.547				
FHWA Noise Mod					T					_	
VehicleType	REMEL	Traffic Flo		stance	Finite		Fresnel	Barrier Att		m Atten	
Autos:	73.22		.82	-4.11		-1.20	-4.87		000	0.000	
Medium Trucks:				-4.11		-1.20	-4.97		000	0.000	
Heavy Trucks:	87.33	-22	.01	-4.11		-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo a	and barri	er attenu	ıation)						
VehicleType	Leq Peak Hou	ur Leq	Day	Leq Ev	ening	Leq Ni	ight	Ldn	CI	VEL	
Autos:	67	7.1	65.2		63.4		57.4	66.0)	66.6	
Medium Trucks:	60).3	58.8		52.4		50.9	59.4	4	59.6	
Heavy Trucks:	60	0.0	58.6		49.5		50.8	59.1	1	59.3	
Vehicle Noise:	68	3.6	66.8		63.9		59.0	67.5	5	68.0	

70 dBA

68

74

Ldn:

CNEL:

65 dBA

147

159

60 dBA

317

342

55 dBA

684

737

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/ICD

Job Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC II	NPUT DA	ATA		NOISE MODEL INPUTS								
Highway Data				S	ite Cond	ditions (F	Hard = 10, S	oft = 15)					
Average Daily	Traffic (Adt):	16,300 ve	ehicles				Autos	: 15					
Peak Hour	Percentage:	10%			Med	lium Truc	ks (2 Axles)	: 15					
Peak H	our Volume:	1,630 ve	ehicles		Hea	vy Truck	s (3+ Axles)	: 15					
Ve	hicle Speed:	60 m	ph	V	'ehicle N	lix							
Near/Far Lai	ne Distance:	76 fe	et	-		cleType	Day	Evening	Night	Daily			
Site Data						AL	itos: 77.59	% 12.9%	9.6%	97.42%			
Bar	rier Height:	0.0 f	eet		Me	dium Tru	cks: 84.89	% 4.9%	10.3%	1.84%			
Barrier Type (0-W		0.0			Н	eavy Tru	cks: 86.5°	% 2.7%	10.8%	0.74%			
Centerline Dis	•	100.0 f	eet	٨	loise So	urce Fle	vations (in	feet)					
Centerline Dist.	to Observer:	100.0 f	eet		10/30 00	Autos:	•	iccij					
Barrier Distance	to Observer:	0.0 f	eet		Medium	Trucks:							
Observer Height (Above Pad):	5.0 f	eet			r Trucks: / Trucks:		Grade Ad	iustment:	0.0			
Pa	ad Elevation:	0.0 f	eet		,								
Roa	Road Elevation: 0.0 feet						Distance (in	feet)					
ŀ	Road Grade:	0.0%)			Autos:	92.547						
	Left View:	-90.0 c	degrees		Medium Trucks: 92.504								
	Right View:	90.0 c	degrees		Heavy	/ Trucks:	92.547						
FHWA Noise Mode	el Calculation	าร											
VehicleType	REMEL	Traffic F	low I	Distance	Finite I	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	73.22		-1.08	-4.11	I.	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	83.68	3 -1	18.32	-4.11		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	87.33	3 -2	22.27	-4.11		-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise	Levels (with	hout Topo	and bai	rrier attenu	ıation)								
VehicleType	Leq Peak Ho	ur Le	q Day	Leq Ev	ening	Leq N	ight	Ldn	CI	VEL			
Autos:	6	6.8	64.	9	63.2		57.1	65.7	7	66.3			
Medium Trucks:	6	0.1	58.	5	52.2		50.6	59.	1	59.3			
Heavy Trucks:	5	9.7	58.	3	49.3		50.5	58.9	9	59.0			
Vehicle Noise:	6	8.3	66.	5	63.7		58.7	67.3	3	67.7			

70 dBA

66

71

Ldn:

CNEL:

65 dBA

142

153

60 dBA

305

329

55 dBA

657

708

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Job Number: 8141

Road Segment: b/w Lake Forest Dr. and Ridge Route Dr.

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	3,400 vehicles	5			Autos:	15				
Peak Hour	Percentage:	10%		Med	dium Truck	ks (2 Axles):	15				
Peak H	lour Volume:	340 vehicles	3	Hea	avy Trucks	(3+ Axles):	15				
Ve	hicle Speed:	60 mph		Vehicle I	/lix						
Near/Far La	ne Distance:	76 feet			cleType	Day	Evening	Night	Daily		
Site Data					Aut		J	9.6%	-		
Ra	rrier Height:	0.0 feet		Ме	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0		H	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Di	•	100.0 feet					4)				
Centerline Dist.		100.0 feet		Noise So		ations (in f	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
Observer Height (5.0 feet			n Trucks:	4.000	0 - 4 - 4 - 4		0.0		
	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0		
Ros		Lane Equ	uivalent D	istance (in	feet)						
	Road Grade:	0.0 feet 0.0%			Autos:	92.547					
	Left View:	-90.0 degree	es	Mediun	n Trucks:	92.504					
	Right View:	90.0 degree		Heav	y Trucks:	92.547					
FHWA Noise Mod							5				
VehicleType	REMEL	Traffic Flow	Distance	Finite		Fresnel	Barrier Att		m Atten		
Autos:	73.22	-7.89	-4.1		-1.20	-4.87		000	0.000		
Medium Trucks:		-25.12	-4.1		-1.20	-4.97		000	0.000		
Heavy Trucks:	87.33	-29.08	-4.1	1	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Topo and	barrier attei	nuation)							
VehicleType	Leq Peak Hou		•	vening	Leq Nig		Ldn		VEL		
Autos:	60		58.1	56.4		50.3	58.9		59.5		
Medium Trucks:	53		51.7	45.4		43.8	52.3		52.5		
Heavy Trucks:	52	.9	51.5	42.5		43.7	52.1	<u> </u>	52.2		
Vehicle Noise:	61	.5	59.7	56.9		51.9	60.5	5	60.9		

70 dBA

23

25

Ldn:

CNEL:

65 dBA

50

54

60 dBA

107

116

55 dBA 231

249

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Job Number: 8141

Road Segment: b/w Ridge Route Dr. and Laguna Canyon

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)						
Peak Hour Peak H	Percentage: our Volume:	10,700 vehicle 10% 1,070 vehicle				dium Tru avy Truc	•	,							
	hicle Speed:	60 mph		V	ehicle l	Vix									
Near/Far La	ne Distance:	76 feet			Veh	icleType	1	Day	Evening	Night	Daily				
Site Data						A	Autos:	77.5%	12.9%	9.6%	97.42%				
Barrier Type (0-W Centerline Dist Centerline Dist. Barrier Distance Observer Height (st. to Barrier: to Observer: to Observer:	0.0 feet 0.0 100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet		N	oise So Mediui	edium Tr Heavy Tr Durce El Autos m Trucks ry Trucks	rucks: levation s: 2 s: 4	84.8% 86.5% ns (in fe .000 .000	2.7%	10.3% 10.8% iustment.	1.84% 0.74%				
	ad Elevation: Road Grade: Left View: Right View:	0.0 feet 0.0% -90.0 degre 90.0 degre		Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547											
FHWA Noise Mode	el Calculation	18													
VehicleType	REMEL	Traffic Flow	Distand	е	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten				
Autos:	73.22	-2.91	_	4.11		-1.20		-4.87	0.0	000	0.000				
Medium Trucks:	83.68	-20.14		4.11		-1.20		-4.97	0.0	000	0.000				
Heavy Trucks:	87.33	-24.10	-	4.11		-1.20		-5.16	0.0	000	0.000				
Unmitigated Noise	Levels (with	nout Topo and	barrier at	tenu	ation)										
VehicleType	Leq Peak Ho	ur Leq Day	/ Le	q Eve	ening	Leq	Night		Ldn	CI	VEL				
Autos:			63.1		61.3		55.		63.9	9	64.5				
Medium Trucks:			56.7		50.4		48.		57.3		57.5				
Heavy Trucks:	57	7.9	56.5		47.5		48.	.7	57.		57.2				
Vehicle Noise:	66	6.5	64.7		61.8		56	.9	65.4	4	65.9				

70 dBA

50

53

Ldn:

CNEL:

65 dBA

107

115

60 dBA

230

248

55 dBA

496

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data			S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	27,000 vehicle	s					Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tru	ucks (2	Axles):	15		
Peak Hour Volume:	2,700 vehicle	S		He	avy Truc	cks (3+	Axles):	15		
Vehicle Speed:	60 mph		V	ehicle l	Miv					
Near/Far Lane Distance:	76 feet		•		icleType	1	Day	Evening	Night	Daily
Site Data				VOIT		Autos:	77.5%		9.6%	-
	0.0 feet			Me	edium Tr		84.8%		10.3%	1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 reet 0.0				leavy Tr		86.5%		10.8%	0.74%
Centerline Dist. to Barrier:	0.0 100.0 feet									011 170
Centerline Dist. to Observer:	100.0 feet		Ν	oise Sc	urce El	evatio	ns (in fe	eet)		
Barrier Distance to Observer:	0.0 feet				Autos		.000			
	5.0 feet			Mediui	n Trucks	s: 4	.000			
Observer Height (Above Pad): Pad Elevation:	0.0 feet			Heav	y Trucks	s: 8	.006	Grade Adj	iustment:	0.0
Road Elevation:	0.0 feet		1	ane Fa	uivalent	Distar	nce (in	feet)		
Road Grade:	0.0%				Autos		2.547	,		
Left View:	-90.0 degre	20		Mediu	n Trucks		2.504			
Right View:	90.0 degre				y Trucks		2.547			
rught view.	50.0 degree			77047	y Traone	J. 0 <u>2</u>				
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos: 73.22	2 1.11		-4.11		-1.20		<i>-4.</i> 87	0.0	000	0.000
Medium Trucks: 83.68	3 -16.13		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87.33	3 -20.08		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier	attenu	ation)						
VehicleType Leq Peak Ho	our Leq Day	/ L	eq Eve	ening	Leq	Night		Ldn	CI	VEL
Autos: 6	9.0	67.1	65.4 59.3 67.9					68.5		
Medium Trucks: 6	2.2	60.7	54.4 52.8 61.3					61.5		
Heavy Trucks: 6	1.9	60.5		51.5		52.	.7	61.1	<u> </u>	61.2
Vehicle Noise: 7	0.5	68.7		65.8		60.	.9	69.5	5	69.9
Centerline Distance to Noise C	Contour (in feet)								

70 dBA

92

99

Ldn:

CNEL:

65 dBA

198

214

60 dBA

427

460

55 dBA

920

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT [DATA			NOIS	E MODE	L INPUT	S	
Highway Data					Site Con	ditions (Har	d = 10, So	oft = 15)		
Average Daily Peak Hou	Traffic (Adt): r Percentage:	31,900 109			Me	dium Trucks	Autos: (2 Axles):			
	Hour Volume:	3,190	vehicles		He	avy Trucks (3+ <i>Axles):</i>	15		
	ehicle Speed: ane Distance:		mph feet		Vehicle Veh	Mix icleType	Day	Evening	Night	Daily
Site Data						Autos		J	9.6%	-
Barrier Type (0-V	,	0.0				edium Trucks Heavy Trucks			10.3% 10.8%	1.84% 0.74%
	ist. to Barrier:	100.0			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist. Barrier Distance Observer Height	to Observer:	5.0	feet feet feet feet			Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	ijustment:	0.0
	ad Elevation:		feet		Lane Equivalent Distance (in feet)					
	Road Grade: Left View: Right View:)% degrees degrees			Autos: m Trucks: ry Trucks:	96.607 96.566 96.608			
FHWA Noise Mod	lel Calculatio	ns								
VehicleType	REMEL		Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos	71.78	3	2.22	-4.:	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40)	-15.02	-4.3	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40)	-18.98	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (wit	hout To	po and b	arrier atte	nuation)					
VehicleType	Leq Peak Ho	our I	Leq Day	Leq I	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos:		8.4		6.5	64.7		58.7	67.3	3	67.9
Medium Trucks:		1.8		0.3	53.9		52.4	60.8		61.1
Heavy Trucks:		1.8	60	0.4	51.4		52.6	61.0)	61.1
Vehicle Noise:	7	0.0	68	8.2	65.3		60.4	68.9	9	69.4
Centerline Distan	ce to Noise C	Contour	(in feet)							

70 dBA

85

91

Ldn:

CNEL:

65 dBA

183

197

60 dBA

395

425

55 dBA

850

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o W. Yale Lp.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIF	IC INF	PUT DATA		NOISE MODEL INPUTS							
Highway Data				Si	te Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic (A	Adt): 29	0,000 vehicles	;					Autos:	15		
Peak Hour Percenta	age:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak Hour Volu	ıme: 2	2,900 vehicles	;		He	avy Trud	cks (3+	Axles):	15		
Vehicle Spe		55 mph		Ve	ehicle l	Vix					
Near/Far Lane Distar	nce:	52 feet			Veh	icleType	,	Day	Evening	Night	Daily
Site Data						A	Autos:	77.5%	12.9%	9.6%	97.42%
Barrier Hei	aht [.]	0.0 feet			Me	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Be	_	0.0			F	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Bar	,	100.0 feet		No	oise Sc	ource El	evatio	ns (in fe	eet)		
Centerline Dist. to Obser	rver:	100.0 feet				Autos		.000	,		
Barrier Distance to Obser	rver:	0.0 feet			Mediui	n Trucks		.000			
Observer Height (Above P	Pad):	5.0 feet						.006	Grade Ad	liustment	. 0 0
Pad Eleva	tion:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0							0.0
Road Eleva	tion:	0.0 feet		La	ne Eq	uivalent	Distai	nce (in i	feet)		
Road Gra	ade:	0.0%				Autos	s: 96	6.607			
Left V	'iew:	-90.0 degree	s		Mediui	n Trucks	s: 96	5.566			
Right V	'iew:	90.0 degree	s		Heav	y Truck	s: 96	8.608			
FHWA Noise Model Calcu	lations										
VehicleType REMI	EL	Traffic Flow	Distance	е	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.80	-4	1.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.44	-4	1.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.39	-4	1.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels	(witho	ut Topo and I	barrier att	tenua	ation)						
VehicleType Leq Pea	ak Hour	Leq Day	Leq	Eve	ning	Leq	Night		Ldn	CI	VEL
Autos:	68.0	(6.1		64.3		58	.3	66.9	9	67.5
Medium Trucks:	61.4		59.9		53.5		52	.0	60.4	4	60.7
Heavy Trucks:	61.4	. 6	0.0		51.0		52	.2	60.6	3	60.7
Vehicle Noise:	69.6	6	67.8		64.8		60	.0	68.5	5	69.0
Centerline Distance to No.	ise Cor	ntour (in feet)									

70 dBA

80

86

Ldn:

CNEL:

65 dBA

172

185

60 dBA

370

398

55 dBA

798

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Lake Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT D	ATA			NOI	SE MODE	L INPUT	S	
Highway Data					Site Con	ditions (Ha	ard = 10, S	oft = 15)		
Average Daily Peak Houi	Traffic (Adt): Percentage:	25,900 10%			Me	dium Trucks	Autos: s (2 Axles):			
Peak H	Hour Volume:	2,590	vehicles		He	avy Trucks	(3+ Axles):	15		
	ehicle Speed: ane Distance:	55 52	mph feet		Vehicle I					
	ine Biolanee.	02			Veh	icleType	Day	Evening	Night	Daily
Site Data						Auto			9.6%	97.42%
Ва	rrier Height:	0.0	feet			edium Truck			10.3%	1.84%
Barrier Type (0-V	Vall, 1-Berm):	0.0			ŀ	Heavy Truck	ks: 86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0			Noise So	ource Eleva	ations (in f	eet)		
Centerline Dist. Barrier Distance Observer Height	to Observer:	5.0	feet feet feet feet			Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0
	ad Elevation:		feet		Lane Equivalent Distance (in feet)					
	Road Grade:	0.0				Autos:	96.607			
	Left View:	-90.0	degrees	3	Mediu	m Trucks:	96.566			
	Right View:	90.0	degrees	3	Heav	y Trucks:	96.608			
FHWA Noise Mod	lel Calculatio	ns								
VehicleType	REMEL	Traffic		Distance			Fresnel	Barrier Att		m Atten
Autos:			1.31	-4.3		-1.20	-4.87		000	0.000
Medium Trucks:			-15.93	-4.3		-1.20	-4.97		000	0.000
Heavy Trucks:	86.40)	-19.88	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (wit	hout Top	oo and b	arrier atte	nuation)					
VehicleType	Leq Peak Ho	our L	.eq Day		vening	Leq Nig	ht	Ldn	CI	VEL
Autos:	6	7.5	65	5.6	63.8		57.8	66.4	4	67.0
Medium Trucks:		0.9		9.4	53.0		51.5	59.9		60.2
Heavy Trucks:	6	0.9	59	9.5	50.5		51.7	60.1	1	60.2
Vehicle Noise:	6	9.1	67	7.3	64.4		59.5	68.0)	68.5
Centerline Distan	ce to Noise C	ontour (in feet)							

70 dBA

74

80

Ldn: CNEL: 65 dBA

159

171

60 dBA

343

369

55 dBA

740

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: b/w Creek Rd. and Lyon

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)		
Average Daily Traffic (Adt):	24,700 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	2,470 vehicle	S	He	avy Trucks (3+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle	Miv				
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data			7011	Autos		_	9.6%	97.42%
	0.0 foot		M	edium Trucks			10.3%	1.84%
Barrier Height:	0.0 feet 0.0			Heavy Trucks			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:							. 0.070	3 ,0
Centerline Dist. to Observer:	100.0 feet		Noise So	ource Elevat	ions (in f	eet)		
	100.0 feet 0.0 feet			Autos:	2.000			
Barrier Distance to Observer:			Mediu	m Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)					
Road Elevation:	0.0 feet		Lane Lq		96.607	iccij		
Road Grade: Left View:	0.0%		Modiu		96.566			
	-90.0 degre				96.608			
Right View:	90.0 degre	es	rieav	y Trucks.	90.000			
FHWA Noise Model Calculation	ns		-1					
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten
Autos: 71.78	1.10	-4	.39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.40	-16.13	-4	.39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.40	-20.09	-4	.39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier att	enuation)					
VehicleType Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos: 6	7.3	65.4	63.6 57.6 66.2				2	66.8
Medium Trucks: 6	0.7	59.2	2 52.8 51.3 59.7					60.0
Heavy Trucks: 6	0.7	59.3	50.3		51.5	59.9	9	60.0
Vehicle Noise: 6	8.9	67.1	64.2	-	59.3	67.8	3	68.3
Centerline Distance to Noise C	Contour (in feet	·)						

70 dBA

72

77

Ldn:

CNEL:

65 dBA

154

166

60 dBA

333

358

55 dBA

717

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o E. Yale Lp.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Si	te Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	24,400 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tru	ıcks (2	Axles):	15		
Peak H	lour Volume:	2,440 vehicle	es		Hea	avy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		Ve	ehicle N	/lix					
Near/Far La	ane Distance:	52 feet				cleType		Day	Evening	Night	Daily
Site Data							lutos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet			Ме	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			H	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		N	nisa Sn	urce Ele	evatio	ns (in fa	20t)		
Centerline Dist.	to Observer:	100.0 feet		/*	0130 00	Autos		.000			
Barrier Distance	to Observer:	0.0 feet			Modium	Autos n Trucks		.000			
Observer Height	(Above Pad):	5.0 feet							Crada Ad	iuotmont	
_	ad Elevation:	0.0 feet			Heav	y Trucks	S. 8	.006	Grade Ad	justrient	0.0
Ro	ad Elevation:	0.0 feet		La	ane Equ	ıivalent	Distar	nce (in	feet)		
	Road Grade:	0.0%				Autos	s: 96	.607			
	Left View:	-90.0 degre	es		Mediun	n Trucks	s: 96	5.566			
	Right View:	90.0 degre			Heav	y Trucks	s: 96	6.608			
FHWA Noise Mod	lol Calculation	ne									
VehicleType	REMEL	Traffic Flow	Distanc	е	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	3 1.05	-4	1.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.19	-2	4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.14	2	4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier att	tenua	ation)						
VehicleType	Leg Peak Ho	-	1	g Eve		Legi	Night		Ldn	CI	VEL
Autos:	6	7.2	65.3	-	63.6		57.	.5	66.1	1	66.7
Medium Trucks:	6	0.6	59.1		52.8		51.	.2	59.7	7	59.9
Heavy Trucks:	6	0.7	59.2		50.2		51.	.5	59.8	3	59.9
Vehicle Noise:	6	8.8	67.1		64.1		59	.2	67.8	3	68.3

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	71	153	330	711
CNEL:	76	165	355	765

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT D	DATA			NOIS	E MODE	L INPUT	S	
Highway Data					Site Con	ditions (Har	d = 10, So	oft = 15)		
	Traffic (Adt): r Percentage:	27,400 10%			Me	dium Trucks	Autos: (2 Axles):			
Peak I	Hour Volume:	2,740	vehicles		He	avy Trucks (3	3+ Axles):	15		
	ehicle Speed: ane Distance:	55 52	mph feet		Vehicle	Mix icleType	Day	Evening	Night	Daily
Site Data						Autos			9.6%	_
Barrier Type (0-V		0.0				edium Trucks Heavy Trucks	: 84.8%	4.9%	10.3% 10.8%	1.84% 0.74%
	ist. to Barrier:	100.0			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist Barrier Distance Observer Height	to Observer:	5.0	feet feet feet			Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0
	ad Elevation:		feet		Lane Equivalent Distance (in feet)					
	Road Grade: Left View: Right View:		% degrees degrees			m Trucks:	96.607 96.566 96.608			
FHWA Noise Mod	del Calculatio	ns								
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos	71.78	3	1.55	-4.3	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks	82.40)	-15.68	-4.3	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks	86.40)	-19.64	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	hout Top	oo and b	arrier atte	nuation)					
VehicleType	Leq Peak Ho	our L	.eq Day		Evening	Leq Nigh	t	Ldn	CI	VEL
Autos	: 6	7.7	65	5.8	64.1		58.0	66.6	5	67.3
Medium Trucks	: 6	1.1	59	9.6	53.3		51.7	60.2	2	60.4
Heavy Trucks	:6	1.2	59	9.7	50.7		52.0	60.3	3	60.4
Vehicle Noise	: 6	9.3	67	7.6	64.6	Ę	59.7	68.3	3	68.8
Centerline Distar	ice to Noise C	Contour ((in feet)							

70 dBA

77

83

Ldn:

CNEL:

65 dBA

166

178

60 dBA

357

384

55 dBA

768

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DA	ATA			N	OISE	MODE	L INPUT	S	
Highway Data				,	Site Con	ditions (Hard:	= 10, Sc	oft = 15)		
•	Traffic (Adt):		ehicles					Autos:			
	r Percentage:	10%				dium Tru	•	,			
Peak l	Hour Volume:	1,770 v	ehicles		He	avy Truci	ks (3+	Axles):	15		
	ehicle Speed:	55 m	nph		Vehicle l	Mix					
Near/Far La	ane Distance:	52 fe	eet		Veh	icleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	97.42%
	arrier Height:	0.0 1	feet		Me	edium Tru	ıcks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0			F	Heavy Tru	ıcks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 1	eet		Noise So	ource Ele	evatio	ns (in fe	eet)		
Centerline Dist	to Observer:	100.0 1	eet			Autos.		2.000	,		
Barrier Distance	to Observer:	0.0 1	eet		Mediu	m Trucks.		.000			
Observer Height	(Above Pad):	5.0 1	eet					3.006	Grade Ad	iustment	0.0
F	Pad Elevation:	0.0 1	eet								0.0
Ro	ad Elevation:	0.0 1	eet		Lane Eq	uivalent	Dista	nce (in	feet)		
	Road Grade:	0.0%	D			Autos.	: 96	6.607			
	Left View:	-90.0	degrees		Mediui	m Trucks.	: 96	6.566			
	Right View:	90.0	degrees		Heav	y Trucks.	: 96	8.608			
FHWA Noise Mod	del Calculatio	ns									
VehicleType	REMEL	Traffic I	-low	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos	71.78	3	-0.34	-4.3	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks	82.40) -	17.58	-4.3	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks	86.40) -:	21.54	-4.3	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	hout Topo	and ba	rrier atten	uation)						
VehicleType	Leq Peak Ho	our Le	q Day	Leq E	vening	Leq N	light		Ldn	CI	VEL
Autos	. 6	5.8	63.	.9	62.2		56	.1	64.7	7	65.4
Medium Trucks	: 5	9.2	57.	.7	51.4		49	.8	58.3	3	58.5
Heavy Trucks	5	9.3	57.	.8	8 48.8 50.1 58.4					58.5	
Vehicle Noise	6	7.4	65.	.7	62.7		57	.8	66.4	4	66.9
Medium Trucks Heavy Trucks	5 5 6	9.2 9.3 7.4	57. 57. 65.	7 8	51.4 48.8		49 50	.8 .1	58.3 58.4	3 4	58 58

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	57	124	266	574
CNEL:	62	133	287	618

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o Sand Canyon. Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA				1	VOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	18,000 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	1,800 vehicle	es		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		1	/ehicle l	Miy					
Near/Far La	ne Distance:	52 feet		_		icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	•	•	97.42%
Ra	rrier Height:	0.0 feet			Ме	edium 7	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0 reet 0.0			F	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet									
Centerline Dist.		100.0 feet		^	loise So			ns (in fe	et)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				n Truck	_	1.000	0 - 4 - 4 - 4		0.0
•	ad Elevation:	0.0 feet			Heav	y Truck	rs: E	3.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	s: 96	6.607	-		
	Left View:	-90.0 degre	es		Mediui	n Truck	rs: 96	6.566			
	Right View:	90.0 degre			Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	lel Calculation	16									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:		-0.27		-4.39)	-1.20		-4.87		000	0.000
Medium Trucks:	82.40	-17.51		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21.46		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	У	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	65	5.9	64.0		62.3		56	.2	64.8	3	65.4
Medium Trucks:	59	9.3	57.8		51.4		49	.9	58.4	1	58.6
Heavy Trucks:	59	9.3	57.9		48.9		50	.1	58.5	5	58.6
Vehicle Noise:	67	7.5	65.7		62.8		57	.9	66.5	5	66.9
Centerline Distan	ce to Noise C	ontour (in fee	t)								
				70 d	<i>BA</i>	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

58

62

125

135

269

290

581

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Sand Canyon. Av.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NO	ISE MOD	DEL INPUT	S		
Highway Data			Site Cor	nditions (H	ard = 10,	Soft = 15)			
Average Daily Traffic (Adt).	15,600 vehicle	es			Auto	s: 15			
Peak Hour Percentage.	·		Me	dium Truck	s (2 Axle	s): 15			
Peak Hour Volume.	1,560 vehicle	es	He	avy Trucks	(3+ Axle	s): 15			
Vehicle Speed.	55 mph		Vehicle	Mix					
Near/Far Lane Distance	52 feet			icleType	Day	v Evening	Night	Daily	
Site Data			Ven	Aut		J	9.6%	_	
				אם. edium Truc			10.3%	1.84%	
Barrier Height				edidili Truc Heavy Truc			10.3%	0.74%	
Barrier Type (0-Wall, 1-Berm)			'	leavy Truc	ns. 00.0)/0 Z.I /0	10.0 /6	0.7470	
Centerline Dist. to Barrier			Noise S	ource Elev	ations (ir	feet)			
Centerline Dist. to Observer				Autos:	2.000				
Barrier Distance to Observer			Mediu	m Trucks:	4.000				
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Ad	ljustment.	0.0	
Pad Elevation			Lane Equivalent Distance (in feet)						
Road Elevation			Lane Eq		•	n reet)			
Road Grade				Autos:	96.607				
Left View	3 -			m Trucks:	96.566				
Right View	90.0 degre	es	Heav	y Trucks:	96.608				
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road	Fresnel	Barrier At	ten Ber	m Atten	
Autos: 71.7	78 -0.89	-2	1.39	-1.20	-4.8	7 0.	000	0.000	
Medium Trucks: 82.4	10 -18.13	-4	1.39	-1.20	-4.9	0.	000	0.000	
Heavy Trucks: 86.4	-22.09	-2	1.39	-1.20	-5.1	6 0.	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	l barrier att	enuation)						
VehicleType Leq Peak F	lour Leq Da	y Leq	Evening	Leq Nig	ght	Ldn	CI	VEL	
Autos:	65.3	63.4	61.6 55.6 64.2					64.8	
	58.7	57.2	50.8		49.3	57.	-	58.0	
Heavy Trucks:	58.7	57.3	48.3		49.5	57.	9	58.0	
Vehicle Noise:	66.9	65.1	62.2		57.3	65.	8	66.3	
Centerline Distance to Noise	Contour (in fee	t)							

70 dBA

53

57

Ldn:

CNEL:

65 dBA

114

122

60 dBA

245

264

55 dBA

528

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Laguna Canyon Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data			Site Conditions (Hard = 10, Soft = 15)										
Average Daily Traffic (Adt).	14,800 vehicle	es			Autos:	15							
Peak Hour Percentage.			Ме	dium Trucks (2 Axles):	15							
Peak Hour Volume.	1,480 vehicle	es	He	avy Trucks (3	+ Axles):	15							
Vehicle Speed.	55 mph		Vehicle	N <i>i</i> lisz									
Near/Far Lane Distance.	•				Day		Niaht	Doilu					
Site Date			ven	icleType	Day	Evening	Night	Daily					
Site Data				Autos:			9.6%						
Barrier Height				edium Trucks:			10.3%	1.84%					
Barrier Type (0-Wall, 1-Berm)			,	Heavy Trucks:	86.5%	2.7%	10.8%	0.74%					
Centerline Dist. to Barrier			Noise So	ource Elevation	ons (in fe	eet)							
Centerline Dist. to Observer				Autos:	2.000								
Barrier Distance to Observer	0.0 feet		Mediu		4.000								
Observer Height (Above Pad)	5.0 feet				8.006	Grade Ad	iustment:	0.0					
Pad Elevation	0.0 feet			-									
Road Elevation	0.0 feet		Lane Eq	uivalent Dista	•	feet)							
Road Grade	0.0%				6.607								
Left View	-90.0 degre	es	Mediu		6.566								
Right View	90.0 degre	es	Heav	y Trucks: 9	6.608								
FHWA Noise Model Calculation	ons												
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten					
Autos: 71.7	78 -1.12	-4.	.39	-1.20	-4.87	0.0	000	0.000					
Medium Trucks: 82.4	10 -18.36	-4.	.39	-1.20	-4.97	0.0	000	0.000					
Heavy Trucks: 86.4	10 -22.31	-4.	.39	-1.20	-5.16	0.0	000	0.000					
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)										
VehicleType Leq Peak F	lour Leq Day	y Leq	Evening	Leq Night		Ldn	CI	VEL					
Autos:	65.1	63.2	61.4	5	5.3	64.0)	64.6					
Medium Trucks:	58.5	56.9	50.6	4	9.0	57.5	5	57.7					
Heavy Trucks:	58.5	57.1	48.0 49.3		57.6		57.8						
Vehicle Noise:	66.6	64.9	61.9	5	7.1	65.6	<u></u>	66.1					
Centerline Distance to Noise	Contour (in feet	t)											

70 dBA

51

55

Ldn:

CNEL:

65 dBA

110

118

60 dBA

236

254

55 dBA

510

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: b/w Discovery and Banting

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				,	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	13,100 vehicle	s					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15				
Peak H	lour Volume:	1,310 vehicle	S		He	avy Tru	cks (3+	Axles):	15				
Ve	hicle Speed:	55 mph		-	Vehicle l	liv							
Near/Far La	ne Distance:	52 feet				cleType	۵ ا	Day	Evening	Night	Daily		
Site Data					VCIII		Autos:	77.5%		•	97.42%		
					M	, edium T		84.8%		10.3%	1.84%		
	rrier Height:	0.0 feet				leavy T		86.5%		10.8%	0.74%		
Barrier Type (0-W	•	0.0				roavy r	raono.	00.070	2.1 70	10.070	0.7 170		
Centerline Di		100.0 feet		1	Noise Source Elevations (in feet)								
Centerline Dist.		100.0 feet				Auto	s: 2	2.000					
Barrier Distance		0.0 feet			Mediur	n Truck	s: 4	1.000					
Observer Height	•	5.0 feet			Heav	y Truck	rs: 8	3.006	Grade Adj	iustment.	0.0		
Pad Elevation: 0.0 feet					Lana Far		4 Dia4a	/:	fa a 4 \				
	ad Elevation:	0.0 feet		<u> </u>	Lane Eq				reet)				
	Road Grade:	0.0%				Auto		6.607					
	Left View:	-90.0 degre				n Truck		5.566					
	Right View:	90.0 degre	es		Heav	y Truck	s: 96	6.608					
FHWA Noise Mod	el Calculation	S											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	71.78	-1.65		-4.3	9	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-18.89		-4.3	9	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-22.84		-4.3	9	-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrie	er atten	uation)								
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	CI	VEL		
Autos:	64	5	62.6		60.9		54	.8	63.4	ļ	64.0		
Medium Trucks:	57	.9	56.4		50.1		48	.5	57.0)	57.2		
Heavy Trucks:	58	5.0	56.5		47.5		48	.8	57.1	<u> </u>	57.2		
Vehicle Noise:	66	5.1	64.4		61.4		56	.5	65.1		65.6		

70 dBA

47

51

Ldn: CNEL: 65 dBA

101

109

60 dBA

218

235

55 dBA

470

505

Sunday	May	20	2012
Sunday.	ıvıav	20.	2012

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: s/o ICD

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOISE MODEL INPUTS							
Highway Data			S	ite Cond	ditions (Hard	d = 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	17,900 vehicle	es				Autos:	15				
Peak Hour Percentage:	10%			Mea	lium Trucks (2 Axles):	15				
Peak Hour Volume:	1,790 vehicle	es		Hea	avy Trucks (3	+ Axles):	15				
Vehicle Speed:	55 mph		V	ehicle M	fiy						
Near/Far Lane Distance:	52 feet		-		cleType	Day	Evening	Night	Daily		
Site Data					Autos.			9.6%	-		
Barrier Height:	0.0 feet			Me	dium Trucks.			10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0 1661			Н	eavy Trucks.	86.5%		10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet										
Centerline Dist. to Observer:	100.0 feet		N	oise So	urce Elevati	•	eet)				
Barrier Distance to Observer:	0.0 feet				Autos:	2.000					
Observer Height (Above Pad):	5.0 feet				n Trucks:	4.000	0 , 4 ,		0.0		
Pad Elevation:	0.0 feet			Heavy	/ Trucks:	8.006	Grade Ad	iustment:	0.0		
Road Elevation:	0.0 feet		L	ane Equ	ivalent Dist	ance (in i	feet)				
Road Grade:	0.0%				Autos:	96.607					
Left View:	-90.0 degre	ees		Medium	n Trucks:	96.566					
Right View:	90.0 degre			Heavy	/ Trucks:	96.608					
FHWA Noise Model Calculation											
VehicleType REMEL	Traffic Flow		tance	Finite F			Barrier Att		m Atten		
Autos: 71.78			-4.39		-1.20	-4.87		000	0.000		
Medium Trucks: 82.40			-4.39		-1.20	-4.97		000	0.000		
Heavy Trucks: 86.40	-21.49	9	-4.39		-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wit	hout Topo and	d barrie	er attenu	ation)							
VehicleType Leq Peak Ho	our Leq Da	ay	Leq Eve	ening	Leq Night		Ldn	CI	VEL		
Autos: 6	5.9	64.0		62.2	5	6.2	64.8	3	65.4		
	9.3	57.8		51.4	4	9.9	58.3	3	58.6		
				40.0		0.4	FO 5	_	F0 C		
	9.3	57.9		48.9	0	0.1	58.5)	58.6		
Heavy Trucks: 5	9.3 7.5	65.7		62.8		7.9	66.4		66.9		
Heavy Trucks: 5	7.5	65.7									

Ldn:

CNEL:

58

62

125

134

268

289

578

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: b/w I-5 HOV Ramp and ICD

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS									
Highway Data				Si	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	20,400 vehicle	s					Autos:	15				
Peak Hour	Percentage:	10%			Med	dium Tru	cks (2	Axles):	15				
Peak H	lour Volume:	2,040 vehicle	es		Hea	avy Truci	ks (3+	Axles):	15				
Ve	ehicle Speed:	55 mph		Ve	ehicle I	/liv							
Near/Far La	ne Distance:	52 feet		70		cleType		Day	Evening	Night	Daily		
Site Data					VOIII		utos:	77.5%	_	9.6%	•		
	unio u Hoiodata	0.0 foot			Me	edium Tru		84.8%		10.3%	1.84%		
	rrier Height:	0.0 feet 0.0				leavy Tru		86.5%		10.8%	0.74%		
Barrier Type (0-W	•	0.0 100.0 feet									011 170		
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet					Noise Source Elevations (in feet)								
Barrier Distance		0.0 feet				Autos.		.000					
					Mediun	n Trucks.	: 4	.000					
Observer Height (Above Pad). Pad Elevation		5.0 feet 0.0 feet			Heav	y Trucks.	: 8	.006	Grade Ad	justment.	0.0		
		1 2	no Fai	uivalent	Dietar	co (in i	foot)						
	ad Elevation:	0.0 feet		La	ine Equ	Autos.		.607	iccij				
	Road Grade:	0.0%		Medium Trucks: 96.566									
	Left View:	-90.0 degre				y Trucks.		.608					
	Right View:	90.0 degre	es		п с аv _.	y Trucks.	. 90	.000					
FHWA Noise Mod	lel Calculation	าร											
VehicleType	REMEL	Traffic Flow	Distanc	е	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	71.78	0.27		4.39		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-16.96		4.39		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-20.92		4.39		-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	barrier at	tenua	ation)								
VehicleType	Leq Peak Ho	ur Leq Day	y Led	q Eve	ning	Leq N	light		Ldn	CI	VEL		
Autos:	60	6.5	64.6		62.8		56.	7	65.4	4	66.0		
Medium Trucks:	59	9.8	58.3		52.0		50.	4	58.9		59.1		
Heavy Trucks:	5	9.9	58.5		49.4		50.	7	59.0)	59.2		
Vehicle Noise:	68	8.0	66.3		63.3		58.	4	67.0)	67.5		

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	63	136	293	631						
CNEL:	68	146	315	679						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: s/o Technology

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt):	21,800 vehicles	3			Autos:	15					
Peak Hour Percentage:	10%		Medium	Trucks (2 A	Axles):	15					
Peak Hour Volume:	2,180 vehicles	6	Heavy T	rucks (3+ A	Axles):	15					
Vehicle Speed:	55 mph	,	/ehicle Mix								
Near/Far Lane Distance:	52 feet	_	VehicleTy	vpe	Day	Evening	Night	Daily			
Site Data				Autos:	77.5%		9.6%	97.42%			
Barrier Height:	0.0 feet		Medium	Trucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-Wall, 1-Berm):	0.0		Heavy	Trucks:	86.5%	2.7%	10.8%	0.74%			
Centerline Dist. to Barrier:	100.0 feet										
Centerline Dist. to Observer:	100.0 feet		Voise Source		•	eet)					
Barrier Distance to Observer:	0.0 feet				000						
Observer Height (Above Pad):	5.0 feet		Medium Tru		000						
Pad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0								
Road Elevation:	1	ane Equivale	ent Distan	ce (in i	feet)						
Road Grade:	0.0 feet 0.0%				607	,					
Left View:	-90.0 degree	25	Medium Tru		566						
Right View:	90.0 degree		Heavy Tru		608						
FHWA Noise Model Calculation											
VehicleType REMEL	Traffic Flow	Distance	Finite Road			Barrier Att		m Atten			
Autos: 71.78		-4.39		-	-4.87	0.0	000	0.000			
Medium Trucks: 82.40	-16.68	-4.39	-1.2	.0	-4.97	0.0	000	0.000			
Heavy Trucks: 86.40	-20.63	-4.39	-1.2	.0	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (with	hout Topo and	barrier atten	uation)								
VehicleType Leq Peak Ho	our Leq Day	Leq Ev	rening Le	eq Night		Ldn	CI	VEL			
Autos: 6	6.7	64.9	63.1	57.0)	65.7	7	66.3			
Medium Trucks: 6	0.1	58.6	52.3	50.7	50.7 59.2		2	59.4			
Heavy Trucks: 6	Heavy Trucks: 60.2 58.7			49.7 51.0 59.3				59.4			
Vehicle Noise: 6	66.6	63.6	58.7	7	67.3	3	67.8				

70 dBA

66

71

Ldn:

CNEL:

65 dBA

142

153

60 dBA

306

329

55 dBA

660

710

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: n/o Technology

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data					,	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	23,000	vehicles	3					Autos:	15			
Peak Hour	Percentage:	10%	6			Me	dium Tr	ucks (2	Axles):	15			
Peak F	lour Volume:	2,300	vehicles	3		He	avy Tru	cks (3+	- Axles):	15			
Ve	ehicle Speed:	55	mph			Vehicle I	Mix						
Near/Far La	ne Distance:	52	feet				icleType	Э	Day	Evening	Night	Daily	
Site Data								Autos:	77.5%		9.6%	-	
Ba	rrier Height:	0.0	feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W		0.0				ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Di		100.0				Noise So	ourco E	lovatio	ns (in f	201			
Centerline Dist.	to Observer:	100.0	feet		-	NOISE SC	Auto		2.000	(C I)			
Barrier Distance	to Observer:	0.0	feet			Modiu	Auto m Truck		4.000 4.000				
Observer Height	(Above Pad):	5.0	feet					_		Grade Ad	iustmant	. 0.0	
P	ad Elevation:	0.0	feet			неач	y Truck	S. C	3.006	Grade Auj	justinent	. 0.0	
Ro	ad Elevation:	0.0	feet			Lane Eq	uivalen	t Dista	nce (in t	feet)			
	Road Grade:	0.0	%				Auto	s: 90	6.607				
	Left View:	-90.0	degree	es		Mediu	m Truck	s: 90	6.566				
	Right View:	90.0	degree	es		Heav	y Truck	rs: 90	6.608				
FHWA Noise Mod	el Calculation	ıs											
VehicleType	REMEL	Traffic	Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	m Atten	
Autos:	71.78	II.	0.79		-4.3	9	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40		-16.44		-4.3	9	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40		-20.40		-4.3	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Top	oo and	barri	ier atten	uation)							
VehicleType	Leq Peak Ho	ur L	.eq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL	
Autos:	67	7.0	(65.1		63.3		57	. .3	65.9	9	66.5	
Medium Trucks:	60).4	;	58.9		52.5		51	.0	59.4	4	59.6	
Heavy Trucks:	60).4	ļ	59.0		49.9		51	.2	59.6	6	59.7	
Vehicle Noise:	68	3.6	(8.66		63.8		59	0.0	67.5	5	68.0	
Centerline Distan	ce to Noise C	ontour ((in feet))									
					70 (dBA	65	dBA	ϵ	60 dBA	55	dBA	

Ldn:

CNEL:

68

74

147

158

317

341

684

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Ada

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS								
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	20,400 vehicl	es				Autos.	15					
Peak Hour	Percentage:	10%			Med	dium Truci	ks (2 Axles).	15					
Peak H	Hour Volume:	2,040 vehicl	es		Hea	avy Trucks	s (3+ Axles).	15					
Ve	ehicle Speed:	55 mph		V	ehicle N	/liy							
Near/Far La	ne Distance:	52 feet		-		cleType	Day	Evening	Night	Daily			
Site Data							tos: 77.5%	J	9.6%				
	rrier Height:	0.0 feet			Ме	edium Truc			10.3%	1.84%			
Barrier Type (0-W	•	0.0 reet				leavy Truc			10.8%	0.74%			
• • • •	ist. to Barrier:	100.0 feet											
Centerline Dist.				N	oise So	urce Elev	ations (in f	eet)					
		100.0 feet				Autos:	2.000						
Barrier Distance		0.0 feet			Mediun	n Trucks:	4.000						
Observer Height	. ,	5.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0			
	ad Elevation:	0.0 feet											
Ro	ad Elevation:	0.0 feet		Li	ane Equ	uvalent D	istance (in	feet)					
	Road Grade:	0.0%				Autos:	96.607						
	Left View:	-90.0 degr	ees		Mediun	n Trucks:	96.566						
	Right View:	90.0 degr	ees		Heav	y Trucks:	96.608						
FHWA Noise Mod	lel Calculation	s											
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	71.78	0.2	7	-4.39		-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-16.9	6	-4.39		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-20.9	2	-4.39		-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Topo an	d barri	er attenu	ation)								
VehicleType	Leq Peak Ho	ır Leq Da	ay	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL			
Autos:	66	5.5	64.6		62.8		56.7	65.4	4	66.0			
Medium Trucks:	59	0.8	58.3		52.0		50.4	58.9	9	59.1			
Heavy Trucks:	59	59.9 58.5			49.4 50.7 5			59.0	59.0 59.2				
Vehicle Noise: 68.0 66.3					63.3		58.4	67.0)	67.5			
Contorlino Distan	co to Noiso C	ontour (in fo	1										

70 dBA	65 dBA	60 dBA	55 dBA
63	136	293	631
68	146	315	679
	63	63 136	63 136 293

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o Marine Wy.

Job Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS								
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	24,400 vehicles	;			Autos:	15					
Peak Hour	Percentage:	10%		Me	dium Truci	ks (2 Axles):	15					
Peak H	our Volume:	2,440 vehicles	;	He	avy Trucks	s (3+ Axles):	15					
Vei	hicle Speed:	55 mph		Vehicle i	Mix							
Near/Far Lar	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily			
Site Data						tos: 77.5%		9.6%	-			
Rar	rier Height:	0.0 feet		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0		H	Heavy Truc	cks: 86.5%	2.7%	10.8%	0.74%			
Centerline Dis	st. to Barrier:	100.0 feet		Noise So	ource Elev	ations (in f	eet)					
Centerline Dist.	to Observer:	100.0 feet			Autos:	2.000	,					
Barrier Distance	to Observer:	0.0 feet		Mediu	m Trucks:	4.000						
Observer Height (Above Pad):	5.0 feet			y Trucks:	8.006	Grade Adj	iustment.	0.0			
Pa												
Roa	ad Elevation:	0.0 feet		Lane Eq		istance (in	feet)					
F	Road Grade:	0.0%			Autos:	96.607						
	Left View:	-90.0 degree	es .	Mediu	m Trucks:	96.566						
	Right View:	90.0 degree	es	Heav	y Trucks:	96.608						
FHWA Noise Mode	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten			
Autos:	71.78	1.05	-4.3	39	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-16.19	-4.3	39	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-20.14	-4.3	39	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise	Levels (with	out Topo and I	barrier atte	nuation)								
VehicleType	Leq Peak Hou	ur Leq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL			
Autos:	67	7.2	65.3	63.6		57.5	66.1		66.7			
Medium Trucks:	60).6	59.1	52.8		51.2	59.7	7	59.9			
Heavy Trucks:	60).7	59.2	50.2		51.5	59.8	3	59.9			

Vehicle Noise:

68.8

Centerline Distance to Noise Contour (in feet)

67.1

Ldn:

CNEL:

64.1

70 dBA

71

76

59.2

65 dBA

153

165

67.8

60 dBA

330

355

68.3

55 dBA

711

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy./Muirlands Bl.

Road Segment: w/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	21,800	vehicles	;				Autos:	15					
Peak Hour	Percentage:	10%	ó			Me	dium Truc	ks (2 Axles).	15					
Peak H	lour Volume:	2,180	vehicles	;		He	avy Truck	s (3+ Axles).	15					
Ve	hicle Speed:	55	mph		V	ehicle l	Mix							
Near/Far La	ne Distance:	52	feet				icleType	Day	Evening	Night	Daily			
Site Data								tos: 77.5%	J	9.6%				
Ra	rrier Height:	0.0	feet			Me	edium Tru	cks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0	icci			ŀ	Heavy True	cks: 86.5%	2.7%	10.8%	0.74%			
Centerline Di		100.0	feet			-: C	- [41					
Centerline Dist.		100.0			N	oise So		ations (in f	eet)					
Barrier Distance			feet				Autos:	2.000						
Observer Height			feet				m Trucks:	4.000						
Pad Elevation			feet			Heav	y Trucks:	8.006	Grade Ad	justment.	: 0.0			
	ad Elevation:		feet		Li	ane Ea	uivalent E	Distance (in	feet)					
	Road Grade:	0.0					Autos:	96.607	,					
	Left View:		degree	ic.		Mediu	m Trucks:	96.566						
	Right View:		degree				y Trucks:	96.608						
	ragin view.	30.0	degree	3		77007	y Traono.	00.000						
FHWA Noise Mod	el Calculation	ıs												
VehicleType	REMEL	Traffic	Flow	Dista	nce	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	71.78		0.56		-4.39		-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40		-16.68		-4.39		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40		-20.63		-4.39		-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Top	o and k	barrier	attenu	ation)								
VehicleType	Leq Peak Ho	ur L	eq Day	L	.eq Eve	ening	Leq Ni	ight	Ldn	CI	NEL			
Autos:	66	6.7	6	64.9		63.1		57.0	65.7	7	66.3			
Medium Trucks:	60).1	5	8.6		52.3		50.7	59.2	2	59.4			
Heavy Trucks:	60).2	5	8.7		49.7		51.0	59.3	3	59.4			
Vehicle Noise: 68.3 66.6				63.6		58.7	67.3	3	67.8					
Contorlino Distan	co to Noiso C	ontour /	(in foot)											

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	66	142	306	660						
CNEL:	71	153	329	710						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy

Road Segment: e/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS								
Highway Data			S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily Tr	affic (Adt):	19,300 vehicl	es					Autos:	15			
Peak Hour Pe	. ,	10% 1,930 vehicles			Medium Trucks (2 Axles): 15							
Peak Hou	ır Volume:				Heavy Trucks (3+ Axles): 15							
Vehic	cle Speed:	55 mph 52 feet			Vehicle Mix							
Near/Far Lane	Distance:				VehicleType Day				Evening	Night	Daily	
Site Data					V 011		Autos:	77.5%		9.6%	-	
		0.0 foot			M	, edium Tr		84.8%		10.3%	1.84%	
	er Height:	0.0 feet 0.0				Heavy Tr		86.5%		10.8%	0.74%	
Barrier Type (0-Wall	•						GONO.			10.070	011 170	
Centerline Dist.		100.0 feet	٨	Noise Source Elevations (in feet)								
Centerline Dist. to			100.0 feet			Autos: 2.000						
Barrier Distance to		0.0 feet			Mediu	m Trucks	s: 4	.000				
Observer Height (Al		5.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	justment.	0.0	
	Elevation:	0.0 feet		,	ano Ea	uivalent	Dictor	nco (in	footl			
	Elevation:	0.0 feet			arie Ly				ieel)			
Ro	oad Grade:	0.0%			1.4 m = 15 m	Autos		5.607				
_	Left View:	3			Medium Trucks: 96.566							
F	Right View:	90.0 degre	ees		Heavy Trucks: 96.608							
FHWA Noise Model	Calculation	s										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	0.03	3	-4.39	١	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-17.2	1	-4.39)	-1.20	-4.97		0.0	000	0.000	
Heavy Trucks:	86.40	-21.16	6	-4.39	1	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise L	Levels (with	out Topo and	d barri	er attenu	uation)							
VehicleType L	eq Peak Hοι	ır Leq Da	ay .	Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	66	.2	64.3		62.6 56		56	6.5 65.1		1	65.7	
Medium Trucks:	59	.6	58.1		51.7 50.2		.2	58.7		58.9		
Heavy Trucks:	59	.6	58.2		49.2 50.4		.4	58.8		58.9		
Vehicle Noise:	67	.8	66.0		63.1 58.		.2	66.8		67.2		
Centerline Distance	to Noise Co	ontour (in fee	et)									

70 dBA

61

65

Ldn:

CNEL:

65 dBA

131

141

60 dBA

282

304

55 dBA

608

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy

Road Segment: e/o Sterling

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Hai	rd = 10, So	oft = 15)			
Average Daily Traffic (Adt):	15,400 vehicles	3			Autos:	15			
Peak Hour Percentage:	10%		Med	dium Trucks	(2 Axles):	15			
Peak Hour Volume:	1,540 vehicles	3	Hea	avy Trucks (3+ <i>Axles):</i>	15			
Vehicle Speed:	55 mph		Vehicle I	Лix					
Near/Far Lane Distance:	52 feet			cleType	Day	Evening	Night	Daily	
Site Data				Autos			9.6%		
Barrier Height:	0.0 feet		Ме	edium Truck	s: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:	100.0 feet		M-1 0-	-	· · · · · · · · · · · · · · · · · · ·	4)			
Centerline Dist. to Observer:	100.0 feet		Noise So	urce Eleva	_	eet)			
Barrier Distance to Observer:	0.0 feet			Autos:	2.000				
Observer Height (Above Pad):	5.0 feet			n Trucks:	4.000	Crada Ad	lia.tma a m.t		
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0	
Road Elevation:	0.0 feet		Lane Equ	uivalent Dis	tance (in	feet)			
Road Grade:	0.0%			Autos:	96.607				
Left View:	-90.0 degree	es	Mediur	n Trucks:	96.566				
Right View:	90.0 degree	es	Heav	y Trucks:	96.608				
FHWA Noise Model Calculation	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten	
Autos: 71.7	8 -0.95	-4.3	39	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 82.4	0 -18.19	-4.3	39	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 86.4	0 -22.14	-4.3	39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)						
VehicleType Leq Peak He	our Leq Day	Leq E	vening	Leq Nigh	nt	Ldn	CI	VEL	
Autos:	55.2	63.3	61.6		55.5	64.′	1	64.7	
Medium Trucks: 5	8.6	57.1	50.8		49.2 57.7		7	57.9	
Heavy Trucks: 5	8.7	57.2	48.2		49.5 57.		3	57.9	
Vehicle Noise:	66.8	65.1	62.1		57.2	65.8	3	66.3	

70 dBA

52

56

Ldn:

CNEL:

65 dBA

113

121

60 dBA

243

261

55 dBA 523

563

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Job Number: 8141
Road Segment: w/o Jamboree Rd. Analyst: B. Lawson

Highway Data			NOISE MODEL INPUTS							
			Site Con	ditions (Ha	rd = 10, Se	oft = 15)				
Average Daily Traffic (Adt)	: 25,300 vehicl	es			Autos:	15				
Peak Hour Percentage			Me	dium Trucks	(2 Axles):	15				
Peak Hour Volume	2,530 vehicl	es	Heavy Trucks (3+ Axles): 15							
Vehicle Speed	50 mph		Vehicle I	Mix						
Near/Far Lane Distance	70 feet			icleType	Day	Evening	Night	Daily		
Site Data				Auto		_	9.6%			
Barrier Height	: 0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm)			F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier						- 41				
Centerline Dist. to Observer			Noise Sc	ource Eleva	•	eet)				
Barrier Distance to Observer				Autos:	2.000					
Observer Height (Above Pad)			Medium Trucks: 4.000					0.0		
Pad Elevation			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
Road Elevation			Lane Equivalent Distance (in feet)							
Road Grade			Autos: 93.723							
Left View		ees	Mediui	m Trucks:	93.680					
Right View	_		Heav	y Trucks:	93.723					
FHWA Noise Model Calculati	ons									
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos: 70.:	20 1.6	2 -4	.20	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 81.0	00 -15.6	2 -4	.19	-1.20	<i>-4</i> .97	0.0	000	0.000		
Heavy Trucks: 85.3	38 -19.5	7 -4	.20	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (w	thout Topo and	d barrier att	enuation)							
VehicleType Leq Peak F	lour Leq Da	ay Leq	Evening	Leq Nigl	ht	Ldn	CI	VEL		
Autos:	66.4	64.5	62.8		56.7	65.3	3	65.9		
Medium Trucks:	60.0	58.5	52.1	50.6		59.0		59.3		
Heavy Trucks:	60.4	59.0	50.0		51.2 59.		6	59.7		
Vehicle Noise:	68.1	66.4	63.3		58.5	67.	1	67.6		

70 dBA

64

69

Ldn:

CNEL:

65 dBA

138

148

60 dBA

297

319

55 dBA

640

687

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Job Number: 8141
Road Segment: e/o Jamboree Rd. Analyst: B. Lawson

SITE S	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard	= 10, So	ft = 15)			
Average Daily Ti	raffic (Adt): 1	9,700 vehicles	3					Autos:	15			
Peak Hour P	Percentage:	10%			Medium Trucks (2 Axles): 15							
Peak Ho	ur Volume:	1,970 vehicles	970 vehicles 55 mph			Heavy Trucks (3+ Axles): 15						
Vehi	icle Speed:	55 mph				Vehicle Mix						
Near/Far Lane	e Distance:	52 feet				icleType	e	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		•	97.42%	
	ia v Haimbt.	0.0 foot			Me	edium T		84.8%		10.3%	1.84%	
	ier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%	
Barrier Type (0-Wa Centerline Dist.	,	100.0 feet									011 170	
Centerline Dist. to		100.0 feet		٨	loise Sc	ource E	levatio	ns (in fe	eet)			
Barrier Distance to		0.0 feet				Auto	os: 2	2.000				
Observer Height (A		5.0 feet			Mediur	n Truck	rs: 4	1.000				
• ,	d Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Adj	justment:	0.0	
	d Elevation:	0.0 feet		1	Lane Equivalent Distance (in feet)							
	oad Grade:	0.0 Teet 0.0%		_	Autos: 96.607							
N	Left View:	-90.0 degree	20	Medium Trucks: 96.566								
ı	Right View:	90.0 degree				y Truck		6.608				
ı	ragiti view.	90.0 degree	73		77007	y Traon	.0. 00	5.000				
FHWA Noise Model	Calculations			1								
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	0.12		-4.39		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-17.12		-4.39		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-21.07		-4.39		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (witho	ut Topo and	barrie	er attenu	ıation)							
	.eq Peak Hour	<u> </u>		Leq Ev		Leq	Night		Ldn	CI	VEL	
Autos:	66.3	3 (64.4	-	62.6	<u>-</u>	56	.6	65.2	2	65.8	
Medium Trucks:	59.7	7	58.2		51.8		50	.3	58.7	7	59.0	
Heavy Trucks:	59.7	7	58.3	8.3 49.3 50.5 58.9			Э	59.0				
Vehicle Noise:	67.9	9	66.1		63.2		58	.3	66.8	3	67.3	
Centerline Distance	e to Noise Co	ntour (in feet))									
				70 d	BA	65	dBA	6	0 dBA	55	dBA	

Ldn:

CNEL:

62

66

133

143

286

308

617

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Job Number: 8141
Road Segment: w/o Culver Dr. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions (F	lard = 10, So	oft = 15)				
	Percentage:	10%					Autos: ks (2 Axles):					
Ve	Hour Volume: ehicle Speed: ane Distance:	55 mph 52 feet	•		ehicle l		s (3+ Axles): Day	15 Evening	Night	Daily		
Site Data						Au	tos: 77.5%	12.9%	9.6%	97.42%		
Barrier Type (0-V	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium Trud Heavy Trud			10.3% 10.8%	1.84% 0.74%		
Centerline D	ist. to Barrier:	100.0 feet		N	loise Sc	urce Elev	vations (in f	eet)				
Centerline Dist. Barrier Distance Observer Height F	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet				Autos: n Trucks: y Trucks:	2.000 4.000 8.006	Grade Adj	iustment:	0.0		
Ro	ad Elevation:	0.0 feet	0.0 feet			uivalent E	Distance (in	feet)				
	Road Grade: Left View: Right View:	0.0% -90.0 degr 90.0 degr				Autos: m Trucks: y Trucks:	96.607 96.566 96.608					
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	_			-4.39		-1.20	-4.87		000	0.000		
Medium Trucks. Heavy Trucks.				-4.39 -4.39		-1.20 -1.20	-4.97 -5.16		000	0.000		
Unmitigated Nois	e Levels (with	hout Topo an	d barrie	r attenu	ation)							
VehicleType	Leq Peak Ho	our Leq D	ay	Leq Eve	ening	Leq Ni	ight	Ldn	CI	VEL		
Autos:		7.6	65.7		63.9		57.9	66.5		67.1		
Medium Trucks:		1.0	59.5		53.1 51.6		51.6	60.0		60.2		
Heavy Trucks:	6	1.0	59.6		50.5 51.8		60.1		60.3			
Vehicle Noise:	6	9.2	67.4		64.4		59.6	68.1	1	68.6		

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	75	161	348	749							
CNEL:	81	174	374	806							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Job Number: 8141
Road Segment: e/o Culver Dr. Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt):	19,300 vehicle	S			Autos.	: 15				
Peak Hour Percentage:	10%		Medium Trucks (2 Axles): 15							
Peak Hour Volume:	1,930 vehicles	S	Heavy Trucks (3+ Axles): 15							
Vehicle Speed:	55 mph		Vehicle	Miv						
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data			V 011		utos: 77.5%	_	9.6%	-		
	0.0 foot		M	edium Tru			10.3%	1.84%		
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			Heavy Tru			10.8%	0.74%		
Centerline Dist. to Barrier:	0.0 100.0 feet									
Centerline Dist. to Observer:	100.0 feet		Noise So		vations (in f	eet)				
Barrier Distance to Observer:	0.0 feet			Autos:						
Observer Height (Above Pad):	5.0 feet		Medium Trucks: 4.000							
Pad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment					0.0		
Road Elevation:	0.0 feet		Lane Eq	uivalent l	Distance (in	feet)				
Road Grade:	0.0%			Autos:						
Left View:	-90.0 degree	20	Mediu	m Trucks:						
Right View:	90.0 degree			ry Trucks:						
rugin viou.	Jo.o degree	55		,	00.000					
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos: 71.78	0.03	-4	.39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.40	-17.21	-4	.39	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.40	-21.16	-4	.39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)							
VehicleType Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq N	light	Ldn	CI	VEL		
Autos: 6	6.2	64.3	62.6		56.5	65.	1	65.7		
Medium Trucks: 5	9.6	58.1	51.7		50.2	58.7	7	58.9		
Heavy Trucks: 5	9.6	58.2	49.2		50.4	58.8	3.8 5			
Vehicle Noise: 6	7.8	66.0	63.1		58.2	66.8	3	67.2		

70 dBA

61

65

Ldn:

CNEL:

65 dBA

131

141

60 dBA

282

304

55 dBA

608

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Job Number: 8141
Road Segment: e/o Eastwood Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS								
Highway Data			S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt):	14,000 vehicle	S					Autos:	15			
Peak Hour Percentage:				Medium Trucks (2 Axles): 15							
Peak Hour Volume:	1,400 vehicle	S		Heavy Trucks (3+ Axles): 15							
Vehicle Speed:	55 mph	55 mph			Mix						
Near/Far Lane Distance:	52 feet				icleType		Day	Evening	Night	Daily	
Site Data						lutos:	77.5%		9.6%		
Barrier Height:	0.0 feet			Me	edium Tr		84.8%		10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):					Heavy Tr	ucks:	86.5%		10.8%	0.74%	
Centerline Dist. to Barrier:											
Centerline Dist. to Observer:			Ν	oise So	ource Ele		•	eet)			
Barrier Distance to Observer:					Autos		2.000				
Observer Height (Above Pad):			Medium Trucks: 4.000					_			
Pad Elevation:			Heavy Trucks: 8.006 Grade Adjustment						0.0		
Road Elevation:			Lane Equivalent Distance (in feet)								
Road Grade:			Autos: 96.607								
Left View:		es		Mediui	m Trucks		6.566				
Right View:	3 -				y Trucks		6.608				
3											
FHWA Noise Model Calculation											
VehicleType REMEL	Traffic Flow	Distan		Finite		Fres		Barrier Att		m Atten	
Autos: 71.7	-		-4.39		-1.20		-4.87		000	0.000	
Medium Trucks: 82.4			-4.39		-1.20		-4.97		000	0.000	
Heavy Trucks: 86.4	0 -22.56		-4.39		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (with	thout Topo and	barrier a	ttenu	ation)							
VehicleType Leq Peak H	our Leq Day	ν Le	q Eve	ening	Leq I	Night		Ldn	CI	VEL	
Autos:	64.8	62.9		61.2		55	.1	63.7	7	64.3	
Medium Trucks:	58.2	56.7		50.3		48	.8	57.3	3	57.5	
Heavy Trucks:	58.2	56.8	i.8 47.8 49.0				49.0 57.4			57.5	
Vehicle Noise:	66.4	64.6		61.7		56	.8	65.4	1	65.8	
Centerline Distance to Noise	Contour (in feet)									

70 dBA

49

53

Ldn:

CNEL:

65 dBA

106

114

60 dBA

228

245

55 dBA

491

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Canyon View Av.

Road Segment: w/o Jamboree Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Cond	ditions (Ha	s (Hard = 10, Soft = 15)						
Average Daily Peak Hour	Traffic (Adt): Percentage:	7,400 vehicles 10%	5	Mea	lium Trucks	Autos: s (2 Axles):						
Peak H	lour Volume:	740 vehicles	6	Hea	vy Trucks	(3+ Axles):	15					
Ve	hicle Speed:	50 mph	,	Vehicle M	lix							
Near/Far La	ne Distance:	70 feet	_		cleType	Day	Evening	Night	Daily			
Site Data					Auto	os: 77.5%	12.9%	9.6%	97.42%			
Ba	rrier Height:	0.0 feet		Me	dium Truck	ks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0		Н	eavy Truck	ks: 86.5%	2.7%	10.8%	0.74%			
Centerline Di	st. to Barrier:	100.0 feet		Noise So	urce Eleva	ations (in f	eet)					
Centerline Dist.		100.0 feet			Autos:	2.000						
Barrier Distance		0.0 feet		Medium	Trucks:	4.000						
Observer Height (•	5.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0								
	ad Elevation:	0.0 feet		l ana Fau	incolone Di	-t-n /:n	foot)					
	ad Elevation:	0.0 feet	_	Lane Equ		stance (in	reet)					
4	Road Grade:	0.0%			Autos:	93.723						
	Left View:	-90.0 degree			Trucks:	93.680						
	Right View:	90.0 degree	es	Heavy	/ Trucks:	93.723						
FHWA Noise Mod	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Distance	Finite F	Road F	-resnel	Barrier Att	en Beri	m Atten			
Autos:	70.20	-3.72	-4.20	0	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	81.00	-20.95	-4.19	9	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	85.38	-24.91	-4.20	0	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise	e Levels (with	out Topo and I	barrier atten	uation)								
VehicleType	Leq Peak Hou		•	vening	Leq Nig	ht	Ldn	CI	VEL			
Autos:	61	.1 5	59.2	57.4	51.4		60.0)	60.6			
Medium Trucks:	54	.7	53.1	46.8		45.2		7	53.9			
Heavy Trucks:	55	.1 5	53.6	44.6 45		45.9	54.2	2	54.3			
Vehicle Noise:	62	.8	61.0	58.0		53.2	61.8	3	62.2			

70 dBA

28

30

Ldn:

CNEL:

65 dBA

61

65

60 dBA

131

141

55 dBA 282

303

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Chapman Ave./Santiago Cyn.

Job Number: 8141

Road Segment: w/o Jamboree Rd.

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS							
Highway Data				S	ite Cond	ditions	(Hard = 10)	, So	ft = 15)			
Average Daily	Traffic (Adt): 2	26,700 vehicle	:S				Aut	os:	15			
Peak Hour	Percentage:	10%			Med	dium Tru	ucks (2 Axle	es):	15			
Peak H	lour Volume:	2,670 vehicle	:S		Hea	avy Truc	cks (3+ Axle	es):	15			
Ve	hicle Speed:	55 mph		V	ehicle N	/liv						
Near/Far La	ne Distance:	88 feet	88 feet			cleType	e Da	V	Evening	Night	Daily	
Site Data	Site Data				VOIII			.5%	_		97.42%	
	rrier Height:	0.0 feet			Me	dium Tı	rucks: 84.	.8%		10.3%		
Barrier Type (0-W	•	0.0			Н	leavy Ti	rucks: 86.	.5%		10.8%	0.74%	
Centerline Di		100.0 feet										
Centerline Dist.		100.0 feet		N	oise So		levations (i		et)			
Barrier Distance		0.0 feet				Autos)				
Observer Height		5.0 feet			Mediun							
•	Pad Elevation: 0.0 feet			Heav	/ Trucks	s: 8.006	;	Grade Adj	ustment	: 0.0		
Road Elevation: 0.0 feet			L	ane Equ	ıivalent	t Distance ((in f	eet)				
	Road Grade:	0.0%			<u> </u>	Autos	·					
	Left View:	-90.0 degre	6 9		Mediun							
	Right View:	90.0 degre				/ Trucks						
FHWA Noise Mod			ı									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite I		Fresnel		Barrier Atte		m Atten	
Autos:	71.78	1.44		-3.92		-1.20	-4.		0.0		0.000	
Medium Trucks:	82.40	-15.80		-3.92		-1.20	-4.	97	0.0	000	0.000	
Heavy Trucks:	86.40	-19.75		-3.92		-1.20	-5.	16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barrie	er attenu	ation)							
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Eve	ening	Leq	Night		Ldn	С	NEL	
Autos:	68	.1	66.2		64.4		58.4		67.0)	67.6	
Medium Trucks:	61	.5	60.0		53.6		52.1	60.5		5	60.8	
Heavy Trucks:	61	.5	60.1		51.1		52.3		60.7	,	60.8	

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	81	175	377	812						
CNEL:	87	188	405	873						

65.0

60.1

68.6

69.1

67.9

Vehicle Noise:

69.7

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Chapman Ave./Santiago Cyn.

Job Number: 8141

Road Segment: e/o Jamboree Rd.

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA			NOISE MODEL INPUTS										
Highway Data				Site Co	onditions	(Hard	= 10, So	ft = 15)					
Average Daily	Traffic (Adt):	41,900 vehicle	es				Autos:	15					
Peak Hour	Percentage:	10%		٨	1edium Tr	ucks (2	Axles):	15					
Peak H	our Volume:	4,190 vehicle	es	F	leavy Tru	cks (3+	Axles):	15					
Ve	hicle Speed:	55 mph			Vehicle Mix								
Near/Far Lai	ne Distance:	88 feet			ehicleType	9	Day	Evening	Night	Daily			
Site Data						Autos:	77.5%	-	9.6%				
Rai	rier Height:	0.0 feet			Medium T	rucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%			
Centerline Dis	,	100.0 feet		Maiaa	Caa. F	lavatia	/: f-						
Centerline Dist.	to Observer:	100.0 feet		Noise	Source E		•	et)					
Barrier Distance	to Observer:	0.0 feet		A 4 1	Auto		2.000						
Observer Height (Above Pad):	5.0 feet			ium Truck 	_	1.000	0		. 0.0			
• ,	ad Elevation:	0.0 feet		He	avy Truck	s: 8	3.006	Grade Ad	iustment	. 0.0			
Road Elevation: 0.0 feet			Lane E	quivalen	t Distai	nce (in f	eet)						
H	Road Grade:	0.0%			Auto	s: 89	9.850						
	Left View:	-90.0 degre	es	Med	ium Truck	s: 89	9.805						
	Right View:	90.0 degre		He	avy Truck	s: 89	9.850						
FHWA Noise Mode	el Calculation	18											
VehicleType	REMEL	Traffic Flow	Distanc	e Fini	te Road	Fres	snel	Barrier Att	en Bei	m Atten			
Autos:	71.78	3.40	-(3.92	-1.20		-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-13.84		3.92	-1.20		-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-17.79	-:	3.92	-1.20		-5.16	0.0	000	0.000			
Unmitigated Noise	e Levels (with	nout Topo and	barrier at	tenuation)								
VehicleType	Leq Peak Ho	ur Leq Day	y Led	Evening	Leq	Night		Ldn	C	NEL			
Autos:	70	D.1	68.2	66	4	60	.3	69.0)	69.6			
Medium Trucks:	63	3.4	61.9	55			.0	62.5	5	62.7			
Heavy Trucks:	63	3.5	62.1	53	0	54	4.3 62.6		6	62.8			
Vehicle Noise:	7	1.6	69.9	66	.9	62	.0	70.6	3	71.1			

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	110	236	509	1,096						
CNEL:	118	254	547	1,179						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Creek Rd.

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOISI	MODE	L INPUT	S		
Highway Data				Site Con	ditions (Hard	I = 10, Sc	oft = 15)			
Peak Hou	r Traffic (Adt):	4,400 vehicles 10%			dium Trucks (,	15			
	Hour Volume:	440 vehicles	3	He	avy Trucks (3	+ Axles):	15			
	ehicle Speed:	35 mph	•	Vehicle I	Mix					
Near/Far L	ane Distance:	20 feet		Veh	icleType	Day	Evening	Night	Daily	
Site Data					Autos:	77.5%	12.9%	9.6%	97.42%	
Barrier Type (0-\	•	0.0 feet 0.0			edium Trucks: Heavy Trucks:			10.3% 10.8%	1.84% 0.74%	
	oist. to Barrier:	100.0 feet		Noise So	ource Elevati	ons (in fe	eet)			
Centerline Dist Barrier Distance Observer Height	e to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet				2.000 4.000 8.006	Grade Ad	justment:	0.0	
	oad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)						
	Road Grade:	0.0%			Autos: 9	9.544				
	Left View:	-90.0 degree	es .	Mediu	m Trucks:	9.504				
	Right View:	90.0 degree	es	Heav	y Trucks: 9	9.544				
FHWA Noise Mod	del Calculation	ıs								
VehicleType	REMEL	Traffic Flow	Distance				Barrier Att		m Atten	
Autos			-4.5		-1.20	-4.87		000	0.000	
Medium Trucks			-4.5		-1.20	-4.97		000	0.000	
Heavy Trucks	<i>:</i> 81.57	-25.62	-4.5	59	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	se Levels (with	out Topo and I	barrier atte	nuation)						
VehicleType	Leq Peak Ho			Evening	Leq Night		Ldn		VEL	
Autos			52.2	50.4		4.4	53.0)	53.6	
Medium Trucks			16.8						47.6	
Heavy Trucks			18.7	39.7	4	1.0	49.3		49.4	
Vehicle Noise	: 56	5.3	54.6	51.2	4	6.8	55.3	3	55.7	
Centerline Distar	nce to Noise C	ontour (in feet)								

70 dBA

10

11

Ldn:

CNEL:

65 dBA

23

24

60 dBA

49

52

55 dBA

105

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: s/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT I	DATA		NOISE MODEL INPUTS							
Highway Data					S	ite Con	ditions (Hard:	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	25,300	vehicles	6					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Tru	icks (2	Axles):	15		
Peak H	lour Volume:	2,530	vehicles	6	Heavy Trucks (3+ Axles): 15							
Ve	ehicle Speed:	60	mph		ν	'ehicle l	Vix					
Near/Far La	ne Distance:	76	feet		ľ		icleType		Day	Evening	Night	Daily
Site Data								utos:	77.5%		9.6%	
Ra	rrier Height:	0.0	feet			Ме	edium Tru	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0				F	leavy Tru	ucks:	86.5%	2.7%	10.8%	0.74%
• • • •	ist. to Barrier:	100.0										
Centerline Dist.		100.0			Λ	loise Sc	ource Ele			eet)		
Barrier Distance			feet				Autos		2.000			
Observer Height			feet				n Trucks		.000			
-	ad Elevation:		feet			Heav	y Trucks	: 8	3.006	Grade Ad	ljustment	: 0.0
	ad Elevation:				1	ane Fai	uivalent	Dista	nce (in	feet)		
	Road Elevation: 0.0 feet Road Grade: 0.0%					u = 4	Autos		2.547			
	Left View:					Modium	n Trucks		2.504			
			degree									
	Right View:	90.0	degree	es		пеач	y Trucks	5. 92	2.547			
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traffic	Flow	Distanc	е	Finite	Road	Fres	snel	Barrier Att	ten Ber	m Atten
Autos:	73.22		0.83	-4	4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		-16.41	-4	4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33		-20.36	-4	4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and l	barrier at	tenu	ation)						
VehicleType	Leq Peak Ho	ur I	Leq Day	Led	g Ev	ening	Leq N	Vight		Ldn	C	NEL
Autos:	68	3.7	(66.8		65.1		59	.0	67.	6	68.2
Medium Trucks:	62	2.0	6	60.5		54.1		52	.6	61.	0	61.2
Heavy Trucks:	61	1.6	6	60.2		51.2		52	.4	60.8	8	60.9
Vehicle Noise:	70).2	(68.4		65.6		60	.6	69.	2	69.7
Contorlino Distan	co to Noisa C	ontour	(in foot)	<u> </u>								

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	88	190	409	881
CNEL:	95	204	440	949

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr. Job Number: 8141 Road Segment: n/o Irvine Bl. Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NOISE	MODE	L INPUT	S	
Highway Data				Site Conditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 2	8,300 vehicles	;			Autos:	15		
Peak Hour	Percentage:	10%		Medium T	rucks (2	Axles):	15		
Peak H	Hour Volume:	2,830 vehicles	;	Heavy Tru	ıcks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph	_	Vehicle Mix					
Near/Far La	ne Distance:	76 feet	_	VehicleTyp	0	Day	Evening	Night	Daily
Site Data				veriicie i yp	Autos:	77.5%	_		97.42%
				Medium 7		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet							0.74%
Barrier Type (0-W	•	0.0		Heavy	TUCKS.	86.5%	2.7%	10.8%	0.74%
Centerline Di	ist. to Barrier:	100.0 feet		Voise Source E	Elevatio	ns (in fe	eet)		
Centerline Dist.	to Observer:	100.0 feet		Auto		2.000	,		
Barrier Distance	to Observer:	0.0 feet		Medium Truci		1.000			
Observer Height	(Above Pad):	5.0 feet		Heavy Truci	_	3.006	Grade Ad	iustment	: 0.0
P	ad Elevation:	0.0 feet							
Ro	ad Elevation:	0.0 feet	1	Lane Equivaler	nt Dista	nce (in i	feet)		
	Road Grade:	0.0%		Auto	os: 92	2.547			
	Left View:	-90.0 degree	s	Medium Truci	ks: 92	2.504			
	Right View:	90.0 degree	S	Heavy Truci	ks: 92	2.547			
FHWA Noise Mod	lel Calculations	;							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	1.32	-4.1	I -1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-15.92	-4.1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-19.88	-4.1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (witho	out Topo and L	barrier atten	uation)					
VehicleType	Leq Peak Hou	r Leq Day	Leq E	vening Led	Night		Ldn	C	NEL
Autos:	69.	2 6	67.3	65.6	65.6 59.5		68.1		68.7
Medium Trucks:	62.	5 6	60.9	54.6	53	.0	61.5	5	61.7

Ullillingated Nois	e Levels (Withou	it ropo and barr	ei atteriuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	69.2	67.3	65.6	59.5	68.1	68.7
Medium Trucks:	62.5	60.9	54.6	53.0	61.5	61.7
Heavy Trucks:	62.1	60.7	51.7	52.9	61.3	61.4
Vehicle Noise:	70.7	68.9	66.1	61.1	69.7	70.1

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	95	205	441	949
CNEL:	102	220	475	1.023

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: s/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECI	FIC INF	UT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				,	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic	(Adt): 36	3,300 vehicles	3					Autos:	15		
Peak Hour Percen	itage:	10%			Me	dium Tri	ucks (2	Axles):	15		
Peak Hour Vo	lume: 3	3,630 vehicles	3		He	avy Trud	cks (3+	Axles):	15		
Vehicle S _l	peed:	60 mph			Vehicle i	Miv					
Near/Far Lane Dist	ance:	76 feet				icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	,
Barrier He	oiaht.	0.0 feet			Me	edium Ti		84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-B	•	0.0 reet 0.0				leavy T		86.5%		10.8%	0.74%
Centerline Dist. to Ba	,	100.0 feet									
Centerline Dist. to Obse		100.0 feet		1	Noise So			•	eet)		
Barrier Distance to Obse		0.0 feet				Auto		.000			
Observer Height (Above		5.0 feet				m Truck		.000			
Pad Elev	,	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	justment.	: 0.0
Road Elev		0.0 feet			Lane Eq	uivalen	t Distar	nce (in t	feet)		
Road G		0.0%			<u> </u>	Auto	s: 92	2.547			
	View:	-90.0 degree	es		Mediu	m Truck	s: 92	2.504			
Right	View:	90.0 degree			Heav	y Truck	s: 92	2.547			
FHWA Noise Model Calc	ulations										
VehicleType REN	ΛEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.40		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.84		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.80		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Level	s (withou	ut Topo and	barri	er atten	uation)						
VehicleType Leq Pe	eak Hour	Leq Day		Leq E	vening	Leq	Night		Ldn	CI	NEL
Autos:	70.3	(68.4		66.6		60.	.6	69.2	2	69.8
Medium Trucks:	63.5	;	62.0		55.7		54.	.1	62.6	6	62.8
Heavy Trucks:	63.2	! (61.8		52.8		54.	.0	62.4	1	62.5
Vehicle Noise:	71.8		70.0		67.1		62	.2	70.7	7	71.2
Centerline Distance to N	oise Con	ntour (in feet))								
				70 d	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

112

121

241

260

520

560

1,121

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: n/o Bryan Av.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Cond	ditions (Ha	ard = 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	31,800 vehicles	3			Autos:	15				
Peak Hour Percentage:	10%		Med	dium Trucks	s (2 Axles):	15				
Peak Hour Volume:	3,180 vehicles	3	Hea	avy Trucks	(3+ Axles):	15				
Vehicle Speed:	60 mph		Vehicle N	/lix						
Near/Far Lane Distance:	76 feet			cleType	Day	Evening	Night	Daily		
Site Data				Auto		-	9.6%	97.42%		
Barrier Height:	0.0 feet		Me	dium Truck	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		Н	leavy Truck	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet									
Centerline Dist. to Observer:	100.0 feet	1	Noise So		ations (in f	eet)				
Barrier Distance to Observer:	0.0 feet			Autos:	2.000					
Observer Height (Above Pad):	5.0 feet		Medium Trucks: 4.000							
Pad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment:							
	Road Elevation: 0.0 feet				stance (in	feet)				
Road Grade:	0.0%		<u> </u>	Autos:	92.547	,				
Left View:	-90.0 degree	29	Mediun	n Trucks:	92.504					
Right View:	90.0 degree			/ Trucks:	92.547					
FHWA Noise Model Calculation										
VehicleType REMEL	Traffic Flow	Distance	Finite I			Barrier Att		m Atten		
Autos: 73.22	_	-4.1		-1.20	<i>-4</i> .87	0.0	000	0.000		
Medium Trucks: 83.68	3 -15.41	-4.1	1	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 87.33	3 -19.37	-4.1	1	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	hout Topo and	barrier atten	uation)							
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nig	ht	Ldn	CI	VEL		
Autos: 6	9.7	67.8	66.1		60.0	68.6	6	69.2		
Medium Trucks: 6	3.0	61.5	55.1		53.5	62.0)	62.2		
Heavy Trucks: 6	2.6	61.2	52.2		53.4	61.8	3	61.9		
Vehicle Noise: 7	1.2	69.4	66.6		61.6	70.2	2	70.7		

70 dBA

103

111

Ldn: CNEL: 65 dBA

221

238

60 dBA

476

513

55 dBA

1,026

1,105

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: s/o Bryan Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	50,700 vehicle 10% 5,070 vehicle				dium Tru avy Trud	•	,	15 15 15		
Near/Far La	ehicle Speed: ane Distance:	60 mph 76 feet		V	'ehicle I Vehi	icleType		Day	Evening	Night	Daily
Site Data Barrier Type (0-W	n rrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium Ti Jeavy Ti		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): lad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre			Mediur Heav ane Eq u Mediur	Autos Autos Trucks y Trucks uivalent Autos n Trucks y Trucks	s: 2 s: 4 s: 8 t Distar s: 92 s: 92	.000 .000 .006	Grade Ad	justment	0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	73.22 83.68	Traffic Flow 2 3.85 3 -13.39	5	-4.11 -4.11 -4.11	Finite	Road -1.20 -1.20 -1.20	Fres	-4.87 -4.97 -5.16	0.0	en Ber 000 000	<i>m Atten</i> 0.000 0.000 0.000
Unmitigated Nois VehicleType Autos:	Leq Peak Ho			r attenu Leq Eve		Leq	Night 62.	0	<i>Ldn</i> 70.7		VEL 71.3
Medium Trucks: Heavy Trucks: Vehicle Noise:	64	5.0 4.7 3.2	63.5 63.2 71.5		57.1 54.2 68.6		55. 55.	5	64.0 63.8 72.2	3	64.3 63.9 72.7

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	140	302	650	1,401
CNEL:	151	325	700	1,508

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S		
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)			
Average Daily Traffic (Adt):	51,600 vehicles	S			Autos:	15			
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15			
Peak Hour Volume:	5,160 vehicles	S	He	avy Trucks (3	3+ Axles):	15			
Vehicle Speed:	60 mph		Vehicle I	Mix					
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily	
Site Data			Vern	Autos	_		9.6%	97.42%	
			Λ./.	Autos edium Trucks			10.3%	1.84%	
Barrier Height:				leavy Trucks			10.8%	0.74%	
Barrier Type (0-Wall, 1-Berm):			,	icavy Trucks	. 00.570	2.1 /0	10.076	0.7476	
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)			
Centerline Dist. to Observer:				Autos:	2.000				
Barrier Distance to Observer:			Mediui	n Trucks:	4.000				
Observer Height (Above Pad):			Heavy Trucks: 8.006 Grade Adjustment: (
Pad Elevation:			Lane Equivalent Distance (in feet)						
Road Elevation:			Lane Ly		92.547	i cc i)			
Road Grade:			Modiuu		92.54 <i>1</i> 92.504				
Left View:	3				92.504 92.547				
Right View:	90.0 degree	es	пеач	y Trucks.	92.547				
FHWA Noise Model Calculation	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	resnel	Barrier Att	en Ber	m Atten	
Autos: 73.2	2 3.93	-4	.11	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 83.6	8 -13.31	-4	.11	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 87.3	3 -17.27	-4	.11	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)						
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Nigh	t	Ldn	CI	VEL	
Autos:	71.8	69.9	68.2	(62.1	70.7	7	71.3	
Medium Trucks:	65.1	63.6	57.2	Ę	55.6	64.1	1	64.3	
Heavy Trucks:	64.7	63.3	54.3	Ę	55.5	63.9	9	64.0	
Vehicle Noise:	73.3	71.5	68.7		63.7	72.3	3	72.8	
Centerline Distance to Noise	Contour (in feet,)	,						

70 dBA

142

153

Ldn:

CNEL:

65 dBA

305

329

60 dBA

658

708

55 dBA

1,417

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: s/o I-5 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA		NOISE MODEL INPUTS						
Highway Data			Site Con	ditions (Hard	d=10, So	oft = 15)			
Average Daily Traffic (Adt):	56,700 vehicles	S			Autos:	15			
Peak Hour Percentage:	10%		Med	dium Trucks ((2 Axles):	15			
Peak Hour Volume:	5,670 vehicles	S	Hea	avy Trucks (3	3+ Axles):	15			
Vehicle Speed:	60 mph		Vehicle I	/lix					
Near/Far Lane Distance:	76 feet			cleType	Day	Evening	Night	Daily	
Site Data				Autos			9.6%	97.42%	
Barrier Height:	0.0 feet		Ме	dium Trucks	: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):	0.0		H	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:	100.0 feet					4)			
Centerline Dist. to Observer:	100.0 feet		Noise So	urce Elevati	_	eet)			
Barrier Distance to Observer:	0.0 feet			Autos:	2.000				
Observer Height (Above Pad):	5.0 feet		Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0						
Pad Elevation:	0.0 feet		Heav	/ Trucks:	8.006	Grade Ad	justment:	0.0	
Road Elevation:	0.0 feet		Lane Equ	iivalent Dist	ance (in	feet)			
Road Grade:	0.0%			Autos:	92.547				
Left View:	-90.0 degree	es	Mediun	n Trucks:	92.504				
Right View:	90.0 degree		Heav	y Trucks:	92.547				
FHWA Noise Model Calculation	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fro	esnel	Barrier Att	en Ber	m Atten	
Autos: 73.2	2 4.34	-4.1	1	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 83.6	8 -12.90	-4.1	1	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 87.3	3 -16.86	-4.1	1	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (with	hout Topo and	barrier atter	nuation)						
VehicleType Leq Peak H	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL	
Autos: 7	72.2	70.3	68.6	6	2.5	71.1	1	71.7	
Medium Trucks:	55.5	64.0	57.6	5	6.1	64.5	5	64.7	
Heavy Trucks:	55.2	63.7	54.7 55.9 64.3						
Vehicle Noise:	' 3.7	72.0	69.1	6	64.1	72.7	7	73.2	

70 dBA

151

163

Ldn:

CNEL:

65 dBA

325

350

60 dBA

700

754

55 dBA

1,509

1,625

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: n/o Walnut Av.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPL	JT DATA		NOISE MODEL INPUTS							
Highway Data					Site Con	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	51,4	400 vehicles	6					Autos:	15		
Peak Hour Percentage:		10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume:	5,	140 vehicles	3		Heavy Trucks (3+ Axles): 15						
Vehicle Speed:		60 mph			Vehicle I	Mix					
Near/Far Lane Distance:		76 feet				icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
		0.0 feet			Me	edium Ti		84.8%		10.3%	1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm).		0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Centerline Dist. to Barrier.		0.0 00.0 feet									
Centerline Dist. to Observer.		00.0 feet			Noise So			•	eet)		
Barrier Distance to Observer.		0.0 feet				Auto		.000			
Observer Height (Above Pad).		5.0 feet				m Truck		.000			
Pad Elevation.		0.0 feet			Heavy Trucks: 8.006 Grade Adjustment: 0.0						: 0.0
Road Elevation.		0.0 feet			Lane Eq	uivalen	t Distai	nce (in i	feet)		
Road Grade: 0.0% Autos: 92.547											
Left View.		90.0 degree	es		Mediu	m Truck	s: 92	2.504			
Right View.		90.0 degree			Heav	y Truck	s: 92	2.547			
FHWA Noise Model Calculation											
VehicleType REMEL		raffic Flow	Di	stance	Finite		Fres		Barrier Atte		m Atten
Autos: 73.2		3.91		-4.1		-1.20		-4.87		000	0.000
Medium Trucks: 83.6		-13.33		-4.1	-	-1.20		-4.97		000	0.000
Heavy Trucks: 87.3	3	-17.28		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout	t Topo and I	barri	ier atter	nuation)						
VehicleType Leq Peak H	our	Leq Day		Leq E	vening	Leq	Night		Ldn	CI	NEL
Autos:	71.8	(59.9		68.2		62	.1	70.7	7	71.3
	55.0		33.5		57.2		55		64.1		64.3
	64.7		3.3		54.3		55	.5	63.9		64.0
Vehicle Noise:	73.3	-	71.5		68.6		63	.7	72.3	3	72.7
Centerline Distance to Noise	Cont	our (in feet))								
				70	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

141

152

305

328

656

707

1,413

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Walnut Av. and Deerfiled Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA		NOISE MODEL INPUTS					
Highway Data			Site Cor	nditions (Ha	rd = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	47,600 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Me	edium Trucks	: (2 Axles):	15		
Peak Hour Volume:	4,760 vehicle	S	He	eavy Trucks	(3+ <i>Axles</i>):	15		
Vehicle Speed:	60 mph		Vehicle	Miv				
Near/Far Lane Distance:	76 feet			nicleType	Day	Evening	Night	Daily
Site Data			1011	Auto	•	J	9.6%	•
Barrier Height:	0.0 feet		М	edium Truck			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			Heavy Truck			10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet							
Centerline Dist. to Observer:	100.0 feet		Noise S	ource Eleva	· · · · · · · · · · · · · · · · · · ·	eet)		
Barrier Distance to Observer:	0.0 feet		Autos: 2.000					
Observer Height (Above Pad):	5.0 feet		Medium Trucks: 4.000					
Pad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0					
Road Elevation:	0.0 feet		Lane Eo	uivalent Dis	stance (in	feet)		
Road Grade:	0.0%		Autos: 92.547					
Left View:	-90.0 degre	29	Mediu	m Trucks:	92.504			
Right View:	90.0 degre			vy Trucks:	92.547			
rugin view.	oo.o degree	00		.,	00			
FHWA Noise Model Calculation	ns		·					
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 3.58	-4	1.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	8 -13.66	-2	1.11	-1.20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks: 87.3	3 -17.62	-2	1.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier att	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Nigl	nt	Ldn	CI	VEL
Autos:	1.5	69.6	67.8 61.8 70.4				4	71.0
Medium Trucks:	64.7	63.2	2 56.8 55.3 63.8					64.0
Heavy Trucks:	64.4	63.0	53.9	ı	55.2	63.5	5	63.7
Vehicle Noise:	7 3.0	71.2	68.3		63.4	71.9	9	72.4
Centerline Distance to Noise	Contour (in feet	·)						

70 dBA

134

145

Ldn:

CNEL:

65 dBA

289

312

60 dBA

623

671

55 dBA

1,343

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr. Job Number: 8141 Road Segment: b/w Deerfield Dr. and ICD Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				S	Site Conditi	ions (Hard	d = 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	42,500 ve	hicles				Autos:	15			
Peak Hour	Percentage:	10%			Mediui	m Trucks (2 Axles):	15			
Peak F	lour Volume:	4,250 ve	hicles		Heavy Trucks (3+ Axles): 15						
Ve	hicle Speed:	60 m	ph	V	/ehicle Mix						
Near/Far La	ne Distance:	76 fe	et	-	Vehicle		Day	Evening	Night	Daily	
Site Data					70111010	Autos.	_	_	9.6%	,	
Ra	rrier Height:	0.0 fc	oot		Mediu	ım Trucks.	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			Hea	vy Trucks.	86.5%	2.7%	10.8%	0.74%	
Centerline Di	,	100.0 fe	eet								
Centerline Dist.		100.0 fe		^	Noise Source Elevations (in feet)						
Barrier Distance		0.0 fe			Autos: 2.000						
Observer Height		5.0 fe			Medium Trucks: 4.000						
	ad Elevation:	0.0 fe			Heavy Trucks: 8.006 Grade Adjustment: (0.0	
	ad Elevation:	0.0 fe		L	Lane Equivalent Distance (in feet)						
	Road Grade:	0.0%	301		•		92.547	,			
	Left View:	-90.0 d	learees		Medium T		92.504				
	Right View:		legrees		Heavy T		92.547				
	10114										
FHWA Noise Mod VehicleType	ei Caiculation REMEL	ns Traffic F	low Di	stance	Finite Roa	ad Fr	esnel	Barrier Att	en Ber	m Atten	
Autos:	73.22		3.08	-4.11		1.20	-4.87	0.0		0.000	
Medium Trucks:	83.68		4.15	-4.11		.20	-4.97	0.0		0.000	
Heavy Trucks:	87.33		8.11	-4.11		.20	-5.16	0.0		0.000	
										0.000	
Unmitigated Nois											
VehicleType	Leq Peak Ho		g Day	Leq Ev		Leq Night		Ldn		VEL	
Autos:		1.0	69.1		67.3		1.3	69.9		70.5	
Medium Trucks:		4.2	62.7		56.3	_	4.8	63.3		63.5	
Heavy Trucks:	60	3.9	62.5		53.4	5	4.7	63.0		63.2	
Vehicle Noise:	72	2.5	70.7		67.8	6	2.9	71.4	ļ	71.9	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	125	268	578	1,245
CNEL:	134	289	622	1,341

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w ICD and Warner Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT [DATA		NOISE MODEL INPUTS					
Highway Data					Site Con	ditions (Hard	d=10, So	oft = 15)		
Peak Hou	r Traffic (Adt): r Percentage:	10%	6			dium Trucks	,	15		
	Hour Volume:	•	vehicles		Heavy Trucks (3+ Axles): 15					
	ehicle Speed:		mph		Vehicle Mix					
Near/Far La	ane Distance:	76	feet		Veh	icleType	Day	Evening	Night	Daily
Site Data						Autos	77.5%	12.9%	9.6%	97.42%
Barrier Type (0-V	•	0.0				edium Trucks Heavy Trucks			10.3% 10.8%	1.84% 0.74%
	ist. to Barrier:	100.0			Noise So	ource Elevati	ons (in f	eet)		
Centerline Dist Barrier Distance Observer Height	e to Observer:	5.0	feet feet feet feet			Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	iustment.	0.0
	oad Elevation:		feet		Lane Eq	uivalent Dist	ance (in	feet)		
	Road Grade:	0.0	%			Autos:	92.547			
	Left View:	-90.0	degrees	3	Medium Trucks: 92.504					
	Right View:	90.0	degrees	3	Heav	y Trucks:	92.547			
FHWA Noise Mod	del Calculatio	ns								
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos	: 73.22	2	3.42	-4.	11	-1.20	-4.87	0.0	000	0.000
Medium Trucks	<i>:</i> 83.68	3	-13.82	-4.	11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks	: 87.33	3	-17.78	-4.	11	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (wit	hout Top	oo and b	arrier atte	nuation)					
VehicleType	Leq Peak Ho		eq Day		Evening	Leq Night		Ldn		VEL
Autos		1.3		9.4	67.7		61.6	70.2		70.8
Medium Trucks		4.6		3.0	56.7		55.1	63.6		63.8
Heavy Trucks	:6	4.2		2.8	53.8	5	5.0	63.4		63.5
Vehicle Noise		2.8		1.0	68.2	6	3.2	71.8	3	72.2
Centerline Distar	nce to Noise C	Contour	(in feet)							

70 dBA

131

141

Ldn:

CNEL:

65 dBA

282

304

60 dBA

608

655

55 dBA

1,311

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Warner Av. and Barranca Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Cor	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt).	46,400 vehicles	S	Autos: 15							
Peak Hour Percentage.	10%		Me	dium Tru	ucks (2	Axles):	15			
Peak Hour Volume.	4,640 vehicles	S	Heavy Trucks (3+ Axles): 15							
Vehicle Speed.	60 mph		Vehicle Mix							
Near/Far Lane Distance	76 feet			icleType		Day	Evening	Night	Daily	
Site Data			Ven		Autos:	77.5%		9.6%		
			Λ.4	ء edium Tı		84.8%		10.3%	1.84%	
Barrier Height						86.5%		10.8%	0.74%	
Barrier Type (0-Wall, 1-Berm)			,	Heavy Ti	ucks.	00.5%	2.1%	10.6%	0.74%	
Centerline Dist. to Barrier			Noise Source Elevations (in feet)							
Centerline Dist. to Observer				Autos	s: 2	2.000	-			
Barrier Distance to Observer			Medium Trucks: 4.000							
Observer Height (Above Pad)	5.0 feet			y Trucks		3.006	Grade Ad	iustment:	0.0	
Pad Elevation	0.0 feet		,							
Road Elevation	0.0 feet		Lane Equivalent Distance (in feet)							
Road Grade	0.0%		Autos: 92.547							
Left View	-90.0 degree	es	Mediu	m Trucks	s: 92	2.504				
Right View	90.0 degree	es	Heav	y Trucks	s: 92	2.547				
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos: 73.2	22 3.46	-4.1	1	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 83.6	68 -13.77	-4.1	1	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 87.3	-17.73	-4.1	1	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier atten	uation)							
VehicleType Leq Peak H	lour Leq Day	Leq E	vening	Leq	Night		Ldn	CI	VEL	
Autos:	71.4	69.5	67.7		61	.7	70.3	3	70.9	
Medium Trucks:	64.6	63.1	56.7		55	.2	63.6	3	63.9	
Heavy Trucks:	64.3	62.9	53.8		55	.1	63.4	4	63.6	
Vehicle Noise:	72.9	71.1	68.2		63	.3	71.8	3	72.3	
Centerline Distance to Noise	Contour (in feet)								

70 dBA

132

142

Ldn:

CNEL:

65 dBA

284

306

60 dBA

613

660

55 dBA

1,320

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT D	DATA		NOISE MODEL INPUTS						
Highway Data					Site Co	onditions ((Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	50,900	vehicles					Autos:	15		
Peak Hour	Percentage:	10%	6		Medium Trucks (2 Axles): 15						
Peak H	lour Volume:	5,090	vehicles		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	60	mph		Vehicle	e Mix					
Near/Far La	ne Distance:	76	feet			ehicleType		Day	Evening	Night	Daily
Site Data							lutos:	77.5%	•	9.6%	
Ra	rrier Height:	0.0	feet			Medium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0				Heavy Tr	ucks:	86.5%		10.8%	0.74%
• • • •	ist. to Barrier:	100.0									
Centerline Dist.		100.0			Noise	Source Ele			eet)		
Barrier Distance			feet			Autos	s: 2	2.000			
					Med						
Observer Height	•		feet		He	avy Trucks	s: 8	3.006	Grade Ad	justment.	0.0
	ad Elevation:		feet				D'- 1-		C 4)		
Road Elevation: 0.0 feet					Lane E	quivalent			reet)		
	Road Grade:	0.0	%			Autos		2.547			
	Left View:	-90.0	degree	s	Med	ium Trucks	s: 92	2.504			
	Right View:	90.0	degree	s	He	avy Trucks	s: 92	2.547			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic	Flow	Distance	Fini	te Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22		3.87	-4.	11	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		-13.37	-4.	11	-1.20		<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks:	87.33		-17.33	-4.	11	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	oo and l	barrier atte	nuation)					
VehicleType	Leq Peak Ho	ur L	.eq Day	Leq	Evening	Leq I	Night		Ldn	CI	VEL
Autos:	71	.8	6	9.9	68	.1	62	.1	70.7	7	71.3
Medium Trucks:	65	5.0	ϵ	3.5	57	.1	55	.6	64.0	0	64.3
Heavy Trucks:	64	1.7	6	3.3	54	.2	55	.5	63.8	8	64.0
Vehicle Noise:	73	3.3	7	71.5	68	.6	63	.7	72.2	2	72.7
Centerline Distan	ce to Noise C	ontour !	(in fact)								

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	140	303	652	1,404
CNEL:	151	326	702	1,512

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Alton Pkwy. and Main St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Cor	nditions (l	Hard = 10, Se	oft = 15)				
Average Daily	Traffic (Adt):	51,700 vehicles	S	Autos: 15							
• •	Percentage:	10%		Me	dium Truc	cks (2 Axles):	15				
	lour Volume:	5,170 vehicles	S	Heavy Trucks (3+ Axles): 15							
Ve	hicle Speed:	60 mph		Vehicle	Mix						
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily		
Site Data				VEII	•	9.6%	97.42%				
				Autos: 77.5% 12.9% 9.6% Medium Trucks: 84.8% 4.9% 10.3%							
	rrier Height:	0.0 feet			Heavy Tru			10.8%	1.84% 0.74%		
Barrier Type (0-W		0.0			i c avy iiu	icks. 00.576	2.1 /0	10.076	0.7470		
Centerline Di		100.0 feet		Noise S	ource Ele	vations (in f	eet)				
Centerline Dist.		100.0 feet		Autos: 2.000							
Barrier Distance		0.0 feet		Mediu	m Trucks:						
Observer Height (,	5.0 feet		Heav	y Trucks:	8.006	Grade Adju	ustment:	0.0		
	ad Elevation:	0.0 feet			<u>- </u>						
	ad Elevation:	0.0 feet	•	Lane Eq		Distance (in	teet)				
	Road Grade:	0.0%			Autos:						
	Left View:	-90.0 degree	es		m Trucks:						
	Right View:	90.0 degree	es	Heav	y Trucks:	92.547					
FHWA Noise Mod	el Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:	73.22	3.93	-4.	11	-1.20	-4.87	0.0	00	0.000		
Medium Trucks:	83.68	-13.30	-4.	11	-1.20	-4.97	0.0	00	0.000		
Heavy Trucks:	87.33	-17.26	-4.	11	-1.20	-5.16	0.0	00	0.000		
Unmitigated Noise	e Levels (witl	hout Topo and	d barrier attenuation)								
VehicleType	Leq Peak Ho	our Leq Day	/ Leq E	Evening	Leq N	light	Ldn	CI	VEL		
Autos:	7	1.8	69.9	68.2		62.1	70.7		71.3		
Medium Trucks:	6	5.1	63.6	57.2		55.7	64.1		64.3		
Heavy Trucks:	6	4.8	63.3	54.3		55.5	63.9		64.0		
Vehicle Noise:	7:	3.3	71.6	68.7		63.7	72.3		72.8		
Centerline Distant	ce to Noise C	Contour (in feet)								

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	142	306	659	1,419
CNEL:	153	329	709	1,528

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Main St. and San Leandro

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT D	ATA		NOISE MODEL INPUTS								
Highway Data					S	ite Con	ditions	(Hard:	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	52,400	vehicles	6					Autos:	15			
	Percentage:	10%				Med	dium Tr	ucks (2	Axles):	15			
Peak H	Hour Volume:	5,240	vehicles	5		Hea	avy Tru	cks (3+	Axles):	15			
	ehicle Speed:	60	mph		V	Vehicle Mix							
Near/Far La	ne Distance:	76	feet			Vehi	cleType)	Day	Evening	Night	Daily	
Site Data							,	Autos:	77.5%	12.9%	9.6%	97.42%	
Ba	rrier Height:	0.0	feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V	•	0.0	1001			H	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
• • •	ist. to Barrier:	100.0	feet			oise So	urco E	lovatio	ns (in fa	not)			
Centerline Dist.	to Observer:	100.0	feet		/4	UISE SU			•	et)			
Barrier Distance	to Observer:	0.0	feet		Autos: 2.000 Medium Trucks: 4.000								
Observer Height	(Above Pad):	5.0	feet						.000	0 - 4 - 4 - 4		0.0	
_	ad Elevation:		feet		Heavy Trucks: 8.006 Grade Adjustment:						: 0.0		
	Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)												
	Road Grade:	0.0					Auto	s: 92	2.547				
	Left View:		degree	25		Mediun	n Truck		2.504				
	Right View:		degree				y Truck		2.547				
FHWA Noise Mod				5: .		- · ··	5 /		,	5 ' 4"		A	
VehicleType	REMEL	Traffic		Distar		Finite		Fres		Barrier Att		m Atten	
Autos:			3.99		-4.11		-1.20		-4.87		000	0.000	
Medium Trucks:			-13.25		-4.11		-1.20		-4.97		000	0.000	
Heavy Trucks:	87.33	3	-17.20		-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Top	oo and l	barrier a	attenu	ation)							
VehicleType	Leq Peak Ho	our L	.eq Day	Le	eq Eve	ening	Leq	Night		Ldn	С	NEL	
Autos:	7	1.9	7	70.0		68.2		62	.2	70.8	3	71.4	
Medium Trucks:	6	5.1	6	63.6		57.3		55	.7	64.2	2	64.4	
Heavy Trucks:	6	4.8	6	63.4		54.4		55	.6	64.0)	64.1	
Vehicle Noise:	7	3.4	7	71.6		68.7		63	.8	72.3	3	72.8	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	143	308	665	1,432
CNEL:	154	332	716	1,542

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w San Leandro and I-405 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	58,500	vehicles						Autos:	15		
Peak Hour	Percentage:	10%	o o			Me	dium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	5,850	vehicles			He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	60	mph		-	Vehicle I	Mix					
Near/Far La	ane Distance:	76	feet				icleType	,	Day	Evening	Night	Daily
Site Data								Autos:	77.5%	Ŭ I	9.6%	_
	rrier Height:	0.0	feet			М	edium T		84.8%		10.3%	1.84%
Barrier Type (0-V	_	0.0	ieet				leavy T		86.5%		10.8%	0.74%
•••	ist. to Barrier:	100.0	feet									
Centerline Dist.		100.0				Noise So				eet)		
Barrier Distance			feet				Auto		2.000			
Observer Height			feet				m Truck		.000	0 - 4 - 4 - 4		0.0
-	Pad Elevation:		feet			Heav	y Truck	s: 8	3.006	Grade Adj	iustment.	. 0.0
Ro	Road Elevation: 0.0 feet					Lane Eq	uivalen	t Distai	nce (in i	feet)		
Road Grade: 0.0%					Auto	s: 92	2.547					
	Left View:	-90.0	degree	s		Mediu	m Truck	s: 92	2.504			
	Right View:	90.0	degree	S		Heav	y Truck	s: 92	2.547			
FHWA Noise Mod	lel Calculation	S										
VehicleType	REMEL	Traffic	Flow	Di	stance	Finite	Road	Fres	snel	Barrier Atte	en Ber	m Atten
Autos:	73.22		4.47		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		-12.77		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33		-16.72		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	o and k	arri	er atten	nuation)						
VehicleType	Leq Peak Ho	ur L	eq Day		Leq E	vening	Leq	Night		Ldn	CI	NEL
Autos:	72	2.4	7	0.5		68.7		62	.7	71.3	3	71.9
Medium Trucks:	65	5.6	6	4.1		57.7		56	.2	64.7	7	64.9
Heavy Trucks:	65	5.3	6	3.9		54.8		56	.1	64.4	1	64.6
Vehicle Noise:	73	3.9	7	2.1		69.2		64	.3	72.8	3	73.3
Centerline Distan	ce to Noise C	ontour (in feet)	1					1			
					70	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

154

166

332

358

715

770

1,541

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: E. Yale Lp.

Road Segment: s/o Barranca Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS								
Highway Data			Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	12,200 vehicles 10% 1,220 vehicles			dium Trucks (avy Trucks (3	,					
Vehicle Speed:	50 mph				+ Axies).	15				
Near/Far Lane Distance:	50 feet		Vehicle I		_	- ·	A	5 "		
Site Data			ven	icleType Autos:	<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%		
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist, to Barrier:	0.0 feet 0.0 100.0 feet		Medium Trucks: 84.8% 4.9% 10 Heavy Trucks: 86.5% 2.7% 10							
Centerline Dist. to Damer: Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet	1	Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Road Elevation: Road Grade: Left View:	Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees			Autos: 96.871 Medium Trucks: 96.830 Heavy Trucks: 96.871						
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten		
Autos: 70.2	0 -1.54	-4.4	1	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 81.0 Heavy Trucks: 85.3		-4.4° -4.4°		-1.20 -1.20	-4.97 -5.16		000	0.000		
Unmitigated Noise Levels (with	thout Topo and L	barrier atten	uation)							
VehicleType Leq Peak H	our Leq Day	Leq E	/ening	Leq Night		Ldn	CI	VEL		
		31.1	59.4		3.3	61.9		62.6		
		55.1	48.7		7.2	55.7		55.9		
		55.6	46.6		7.8	56.2		56.3		
Vehicle Noise: 6 Centerline Distance to Noise		33.0	59.9	5	5.2	63.7	7	64.2		

70 dBA

38

41

Ldn:

CNEL:

65 dBA

82

88

60 dBA

177

190

55 dBA

381

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: E. Yale Lp.

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Ha	rd = 10, S	oft = 15)				
Average Daily Traffic (Adt):	11,600 vehicles	S			Autos:	15				
Peak Hour Percentage:	10%		Ме	dium Trucks	s (2 Axles):	15				
Peak Hour Volume:	1,160 vehicles	S	He	avy Trucks	(3+ <i>Axles</i>):	15				
Vehicle Speed:	55 mph		Vehicle Mix							
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data				Auto	os: 77.5%	12.9%	9.6%	97.42%		
Barrier Height:	0.0 feet		M	edium Truck	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):			1	Heavy Truck	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:			Noise S	ource Eleva	tions (in f	oot)				
Centerline Dist. to Observer:	100.0 feet		710/30 01	Autos:	2.000					
Barrier Distance to Observer:	0.0 feet		Modiu	m Trucks:	4.000					
Observer Height (Above Pad):	5.0 feet			justment:						
Pad Elevation:	0.0 feet		пеал	y Trucks:	8.006	Grade Auj	justin o nt.	0.0		
Road Elevation:	0.0 feet		Lane Eq	uivalent Di	stance (in	feet)				
Road Grade:	0.0%			Autos:	96.607					
Left View:	-90.0 degree	es	Medium Trucks: 96.566							
Right View:	90.0 degree	es	Heavy Trucks: 96.608							
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road F	-resnel	Barrier Att	en Ber	m Atten		
Autos: 71.7	8 -2.18	-4.	39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -19.42	-4.	39	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	0 -23.37	-4.	39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)							
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Nig	ht	Ldn	CI	VEL		
Autos:	64.0	62.1	60.3		54.3	62.9	9	63.5		
Medium Trucks:	57.4	55.9			48.0	56.4	4	56.7		
Heavy Trucks:	57.4	56.0) 47.0 48.2				56.6			
Vehicle Noise:	65.6	63.8	60.9		56.0	64.5	5	65.0		
Centerline Distance to Noise	Contour (in feet,)								

70 dBA

43

47

Ldn:

CNEL:

65 dBA

93

100

60 dBA

201

216

55 dBA

433

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: E. Yale Lp.

Road Segment: s/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data			5	Site Conditions (Hard = 10, Soft = 15)						
Average Daily Traffic (Adt):	11,500 vehicles	S					Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tru	cks (2	Axles):	15		
Peak Hour Volume:	1,150 vehicles	S		He	avy Truc	ks (3+	Axles):	15		
Vehicle Speed:	55 mph		1	/ehicle l	Wiy					
Near/Far Lane Distance:	52 feet		_		icleType		Day	Evening	Night	Daily
Site Data						utos:	77.5%		9.6%	97.42%
Barrier Height:	0.0 feet			Me	edium Tri	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			F	leavy Tro	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet									
Centerline Dist. to Observer:	100.0 feet		^	loise Sc	ource Ele			eet)		
Barrier Distance to Observer:	0.0 feet				Autos		.000			
Observer Height (Above Pad):	5.0 feet				n Trucks		.000	0 , 4 ,		0.0
Pad Elevation:	0.0 feet			Heav	y Trucks	: 8	.006	Grade Adj	iustment:	0.0
Road Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	ice (in f	feet)		
Road Grade: 0.0%					Autos	: 96	.607			
Left View:	-90.0 degree	es		Mediur	n Trucks	: 96	.566			
Right View:	90.0 degree			Heav	y Trucks	: 96	.608			
FUMA Naisa Madal Calandatia										
FHWA Noise Model Calculation VehicleType REMEL	Traffic Flow	Die	stance	Finite	Pood	Fres	nol	Barrier Atte	on Por	m Atten
Autos: 71.78		Dis	-4.39	1	-1.20	ries	-4.87		000 000	0.000
Medium Trucks: 82.40			-4.39		-1.20		-4.97		000	0.000
Heavy Trucks: 86.40			-4.39		-1.20		-5.16	0.0		0.000
		h a wwi								
VehicleType Leg Peak Ho			Leg Ev		Leq N	liaht		Ldn	C	VEL
	, ,	62.1	Leq Ev	60.3	Leqi	vigrit 54.	3	62.9		63.5
		55.9		49.5		47.		56.4		56.6
		56.0		46.9		48.		56.5		56.7
•		63.8						65.0		
Centerline Distance to Noise C										
Centerline Distance to Noise C	ontour (m reet,	,	70 d	IBA	65 c	IBA	6	60 dBA	55	dBA

Ldn:

CNEL:

43

46

93

100

200

215

431

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Camino Real Job Number: 8141
Road Segment: e/o Tustin Ranch Rd. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Ha	ard = 10, Sc	oft = 15)				
,	, ,	16,500 vehicles	S			Autos:	15				
	Percentage:	10%				rs (2 Axles):					
	lour Volume:	1,650 vehicles	3	He	avy Trucks	(3+ <i>Axles</i>):	15				
	ehicle Speed:	50 mph		Vehicle l	Vix						
Near/Far La	ne Distance:	70 feet		Veh	icleType	Day	Evening	Night	Daily		
Site Data					Aut	os: 77.5%	12.9%	9.6%	97.42%		
Ва	rrier Height:	0.0 feet		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0		ŀ	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Di	ist. to Barrier:	100.0 feet		Noise Source Elevations (in feet)							
Centerline Dist.	to Observer:	100.0 feet			Autos:	2.000					
Barrier Distance	to Observer:	0.0 feet		Medium Trucks: 4.000							
Observer Height	Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet			Heavy Trucks: 8.006 Grade Adjustment: 0.							
P				,							
Ro	Road Elevation: 0.0 feet				uivalent Di	istance (in	feet)				
	Road Grade:	0.0%			Autos:	93.723					
	Left View:	-90.0 degree	es	Medium Trucks: 93.680 Heavy Trucks: 93.723							
	Right View:	90.0 degree	es								
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	70.20	-0.23	-4.2	20	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-17.47	-4.1	9	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-21.43	-4.2	20	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atter	nuation)							
VehicleType	Leq Peak Hou	ur Leq Day	Leq E	vening	Leq Nig	ght	Ldn	CI	VEL		
Autos:	64	l.6 (62.7	60.9		54.9	63.5	5	64.1		
Medium Trucks:	58	3.1	56.6		50.3 48		57.2	2	57.4		
Heavy Trucks:	58	3.6	57.1	48.1 49.3 57.7		7	57.8				
Vehicle Noise:	66	6.3	64.5	61.5		56.7	65.2	2	65.7		

70 dBA

48

52

Ldn:

CNEL:

65 dBA

104

111

60 dBA

223

240

55 dBA

481

517

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Camino Real

Road Segment: e/o Jamboree Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS															
Highway Data			Site Con	ditions (Hard	I = 10, Sc	oft = 15)												
Average Daily Traffic (Adt):	24,300 vehicles	S			Autos:	15												
Peak Hour Percentage:	10%		Me	dium Trucks (2 Axles):	15												
Peak Hour Volume:	2,430 vehicles	S	Heavy Trucks (3+ Axles): 15															
Vehicle Speed:	55 mph		Vehicle Mix															
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily										
Site Data				Autos:	•	•	9.6%	•										
Barrier Height:	0.0 feet		М	edium Trucks:	84.8%	4.9%	10.3%	1.84%										
Barrier Type (0-Wall, 1-Berm):			1	Heavy Trucks:	86.5%	2.7%	10.8%	0.74%										
Centerline Dist. to Barrier:			Noine C		(: f:	4)												
Centerline Dist. to Observer:			Noise So	ource Elevation	•	eet)												
Barrier Distance to Observer:				Autos:	2.000 4.000													
Observer Height (Above Pad):			Mediu															
Pad Elevation:			Heav	iustment:	0.0													
	Road Elevation: 0.0 feet				ance (in	feet)												
Road Grade:					Autos: 96.607													
Left View:	-90.0 degree	es	Medium Trucks: 96.566															
Right View:	•		Heavy Trucks: 96.608															
FHWA Noise Model Calculation	ons																	
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten										
Autos: 71.7	8 1.03	-4.	39	-1.20	-4.87	0.0	000	0.000										
Medium Trucks: 82.4	-16.20	-4.	39	-1.20	-4.97	0.0	000	0.000										
Heavy Trucks: 86.4	-20.16	-4.	39	-1.20	-5.16	0.0	000	0.000										
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	nuation)															
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Night		Ldn	CI	VEL										
Autos:	67.2	65.3	63.6	5	7.5	66.1		66.7										
Medium Trucks:		5 59.1		5	1.2	59.7		59.9										
Heavy Trucks:	60.6	59.2	50.2 51.4		59.8		59.9											
Vehicle Noise:	8.86	67.0	64.1	5	9.2	67.8	3	68.2										
Centerline Distance to Noise	Contour (in feet,)						Centerline Distance to Noise Contour (in feet)										

70 dBA

71

76

Ldn:

CNEL:

65 dBA

153

164

60 dBA

329

354

55 dBA

709

Sunday, May 20, 2012

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Camino Real N.

Road Segment: s/o Bryan Ave.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIF	FIC INP	UT DATA			NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (A	Adt): 7	,800 vehicles						Autos:	15			
Peak Hour Percent	•	10%			Me	dium Tru	ıcks (2	Axles):	15			
Peak Hour Volu	•	780 vehicles			He	avy Truc	ks (3+	Axles):	15			
Vehicle Sp	eed:	55 mph		V	Vehicle Mix							
Near/Far Lane Dista	nce:	52 feet				icleType		Day	Evening	Night	Daily	
Site Data					V GI I		Autos:	77.5%		9.6%	-	
	• • •	0011			1/1	edium Tr		84.8%		10.3%	1.84%	
Barrier Hei	•	0.0 feet						86.5%		10.8%	0.74%	
Barrier Type (0-Wall, 1-Be	,	0.0 100.0 feet			Heavy Trucks: 86.5% 2.7% 10.8%						0.7 4 70	
Centerline Dist. to Ba	N	oise So	ource Ele	evatio	ns (in fe	eet)						
Centerline Dist. to Obse		100.0 feet				Autos	s: 2	2.000				
Barrier Distance to Obse					Medium Trucks: 4.000							
Observer Height (Above F	~ · · · · · · · · · · · · · · · · · · ·				Heav	y Trucks	s: 8	3.006	Grade Ad	justment:	0.0	
Pad Elevation: 0.0 feet					ano Fa	uivalent	Dicto	nco (in i	Foot)			
Road Elevation: 0.0 feet					ane Eq				eei)			
Road Gr		0.0%			N 4 = =15	Autos		6.607				
Left V		-90.0 degree			Medium Trucks: 96.566 Heavy Trucks: 96.608							
Right \	/iew:	90.0 degree	S		Heav	y Trucks	s: 9t	6.608				
FHWA Noise Model Calcu	llations											
VehicleType REM	IEL 7	raffic Flow	Dista	nce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-3.90		-4.39		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-21.14		-4.39		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-25.10		-4.39		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels	(withou	ıt Topo and l	parrier	attenu	ation)							
VehicleType Leq Pe	ak Hour	Leq Day	L	eq Eve	ening	Leq I	Night		Ldn	CI	VEL	
Autos:	62.3	6	60.4		58.6		52	.6	61.2	2	61.8	
Medium Trucks:	55.7	54.2			47.8		46	.3	54.7	7	55.0	
Heavy Trucks:	55.7	5	54.3		45.2		46	.5	54.9		55.0	
Vehicle Noise:	63.9		32.1		59.1		54	.3	62.8	3	63.3	
Centerline Distance to No	ise Con	tour (in feet)										

70 dBA

33

36

Ldn: CNEL: 65 dBA

72

77

60 dBA

154

166

55 dBA

332

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Portola Pkwy./S. Margarita Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (H	ard = 10, Se	oft = 15)						
Average Daily	Traffic (Adt):	20,000 vehicle	s			Autos:	15						
Peak Hour	Percentage:	10%		Ме	dium Truck	s (2 Axles):	15						
Peak H	lour Volume:	2,000 vehicle	s	Heavy Trucks (3+ Axles): 15									
Ve	hicle Speed:	55 mph		Vehicle I	Mix								
Near/Far La	ne Distance:	88 feet			icleType	Day	Evening	Night	Daily				
Site Data					Aut		-	9.6%					
Ra	rrier Height:	0.0 feet		Ме	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%				
Barrier Type (0-W	_	0.0		ŀ	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%				
Centerline Di		100.0 feet		M-1 0-		- ('- · · ·	4)						
Centerline Dist.		100.0 feet		Noise So		ations (in f	eet)						
Barrier Distance		0.0 feet			Autos:	2.000 4.000							
Observer Height		5.0 feet		Mediui		le Adjustment: 0.0							
•	Pad Elevation: 0.0 feet			Heav	y Trucks:	8.006	Grade Adj	iustment.	0.0				
	Road Elevation: 0.0 feet				uivalent Di	istance (in	feet)						
	Road Grade:	0.0%			Autos:	89.850							
	Left View:	-90.0 degre	es	Mediui	n Trucks:	89.805							
	Right View:	90.0 degre		Heavy Trucks: 89.850									
FHWA Noise Mod	el Calculation	1S											
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten				
Autos:	71.78	0.19	-3.	92	-1.20	-4.87	0.0	000	0.000				
Medium Trucks:	82.40	-17.05	-3.	92	-1.20	-4.97	0.0	000	0.000				
Heavy Trucks:	86.40	-21.01	-3.	92	-1.20	-5.16	0.0	000	0.000				
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)									
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq	Evening	Leq Nig	ght	Ldn	CI	VEL				
Autos:	60	6.8	64.9	63.2		57.1	65.7	7	66.4				
Medium Trucks:	60	0.2	58.7	52.4		50.8	59.3	3	59.5				
Heavy Trucks:	60	0.3	58.8	49.8 51		51.1	59.4	1	59.5				
Vehicle Noise:	68	8.4	66.7	63.7		58.8	67.4	1	67.9				
Contouling Dieton		\											

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	67	144	311	670
CNEL:	72	155	334	720

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o Portola Pkwy./S. Margarita Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site (Conditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	43,000 v	ehicles/					Autos:	15			
Peak Hour	Percentage:	10%)			Medium Tru	icks (2	Axles):	15			
Peak H	lour Volume:	4,300 \	ehicles/		Heavy Trucks (3+ Axles): 15							
Ve	hicle Speed:	55 r	mph		Vehic	cle Mix						
Near/Far La	ne Distance:	88 f	eet			VehicleType		Day	Evening	Night	Daily	
Site Data							utos:	77.5%	-	9.6%		
Ra	rrier Height:	0.0	feet			Medium Tr	ucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0	icei			Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Di		100.0	feet									
Centerline Dist.		100.0			Noise	e Source Ele		•	eet)			
Barrier Distance			feet			Autos		2.000				
	Observer Height (Above Pad): 5.0 feet				Me	edium Trucks	s: 4	1.000				
- · · · · · · · · · · · · · · · · · · ·				Heavy Trucks: 8.006				Grade Ad	justment	: 0.0		
Road Elevation: 0.0 feet					I ane	Equivalent	Dista	nce (in :	feet)			
				Laric	Autos		9.850	1001)				
	Road Grade:			_	1.40	Autos edium Trucks		9.805				
	Left View:		degree									
	Right View:	90.0	degree	S		leavy Trucks	s: 88	9.850				
FHWA Noise Mod	el Calculation	S										
VehicleType	REMEL	Traffic	Flow	Distance	Fil	nite Road	Fres	snel	Barrier Att	en Bei	m Atten	
Autos:	71.78		3.51	-3.	92	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40		-13.73	-3.	92	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40		-17.68	-3.	92	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Top	o and b	arrier atte	nuatio	on)						
VehicleType	Leq Peak Hou	ır L	eq Day	Leq I	Evenin	g Leq I	Night		Ldn	С	NEL	
Autos:	70	.2	6	8.3	6	6.5	60	.5	69.	1	69.7	
Medium Trucks:	63	.6	6	62.1		5.7	54	.1	62.0	6	62.8	
Heavy Trucks:	63	.6	6	2.2			54.4 62.7		62.7			
Vehicle Noise:	Vehicle Noise: 71.7 70.0		0.0	67.0 62.2 70.7			71.2					
Contorlino Distan	co to Noiso C	ontour (in foot)									

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	112	240	518	1,115
CNEL:	120	259	557	1,200

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	22,000 vehicle	es					Autos:	15			
Peak Hour Percentage:		10%			Med	dium Tri	ucks (2	? Axles):	15			
Peak Hour Volume:		2,200 vehicle	es		Hea	avy Trud	cks (3+	- Axles):	15			
Vehicle Speed: Near/Far Lane Distance: Site Data		55 mph 88 feet		V	ehicle I							
				-	VehicleType Day			Evening	Night	Daily		
							Autos:	77.5%	J		97.42%	
Barrier Height:		0.0 feet			Ме	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):		0.0			H	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:		100.0 feet			laina Ca		laa4!a	ma (in f	41			
Centerline Dist.	to Observer:	100.0 feet		^	ioise So			ns (in fe	eet)			
Barrier Distance to Observer:		0.0 feet				Auto	_	2.000				
Observer Height (Above Pad):		5.0 feet				n Truck	_	4.000	Orodo Ad			
Pad Elevation:		0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	usimeni	. 0.0	
Road Elevation:		0.0 feet		L	ane Equ	uivalent	t Dista	nce (in	feet)			
Road Grade:		0.0%				Auto	s: 8	9.850				
Left View:		-90.0 degre	-90.0 degrees			Medium Trucks: 89.805						
Right View:		90.0 degre	es		Heav	y Truck	s: 8	9.850				
FHWA Noise Mod	el Calculation	18										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	0.60		-3.92		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-16.64		-3.92		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-20.59		-3.92		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	nout Topo and	barri	er attenu	ation)							
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	ening	Leq	Night		Ldn	C	NEL	
Autos:	67	7.3	65.4		63.6		57	7.5	66.2	<u> </u>	66.8	
Medium Trucks:	60.6 59.1			52.8			51.2 59.7			59.9		
Heavy Trucks:	60.7 59.3			50.2 51.5			59.8 60.0					

Centerline Distance to Noise Contour (in feet)									
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn: ¯	71	154	331	714					
CNEL:	77	165	356	768					

64.1

59.2

67.8

67.1

68.3

Vehicle Noise:

68.8

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Toledo Wy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily Tra	nffic (Adt): 4	14,000 vehicle	S					Autos:	15			
Peak Hour Percentage:		10%			Medium Trucks (2 Axles): 15							
Peak Hour Volume:		1,400 vehicles			Heavy Trucks (3+ Axles): 15							
Vehic	le Speed:	60 mph 106 feet		1	/ehicle l	Miv						
Near/Far Lane	Distance:					icleType	1	Day	Evening	Night	Daily	
Site Data					V 011		Autos:	77.5%		9.6%	-	
		0.0 foot			Me	, edium Tı		84.8%		10.3%	1.84%	
	er Height:	0.0 feet 0.0	et					86.5%		10.8%	0.74%	
Barrier Type (0-Wall,	,						40110.		2,0	10.070	0.1 170	
Centerline Dist. to		100.0 feet		٨	loise Sc	ource El	evatio	ns (in f	eet)			
Centerline Dist. to		100.0 feet				Autos	s: 2	.000				
Barrier Distance to Observer:		0.0 feet			Mediui	n Trucks	s: 4	.000				
Observer Height (Above Pad):		5.0 feet			Heav	y Trucks	s: 8	.006	Grade Adj	justment.	0.0	
Pad Elevation:		0.0 feet		,	Fa		· Diata	(:	faa4)			
Road Elevation:		0.0 feet		L	ane Eq	uivalent		•	reet)			
Road Grade:		0.0%				Autos		.853				
Left View:		-90.0 degrees			Medium Trucks: 84.806							
Right View:		90.0 degre	es		Heav	y Truck	s: 84	.853				
FHWA Noise Model C	Calculation	S										
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	73.22	3.23		-3.55		-1.20	-4.87		0.0	000	0.000	
Medium Trucks:	83.68	-14.00		-3.55	-1.20			-4.97	0.0	000	0.000	
Heavy Trucks:	Heavy Trucks: 87.33 -17.96			-3.55	-1.20		<i>-5.16</i> 0.0		0.000			
Unmitigated Noise Lo	evels (with	out Topo and	barrie	r attenu	uation)							
VehicleType Le	q Peak Hoι	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos: 7		.7	69.8		68.0		62.0		70.6	6	71.2	
Medium Trucks: 6-		.9	63.4		57.1 5		55.	55.5 64.0)	64.2	
Heavy Trucks: 6		.6	63.2		54.2 55		55.	5.4 63.8		3	63.9	
Vehicle Noise: 73		.2	71.4		68.5 63		63	.6 72.1		1	72.6	
Centerline Distance	to Noise Co	ntour (in feet	·)									

70 dBA

139

150

Ldn:

CNEL:

65 dBA

299

322

60 dBA

645

695

55 dBA

1,390

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT D	ATA		NOISE MODEL INPUTS					
Highway Data			-		Site Con	ditions (F	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	44,000 v	ehicles				Autos	15		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Axles).	15		
Peak H	lour Volume:	4,400 v	ehicles		He	avy Truck	s (3+ Axles)	15		
Ve	ehicle Speed:	60 n	nph		Vehicle I	Viy				
Near/Far La	ne Distance:	106 f	eet			icleType	Day	Evening	Night	Daily
Site Data							tos: 77.5%	_	9.6%	,
Ra	rrier Height:	0.0	foot		Me	edium Tru	cks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0	ICCL		F	leavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%
• • •	st. to Barrier:	100.0	feet							
Centerline Dist.		100.0			Noise Sc		ations (in f	eet)		
Barrier Distance		0.0				Autos:	2.000			
Observer Height		5.0				n Trucks:	4.000			
•	ad Elevation:	0.0			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
-	ad Elevation:	0.0			Lane Equivalent Distance (in feet)					
	Road Grade:	0.0%			Autos: 84.853					
	Left View:		degree	9	Mediur	n Trucks:	84.806			
	Right View:		degree			y Trucks:	84.853			
	rugine vieni.	00.0	aogroo			,				
FHWA Noise Mod	lel Calculatio	ns								
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	73.22	2	3.23	-3.5	55	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	3 -	14.00	-3.5	55	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3 -	17.96	-3.5	55	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (wit	hout Top	o and b	parrier atte	nuation)					
VehicleType	Leq Peak Ho	our Le	eq Day	Leq E	vening	Leq N	ight	Ldn	CI	VEL
Autos:	7	1.7	6	9.8	68.0		62.0	70.6	3	71.2
Medium Trucks:	6	4.9	6	3.4	57.1		55.5	64.0)	64.2
Heavy Trucks:	6	4.6	6	3.2	54.2		55.4	63.8	3	63.9
Vehicle Noise:	7	3.2	7	' 1.4	68.5		63.6	72.	1	72.6

70 dBA

139

150

Ldn:

CNEL:

65 dBA

299

322

60 dBA

645

695

55 dBA

1,390

1,497

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	ATA				N	OISE	MODE	L INPUT	S			
Highway Data					Sit	te Con	ditions (Hard:	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	46,000 v	vehicles	i					Autos:	15				
Peak Hour	Percentage:	10%	, D			Med	dium Tru	cks (2	Axles):	15				
Peak H	lour Volume:	4,600 \	vehicles			Hea	avy Truc	ks (3+	+ <i>Axles):</i> 15					
Ve	ehicle Speed:	60 ı	mph		Ve	hicle N	Лix							
Near/Far La	ne Distance:	106 f	eet				cleType		Day	Evening	Night	Daily		
Site Data								utos:	77.5%	-	9.6%	-		
Ra	rrier Height:	0.0	feet			Мє	edium Tru	ucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0	icci		H	leavy Tru	ucks:	86.5%	2.7%	10.8%	0.74%			
• • • •	ist. to Barrier:	100.0	feet						<i>(</i> : 6	4)				
Centerline Dist.		100.0			No	ise So	urce Ele			eet)				
Barrier Distance			feet				Autos		2.000					
Observer Height			feet		1		n Trucks		.000					
-	ad Elevation:		feet			Heav	y Trucks	: 8	3.006	Grade Ad	ljustment	: 0.0		
	ad Elevation:		feet		La	ne Eau	uivalent	Distai	nce (in i	feet)				
	Road Grade:	0.09					Autos		1.853					
	Left View:		degree	c		Mediun	n Trucks		1.806					
	Right View:		degree		'		y Trucks		1.853					
	ragin view.	30.0	degree	3		mouv.	y Tracko	. 0	1.000					
FHWA Noise Mod	lel Calculation	s												
VehicleType	REMEL	Traffic	Flow	Distance)	Finite	Road	Fres	snel	Barrier Att	ten Ber	m Atten		
Autos:	73.22		3.43	-3.	.55		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	83.68		-13.81	-3.	.55		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33		-17.77	-3.	.55		-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Top	o and b	parrier atte	enua	ition)								
VehicleType	Leq Peak Hou	ır L	eq Day	Leq	Ever	ning	Leq N	Vight		Ldn	C	NEL		
Autos:	71	.9	7	0.0		68.2	-	62	.2	70.8	8	71.4		
Medium Trucks:	65	.1	6	3.6		57.3		55	.7	64.2	2	64.4		
Heavy Trucks:	64	.8	6	3.4		54.4		55	.6	64.0	0	64.1		
Vehicle Noise:	73	.4	7	71.6		68.7		63	.8	72.	3	72.8		
Contorlino Distan	co to Noiso C	ontour (in foot)											

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	143	308	664	1,432						
CNEL:	154	332	716	1,542						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Rockfield Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECI	IFIC INP	UT DATA		NOISE MODEL INPUTS						
Highway Data				Site Con	ditions (Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic Peak Hour Percer Peak Hour Vo	itage:	,000 vehicles 10% ,000 vehicles			dium Trud avy Truck	•	,			
Vehicle S _i Near/Far Lane Dist		60 mph 106 feet		Vehicle Veh	Mix icleType		Day	Evening	Night	Daily
Site Data					A	utos:	77.5%	12.9%	9.6%	97.42%
Barrier He Barrier Type (0-Wall, 1-E Centerline Dist. to Be Centerline Dist. to Obse Barrier Distance to Obse Observer Height (Above Pad Elev Road Elev Left Right	Berm): arrier: erver: erver: Pad): ration: ration: Grade: View:	0.0 feet 0.0 100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 degree 90.0 degree		Medium Trucks: 84.8% 4.9% 10.3 Heavy Trucks: 86.5% 2.7% 10.8 Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustme Lane Equivalent Distance (in feet) Autos: 84.853 Medium Trucks: 84.806 Heavy Trucks: 84.853						1.84% 0.74%
FHWA Noise Model Calc	ulations									
VehicleType REI	MEL 7	raffic Flow	Distance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	3.79	-3.5	55	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-13.45	-3.5	55	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-17.40	-3.5	55	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Level	ls (withou	it Topo and b	oarrier attei	nuation)						
VehicleType Leq Pe	eak Hour	Leq Day	Leq E	vening	Leq ∧	light		Ldn		VEL
Autos:	72.3		0.4	68.6		62.		71.2		71.8
Medium Trucks:	65.5		34.0	57.6		56.		64.5		64.8
Heavy Trucks:	65.2	6	3.8	54.7		56.	0	64.3	3	64.4
Vehicle Noise:	73.7	7	2.0	69.1		64.	1	72.7	7	73.2

70 dBA

151

163

Ldn:

CNEL:

65 dBA

326

351

60 dBA

702

757

55 dBA

1,513

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: b/w Rockfield Bl.and I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INP	UT DATA		NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Ad	t): 65	,000 vehicles	S					Autos:	15		
Peak Hour Percentag	e:	10%			Ме	dium Tr	ucks (2	Axles):	15		
Peak Hour Volum	e: 6	,500 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Vehicle Spee	d:	60 mph		V	ehicle l	Miy					
Near/Far Lane Distand	e:	106 feet		-		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	Ū	9.6%	_
Barrier Heigl	· + -	0.0 feet			М	edium T	rucks:	84.8%		10.3%	
Barrier Type (0-Wall, 1-Bern		0.0			H	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrie	,	100.0 feet		_							
Centerline Dist. to Observe		100.0 feet		Ν	oise So			ns (in fe	eet)		
Barrier Distance to Observe		0.0 feet				Auto		2.000			
Observer Height (Above Pa		5.0 feet				m Truck		1.000	0 , 4,		0.0
Pad Elevation		0.0 feet			Heavy Trucks: 8.006 Grade Adjustment: 0.0						
Road Elevation		0.0 feet		L	Lane Equivalent Distance (in feet)						
Road Grad		0.0%				Auto	s: 84	4.853			
Left Vie	N:	-90.0 degree	es		Mediu	m Truck	s: 84	4.806			
Right Vie		90.0 degree			Heav	y Truck	s: 84	4.853			
FHWA Noise Model Calcula	ions										
VehicleType REMEL	7	raffic Flow	Dista	nce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 73	.22	4.93		-3.55		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 83	.68	-12.31		-3.55		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87	.33	-16.27		-3.55		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (vithou	ıt Topo and	barrier	attenu	ation)						
VehicleType Leq Peak	Hour	Leq Day	L	eq Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	73.4		71.5		69.7		63	.7	72.3	3	72.9
Medium Trucks:	66.6	(65.1		58.8 57.2			.2	65.7	7	65.9
Heavy Trucks:	66.3	-	64.9	55.9 57.1 65.5					65.6		
Vehicle Noise:	74.9		73.1		70.2		65	.3	73.8	3	74.3
Centerline Distance to Nois	e Con	tour (in feet,)								

70 dBA

180

194

Ldn:

CNEL:

65 dBA

388

418

60 dBA

837

901

55 dBA

1,803

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: b/w I-5 SB Ramps and Avenida Carlota

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS							
Highway Data			S	ite Con	ditions (H	lard =	10, Sc	oft = 15)		
Average Daily Traffic (Adt):	44,800 vehicle	es				,	Autos:	15		
Peak Hour Percentage:	10%			Med	dium Truci	ks (2 A	Axles):	15		
Peak Hour Volume:	4,480 vehicle	es		Heavy Trucks (3+ Axles): 15						
Vehicle Speed:	55 mph		V	ehicle I	/liv					
Near/Far Lane Distance:	88 feet				cleType		Day	Evening	Night	Daily
Site Data				V 0/11			77.5%		9.6%	•
	0.0 foot			Ме	edium Truc		84.8%		10.3%	1.84%
Barrier Height:	0.0 feet 0.0				leavy Truc		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:									101070	0.1 170
Centerline Dist. to Observer:			N	oise So	urce Elev	/ation	s (in fe	eet)		
					Autos:	2.	000			
Barrier Distance to Observer:	0.0 feet			Mediur	n Trucks:	4.0	000			
Observer Height (Above Pad):				Heav	y Trucks:	8.	006	Grade Ad	justment.	0.0
Pad Elevation:	0.0 feet		,	Lane Equivalent Distance (in feet)						
Road Elevation:	0.0 feet		L	arie Equ			•	eet)		
Road Grade:					Autos:	89.				
Left View:					n Trucks:	89.				
Right View:	90.0 degre	es		Heav	y Trucks:	89.	850			
FHWA Noise Model Calculatio	ns									
VehicleType REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresr	nel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 3.69	١	-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -13.55	;	-3.92		-1.20		<i>-4</i> .97	0.0	000	0.000
Heavy Trucks: 86.4	0 -17.50)	-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	thout Topo and	barrier	attenu	ation)						
VehicleType Leq Peak Ho	our Leq Da	y L	eq Eve	ening	Leq Ni	ght		Ldn	CI	VEL
Autos: 7	70.3	68.5		66.7		60.6	5	69.3	3	69.9
Medium Trucks: 6	3.7	62.2	55.9 54.3 62.8					63.0		
Heavy Trucks: 6	3.8	62.3	53.3 54.6 62.9						63.0	
Vehicle Noise:	71.9	70.2		67.2		62.3	3	70.9	9	71.4
Centerline Distance to Noise (Contour (in fee	t)								

70 dBA

115

123

Ldn:

CNEL:

65 dBA

247

266

60 dBA

532

572

55 dBA

1,146

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Paseo de Valencia

Job Number: 8141

Analyst: B. Lawson

	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 2	9,600 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	icks (2	Axles):	15		
Peak F	lour Volume:	2,960 vehicles	S		He	avy Truc	ks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		· ·	ehicle l	Miy					
Near/Far La	ne Distance:	88 feet		-		icleType		Day	Evening	Night	Daily
Site Data						A	utos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			F	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
• • • •	st. to Barrier:	100.0 feet		_	loisa Sa	ource Ele	ovatio	ne (in fa	oot)		
Centerline Dist.	to Observer:	100.0 feet			10/36 30	Autos		2.000	,e t)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Autos m Trucks		.000			
Observer Height	(Above Pad):	5.0 feet						3.006	Grade Ad	iustmont	
P	ad Elevation:	0.0 feet			пеач	y Trucks	s. c	.006	Orace Au	Justinent	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distai	nce (in i	feet)		
	Road Grade:	0.0%				Autos	s: 89	9.850			
	Left View:	-90.0 degree	es		Mediu	m Trucks	s: 89	9.805			
	Right View:	90.0 degree	es		Heav	y Trucks	s: 89	9.850			
FHWA Noise Mod	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.89		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.35		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.30		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (witho	out Topo and	barrier	attenu	uation)						
VehicleType	Leq Peak Hou	r Leq Day	′	Leq Ev	ening	Leq	Night		Ldn	C	VEL
Autos:	68.	5	66.7		64.9		58	.8	67.5	5	68.1

Unmitigated Nois	e Levels (withou	t Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	68.5	66.7	64.9	58.8	67.5	68.1
Medium Trucks:	61.9	60.4	54.1	52.5	61.0	61.2
Heavy Trucks:	62.0	60.5	51.5	52.8	61.1	61.2
Vehicle Noise:	70.1	68.4	65.4	60.5	69.1	69.6

Centerline Distance to Noise Contour (in feet)									
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	87	187	404	870					
CNEL:	94	202	434	936					

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o Paseo de Valencia

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA	1		NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions (Hard = 10	, So	ft = 15)				
Average Daily	Traffic (Adt): Percentage:	32,900 vehice 10%	les		Me	dium Tru	Autoks (2 Axle		15 15				
	Hour Volume:	3,290 vehic	عما				ks (3+ Axl	•					
Ve	ehicle Speed: ane Distance:	55 mph 88 feet	103	V	ehicle l		De		Evening	Night	Daily		
Site Data					VCIII			.5%	12.9%	9.6%	-		
	uuiau Haimbt.	0.0 foot			Me	edium Tru		.8%	4.9%	10.3%	1.84%		
Barrier Type (0-V	rrier Height:	0.0 feet 0.0				leavy Tru		.5%	2.7%	10.8%	0.74%		
	ist. to Barrier:	100.0 feet		N			vations (
Centerline Dist.	to Observer:	100.0 feet		74	0/36 30	Autos:	•		ei)				
Barrier Distance	to Observer:	0.0 feet			Modium	n Trucks:							
Observer Height	(Above Pad):	5.0 feet			Heavy Trucks: 8.006 Grade Adjustment:								
P	ad Elevation:	0.0 feet							dott/fort.	0.0			
Ro	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)									
	Road Grade:	0.0%				Autos:	89.850)					
	Left View:	-90.0 deg	rees		Mediur	n Trucks:	89.80	5					
	Right View:	90.0 deg	rees		Heav	y Trucks:	89.850)					
FHWA Noise Mod	lel Calculation	าร											
VehicleType	REMEL	Traffic Flow	/ Dis	tance	Finite	Road	Fresnel	1	Barrier Atte	en Ber	m Atten		
Autos:	71.78	3 2.3	5	-3.92		-1.20		87	0.0	000	0.000		
Medium Trucks:	82.40	-14.8	9	-3.92		-1.20	-4.	97	0.0	000	0.000		
Heavy Trucks:	86.40	-18.8	4	-3.92		-1.20	-5.	16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo an	d barrie	er attenu	ation)								
VehicleType	Leq Peak Ho	our Leq D	ay	Leq Eve	ening	Leq N	light		Ldn	CI	VEL		
Autos:	6	9.0	67.1		65.3		59.3		67.9)	68.5		
Medium Trucks:		2.4	60.9		54.5		53.0		61.4		61.7		
Heavy Trucks:	6:	2.4	61.0		52.0		53.2		61.6	5	61.7		
Vehicle Noise:	7	0.6	68.8		65.9		61.0		69.5	5	70.0		

70 dBA

93

100

Ldn: CNEL: 65 dBA

201

216

60 dBA

433

466

55 dBA

933

1,004

Sunday, May 20, 2012

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o Moulton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume: Vehicle Speed: Near/Far Lane Distance:	10% 3,240 vehicles 55 mph		Vehicle		+ Axles):	15 15 15		
			Veh	icleType	Day	Evening	Night	Daily
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:			I	Autos: edium Trucks: Heavy Trucks:	77.5% 84.8% 86.5%	4.9% 2.7%	10.3% 10.8%	97.42% 1.84% 0.74%
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet		Mediu	m Trucks:	2.000 4.000 8.006	eet) Grade Adj	iustment:	0.0
Road Elevation: Road Grade: Left View: Right View:	0.0% -90.0 degree		Mediu	m Trucks: 8	nce (in 1 9.850 9.805 9.850	feet)		
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fre	snel	Barrier Att	en Ber	m Atten
Autos: 71.7 Medium Trucks: 82.4 Heavy Trucks: 86.4	0 -14.96	-3	.92 .92 .92	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	000 000 000	0.000 0.000 0.000
Unmitigated Noise Levels (with	thout Topo and	barrier att	enuation)					
VehicleType Leq Peak H			Evening	Leq Night		Ldn		VEL
Medium Trucks:	62.3	67.0 60.8 60.9	65.3 54.5 51.9	52	9.2 2.9 3.2	67.8 61.4 61.5	1	68.5 61.6 61.6
	70.5	68.8	65.8).9	69.5		70.0

70 dBA

92

99

Ldn:

CNEL:

65 dBA

199

214

60 dBA

429

461

55 dBA

924

994

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Aliso Creek Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOIS	SE MODE	L INPUT	S			
Highway Data				Site Con	ditions (Ha	rd = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	26,400 vehicles	3			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles).	15				
Peak H	lour Volume:	2,640 vehicles	S	He	avy Trucks ((3+ <i>Axles</i>):	15				
Ve	ehicle Speed:	55 mph		Vehicle i	Miy						
Near/Far La	ne Distance:	88 feet									
Site Data					Auto	,	J	9.6%	<i>Daily</i> 97.42%		
	rrier Height:	0.0 feet		М	edium Truck			10.3%	1.84%		
Barrier Type (0-W	_	0.0 feet 0.0			leavy Truck			10.8%	0.74%		
, ,	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		Noise So	ource Eleva	•	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
Observer Height		5.0 feet			m Trucks:	4.000	0 / 4 /				
	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0%			Autos:	89.850					
	Left View:	-90.0 degree	es	Medium Trucks: 89.805							
	Right View:	90.0 degree	es	Heav	y Trucks:	89.850					
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	1.39	-3.	92	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-15.84	-3.	92	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-19.80	-3.9	92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Ho	ur Leq Day	Leq I	Evening	Leq Nigl	nt	Ldn	CI	VEL		
Autos:	6	8.1	66.2	64.4		58.3	67.0)	67.6		
Medium Trucks:	6	1.4	59.9	53.6		52.0	60.5	5	60.7		
Heavy Trucks:	6	1.5	60.1	51.0		52.3	60.6	6	60.7		

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	81	174	374	806						
CNEL:	87	187	402	867						

64.9

60.0

68.6

69.1

67.9

Vehicle Noise:

69.6

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o SR-73

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT I	DATA				r	NOISE	MODE	L INPUT	S	
Highway Data					S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	29,900	vehicles	S					Autos:	15		
	Percentage:	109				Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,990	vehicles	S		He	avy Tru	cks (3+	Axles):	15		
	ehicle Speed:		mph		ν	Vehicle Mix						
Near/Far La	ne Distance:	88	feet			Vehi	cleType	Э	Day	Evening	Night	Daily
Site Data							,	Autos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0) feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0				F	łeavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:) feet		^	loise Sc	urce F	levatio	ns (in fa	eet)		
Centerline Dist.	to Observer:	100.0) feet			10/30 00	Auto		2.000	,		
Barrier Distance	to Observer:	0.0) feet			Modium	Auto n Truck					
Observer Height	(Above Pad):	5.0) feet						.000	Crada Ad	livotmont	
•	ad Elevation:) feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	7 0.0
	ad Elevation:) feet							feet)		
	Road Grade:	0.0					Auto	s: 89	9.850			
	Left View:) degree	es		Mediur	n Truck	s: 89	9.805			
	Right View:) degree			Heav	y Truck	rs: 89	9.850			
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	_	Flow	Dist	ance	Finite	Road	Fres	snel	Barrier Att	en Bei	rm Atten
Autos:	71.78	3	1.93		-3.92	l	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40)	-15.30		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40)	-19.26		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout To	po and	barrie	r attenu	ıation)						
VehicleType	Leq Peak Ho	ur	Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	С	NEL
Autos:	6	8.6	(66.7		64.9		58	.9	67.5	5	68.1
Medium Trucks:	6	2.0	(60.5		54.1		52	.6	61.0)	61.3
Heavy Trucks:	6	2.0	(60.6		51.6		52	.8	61.2	2	61.3
Vehicle Noise:	7	0.2		68.4		65.5		60	.6	69.	1	69.6

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	88	189	406	876						
CNEL:	94	203	437	942						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o SR-73

Job Number: 8141

Analyst: B. Lawson

Average Daily Traffic (Adt): 17,800 vehicles Autos: 15 Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Volume: 1,780 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 70 feet Vehicle Type Day Evening Night Day Evening Night Day Vehicle Type Day Evening Night Day Evening Ni
Peak Hour Percentage: 10%
Peak Hour Volume: 1,780 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 70 feet Vehicle Mix
Vehicle Speed: 50 mph Vehicle Mix Near/Far Lane Distance: 70 feet Vehicle Type Day Evening Night Day Site Data Autos: 77.5% 12.9% 9.6% 97. Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 1. Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8% 0. Centerline Dist. to Doserver: 100.0 feet Heavy Trucks: 86.5% 2.7% 10.8% 0. Barrier Distance to Observer: 0.0 feet Autos: 2.000 Medium Trucks: 4.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Right View: 90.0 degrees Heavy Trucks: 93.723 Medium Trucks: 93.723
Near/Far Lane Distance: 70 feet Vehicle Mix
Near/Far Lane Distance: 70 feet VehicleType Day Evening Night Day
Site Data Autos: 77.5% 12.9% 9.6% 97.
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Grade: 0.0% Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees FHWA Noise Model Calculations
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees FHWA Noise Model Calculations Heavy Trucks: 86.5% 2.7% 10.8% 0. Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Medium Trucks: 93.723 Medium Trucks: 93.723
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees FHWA Noise Model Calculations Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees FHWA Noise Model Calculations Noise Source Elevations (In feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723
Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees FHWA Noise Model Calculations Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees FHWA Noise Model Calculations Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Lane Equivalent Distance (in feet) Autos: 93.723 Left View: -90.0 degrees Right View: 90.0 degrees Heavy Trucks: 93.680 Heavy Trucks: 93.723
Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Heavy Trucks: 93.723 Heavy Trucks: 93.723
Road Grade: 0.0% Autos: 93.723 Left View: -90.0 degrees Medium Trucks: 93.680 Right View: 90.0 degrees Heavy Trucks: 93.723 FHWA Noise Model Calculations
Left View: -90.0 degrees Medium Trucks: 93.680 Right View: 90.0 degrees Heavy Trucks: 93.723 FHWA Noise Model Calculations
Right View: 90.0 degrees Heavy Trucks: 93.723 FHWA Noise Model Calculations
FHWA Noise Model Calculations
Vehicle Type REMEL Traffic Flow Distance Finite Poad Freehol Barrier Atten Porm At
,,
Autos: 70.20 0.10 -4.20 -1.20 -4.87 0.000 0
Medium Trucks: 81.00 -17.14 -4.19 -1.20 -4.97 0.000 0
Heavy Trucks: 85.38 -21.10 -4.20 -1.20 -5.16 0.000 0
Unmitigated Noise Levels (without Topo and barrier attenuation)
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL
Autos: 64.9 63.0 61.2 55.2 63.8
Medium Trucks: 58.5 57.0 50.6 49.1 57.5
Heavy Trucks: 58.9 57.5 48.4 49.7 58.0
Vehicle Noise: 66.6 64.8 61.8 57.0 65.6
Centerline Distance to Noise Contour (in feet)

70 dBA

51

54

Ldn: CNEL: 65 dBA

109

117

60 dBA

235

252

55 dBA

506

544

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Fortune Dr.

Road Segment: b/w Gateway Bl. and Spectrum

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NO	ISE MODE	L INPUT	NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (H	lard = 10, Sc	oft = 15)						
Average Daily	Traffic (Adt):	8,700 vehicles	3			Autos:	15						
Peak Hour	Percentage:	10%		Med	dium Truck	ks (2 Axles):	15						
Peak H	lour Volume:	870 vehicles	S	Hea	avy Trucks	s (3+ Axles):	15						
Ve	hicle Speed:	55 mph		Vehicle I	/lix								
Near/Far La	ne Distance:	52 feet			cleType	Day	Evening	Night	Daily				
Site Data					Aut	tos: 77.5%	12.9%	9.6%	97.42%				
Bai	rrier Height:	0.0 feet		Me	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%				
Barrier Type (0-W	_	0.0		F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%				
Centerline Di		100.0 feet		Noisa Sa	urco Elov	rations (in f	not)						
Centerline Dist.	to Observer:	100.0 feet		Noise 30	Autos:	2.000	eet)						
Barrier Distance	to Observer:	0.0 feet		Modium	n Trucks:								
Observer Height (Above Pad):	5.0 feet				4.000	Crada Ad	iuotmont					
• ,	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment.	0.0				
Roa	ad Elevation:	0.0 feet		Lane Equ	ıivalent D	istance (in	feet)						
	Road Grade:	0.0%			Autos:	96.607							
	Left View:	-90.0 degree	es	Mediur	n Trucks:	96.566							
	Right View:	90.0 degree		Heav	y Trucks:	96.608							
FHWA Noise Mode	el Calculation	S											
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten				
Autos:	71.78	-3.43	-4.3	9	-1.20	-4.87	0.0	000	0.000				
Medium Trucks:	82.40	-20.67	-4.3	9	-1.20	-4.97	0.0	000	0.000				
Heavy Trucks:	86.40	-24.62	-4.3	9	-1.20	-5.16	0.0	000	0.000				
Unmitigated Noise	e Levels (with	out Topo and	barrier atter	nuation)									
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL				
Autos:	62	.8	60.9	59.1		53.0	61.7	7	62.3				
Medium Trucks:	56	.1	54.6	48.3		46.7	55.2	2	55.4				
Heavy Trucks:	56	.2	54.8	45.7		47.0	55.3	3	55.5				
Vehicle Noise:	64	3	62.6	59.6		54.7	63.3	3	63.8				

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	36	77	166	358
CNEL:	38	83	179	385

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Fortune Dr.

Road Segment: b/w Pacifica and Spectrum

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (H	lard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	8,900 vehicle	s			Autos:	15		
Peak Hour	Percentage:	10%		Ме	dium Truci	ks (2 Axles):	15		
Peak H	Hour Volume:	890 vehicle	s	He	avy Trucks	s (3+ Axles):	15		
	ehicle Speed:	55 mph		Vehicle	Mix				
Near/Far La	ane Distance:	52 feet		Veh	icleType	Day	Evening	Night	Daily
Site Data					Au	tos: 77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet		М	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0		1	Heavy Truc	cks: 86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		Noise S	ource Flev	vations (in fe	not)		
Centerline Dist.	to Observer:	100.0 feet		140/36 30	Autos:	2.000			
Barrier Distance	to Observer:	0.0 feet		Madiu					
Observer Height	(Above Pad):	5.0 feet			m Trucks:	4.000	Crada Ad	iuotmont	0.0
•	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)		
	Road Grade:	0.0%			Autos:	96.607			
	Left View:	-90.0 degre	es	Mediu	m Trucks:	96.566			
	Right View:	90.0 degre		Heav	y Trucks:	96.608			
FHWA Noise Mod	lel Calculation	<u> </u>							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	-3.33	-4	.39	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-20.57	-4	.39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-24.52	-4	.39	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)					
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq	Evening	Leq Ni	ght	Ldn	CI	VEL
Autos:	62	2.9	61.0	59.2		53.1	61.8	3	62.4
Medium Trucks:	56	5.2	54.7	48.4		46.8	55.3	3	55.5
Heavy Trucks:	56	5.3	54.9	45.8		47.1	55.4	4	55.6
Vehicle Noise:	64	1.4	62.7	59.7		54.8	63.4	4	63.9

CNEL:	39	84	181	391

70 dBA

36

Ldn:

65 dBA

78

60 dBA

168

55 dBA

363

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Gateway Bl.

Road Segment: w/o Fortune Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				NO	ISE MODE	L INPUT	S	
Highway Data				Si	ite Con	ditions (H	lard = 10, So	oft = 15)		
Average Daily	Traffic (Adt):	7,100 vehicles	S				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truci	ks (2 Axles):	15		
Peak H	lour Volume:	710 vehicles	S		He	avy Trucks	s (3+ Axles):	15		
Ve	ehicle Speed:	55 mph		V	ehicle l	Mix				
Near/Far La	ne Distance:	52 feet				icleType	Day	Evening	Night	Daily
Site Data							tos: 77.5%	J	9.6%	
Ra	rrier Height:	0.0 feet			Me	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			H	Heavy Truc			10.8%	0.74%
Centerline Di		100.0 feet								
Centerline Dist.		100.0 feet		N	oise So	ource Elev	ations (in f	eet)		
Barrier Distance		0.0 feet				Autos:	2.000			
					Mediui	m Trucks:	4.000			
Observer Height	•	5.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
	ad Elevation:	0.0 feet		1.	ono Fa	uivalant F	Niotonoo (in	foot)		
	ad Elevation:	0.0 feet		L	arie Eq		Distance (in	ieet)		
	Road Grade:	0.0%				Autos:	96.607			
	Left View:	-90.0 degree				m Trucks:	96.566			
	Right View:	90.0 degree	es		Heav	y Trucks:	96.608			
FHWA Noise Mod	lel Calculation	s								
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	-4.31		-4.39		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-21.55		-4.39		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-25.50		-4.39		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r attenu	ation)					
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	61	.9	60.0		58.2		52.2	60.8	3	61.4
Medium Trucks:	55	.3	53.8		47.4		45.9	54.3	3	54.5
Heavy Trucks:	55	.3	53.9		44.8		46.1	54.4	4	54.6
Vehicle Noise:	63	.5	61.7		58.7		53.9	62.4	4	62.9
Contorlino Distan	co to Noisa Co	ontour (in foot	١							

Centerline Distance to Noise Contour (in feet)									
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	31	67	145	312					
CNEL:	34	72	156	336					

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Gateway Bl.

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NOISE MODEL INPUTS							
Highway Data				S	Site Con	ditions (Ha	ard = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	1,700 vehicles	3				Autos	: 15				
Peak Hour	Percentage:	10%			Me	dium Truck	s (2 Axles)	: 15				
Peak H	lour Volume:	170 vehicles	3		He	avy Trucks	(3+ Axles)	: 15				
Ve	hicle Speed:	55 mph		ν	/ehicle l	Mix						
Near/Far La	ne Distance:	52 feet		-		icleType	Day	Evening	Night	Daily		
Site Data						Auto	os: 77.5%	-	9.6%	-		
Ra	rrier Height:	0.0 feet			Me	edium Truci	ks: 84.89	4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0			ŀ	leavy Truci	ks: 86.5%	6 2.7%	10.8%	0.74%		
Centerline Di	,	100.0 feet			laina Ca	······································	ationa /in	Fa. 41				
Centerline Dist.	to Observer:	100.0 feet		N	ioise so	ource Eleva	•	reet)				
Barrier Distance	to Observer:	0.0 feet			Modiu	Autos: m Trucks:	2.000					
Observer Height	(Above Pad):	5.0 feet					4.000	Grade Ad	liustmont:			
P	ad Elevation:	0.0 feet			неач	y Trucks:	8.006	Grade Ad	jusimeni.	0.0		
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent Di	stance (in	feet)				
	Road Grade:	0.0%				Autos:	96.607					
	Left View:	-90.0 degree	es		Mediui	m Trucks:	96.566					
	Right View:	90.0 degree	es		Heav	y Trucks:	96.608					
FHWA Noise Mod	el Calculations	S										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	-10.52		-4.39)	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-27.76		-4.39)	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-31.71		-4.39)	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrie	er attenu	uation)							
VehicleType	Leq Peak Hou	r Leq Day	,	Leq Ev	ening	Leq Nig	ıht	Ldn	CI	VEL		
Autos:	55.	7 :	53.8		52.0		45.9	54.6	6	55.2		
Medium Trucks:	49.	.1	47.5		41.2		39.6	48.	1	48.3		
Heavy Trucks:	49.	.1 4	47.7		38.6		39.9	48.2	2	48.4		
Vehicle Noise:	57.	2	55.5		52.5		47.7	56.2	2	56.7		
Centerline Distan	ce to Noise Co	ntour (in feet))									
				70 di	BA	65 dB/	4	60 dBA	55	dBA		

Ldn:

CNEL:

12

13

26

28

56

60

120

130

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Gateway Bl.

Road Segment: w/o ICD

Job Number: 8141

Analyst: B. Lawson

	SPECIFIC INI	PUT DATA		NOISE MODEL INPUTS							
Highway Data				Site	e Conditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	2,700 vehicles	S				Autos:	15			
Peak Hour	Percentage:	10%			Medium Ti	rucks (2	2 Axles):	15			
Peak F	lour Volume:	270 vehicles	S		Heavy Tru	icks (3+	- Axles):	15			
Ve	hicle Speed:	55 mph		Vel	nicle Mix						
Near/Far La	ne Distance:	52 feet		Vei	VehicleTyp	е	Day	Evening	Night	Daily	
Site Data						Autos:	77.5%		-	97.42%	
Ba	rrier Height:	0.0 feet			Medium 7	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	_	0.0			Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Di		100.0 feet		Noise Source Elevations (in feet)							
Centerline Dist.	to Observer:	100.0 feet		Autos: 2.000							
Barrier Distance	to Observer:	0.0 feet		٨	Auto Iedium Truck		4.000				
Observer Height	(Above Pad):	5.0 feet					4.000 8.006	Grade Ad	iustment	. 0.0	
P	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0					0.0		
Ro	ad Elevation:	0.0 feet		Lar	ne Equivalen	t Dista	nce (in i	feet)			
	Road Grade:	0.0%			Auto	os: 9	6.607				
	Left View:	-90.0 degree	es	٨	/ledium Truck	rs: 9	6.566				
	Right View:	90.0 degree	es		Heavy Truck	rs: 9	6.608				
FHWA Noise Mod	el Calculations	<u> </u>									
VehicleType	REMEL	Traffic Flow	Distanc	e i	Finite Road	Fre	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-8.51	-4	4.39	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-25.75	-4	4.39	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-29.70	-4	4.39	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (witho	ut Topo and	barrier at	tenuat	tion)						
VehicleType	Leq Peak Hour	Leq Day	Lec	g Even	ing Leq	Night		Ldn	CI	VEL	
Autos:	57.	7	55.8		54.0	48	3.0	56.6	3	57.2	
Medium Trucks:	51.	1 .	49.6		43.2	41	.7	50.1	1	50.3	

venicie i ype	Led Peak Hour	Leq Day	Leq Evening	Leq Nigrit	Lan	CINEL
Autos	s: 57.7	55.8	54.0	48.0	56.6	57.2
Medium Trucks	51.1	49.6	43.2	41.7	50.1	50.3
Heavy Trucks	s:51.1	49.7	40.6	41.9	50.2	50.4
Vehicle Noise	e: 59.3	57.5	54.5	49.7	58.2	58.7
Cantarlina Diata	naa ta Naisa Can	torry (in foot)				

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	16	35	76	164
CNEL:	18	38	82	176

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Glenn Ranch Rd.

Road Segment: n/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions (Hard =	10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	29,000 vehicle 10% 2,900 vehicle				dium Truc avy Truck	cks (2 A	,			
	ehicle Speed: ane Distance:	50 mph 70 feet		V	ehicle I Vehi	cleType		Day 77.5%	Evening 12.9%	Night 9.6%	Daily 97.42%
	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium Tru Heavy Tru	ıcks: 8	77.5% 34.8% 36.5%	4.9%	9.6% 10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 90.0 degree		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723					0.0		
VehicleType Autos: Medium Trucks: Heavy Trucks:	70.20 81.00	Traffic Flow 2.22 1 -15.02	2	-4.20 -4.19 -4.20		-1.20 -1.20 -1.20	-	el -4.87 -4.97 -5.16	0.0	en Ber 000 000 000	<i>m Atten</i> 0.000 0.000 0.000
Unmitigated Nois VehicleType	e Levels (with Leq Peak Ho			ttenu eq Eve		Leq N	light		Ldn	C	VEL
Autos: Medium Trucks: Heavy Trucks:	66	7.0 0.6 1.0	65.1 59.1 59.6		63.4 52.7 50.5		57.3 51.2 51.8		65.9 59.6 60.	6 1	66.5 59.9 60.3
Vehicle Noise:	68	8.7	67.0		63.9		59.1		67.7	7	68.2

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	70	151	325	701
CNEL:	75	162	349	753

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Glenwood Dr./Indian Creek

Road Segment: w/o Moulton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA				NOISE	MODE	L INPUT	S	
Highway Data				Site	Conditions	(Hard =	10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	11,700 vehicle 10% 1,170 vehicle			Medium Ti Heavy Tru	rucks (2 /	,			
Near/Far La	ehicle Speed: ane Distance:	50 mph 70 feet		Veh	icle Mix VehicleTyp		Day	Evening	Night	Daily
Site Data Barrier Type (0-V	n rrier Height: Vall, 1-Berm):	0.0 feet 0.0			Medium 1 Heavy 1		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): lad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre 90.0 degre		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723					0.0	
VehicleType Autos: Medium Trucks: Heavy Trucks:	70.20 81.00	<i>Traffic Flow</i> -1.73 -18.97	-4	e <i>F</i> I.20 I.19 I.20	-1.20 -1.20 -1.20 -1.20		-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Nois VehicleType	e Levels (with Leg Peak Ho			enuati Eveni		ı Night		Ldn	CI	VEL
Autos: Medium Trucks: Heavy Trucks:	63 56	3.1 6.6	61.2 55.1 55.6		79 209 59.4 48.8 46.6	53.4 47.2 47.9	2	62.0 55.7 56.2	7	62.6 55.9 56.3
Vehicle Noise:			63.0		60.0	55.2		63.7		64.2

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	38	82	178	383
CNEL:	41	89	191	411

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Handy Creek Rd.

Road Segment: e/o Jamboree Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S			
Highway Data			Site Con	ditions (Har	d=10, Se	oft = 15)				
Average Daily Traffic (Adt): Peak Hour Percentage:	•	S		dium Trucks		15				
Peak Hour Volume:	220 vehicle	S	Heavy Trucks (3+ Axles): 15							
Vehicle Speed: Near/Far Lane Distance:	•		Vehicle					5 "		
			Veh	icleType	Day	Evening	Night	Daily		
Site Data				Autos				97.42%		
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0			edium Trucks Heavy Trucks			10.3% 10.8%	1.84% 0.74%		
Centerline Dist. to Barrier:			Noise So	ource Elevati	ions (in f	eet)				
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	0.0 feet 5.0 feet			Autos: m Trucks: yy Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0		
Road Elevation:			Lane Eq	uivalent Dist	ance (in	feet)				
Road Grade:					99.865	,				
Left View:		es	Mediu		99.825					
Right View:	3 -				99.865					
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distance			esnel	Barrier Att	en Ber	m Atten		
Autos: 66.5		-4.0		-1.20	-4.87		000	0.000		
Medium Trucks: 77.7		-4.0	_	-1.20	-4.97		000	0.000		
Heavy Trucks: 82.9	9 -29.21	-4.0	61	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	nuation)							
VehicleType Leq Peak H	our Leq Day	/ Leq E	Evening	Leq Night	<u> </u>	Ldn	CI	VEL		
Autos:	52.7	50.8	49.0	4	13.0	51.6	3	52.2		
		45.1	38.8		37.2	45.7		45.9		
Heavy Trucks:	18.0	46.6	37.5	3	88.8	47.	1	47.2		
Vehicle Noise:	54.7	53.0	49.7		15.1	53.7	7	54.1		
Centerline Distance to Noise	Contour (in feet)			,					

70 dBA

8

9

Ldn:

CNEL:

65 dBA

18

19

60 dBA

38

41

55 dBA

82

87

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Harvard Av.

Road Segment: s/o Walnut Av.

Job Number: 8141

Analyst: B. Lawson

Medium Trucks: 75.75 -17.42 -4.59 -1.20 -4.97 0.000 0.000 Heavy Trucks: 81.57 -21.37 -4.59 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8											
Average Daily Traffic (Adt): 11,700 vehicles Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15	SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS						
Peak Hour Percentage: 10% Peak Hour Volume: 1,170 vehicles Vehicle Speed: 35 mph Near/Far Lane Distance: 20 feet Medium Trucks (2 Axles): 15 15 Heavy Trucks (3+ Axles): 15 15 Heavy Trucks: 15 Heavy Trucks: 17.5% 12.9% 9.0% 9.0 9.0 9.0 9.7.42% Medium Trucks: 84.8% 4.9% 10.3% 1.84% Heavy Trucks: 86.5% 2.7% 10.3% 1.84% Heavy Trucks: 86.5% 2.7% 10.0% 1.84% Heavy Trucks: 86.5% 2.7% 10.0% 1.84% Heavy Trucks: 86.5% 2.0% 0.74% Medium Trucks: 86.5% 2.7% 10.0% 0.0% Medium Trucks: 80.0% Grad experiment of the Propersion of the	Highway Data				Site Con	ditions	(Hard = 10, Set)	oft = 15)			
Peak Hour Volume: Vehicle Speed: Near/Far Lane Distance: 20 feet Vehicle Mix	Average Daily	Traffic (Adt):	11,700 vehicles	3			Autos:	15			
Vehicle Speed: Near/Far Lane Distance: 20 feet Vehicle Mix Vehicle Type Day Evening Night Daily Site Data Autos: 77.5% 12.9% 9.6% 97.42% Barrier Height: Dist. to Barrier: 100.0 feet Medium Trucks: 84.8% 4.9% 10.3% 1.84% Heavy Trucks: 86.5% 2.7% 10.8% 10.8% 10.84% No.74% Centerline Dist. to Observer: Observer: Distance to Observer: 0.0 feet No.10 feet Noise Source Elevations (in feet) Noise Source Elevations (in fee	Peak Hour	Percentage:	10%		Me	dium Tru	ucks (2 Axles):	15			
Near/Far Lane Distance: 20 feet VehicleType Day Evening Night Daily	Peak H	lour Volume:	1,170 vehicles	S	He	avy Trud	cks (3+ Axles):	15			
Near/Far Lane Distance: 20 feet VehicleType Day Evening Night Daily	Ve	ehicle Speed:	35 mph		Vehicle	Miv					
Autos: 77.5% 12.9% 9.6% 97.42%	Near/Far La	ne Distance:	20 feet				Dav	Evenina	Night	Daily	
Barrier Height: Barrier Type (0-Wall, 1-Berm): 0.0 0	Site Data				VOIT			_	•		
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet		unia u Haiada (0.0 foot		Me	=					
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Autos: 2.000 Medium Trucks: 4.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Grade Adjustment: 0.0 Grade Adjustment: 0.0 Grade Adjustment: 0.0 Heavy Trucks: 99.544 Heavy		•									
Note Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Heavy Trucks: 8.006 Grade Adjustment: 0.0 Medium Trucks: 99.544 Medium Trucks: 99.544 Medium Trucks: 99.504 Medium Trucks: 99.544 Medium Truc		,									
Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Autos: 99.544 Autos: 99.504 Autos: 99.544					Noise Source Elevations (in feet)						
Medium Trucks: 4.000 Medium Trucks: 4.000 Pad Elevation: Pad Elevation: Road Elevation: Road Grade: 0.0% Lane Equivalent Distance (in feet) Road Grade: Left View: -90.0 degrees Right View: 90.0 degrees Medium Trucks: 99.504 Heavy Trucks: 99.544 Medium Trucks: 99.544 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 64.30 -0.18 -4.59 -1.20 -4.87 0.000 0.000 Medium Trucks: 75.75 -17.42 -4.59 -1.20 -4.97 0.000 0.000 Heavy Trucks: 81.57 -21.37 -4.59 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8											
Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 99.544 Left View: -90.0 degrees Medium Trucks: 99.504 Right View: 90.0 degrees Heavy Trucks: 99.544 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 64.30 -0.18 -4.59 -1.20 -4.87 0.000 0.000 Medium Trucks: 75.75 -17.42 -4.59 -1.20 -4.97 0.000 0.000 Heavy Trucks: 81.57 -21.37 -4.59 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1					Mediur	n Truck	s: 4.000				
Road Elevation: 0.0 feet Road Grade: 0.0% Autos: 99.544	•	•			Heavy Trucks: 8.006 Grade Adjustment: 0.					0.0	
Road Grade: 0.0%					Lane Equivalent Distance (in feet)						
Left View: -90.0 degrees Medium Trucks: 99.504 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 64.30 -0.18 -4.59 -1.20 -4.87 0.000 0.000 Medium Trucks: 75.75 -17.42 -4.59 -1.20 -4.97 0.000 0.000 Heavy Trucks: 81.57 -21.37 -4.59 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8								7			
FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 64.30 -0.18 -4.59 -1.20 -4.87 0.000 0.000 Medium Trucks: 75.75 -17.42 -4.59 -1.20 -4.97 0.000 0.000 Heavy Trucks: 81.57 -21.37 -4.59 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8				20	Mediui						
FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 64.30 -0.18 -4.59 -1.20 -4.87 0.000 0.000 Medium Trucks: 75.75 -17.42 -4.59 -1.20 -4.97 0.000 0.000 Heavy Trucks: 81.57 -21.37 -4.59 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8			•								
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 64.30 -0.18 -4.59 -1.20 -4.87 0.000 0.000 Medium Trucks: 75.75 -17.42 -4.59 -1.20 -4.97 0.000 0.000 Heavy Trucks: 81.57 -21.37 -4.59 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8		rugne vioir.	co.o dogio	50		,					
Autos: 64.30 -0.18 -4.59 -1.20 -4.87 0.000 0.000 Medium Trucks: 75.75 -17.42 -4.59 -1.20 -4.97 0.000 0.000 Heavy Trucks: 81.57 -21.37 -4.59 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8	FHWA Noise Mod	el Calculation	s								
Medium Trucks: 75.75 -17.42 -4.59 -1.20 -4.97 0.000 0.000 Heavy Trucks: 81.57 -21.37 -4.59 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8	VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten	
Heavy Trucks: 81.57 -21.37 -4.59 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8	Autos:	64.30	-0.18	-4.	59	-1.20	-4.87	0.0	000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8	Medium Trucks:	75.75	-17.42	-4.	59	-1.20	-4.97	0.0	000	0.000	
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8	Heavy Trucks:	81.57	-21.37	-4.	59	-1.20	-5.16	0.0	000	0.000	
Autos: 58.3 56.4 54.7 48.6 57.2 57.8 Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8	Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)						
Medium Trucks: 52.5 51.0 44.7 43.1 51.6 51.8	VehicleType	Leq Peak Hou	ır Leq Day	Leq	Evening	Leq	Night	Ldn	CI	VEL	
	Autos:	58	.3	56.4	54.7		48.6	57.2	2	57.8	
Heavy Trucks: 54.4 53.0 43.9 45.2 53.6 53.7	Medium Trucks:	52	.5	51.0	44.7		43.1	51.6	6	51.8	
	Heavy Trucks:	54	.4	53.0	43.9		45.2	53.6	<u> </u>	53.7	

Centerline Distance to Noise Contour (in feet)			Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA										
Ldn:	20	43	93	201										
CNEL:	21	46	100	215										

55.4

51.0

59.5

60.0

58.8

Vehicle Noise:

60.6

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Harvard Av. Job Number: 8141
Road Segment: n/o Edinger Av. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				DISE MODE		S	
Highway Data				Site Con	ditions (l	Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	13,200 vehicles	S			Autos	: 15		
Peak Hour	Percentage:	10%		Me	dium Truc	cks (2 Axles).	: 15		
Peak H	lour Volume:	1,320 vehicles	S	He	avy Truck	ks (3+ Axles).	: 15		
Ve	ehicle Speed:	55 mph		Vehicle I	Miv				
Near/Far La	ane Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data				VEII		utos: 77.5%		9.6%	
				1.11	ה. edium Tru			10.3%	1.84%
	rrier Height:	0.0 feet			J eavy Tru			10.8%	0.74%
Barrier Type (0-V	•	0.0		,	leavy IIu	icks. 00.57	0 2.1 /0	10.076	0.7470
	ist. to Barrier:	100.0 feet		Noise So	ource Ele	vations (in f	eet)		
Centerline Dist.		100.0 feet			Autos:	2.000			
Barrier Distance		0.0 feet		Mediui	n Trucks:	4.000			
Observer Height	•	5.0 feet		Heav	y Trucks:	8.006	Grade Adj	ustment.	0.0
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)					
	ad Elevation:	0.0 feet		Larie Eq			reet)		
	Road Grade:	0.0%		N 4 1"	Autos:				
	Left View:	-90.0 degree			n Trucks:				
	Right View:	90.0 degree	es	Heav	y Trucks:	96.608			
FHWA Noise Mod	1							1	
VehicleType	REMEL	Traffic Flow	Distance	Finite		Fresnel	Barrier Atte	en Ber	m Atten
Autos:	_	-1.62	-4.3	39	-1.20	-4.87		000	0.000
Medium Trucks:	82.40	-18.86	-4.3	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-22.81	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	Evening	Leq N	light	Ldn	CI	VEL
Autos:	64	4.6	62.7	60.9		54.9	63.5	5	64.1
Medium Trucks:	58	8.0	56.4	50.1		48.5	57.0)	57.2
Heavy Trucks:	58	8.0	56.6	47.5		48.8	57.1		57.3

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	47	102	219	472
CNEL:	51	109	236	508

61.4

56.6

65.1

64.4

65.6

Vehicle Noise:

66.1

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Harvard Av. Job Number: 8141
Road Segment: b/w Edinger Av. And Paseo Westpark Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				NO	ISE MODE	L INPUT	s	
Highway Data				S	ite Con	ditions (H	ard = 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	15,200 vehicl 10% 1,520 vehicl					Autos: ks (2 Axles): s (3+ Axles):			
Ve	ehicle Speed: ane Distance:	55 mph 52 feet		V	'ehicle		Day	Evening	Night	Daily
Site Data						Aut	tos: 77.5%	12.9%	9.6%	97.42%
Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium Truc Heavy Truc			10.3% 10.8%	1.84% 0.74%
	ist. to Barrier:	100.0 feet		N	loise So	ource Elev	ations (in f	eet)		
-	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet		L	Heav	Autos: m Trucks: yy Trucks: uivalent D	2.000 4.000 8.006	Grade Ad,	iustment:	0.0
	Road Grade:	0.0%			<u> </u>	Autos:	96.607			
	Left View: Right View:	-90.0 degr				m Trucks: ry Trucks:	96.566 96.608			
FHWA Noise Mod	lel Calculation	ns								
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	3 -1.00)	-4.39		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-18.2	4	-4.39		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-22.20)	-4.39		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	d barrie	er attenu	ation)					
VehicleType	Leq Peak Ho	our Leq Da	ay .	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	_	5.2	63.3		61.5		55.5	64.1	l	64.7
Medium Trucks:	5	8.6	57.1		50.7		49.2	57.6	6	57.8
Heavy Trucks:	5	8.6	57.2		48.1		49.4	57.8	3	57.9
Vehicle Noise:	6	6.8	65.0		62.0		57.2	65.7	7	66.2

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	52	112	241	519							
CNEL:	56	120	259	558							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Hubble Job Number: 8141
Road Segment: n/o ICD Analyst: B. Lawson

SITE SPE	CIFIC INI	PUT DATA			N	OISE N	/IODE	L INPUT	S	
Highway Data				Site Co.	nditions	(Hard =	10, Sc	oft = 15)		
Average Daily Traffi Peak Hour Perc	, ,	2,000 vehicles 10%			edium Tru	icks (2 A				
Peak Hour V	/olume:	200 vehicles		He	eavy Truc	ks (3+ A	Axles):	15		
Vehicle	•	55 mph		Vehicle	Mix					
Near/Far Lane Di	stance:	52 feet		Vel	hicleType		Day	Evening	Night	Daily
Site Data					A	utos:	77.5%	12.9%	9.6%	97.42%
Barrier I	Heiaht:	0.0 feet		N	ledium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1	•	0.0			Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to	Barrier:	100.0 feet		Noise S	ource El	evation	s (in fe	eet)		
Centerline Dist. to Ob		100.0 feet			Autos		000			
Barrier Distance to Ob		0.0 feet		Mediu	ım Trucks	s: 4.0	000			
Observer Height (Abov	,	5.0 feet		Hea	vy Trucks	s: 8.0	006	Grade Ad	iustment:	0.0
	evation:	0.0 feet						• 4		
Road Ele		0.0 feet		Lane Ed	quivalent			reet)		
	Grade:	0.0%			Autos					
	ft View:	-90.0 degree	S		ım Trucks					
Righ	nt View:	90.0 degree	S	Hea	vy Trucks	s: 96.	808			
FHWA Noise Model Ca	lculations									
VehicleType Ri	EMEL	Traffic Flow	Distance	Finite	e Road	Fresr	el	Barrier Att	en Ber	m Atten
Autos:	71.78	-9.81	-4	.39	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-27.05	-4	.39	-1.20		<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks:	86.40	-31.01	-4	.39	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Lev	els (witho	ut Topo and I	barrier atte	enuation)						
VehicleType Leq	Peak Hour	Leq Day	Leq	Evening	Leq	Vight		Ldn	CI	VEL
Autos:	56.4	4 5	54.5	52.7	7	46.7	•	55.3	3	55.9
Medium Trucks:	49.8	8 4	18.3	41.9)	40.3	}	48.8	3	49.0
Heavy Trucks:	49.8	8 4	18.4	39.3	3	40.6	<u> </u>	48.9	9	49.1
Vehicle Noise:	58.0	0 5	6.2	53.2		48.4		56.9)	57.4

70 dBA

13

14

Ldn:

CNEL:

65 dBA

29

31

60 dBA

62

67

55 dBA

134

144

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: b/w Newport and Red Hill

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DAT	Α			ſ	NOISE	MODE	L INPUT	S	
Highway Data					Site Cor	nditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	54,700 veh	icles					Autos:	15		
Peak Hour	Percentage:	10%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	5,470 veh	icles		He	eavy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mpł	า		Vehicle	Miv					
Near/Far La	ne Distance:	88 feet				iicleType	۵ .	Day	Evening	Night	Daily
Site Data					VCI		Autos:	77.5%	_	9.6%	
					Λ/	ledium T		84.8%		10.3%	1.84%
	rrier Height:	0.0 fee	et			Heavy T		86.5%		10.8%	0.74%
Barrier Type (0-W		0.0				nouvy i	raono.	00.070	2.1 /0	10.070	0.7 4 70
Centerline Di		100.0 fee			Noise S	ource E	levation	ns (in fe	eet)		
Centerline Dist.		100.0 fee				Auto	s: 2	.000			
Barrier Distance		0.0 fee			Mediu	m Truck	s: 4	.000			
Observer Height	•	5.0 fee			Hea	vy Truck	s: 8	.006	Grade Ad	justment	0.0
_	ad Elevation:	0.0 fee									
Ro	ad Elevation:	0.0 fee	et		Lane Eq	uivalen			feet)		
	Road Grade:	0.0%				Auto	s: 89	.850			
	Left View:	-90.0 de	grees		Mediu	m Truck	rs: 89	.805			
	Right View:	90.0 de	grees		Hea	vy Truck	rs: 89	.850			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flo	W	Distance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	4	.56	-3.9	2	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-12	.68	-3.9	2	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-16	.64	-3.9	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo a	nd ba	rrier atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq	Day	Leq E	vening	Leq	Night		Ldn	C	VEL
Autos:	71	.2	69.	.3	67.6		61.	5	70.1	1	70.7
Modium Trucks:	64	C	62	4	56 7		55	2	62 7	7	62.0

Unmitigated Nois	e Levels (withou	it Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	71.2	69.3	67.6	61.5	70.1	70.7
Medium Trucks:	64.6	63.1	56.7	55.2	63.7	63.9
Heavy Trucks:	64.6	63.2	54.2	55.4	63.8	63.9
Vehicle Noise:	72.8	71.0	68.1	63.2	71.8	72.2

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	131	282	608	1,310
CNEL:	141	304	654	1,409

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: b/w Red Hill and Browning

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data				Site Con	ditions (Hai	d = 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	53,400 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak H	lour Volume:	5,340 vehicles	S	He	avy Trucks (3+ <i>Axles):</i>	15		
Ve	ehicle Speed:	50 mph		Vehicle I	Mix				
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data					Autos		-	9.6%	,
Ra	rrier Height:	0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0		H	Heavy Truck	s: 86.5%	2.7%	10.8%	0.74%
Centerline Di	ist. to Barrier:	100.0 feet		Noise So	ource Eleva	tions (in f	eet)		
Centerline Dist.	to Observer:	100.0 feet			Autos:	2.000	,		
Barrier Distance	to Observer:	0.0 feet		Mediui	m Trucks:	4.000			
Observer Height	(Above Pad):	5.0 feet			y Trucks:	8.006	Grade Ad	iustment.	: 0.0
	ad Elevation:	0.0 feet			-				
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis		feet)		
	Road Grade:	0.0%			Autos:	93.723			
	Left View:	-90.0 degree	es		n Trucks:	93.680			
	Right View:	90.0 degree	es	Heav	y Trucks:	93.723			
FHWA Noise Mod	lel Calculation	าร							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	70.20	4.87	-4.	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-12.37	-4.	19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-16.33	-4.	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (witl	hout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	Leq I	Evening	Leq Nigh	t	Ldn	CI	NEL
Autos:	69	9.7	67.8	66.0		60.0	68.6	6	69.2
Medium Trucks:	6	3.2	61.7	55.4		53.8	62.3	3	62.5
Heavy Trucks:	6	3.7	62.2	53.2		54.4	62.8	3	62.9

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	105	227	489	1,053						
CNEL:	113	244	525	1,131						

66.6

61.8

70.3

70.8

69.6

Vehicle Noise:

71.4

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Tustin Ranch Rd.

Job Number: 8141

Analyst: B. Lawson

SITE S	PECIFIC IN	IPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data				Site Condition	ns (Hard	l = 10, Sc	oft = 15)		
Average Daily T	raffic (Adt): 4	47,800 vehicles	6			Autos:	15		
Peak Hour P	Percentage:	10%		Medium	Trucks (2 Axles):	15		
Peak Ho	ur Volume:	4,780 vehicles	3	Heavy	Trucks (3	+ Axles):	15		
Vehi	icle Speed:	55 mph		Vehicle Mix					
Near/Far Land	e Distance:	88 feet		VehicleT	уре	Day	Evening	Night	Daily
Site Data					Autos:	77.5%	12.9%	9.6%	97.42%
Barr	ier Height:	0.0 feet		Mediur	n Trucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wa	•	0.0		Heav	y Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist	to Barrier:	100.0 feet		Noise Source	. Flovati	ons (in fa	not)		
Centerline Dist. to	Observer:	100.0 feet			utos:	2.000			
Barrier Distance to	Observer:	0.0 feet		A Medium Tri		4.000			
Observer Height (A	bove Pad):	5.0 feet					Grade Adj	iustmont	
Pad	d Elevation:	0.0 feet		Heavy Tr	icks.	8.006	Grade Auj	usimeni.	0.0
Road	d Elevation:	0.0 feet		Lane Equiva	lent Dista	ance (in i	feet)		
Re	oad Grade:	0.0%		Α	utos: 8	39.850			
	Left View:	-90.0 degree	es	Medium Tri	ucks: 8	39.805			
1	Right View:	90.0 degree	es	Heavy Tro	ucks: 8	89.850			
FHWA Noise Model	Calculation	s							
VehicleType	REMEL	Traffic Flow	Distance	Finite Roa	d Fre	esnel	Barrier Att	en Ber	m Atten
Autos:	71.78	3.97	-3.9	2 -1.	20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-13.27	-3.9	2 -1.:	20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-17.22	-3.9	2 -1.	20	-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier atter	nuation)					

Unmitigated Nois	Inmitigated Noise Levels (without Topo and barrier attenuation)											
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL						
Autos:	70.6	68.7	67.0	60.9	69.5	70.1						
Medium Trucks:	64.0	62.5	56.1	54.6	63.1	63.3						
Heavy Trucks:	64.1	62.6	53.6	54.8	63.2	63.3						
Vehicle Noise:	72.2	70.4	67.5	62.6	71.2	71.6						

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	120	258	556	1,197
CNEL:	129	277	598	1,288

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Jamboree Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA	1	NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	41,900 vehic 10% 4,190 vehic				dium Tru avy Truc	•	,			
Near/Far La	ehicle Speed: ane Distance:	55 mph 88 feet		V	ehicle l Vehi	icleType		Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%		9.6%	
Barrier Type (0-V	Nall , 1-Berm):	0.0 feet 0.0				edium Ti Ieavy Ti		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline D	ist. to Barrier:	100.0 feet		N	loise Sc	urce El	evation	ns (in fe	eet)		
Ro	to Observer:	bo Observer: 0.0 feet bove Pad): 5.0 feet d Elevation: 0.0 feet d Elevation: 0.0 feet d Grade: 0.0% Left View: -90.0 degrees				Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Autos: 89.850 Medium Trucks: 89.805 Heavy Trucks: 89.850					
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	3.4	0	-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:				-3.92		-1.20		-4.97		000	0.000
Heavy Trucks:	86.40) -17.7	9	-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo an	d barrie	r attenu	ation)						
VehicleType	Leq Peak Ho	our Leq Da	ay	Leq Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:		0.1	68.2		66.4		60.	_	69.0	-	69.6
Medium Trucks:		3.4	61.9		55.6		54.	0	62.5		62.7
Heavy Trucks:	6:	3.5	62.1		53.0		54.	3	62.6	3	62.8
Vehicle Noise:	7	1.6	69.9		66.9		62.	0	70.6	6	71.1

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	110	236	509	1,096
CNEL:	118	254	547	1,179

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Jamboree Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS								
Highway Data				Site Cor	ditions (F	Hard = 10, So	oft = 15)			
Average Daily Traffic (Adt):	45,000	vehicles	;			Autos:	15			
Peak Hour Percentage:	10	%		Ме	dium Truc	ks (2 Axles):	15			
Peak Hour Volume:	4,500	vehicles	;	He	avy Truck	s (3+ Axles):	15			
Vehicle Speed:	60	mph		Vehicle	Miv					
Near/Far Lane Distance:	76	feet			icleType	Day	Evening	Night	Daily	
Site Data				7011		itos: 77.5%		•	97.42%	
	. 0	O foot		М	edium Tru			10.3%	1.84%	
Barrier Height: Barrier Type (0-Wall, 1-Berm).		0 feet			Heavy Tru			10.8%	0.74%	
Centerline Dist. to Barrier.		o 0 feet								
Centerline Dist. to Observer.		0 feet		Noise S	ource Ele	vations (in f	eet)			
Barrier Distance to Observer.		0 feet			Autos:					
Observer Height (Above Pad).		0 feet		Mediu	m Trucks:	4.000				
Pad Elevation.		Heav	y Trucks:	8.006	Grade Ad	ustment:	0.0			
Road Elevation.	-	0 feet 0 feet		Lane Eq	uivalent [Distance (in	feet)			
Road Grade.	_	0 1661 0%			Autos:	•	,			
Left View.		0 70 0 degree	.c	Mediu	m Trucks:					
Right View.		o degree O degree			y Trucks:					
riight view.	50.	o acgree		77041	y maono.	02.017				
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffi	ic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos: 73.2	22	3.33	-4	.11	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 83.6	88	-13.91	-4	.11	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 87.3	33	-17.86	-4	.11	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout To	ppo and l	barrier atte	enuation)						
VehicleType Leq Peak H		Leq Day		Evening	Leq N	ight	Ldn	CI	VEL	
Autos:	71.2		69.3	67.6	-	61.5	70.1	1	70.7	
Medium Trucks:	64.5	6	3.0	56.6		55.1	63.5	5	63.7	
Heavy Trucks:	64.1	6	32.7	53.7		54.9	63.3	3	63.4	
	72.7		70.9	68.1			71.7		72.2	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	129	279	600	1,293
CNEL:	139	300	647	1,393

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: Irvine Bl. Job Number: 8141 Road Segment: b/w SR-261 Ramps Analyst: B. Lawson

SITE SPECIFIC I		NOISE MODEL INPUTS								
Highway Data			3	Site Con	ditions	(Hard	= 10, So	oft = 15)		
Average Daily Traffic (Adt):	43,800 vehicle	s					Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tr	rucks (2	Axles):	15		
Peak Hour Volume:	4,380 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Vehicle Speed:	60 mph		1	/ehicle l	Mix					
Near/Far Lane Distance:	76 feet		_		icleType	e	Day	Evening	Night	Daily
Site Data						Autos:	77.5%	-	•	97.42%
Barrier Height:	0.0 feet			Me	edium T	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0 1661			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		_							
Centerline Dist. to Observer:	100.0 feet		^	Voise So			•	eet)		
Barrier Distance to Observer:	0.0 feet				Auto		2.000			
Observer Height (Above Pad):	5.0 feet				n Truck	_	1.000			
Pad Elevation:	0.0 feet			Heav	y Truck	rs: E	3.006	Grade Adj	iustment:	0.0
Road Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	feet)		
Road Grade:	0.0%				Auto	os: 92	2.547			
Left View:	-90.0 degre	es		Mediui	n Truck	(s: 92	2.504			
Right View:	90.0 degre			Heav	y Truck	rs: 92	2.547			
FHWA Noise Model Calculation	_							5 / 4		•
VehicleType REMEL	Traffic Flow	Dis	stance	Finite		Fres		Barrier Att		m Atten
Autos: 73.22	_		-4.11		-1.20		-4.87		000	0.000
Medium Trucks: 83.68			-4.11		-1.20		-4.97		000	0.000
Heavy Trucks: 87.33	3 -17.98		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with		barri	er atteni	uation)						
VehicleType Leq Peak Ho			Leq Ev		Leq	Night		Ldn		VEL
		69.2		67.5		61	.4	70.0		70.6
Medium Trucks: 6	_	62.8		56.5		54	.9	63.4		63.6
Heavy Trucks: 6	4.0	62.6		53.6		54	.8	63.2	2	63.3
Vehicle Noise: 7	2.6	70.8		68.0		63	.0	71.6	6	72.0
Centerline Distance to Noise C	Contour (in feet	•)								
			70 a	IBA	65	dBA	6	60 dBA	55	dBA

127

137

Ldn: CNEL: 274

295

590

635

1,270

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o SR-261 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)			
Peak Hou	Traffic (Adt): Percentage: Hour Volume:	45,000 vehicle 10% 4,500 vehicle					•	Autos: Axles): Axles):				
Near/Far La	ehicle Speed: ane Distance:	60 mph 76 feet		V	Vehicle Mix VehicleType Day Evening Night							
Site Data						-	Autos:	77.5%		9.6%		
Barrier Type (0-V	vall, 1-Berm):	0.0 feet 0.0				edium Ti leavy Ti		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%	
Centerline D	ist. to Barrier:	100.0 feet		N	oise So	urce E	levatio	ns (in fe	eet)			
Ro	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Li	Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547							
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Distar		Finite		Fres	nel	Barrier Att	en Ber	m Atten	
Autos:				-4.11		-1.20		-4.87		000	0.000	
Medium Trucks:				-4.11		-1.20		-4.97		000	0.000	
Heavy Trucks:	87.33	-17.86	;	-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	l barrier a	attenu	ation)							
VehicleType	Leq Peak Ho	our Leq Da	y L	eq Eve	ening	Leq	Night		Ldn	CI	VEL	
Autos:		1.2	69.3		67.6		61.		70.1		70.7	
Medium Trucks:		4.5	63.0		56.6		55.	1	63.5		63.7	
Heavy Trucks:		4.1	62.7		53.7		54.		63.3		63.4	
Vehicle Noise:	7.	2.7	70.9		68.1		63.	1	71.7	7	72.2	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	129	279	600	1,293
CNEL:	139	300	647	1,393

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DA	ATA		NOISE MODEL INPUTS					
Highway Data					Site Con	ditions (H	ard = 10, S	oft = $\overline{15}$)		
Average Daily	Traffic (Adt):	38,400 ve	ehicles				Autos:	15		
	Percentage:	10%			Med	dium Truck	ks (2 Axles).	15		
Peak H	lour Volume:	3,840 ve	ehicles		Hea	avy Trucks	(3+ <i>Axles</i>).	15		
Ve	hicle Speed:	60 m	ph	-	Vehicle N	/lix				
Near/Far La	ne Distance:	76 fe	et			cleType	Day	Evening	Night	Daily
Site Data						Aut			9.6%	-
Ra	rrier Height:	0.0 f	eet		Ме	dium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	CCI		H	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 f	eet		M-' O-	= = = = = = = = = = = = = = = = =	('	4)		
Centerline Dist.		100.0 f			Noise So		ations (in f	eet)		
Barrier Distance		0.0 f				Autos:	2.000			
Observer Height		5.0 f				n Trucks:	4.000			
•	ad Elevation:	0.0 f			Heav	/ Trucks:	8.006	Grade Ad	iustment:	0.0
-	ad Elevation:	0.0 f			Lane Equ	ıivalent D	istance (in	feet)		
	Road Grade:	0.0%		-		Autos:	92.547	,		
	Left View:		degrees		Mediun	n Trucks:	92.504			
	Right View:		degrees			/ Trucks:	92.547			
	ragin view.	30.0	acgices		77047	, machel	02.017			
FHWA Noise Mod	el Calculatio	ns		,						
VehicleType	REMEL	Traffic F	low	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	73.22	2	2.64	-4.1	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	3 -1	14.60	-4.1	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3 -1	18.55	-4.1	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (wit	hout Topo	and ba	rrier atten	uation)					
VehicleType	Leq Peak Ho	our Le	q Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL
Autos:	7	0.5	68	.7	66.9		60.8	69.5	5	70.1
Medium Trucks:	6	3.8	62	.3	55.9		54.4	62.8	3	63.1
Heavy Trucks:	6	3.5	62	.0	53.0		54.3	62.6	6	62.7
Vehicle Noise:	7	2.0	70	.3	67.4		62.4	71.0)	71.5

70 dBA

116

125

Ldn:

CNEL:

65 dBA

251

270

60 dBA

540

582

55 dBA 1,164

1,253

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA			NOISE MODEL INPUTS								
Highway Data				S	ite Conditio	ns (Hard	= 10, Sc	oft = 15)					
Average Daily	Traffic (Adt):	38,800 vehicle	es				Autos:	15					
Peak Hour	Percentage:	10%			Medium	Trucks (2	2 Axles):	15					
Peak H	lour Volume:	3,880 vehicle	es		Heavy T	rucks (3-	+ Axles):	15					
Ve	hicle Speed:	60 mph		V	ehicle Mix								
Near/Far La	ne Distance:	76 feet		-	VehicleTy	me.	Day	Evening	Night	Daily			
Site Data					10/110/01	Autos:	77.5%	•		97.42%			
Ra	rrier Height:	0.0 feet			Medium	Trucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	_	0.0			Heavy	Trucks:	86.5%	2.7%	10.8%	0.74%			
Centerline Di		100.0 feet					/: 6						
Centerline Dist.		100.0 feet		N	oise Source		•	eet)					
Barrier Distance		0.0 feet					2.000						
Observer Height		5.0 feet			Medium Tru	-	4.000						
P	0.0 feet			Heavy Tru	cks:	8.006	Grade Adj	ustment	: 0.0				
	ad Elevation:	0.0 feet		L	ane Equivale	ent Dista	nce (in	feet)					
	Road Grade:	0.0%			Αι	ıtos: 9	2.547						
	Left View:	-90.0 degre	ees		Medium Tru	cks: 9	2.504						
	Right View:	90.0 degre			Heavy Tru	cks: 9	2.547						
FHWA Noise Mod	el Calculation	15											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite Road	l Fre	snel	Barrier Atte	en Ber	m Atten			
Autos:	73.22	2.69)	-4.11	-1.2	:0	-4.87	0.0	000	0.000			
Medium Trucks:	83.68	-14.55	5	-4.11	-1.2	.0	-4.97	0.0	000	0.000			
Heavy Trucks:	87.33	-18.5	l	-4.11	-1.2	.0	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Topo and	d barri	er attenu	ation)								
VehicleType	Leq Peak Ho	ur Leq Da	ıy	Leq Eve	ening Le	eq Night		Ldn	CI	NEL			
Autos:	70	0.6	68.7		66.9	60	0.9	69.5	5	70.1			
Medium Trucks:	63	3.8	62.3		56.0	54	1.4	62.9)	63.1			
Heavy Trucks:	63	3.5	62.1		53.0	54	4.3	62.7	,	62.8			

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	117	252	544	1,172
CNEL:	126	272	586	1,262

67.4

71.0

62.5

71.5

70.3

Vehicle Noise:

72.1

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Yale Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA							NOISE MODEL INPUTS								
Highway Data						Site Con	ditions	(Hard :	= 10, Sc	oft = 15)						
Average Daily	Traffic (Adt):	42,400) vehicles	S					Autos:	15						
Peak Hour	Percentage:	10	0%			Me	dium Tr	ucks (2	Axles):	15						
Peak H	lour Volume:	4,240) vehicles	S		He	avy Tru	cks (3+	Axles):	15						
Ve	ehicle Speed:	60) mph			Vehicle I	Miv									
Near/Far La	ne Distance:	76	6 feet				icleType	.	Day	Evening	Night	Daily				
Site Data						7011		Autos:	77.5%		9.6%	-				
	wiew Heierbt.		.0 feet			Me	edium T		84.8%		10.3%	1.84%				
	rrier Height:	_	. 0 reet .0				Heavy T		86.5%		10.8%	0.74%				
Barrier Type (0-W	ist. to Barrier:		.0 .0 feet													
Centerline Dist.			.0 feet			Noise So	ource E	levatio	ns (in fe	eet)						
Barrier Distance			.0 feet				Auto	s: 2	.000							
Observer Height			.0 feet			Mediui	m Truck	s: 4	.000							
•	ad Elevation:	_	.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	iustment.	0.0				
	ad Elevation:		.0 feet			Lane Eq	uivalen	t Distai	nce (in t	feet)						
	Road Grade:		.0 1eet .0%				Auto		2.547							
	Left View:		.0 degree	26		Mediu	m Truck		2.504							
	Right View:		.0 degree				ry Truck		2.547							
	rugin viewi	00	.o dogiot	50			,	-								
FHWA Noise Mod	lel Calculation	าร														
VehicleType	REMEL	Trafi	fic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten				
Autos:		<u>)</u>	3.07		-4.1	1	-1.20		-4.87	0.0	000	0.000				
Medium Trucks:	83.68	3	-14.17		-4.1	-	-1.20		-4.97	0.0	000	0.000				
Heavy Trucks:	87.33	3	-18.12		-4.1	1	-1.20		-5.16	0.0	000	0.000				
Unmitigated Nois	e Levels (with	hout To	opo and	barri	er atter	nuation)										
VehicleType	Leq Peak Ho	ur	Leq Day	,	Leq E	vening	Leq	Night		Ldn	CI	VEL				
Autos:	7	1.0		69.1	-	67.3		61.	.3	69.9)	70.5				
Medium Trucks:	64	4.2	(62.7		56.3		54.	.8	63.3	3	63.5				
Heavy Trucks:	63	3.9		62.5		53.4		54.	.7	63.0)	63.2				
Vehicle Noise:	7:	2.5		70.7		67.8		62	.9	71.4	1	71.9				
Centerline Distan	ce to Noise C	ontou	r (in feet)												
			(70	dBA	65	dBA	6	60 dBA	55	dBA				
											-					

Ldn:

CNEL:

124

134

268

288

577

621

1,243

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIF	IC INF	PUT DATA			NOISE MODEL INPUTS								
Highway Data					Site Cor	ditions	(Hard	= 10, Se	oft = 15)				
Average Daily Traffic (A	dt): 37	7,500 vehicles	3					Autos:	15				
Peak Hour Percenta	ige:	10%			Me	dium Tr	ucks (2	2 Axles):	15				
Peak Hour Volu	me: 3	3,750 vehicles	3		He	avy Tru	cks (3+	- Axles):	15				
Vehicle Spe	ed:	60 mph			Vehicle .	Miv							
Near/Far Lane Distar	ice:	76 feet				icleType	2	Day	Evening	Night	Daily		
Site Data					Veri		Autos:	77.5%	_	9.6%			
					Μ	edium T		84.8%		10.3%			
Barrier Heig		0.0 feet				Heavy T		86.5%		10.8%			
Barrier Type (0-Wall, 1-Bei	•	0.0				loavy i	ruono.	00.07	2.170	10.070	0.7 4 70		
Centerline Dist. to Bar		100.0 feet			Noise S	ource E	levatio	ns (in f	eet)				
Centerline Dist. to Obser		100.0 feet				Auto	s: i	2.000					
Barrier Distance to Obser		0.0 feet			Mediu	m Truck	is:	4.000					
Observer Height (Above Pa	,	5.0 feet			Heav	y Truck	s:	8.006	Grade Ad	justment	: 0.0		
Pad Elevat		0.0 feet 0.0 feet			Lane Eq	uivalon	t Dieta	nco (in	foot)				
Road Elevat		Larie Ly			2.547	i cc i)							
Road Gra		Madiu	Auto m Truck		2.54 <i>1</i> 2.504								
Left V		-90.0 degree				m muck ∕y Truck		2.504 2.547					
Right Vi	ew.	90.0 degree	es		пеач	y Truck	.S. 9	2.347					
FHWA Noise Model Calcul	ations												
VehicleType REME	EL	Traffic Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	m Atten		
Autos:	73.22	2.54		-4.1	1	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	33.68	-14.70		-4.1	1	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	37.33	-18.65		-4.1	1	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels	(witho	ut Topo and	barri	ier atter	uation)								
VehicleType Leq Pea	•				vening	Leq	Night		Ldn	C	NEL		
Autos:	70.4	1 (68.5	-	66.8		60).7	69.3	3	70.0		
Medium Trucks:	63.7	7 (62.2		55.8		54	1.3	62.7	7	63.0		
Heavy Trucks:	63.4	1 (61.9		52.9		54	l.1	62.5	5	62.6		
Vehicle Noise:	71.9)	70.2		67.3		62	2.3	70.9	9	71.4		
Centerline Distance to Noi	se Cor	ntour (in feet))										
		·		70	dBA	65	dBA	(60 dBA	55	dBA		
			Ldn:	1	15	2	47		532	1,	145		

CNEL:

123

266

1,234

573

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT [DATA				ı	NOISE	MODE	L INPUT	S	
Highway Data					,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	36,300	vehicles	S					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Tr	ucks (2	? Axles):	15		
Peak H	lour Volume:	3,630	vehicles	s		He	avy Tru	cks (3+	- Axles):	15		
Ve	ehicle Speed:	60	mph			Vehicle l	Mix					
Near/Far La	ne Distance:	76	feet				icleType	Э	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	_
Ra	rrier Height:	0.0) feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0				ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0				Noise So	ourco E	lovatio	ns (in f	201		
Centerline Dist.	to Observer:	100.0) feet		-	NOISE SC	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0) feet			Madiu	Auto m Truck		4.000			
Observer Height	(Above Pad):	5.0) feet					_		Grade Ad	liustmont	. 0.0
P	ad Elevation:	0.0) feet			пеач	y Truck	.S. (3.006	Grade Au	justin o nt	. 0.0
Ro	ad Elevation:	0.0) feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0)%				Auto	s: 9:	2.547			
	Left View:	-90.0) degree	es		Mediu	m Truck	s: 9	2.504			
	Right View:	90.0) degree	es		Heav	y Truck	rs: 91	2.547			
FHWA Noise Mod	lel Calculation	18										
VehicleType	REMEL	Traffic	Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	m Atten
Autos:	73.22		2.40		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	1	-14.84		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33		-18.80		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and	barri	ier atten	uation)						
VehicleType	Leq Peak Ho	ur l	Leq Day	′	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	70	0.3	(68.4		66.6		60).6	69.2	2	69.8
Medium Trucks:	63	3.5	(62.0		55.7		54	.1	62.6	6	62.8
Heavy Trucks:	63	3.2	(61.8		52.8		54	.0	62.4	4	62.5
Vehicle Noise:	7′	1.8	•	70.0		67.1		62	2.2	70.7	7	71.2
Centerline Distan	ce to Noise C	ontour	(in feet))								
					70 (dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

112

121

241

260

520

560

1,121

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: Irvine Bl. Job Number: 8141 Road Segment: e/o Groveland Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	36,500 vehicle	s					Autos:	15			
Peak Hour	Percentage:	: 10%			Medium Trucks (2 Axles): 15							
Peak Hour Volume: 3,65		3,650 vehicle	3,650 vehicles		Heavy Trucks (3+ Axles): 15							
Vehicle Speed:		60 mph			Vehicle i	Miv						
Near/Far La	ne Distance:	76 feet				icleType		Day	Evening	Night	Daily	
Site Data					7011		utos:	77.5%	Ŭ,	9.6%	-	
	rrior Usiabti	0.0 feet		М	edium Tru		84.8%		10.3%	1.84%		
Barrier Height: Barrier Type (0-Wall, 1-Berm):		0.0 feet 0.0				Heavy Tru		86.5%		10.8%	0.74%	
		0.0 100.0 feet										
Centerline Dist. to Barrier: Centerline Dist. to Observer:		100.0 feet	1	Noise Source Elevations (in feet)								
Barrier Distance to Observer:		0.0 feet 5.0 feet 0.0 feet						000				
Observer Height (Above Pad):						m Trucks.		000				
Pad Elevation:					Heavy Trucks: 8.			006 Grade Adjustment: 0.0				
Road Elevation:		0.0 feet			Lane Equivalent Distance (in feet)							
7.00	0.0%			Autos: 92.547								
•	-90.0 degree		Medium Trucks: 92.504									
	90.0 degrees			Heavy Trucks: 92.547								
	Right View:											
FHWA Noise Model Calculations												
VehicleType	REMEL	Traffic Flow	Di	stance	Finite		Fresr		Barrier Att		m Atten	
Autos:			2.42		-4.11				<i>-4.87</i> 0.00		0.000	
Medium Trucks:	83.68	-14.82		-4.11				<i>-4.97</i> 0.00			0.000	
Heavy Trucks: 87.33		-18.77		-4.1	1	-1.20	-1.20 <i>-5.16</i>		0.0	000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)												
VehicleType	Leq Peak Hou	ır Leq Day		Leq Evening		Leq N	light		Ldn	CI	VEL	
Autos:	70	3 68.4			66.7	60.6		6	69.2		69.8	
Medium Trucks: 6		.6 62.0			55.7		54.1		62.6	6	62.8	
Heavy Trucks: 6		61.8			52.8	54.0)	62.4	1	62.5	
Vehicle Noise: 7		.8 70.0			67.2		62.2	62.2 70		71.3		
Centerline Distance to Noise Contour (in feet)												
				70 d	dBA	65 d	BA	6	60 dBA	55	dBA	

112

121

Ldn:

CNEL:

242

261

522

562

1,125

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Sand Canyon. Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Si	ite Con	ditions ((Hard =	: 10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	38,900 vehicle 10% 3,890 vehicle				dium Tru avy Truc	icks (2 i	,			
	ehicle Speed: nne Distance:	60 mph 76 feet		Ve	ehicle I Vehi	cleType	Autos:	<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
Barrier Type (0-V	•	0.0 feet 0.0				edium Tr Jeavy Tr	ucks:	84.8% 86.5%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): lad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 90.0 degree			Mediur Heav ane Equ Mediur	Autos Trucks y Trucks y Trucks uivalent Autos n Trucks y Trucks	s: 2. s: 4. s: 8. Distan s: 92.	000 000 006	Grade Ad	ijustment	: 0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 73.22 83.68	Traffic Flow 2.70 -14.54		e 4.11 4.11 4.11	Finite	Road -1.20 -1.20 -1.20	Fresi	-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Nois VehicleType	e Levels (with Leq Peak Ho				ation) ening	Leq I	Night		Ldn	C	NEL
Autos: Medium Trucks: Heavy Trucks:	63	0.6 3.8 3.5	68.7 62.3 62.1		66.9 56.0 53.1	-	60.9 54.4 54.3	4	69.9 62.9 62.7	9	70.1 63.1 62.8
Vehicle Noise:	72	2.1	70.3		67.4		62.	5	71.0)	71.5

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	117	253	545	1,174
CNEL:	126	272	587	1,264

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o SR-133 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT	DATA			NC	DISE N	MODE	L INPUT	S			
Highway Data				Site Con	ditions (l	Hard =	10, Sc	oft = 15)				
Average Daily Traffic (Ad Peak Hour Percentag Peak Hour Volum Vehicle Spee	e: 10 e: 4,250	O vehicles O% O vehicles O mph			dium Truck avy Truck Mix	cks (2 A	•					
Near/Far Lane Distanc	e: 76	6 feet			icleType		Day	Evening	Night	Daily		
Site Data						ıtos:	77.5%		9.6%			
Barrier Type (0-Wall, 1-Bern Centerline Dist. to Barrie Centerline Dist. to Observe Barrier Distance to Observe Observer Height (Above Pad Pad Elevatio Road Elevatio Road Grad	Centerline Dist. to Barrier: 100.0 feet enterline Dist. to Observer: 100.0 feet orrier Distance to Observer: 0.0 feet					Medium Trucks: 84.8% 4.9% 10.3% Heavy Trucks: 86.5% 2.7% 10.8% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547						
FHWA Noise Model Calcula	tions											
VehicleType REMEL	. Trafi	fic Flow	Distance	Finite	Road	Fresr	nel	Barrier Att	en Ber	m Atten		
	3.22	3.08	-4.1		-1.20		-4.87		000	0.000		
	3.68 7.33	-14.15 -18.11	-4.1 ²		-1.20 -1.20		-4.97 -5.16		000	0.000		
Unmitigated Noise Levels (v	without T	opo and b	arrier atten	uation)								
VehicleType Leq Peak	Hour	Leq Day	Leq E	/ening	Leq N	light		Ldn	CI	VEL		
Autos:	71.0	6	9.1	67.3		61.3	3	69.9	9	70.5		
Medium Trucks:	64.2		2.7	56.3		54.8		63.3		63.5		
Heavy Trucks:	63.9	6	2.5	53.4		54.7	7	63.0)	63.2		
Vehicle Noise:	72.5	7	0.7	67.8		62.9	9	71.4	1	71.9		

70 dBA

125

134

Ldn:

CNEL:

65 dBA

268

289

60 dBA

578

622

55 dBA

1,245

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o O St.

Job Number: 8141

Analyst: B. Lawson

SITE SF	PECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Tra	affic (Adt):	36,500 vehicle	es					Autos:	15		
Peak Hour Pe	• •	10%			Me	dium Tru	ucks (2	Axles):	15		
	ır Volume:	3,650 vehicle	es		He	avy Truc	cks (3+	Axles):	15		
Vehic	cle Speed:	60 mph		_	/ehicle l	Misz					
Near/Far Lane	Distance:	76 feet						Day		Niaht	Doilu
Cita Data					ven	icleType		Day 50/	Evening	Night	Daily
Site Data					1.4		Autos:	77.5%		9.6%	
	er Height:	0.0 feet				edium Tr		84.8%		10.3%	1.84%
Barrier Type (0-Wall	•	0.0			,	leavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist.		100.0 feet		1	Voise So	ource El	evatio	ns (in f	eet)		
Centerline Dist. to	Observer:	100.0 feet				Autos		.000			
Barrier Distance to	Observer:	0.0 feet			Mediui	n Trucks		.000			
Observer Height (Ab	oove Pad):	5.0 feet				y Trucks		.006	Grade Ad	iustment.	0.0
Pad	Elevation:	0.0 feet			,						
Road	Elevation:	0.0 feet		L	.ane Eq	uivalent	t Distar	nce (in	feet)		
Ro	ad Grade:	0.0%				Autos		2.547			
	Left View:	-90.0 degre	ees		Mediui	n Trucks	s: 92	2.504			
R	Right View:	90.0 degre	ees		Heav	y Trucks	s: 92	2.547			
FHWA Noise Model	Calculation	s									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.42	2	-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.82	2	-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.77	7	-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise L	evels (with	out Topo and	d barri	ier atten	uation)						
VehicleType Le	eq Peak Hou	ır Leq Da	ıy	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	70	.3	68.4		66.7		60	.6	69.2	2	69.8
Medium Trucks:	63	.6	62.0		55.7		54.	.1	62.6	6	62.8
Heavy Trucks:	63	.2	61.8		52.8		54.	.0	62.4	1	62.5
Vehicle Noise:	71	.8	70.0		67.2		62	.2	70.8	3	71.3
Centerline Distance	to Noise Co	ontour (in fee	t)								

70 dBA

112

121

Ldn:

CNEL:

65 dBA

242

261

60 dBA

522

562

55 dBA

1,125

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o O St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA	NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	39,200 vehicle 10% 3,920 vehicle				dium Tru avy Truc	icks (2	,			
Near/Far La	ehicle Speed: ane Distance:	60 mph 76 feet		V	ehicle l Vehi	cleType		Day	Evening 12.9%	Night	Daily 97.42%
Site Data Barrier Type (0-V	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium Tr Heavy Tr		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	1.84%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre			Mediur Heav ane Eq u Mediur	Autos Autos Trucks y Trucks uivalent Autos m Trucks y Trucks	s: 2. s: 4. s: 8. Distan s: 92	.000 .000 .006	Grade Ad	ljustment	: 0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	73.22 83.68	Traffic Flow 2.73 -14.51	-4	e 4.11 4.11 4.11	Finite	Road -1.20 -1.20 -1.20	Fresi	-4.87 -4.97 -5.16	0.0	ten Ber 2000 2000 2000	0.000 0.000 0.000
Unmitigated Nois VehicleType	e Levels (with Leg Peak Ho				ation) ening	l ea l	Night		Ldn	C	NEL
Autos: Medium Trucks: Heavy Trucks:	70 60	0.6 3.9 3.6	68.7 62.4 62.1	1 - 1	67.0 56.0 53.1	2091	60. 54. 54.	5	69.9 62.9 62.7	5 9	70.1 63.1 62.8
Vehicle Noise:		2.1	70.3		67.5		62.		71.		71.6

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	118	254	548	1,180
CNEL:	127	274	590	1,271

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o A St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOISE MODEL INPUTS								
Highway Data				S	ite Cond	itions (Hard = 10, S	Soft = 15)					
Average Daily	Traffic (Adt):	39,600 vehicle	es				Autos	s: 15					
Peak Hour	Percentage:	10%			Med	ium Tru	cks (2 Axles) <i>:</i> 15					
Peak H	lour Volume:	3,960 vehicle	es		Hea	vy Truci	ks (3+ Axles) <i>:</i> 15					
Ve	hicle Speed:	60 mph		V	ehicle M	iv							
Near/Far La	ne Distance:	76 feet		7		leType	Day	Evening	Night	Daily			
Site Data					101110		utos: 77.5	J		97.42%			
Ra	rrier Height:	0.0 feet			Med	dium Tru	ucks: 84.8°	% 4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0			He	eavy Tru	ucks: 86.5°	% 2.7%	10.8%	0.74%			
Centerline Di	•	100.0 feet						<i>c</i>					
Centerline Dist.		100.0 feet		N	oise Soi		evations (in	teet)					
Barrier Distance		0.0 feet				Autos							
Observer Height ((Above Pad):	5.0 feet			Medium			O da A.d		. 0.0			
	ad Elevation:	0.0 feet			Heavy	Trucks	: 8.006	Grade Ad	justment	. 0.0			
Roa	ad Elevation:	0.0 feet		Lá	ane Equ	ivalent	Distance (ir	feet)					
	Road Grade:	0.0%				Autos	: 92.547						
	Left View:	-90.0 degre	es		Medium	Trucks	: 92.504						
	Right View:	90.0 degre	es		Heavy	Trucks	92.547						
FHWA Noise Mod	el Calculatior	18											
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite F	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	73.22	2.78		-4.11		-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	83.68	-14.46		-4.11		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	87.33	-18.42		-4.11		-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise	e Levels (with	out Topo and	barrie	r attenu	ation)								
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Eve	ening	Leq N	Vight	Ldn	C	NEL			
Autos:	70	0.7	68.8		67.0		61.0	69.6	6	70.2			
Medium Trucks:	63	3.9	62.4		56.0		54.5	63.0)	63.2			
Heavy Trucks:	63	3.6	62.2		53.1		54.4	62.7	7	62.9			

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	119	256	551	1,188
CNEL:	128	276	594	1,279

67.5

71.1

62.6

71.6

70.4

Vehicle Noise:

72.2

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Z St.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA	1			N	OISE	MODE	L INPUT	S	
Highway Data			S	ite Con	ditions (Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 45,300 vehic	les					Autos:	15		
Peak Hour Percentage	•			Me	dium Tru	cks (2	Axles):	15		
Peak Hour Volume	: 4,530 vehic	les		He	avy Truci	ks (3+	Axles):	15		
Vehicle Speed	: 60 mph		1/	ehicle l	Mix					
Near/Far Lane Distance	: 76 feet		V				Day	Evening	Night	Doily
Site Data				vern	icleType	utoo:	77.5%	Evening 12.9%	9.6%	<i>Daily</i> 97.42%
				1.1.	A edium Tru	utos:				
Barrier Height							84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)				r	leavy Tru	JCKS.	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier			٨	loise Sc	ource Ele	evation	ıs (in fe	eet)		
Centerline Dist. to Observer					Autos	: 2	.000			
Barrier Distance to Observer				Mediur	n Trucks	: 4	.000			
Observer Height (Above Pad)					y Trucks		.006	Grade Ad	iustment:	0.0
Pad Elevation			_		-					
Road Elevation			L	ane Eq	uivalent			feet)		
Road Grade	: 0.0%				Autos		.547			
Left View	: -90.0 degr	ees		Mediur	n Trucks	: 92	.504			
Right View	: 90.0 degr	ees		Heav	y Trucks	: 92	.547			
FHWA Noise Model Calculati	ons									
VehicleType REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos: 73.:	22 3.3	6	-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 83.	68 -13.8	8	-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87.	33 -17.8	3	-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w.	ithout Topo an	d barrier	attenu	ation)						
VehicleType Leq Peak F	Hour Leq D	ay i	Leq Ev	ening	Leq N	Vight		Ldn	CI	VEL
Autos:	71.3	69.4		67.6		61.	5	70.2	2	70.8
Medium Trucks:	64.5	63.0		56.6		55.	1	63.5	5	63.8
Heavy Trucks:	64.2	62.8		53.7		55.	0	63.3	3	63.5
Vehicle Noise:	72.7	71.0		68.1		63.	1	71.7	7	72.2
Centerline Distance to Noise	Contour (in fe	et)								

70 dBA

130

140

Ldn: CNEL: 65 dBA

280

301

60 dBA

603

650

55 dBA

1,299

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Z St.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NOISE MODEL INPUTS									
Highway Data			S	ite Con	ditions ((Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	47,000 vehicle	es					Autos:	15		
Peak Hour Percentage				Me	dium Tru	icks (2	Axles):	15		
Peak Hour Volume		es		He	avy Truc	ks (3+	Axles):	15		
Vehicle Speed	60 mph		V	ehicle l	Miv					
Near/Far Lane Distance	76 feet		-		icleType		Day	Evening	Night	Daily
Site Data				VOIT		utos:	77.5%		9.6%	-
	0.0 (1			M	edium Tri		84.8%		10.3%	1.84%
Barrier Height					leavy Tr		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm)					Today Tri	aono.	00.070	2.1 70	10.070	0.7 170
Centerline Dist. to Barrier			N	oise Sc	ource Ele	evatio	ns (in fe	eet)		
Centerline Dist. to Observer					Autos	s: 2	2.000			
Barrier Distance to Observer				Mediui	n Trucks	s: 4	1.000			
Observer Height (Above Pad)				Heav	y Trucks	s: 8	3.006	Grade Ad	justment:	0.0
Pad Elevation			Lane Equivalent Distance (in feet)							
Road Elevation				ane Ly			2.547	ieei)		
Road Grade				1 10 di	Autos m Trucks		2.54 <i>1</i> 2.504			
Left View										
Right View	: 90.0 degre	es		неач	y Trucks	5. 92	2.547			
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distan	ce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 73.2	22 3.52	-	-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 83.6	68 -13.72		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87.3	33 -17.67		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier a	ttenu	ation)						
VehicleType Leq Peak F	lour Leq Da	y Le	q Eve	ening	Leq l	Vight		Ldn	CI	VEL
Autos:	71.4	69.5		67.8		61	.7	70.3	3	70.9
Medium Trucks:	64.7	63.1		56.8		55	.2	63.7	7	63.9
Heavy Trucks:	64.3	62.9		53.9		55	.1	63.5	5	63.6
Vehicle Noise:	72.9	71.1		68.3		63	.3	71.9	9	72.3
Centerline Distance to Noise	Contour (in fee	t)								

70 dBA

133

143

Ldn: CNEL: 65 dBA

287

309

60 dBA

618

666

55 dBA

1,332

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o LQ St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA	4			N	IOISE	MODE	L INPUT	S	
Highway Data				,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	46,700 vehic	eles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	4,670 vehic	eles		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph			Vehicle I	Mix					
Near/Far La	ne Distance:	76 feet				icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
Ra	rrier Height:	0.0 fee			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
,	ist. to Barrier:	100.0 feet			Noise So	urco E	lovatio	ne (in fa	not)		
Centerline Dist.	to Observer:	100.0 feet		-	NOISE SC	Auto		2.000	,e t)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auto m Truck		1.000			
Observer Height	(Above Pad):	5.0 feet					_		Grade Ad	liustmant	
P	ad Elevation:	0.0 feet			пеач	y Truck	S. C	3.006	Grade Auj	justin o nt	. 0.0
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0%				Auto	s: 92	2.547			
	Left View:	-90.0 deg	rees		Mediu	m Truck	s: 92	2.504			
	Right View:	90.0 deg	rees		Heav	y Truck	s: 92	2.547			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flov	v D	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	3.4	19	-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-13.7	7 5	-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-17.	70	-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo ai	nd barr	ier atten	uation)						
VehicleType	Leq Peak Ho	ır Leq E	ay	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	71	.4	69.5		67.7		61	.7	70.3	3	70.9
Medium Trucks:	64	.6	63.1		56.8		55	.2	63.7	7	63.9
Heavy Trucks:	64	.3	62.9		53.9		55	.1	63.5	5	63.6
Vehicle Noise:	72	2.9	71.1		68.2		63	.3	71.8	3	72.3
Centerline Distan	ce to Noise C	ontour (in fe	et)	1							
				70 (dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

133

143

286

308

1,326

1,428

615

663

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o LQ St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT [DATA		NOISE MODEL INPUTS							
Highway Data					S	ite Con	ditions ((Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	52,500	vehicles	3					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Tru	icks (2	Axles):	15		
Peak H	lour Volume:	5,250	vehicles	5		He	avy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	60	mph		V	ehicle l	Vix					
Near/Far La	ne Distance:	76	feet				icleType		Day	Evening	Night	Daily
Site Data								utos:	77.5%		9.6%	,
Ra	rrier Height:	0.0	feet			Мє	edium Tri	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0				F	leavy Tro	ucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0			_							
Centerline Dist.		100.0			Ν	oise Sc	ource Ele			eet)		
Barrier Distance) feet				Autos		2.000			
						Mediur	n Trucks	: 4	1.000			
Observer Height	•		feet			Heav	y Trucks	:: 8	3.006	Grade Ad	ljustment	0.0
	ad Elevation:		feet		,	one Far	uivalent	Dioto	noo (in	foot)		
	ad Elevation:) feet		L	ane Equ						
	Road Grade:	0.0					Autos		2.547			
	Left View:	-90.0) degree	es			n Trucks		2.504			
	Right View:	90.0	degree	es		Heav	y Trucks	: 92	2.547			
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traffic	Flow	Distance	е	Finite	Road	Fres	snel	Barrier Att	ten Ber	m Atten
Autos:	73.22		4.00	-4	1.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		-13.24	-4	1.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33		-17.19	-4	l.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and i	barrier att	enu	ation)						
VehicleType	Leq Peak Ho	ur I	Leq Day	Leq	Eve	ening	Leq N	Vight		Ldn	C	NEL
Autos:	71	.9	7	70.0		68.2		62	.2	70.	8	71.4
Medium Trucks:	65	5.1	6	63.6		57.3		55	.7	64.2	2	64.4
Heavy Trucks:	64	1.8	6	63.4		54.4		55	.6	64.	0	64.1
Vehicle Noise:		3.4	-	71.6		68.7		63	.8	72.	3	72.8
Contorlino Distan	co to Noisa C	ontour	(in foot)									

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	143	309	665	1,433
CNEL:	154	333	717	1,544

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data			S	ite Con	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	54,800 vehicle	S					Autos:	15		
Peak Hour Percentage:	•			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume:	5,480 vehicle	S		He	avy Trud	cks (3+	Axles):	15		
Vehicle Speed:	60 mph		1/	ehicle l	Mix					
Near/Far Lane Distance:	76 feet		V		icleType	,	Day	Evening	Night	Daily
Site Data				ven		Autos:	77.5%		9.6%	-
				N 11	r edium Ti		84.8%		10.3%	1.84%
Barrier Height:					leavy T		86.5%		10.3%	0.74%
Barrier Type (0-Wall, 1-Berm).				,	leavy I	iucks.	00.5 /0	2.1 /0	10.0 /6	0.7470
Centerline Dist. to Barrier.			N	loise Sc	ource E	levatio	ns (in fe	eet)		
Centerline Dist. to Observer.					Auto	s: 2	2.000			
Barrier Distance to Observer.				Mediui	n Truck	s: 4	.000			
Observer Height (Above Pad).				Heav	y Truck	s: 8	3.006	Grade Ad	justment.	0.0
Pad Elevation.			Lane Equivalent Distance (in feet)							
Road Elevation.			L	ane Eq			•	reet)		
Road Grade.					Auto		2.547			
Left View.	3 -				n Truck	-	2.504			
Right View.	90.0 degre	es		Heav	y Truck	s: 92	2.547			
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distan	ice	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 73.2	22 4.19		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 83.6	68 -13.05		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87.3	33 -17.01		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier a	ttenu	ation)						
VehicleType Leq Peak H	our Leq Day	/ Le	eq Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	72.1	70.2		68.4		62	.4	71.0)	71.6
Medium Trucks:	65.3	63.8	57.5			55	.9	64.4	4	64.6
Heavy Trucks:	65.0	63.6	5 54.5 55.8 64.2				64.3			
Vehicle Noise:	73.6	71.8		68.9		64	.0	72.5	5	73.0
Centerline Distance to Noise	Contour (in feet)								

70 dBA

148

159

Ldn:

CNEL:

65 dBA

318

342

60 dBA

685

737

55 dBA

1,475

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT [DATA			NOISE MODEL INPUTS						
Highway Data					,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	43,900	vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%	%			Me	dium Tr	ucks (2	? Axles):	15		
Peak H	lour Volume:	4,390	vehicles	3		He	avy Tru	cks (3+	- Axles):	15		
Ve	ehicle Speed:	60	mph			Vehicle I	Wix					
Near/Far La	ne Distance:	76	feet				icleType	Э	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	_
Ra	rrier Height:	0.0	feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0				F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
,	ist. to Barrier:	100.0				Noise So	urco E	lovatio	ns (in fa	not)		
Centerline Dist.	to Observer:	100.0) feet		-	NOISE SC	Auto		2.000	(C I)		
Barrier Distance	to Observer:	0.0) feet			Madiu	Auto n Truck		4.000			
Observer Height	(Above Pad):	5.0) feet					_		Grade Ad	liustmont	
P	ad Elevation:	0.0) feet			неач	y Truck	S. C	3.006	Grade Auj	jusimem	. 0.0
Ro	ad Elevation:	0.0) feet			Lane Eq	uivalen	t Dista	nce (in t	feet)		
Road Grade: 0.0%							Auto	s: 9:	2.547			
	Left View:	-90.0	degree	es		Mediui	n Truck	rs: 9:	2.504			
	Right View:	90.0	degree	es		Heav	y Truck	rs: 91	2.547			
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic	Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	m Atten
Autos:	73.22	I	3.22		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		-14.01		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33		-17.97		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	po and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	ur L	Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	71	.1	(69.2		67.5		61	.4	70.0)	70.6
Medium Trucks:	64	1.4	(62.9		56.5		54	.9	63.4	4	63.6
Heavy Trucks:	64	1.0	(62.6		53.6		54	.8	63.2	2	63.3
Vehicle Noise:	72	2.6		70.8		68.0		63	3.0	71.6	6	72.1
Centerline Distan	ce to Noise C	ontour	(in feet))							1	
					70 (dBA	65	dBA	6	60 dBA	55	dBA

127

137

Ldn: CNEL: 274

295

591

636

1,272

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD/Edinger Av.

Road Segment: w/o Jamboree

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOISI	MODE	L INPUT	S			
Highway Data			Site Con	ditions (Hard	l = 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	26,800 vehicle	S			Autos:	15				
Peak Hour Percentage:	10%		Me	dium Trucks (2 Axles):	15				
Peak Hour Volume:	2,680 vehicle	S	He	avy Trucks (3	+ Axles):	15				
Vehicle Speed:	55 mph		Vehicle I	Miv						
Near/Far Lane Distance:	88 feet			icleType	Day	Evening	Night	Daily		
Site Data			Veri	Autos:	•		9.6%	-		
			1//	edium Trucks:			10.3%	1.84%		
Barrier Height:				Heavy Trucks:			10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm):				reavy Tracks.	00.070	2.1 /0	10.070	0.7 4 70		
Centerline Dist. to Barrier:			Noise So	ource Elevati	ons (in fe	eet)				
Centerline Dist. to Observer:				Autos:	2.000					
Barrier Distance to Observer:			Mediui	m Trucks:	4.000					
Observer Height (Above Pad):			Heav	iustment:	0.0					
Pad Elevation:			Lano Fa	anco (in s	foot)					
Road Elevation:			Lane Ly	uivalent Dista Autos: 8	39.850	eei)				
Road Grade:			Modium							
Left View:	3		Medium Trucks: 89.805 Heavy Trucks: 89.850							
Right View:	90.0 degree	es	пеач	y Hucks.	39.850					
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten		
Autos: 71.7	8 1.46	-3.	92	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -15.78	-3.	92	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	0 -19.74	-3.	92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)							
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL		
Autos:	88.1	66.2	64.5	5	8.4	67.0)	67.6		
Medium Trucks:	61.5	60.0	53.6 52.1			60.6	6	60.8		
Heavy Trucks:	31.5	60.1	51.1 52.3 60.7				60.8			
Vehicle Noise:	69.7	67.9	65.0	6	0.1	68.7	7	69.1		
Centerline Distance to Noise	Contour (in feet)								

70 dBA

81

88

Ldn:

CNEL:

65 dBA

175

189

60 dBA

378

406

55 dBA

814

876

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD/Edinger Av.

Road Segment: e/o Jamboree

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				Si	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	30,200 vehicle	es					Autos:	15			
Peak Hour	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15			
Peak F	lour Volume:	3,020 vehicle	es		Hea	avy Trud	cks (3+	Axles):	15			
Ve	ehicle Speed:	55 mph	55 mph			/lix						
Near/Far La	ne Distance:	88 feet				cleType	,	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	•	9.6%	•	
	rrier Height:	0.0 feet			Ме	edium T		84.8%		10.3%	1.84%	
Barrier Type (0-W	_	0.0			H	leavy T	rucks:	86.5%		10.8%	0.74%	
Centerline Di	•	100.0 feet										
Centerline Dist.		100.0 feet		N	oise So			•	eet)			
Barrier Distance		0.0 feet				Auto		.000				
Observer Height		5.0 feet			Mediun	n Truck	s: 4	.000				
	ad Elevation:		0.0 feet			y Truck	s: 8	.006	Grade Ad	iustment	0.0	
	ad Elevation:	0.0 feet				Lane Equivalent Distance (in feet)						
	Road Grade:	0.0%			= 40	Auto		.850				
	Left View:	-90.0 degre	000		Mediun			.805				
	Right View:	90.0 degre				y Truck		.850				
	ragin view.	30.0 degre	503		ricav.	y maon	o. 00	.000				
FHWA Noise Mod	lel Calculation	ns										
VehicleType	REMEL	Traffic Flow	Distan	nce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	1.98	3	-3.92		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-15.26	5	-3.92		-1.20		<i>-4.</i> 97	0.0	000	0.000	
Heavy Trucks:	86.40	-19.22	2	-3.92		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	l barrier a	attenu	ation)							
VehicleType	Leg Peak Ho			eq Eve		Leg	Night		Ldn	CI	VEL	
Autos:	6	8.6	66.7	-	65.0		58.	9	67.5	5	68.1	
Medium Trucks:	6	2.0	60.5		54.2		52.	6	61.1	l	61.3	
Heavy Trucks:	6	2.1	60.6		51.6		52.	9	61.2	2	61.3	
Vehicle Noise:	7	0.2	68.5	•	65.5		60.	6	69.2	2	69.7	

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	88	190	409	881							
CNEL:	95	204	440	948							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: e/o Hearthstone Bl. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOI	SE MODI	EL INPUT	S		
Highway Data			Site Cor	nditions (Ha	ard = 10, S	oft = 15)			
Average Daily Traffic (Adt).	25,700 vehicle	s			Autos	: 15			
Peak Hour Percentage.			Me	edium Truck	s (2 Axles)	: 15			
Peak Hour Volume:	2,570 vehicle	s	He	eavy Trucks	(3+ Axles)	: 15			
Vehicle Speed:	60 mph		Vehicle	Mix					
Near/Far Lane Distance.	76 feet				Day	Evening	Night	Doily	
Site Data			ver	nicleType Auto		Evening 6 12.9%	9.6%	<i>Daily</i> 97.42%	
				Auto ledium Trucl			10.3%	1.84%	
Barrier Height							10.8%	0.74%	
Barrier Type (0-Wall, 1-Berm).			1	Heavy Truck	ks: 86.5%	6 Z.170	10.6%	0.74%	
Centerline Dist. to Barrier			Noise S	ource Eleva	ations (in	feet)			
Centerline Dist. to Observer				Autos:	2.000				
Barrier Distance to Observer			Mediu	m Trucks:	4.000				
Observer Height (Above Pad)			Hea	vy Trucks:	8.006	Grade Ad	justment:	0.0	
Pad Elevation			Lane Equivalent Distance (in feet)						
Road Elevation.			Lane Eq			teet)			
Road Grade				Autos:	92.547				
Left View	3 -			m Trucks:	92.504				
Right View	90.0 degre	es	Hea	vy Trucks:	92.547				
FHWA Noise Model Calculation									
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos: 73.2	22 0.90		4.11	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 83.6	68 -16.34		4.11	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 87.3	-20.30		4.11	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier at	tenuation)				,		
VehicleType Leq Peak H	lour Leq Day		q Evening	Leq Nig	ıht	Ldn	CI	VEL	
Autos:	68.8	66.9	65.1		59.1	67.7	7	68.3	
	62.0	60.5	54.2		52.6	61.	=	61.3	
Heavy Trucks:	61.7	60.3	3 51.3 52.5 60.9				61.0		
Vehicle Noise:	70.3	68.5	65.6		60.7	69.2	2	69.7	
Centerline Distance to Noise	Contour (in feet	t)							

70 dBA

89

96

Ldn:

CNEL:

65 dBA

192

207

60 dBA

413

445

55 dBA

890

959

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: e/o Culver Dr. Analyst: B. Lawson

SITE SP	ECIFIC IN	PUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data				3	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Tra	affic (Adt): 2	26,900 vehicle	s					Autos:	15		
Peak Hour Pe	, ,	10%			Me	dium Tru	ıcks (2	Axles):	15		
	r Volume:	2,690 vehicle	S		He	avy Truc	ks (3+	Axles):	15		
Vehic	le Speed:	60 mph		,	/ehicle l	Miss					
Near/Far Lane	Distance:	76 feet		,				Day	Funning	Niosht	Doilu
Cita Data					ven	icleType		Day 50/	Evening	Night	Daily
Site Data					A 4.		Autos:	77.5%		9.6%	
	er Height:	0.0 feet				edium Tr		84.8%		10.3%	1.84%
Barrier Type (0-Wall	•	0.0			,	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist.		100.0 feet		^	loise Sc	ource El	evatio	ns (in fe	eet)		
Centerline Dist. to		100.0 feet				Autos	s: 2	.000			
Barrier Distance to	Observer:	0.0 feet			Medium Trucks: 4.000						
Observer Height (Ab	ove Pad):	5.0 feet			Heavy Trucks: 8.006 Grade Adjustmen					iustment:	0.0
Pad	Elevation:	0.0 feet			,						
Road	Elevation:	0.0 feet		L	Lane Equivalent Distance (in feet)						
Ro	ad Grade:	0.0%				Autos		2.547			
	Left View:	-90.0 degre	es		Mediui	n Trucks	s: 92	2.504			
R	ight View:	90.0 degree	es		Heav	y Trucks	s: 92	547			
FHWA Noise Model	Calculation	S									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	1.10		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.14		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.10		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise L	evels (with	out Topo and	barrie	er atteni	uation)						
VehicleType Le	eq Peak Hou	r Leq Day	,	Leq Ev	rening	Leq i	Night		Ldn	CI	VEL
Autos:	69	.0	67.1		65.3		59.	.3	67.9	9	68.5
Medium Trucks:	62	.2	60.7		54.4		52.	.8	61.3	3	61.5
Heavy Trucks:	61	.9	60.5		51.5			.7	61.1	<u> </u>	61.2
Vehicle Noise:	70	.5	68.7		65.8		60.	.9	69.4	1	69.9
Centerline Distance	to Noise Co	ntour (in feet)								

70 dBA

92

99

Ldn:

CNEL:

65 dBA

198

213

60 dBA

426

459

55 dBA

918

989

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Yale Av. And Fontaine Av. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	TA		NOISE MODEL INPUTS								
Highway Data				S	ite Cond	litions (H	ard = 10, S	oft = 15)					
Average Daily	Traffic (Adt):	28,800 ve	hicles				Autos:	15					
Peak Hour	Percentage:	10%			Med	ium Truck	ks (2 Axles):	15					
Peak H	our Volume:	2,880 ve	hicles		Hea	vy Trucks	s (3+ Axles):	15					
Ve	hicle Speed:	60 m	ph	V	ehicle M	lix							
Near/Far Lai	ne Distance:	76 fe	et			:leType	Day	Evening	Night	Daily			
Site Data						Aut			9.6%	97.42%			
Bai	rier Height:	0.0 fc	eet		Med	dium Truc	ks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W		0.0			H	eavy Truc	ks: 86.5%	2.7%	10.8%	0.74%			
Centerline Dis	•	100.0 fe	eet		loisa Sai	urco Elov	ations (in f	oot)					
Centerline Dist.	to Observer:	100.0 fe	eet		10/36 300	Autos:	2.000						
Barrier Distance	to Observer:	0.0 fe	eet		Modium	Trucks:	4.000						
Observer Height (Above Pad):	5.0 fe	eet			Trucks:	8.006	Grade Ad	iustment:	0.0			
Pa	ad Elevation:	0.0 fe	eet		Heavy	TTUCKS.	0.000	Grade Adj	ustinont.	0.0			
Roa	ad Elevation:	0.0 fe	eet	L	Lane Equivalent Distance (in feet)								
I	Road Grade:	0.0%				Autos:	92.547						
	Left View:	-90.0 d	legrees		Medium	Trucks:	92.504						
	Right View:	90.0 d	legrees		Heavy	Trucks:	92.547						
FHWA Noise Mode	el Calculation	1S											
VehicleType	REMEL	Traffic F	low I	Distance	Finite F	Road	Fresnel	Barrier Att	en Beri	m Atten			
Autos:	73.22	<u>)</u>	1.39	-4.11	1	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	83.68	3 -1	5.84	-4.11		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	87.33	3 -1	9.80	-4.11		-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise	e Levels (with	hout Topo	and bai	rrier attenu	uation)								
VehicleType	Leq Peak Ho	ur Led	q Day	Leq Ev	ening	Leq Ni	ght	Ldn	CI	VEL			
Autos:	6	9.3	67.	4	65.6		59.6	68.2	<u> </u>	68.8			
Medium Trucks:	6	2.5	61.	0	54.7		53.1	61.6	6	61.8			
Heavy Trucks:	6	2.2	60.	8	51.8		53.0	61.4		61.5			
Vehicle Noise:	7	0.8	69.	0	66.1		61.2	69.7	7	70.2			

70 dBA

96

103

Ldn:

CNEL:

65 dBA

207

223

60 dBA

446

480

55 dBA

961

1,035

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: e/o Jeffrey Rd. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS						
Highway Data			Site Cor	nditions (Har	d = 10, S	oft = 15)			
Average Daily Traffic (Adt):	41,600 vehicle	es			Autos.	: 15			
Peak Hour Percentage:	•		Me	dium Trucks	(2 Axles).	: 15			
Peak Hour Volume:	4,160 vehicle	s	He	avy Trucks (3+ Axles).	: 15			
Vehicle Speed:	60 mph		Vehicle	Mix					
Near/Far Lane Distance:	76 feet				Dov	Evening	Night	Doily	
Site Date			ven	icleType	Day 5: 77.5%	Evening 12.9%	Night 9.6%	Daily	
Site Data				Autos edium Trucks					
Barrier Height:							10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):			'	Heavy Trucks	s: 86.5%	6 2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:			Noise S	ource Elevat	tions (in f	eet)			
Centerline Dist. to Observer:				Autos:	2.000	<u> </u>			
Barrier Distance to Observer:			Mediu	m Trucks:	4.000				
Observer Height (Above Pad):				y Trucks:	8.006	Grade Ad	justment:	0.0	
Pad Elevation:									
Road Elevation:			Lane Eq	uivalent Dis		feet)			
Road Grade:	0.0%			Autos:	92.547				
Left View:	-90.0 degre	es	Mediu	m Trucks:	92.504				
Right View:	90.0 degre	es	Hear	y Trucks:	92.547				
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road F	resnel	Barrier Att	en Ber	m Atten	
Autos: 73.2	2.99	-4	.11	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 83.6	68 -14.25	-4	.11	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 87.3	3 -18.20	-4	.11	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)						
VehicleType Leq Peak H	our Leq Day	y Leq	Evening	Leq Nigh	nt	Ldn	CI	VEL	
Autos:	70.9	69.0	67.2		61.2	69.8	3	70.4	
	64.1	62.6	56.3		54.7	63.2		63.4	
Heavy Trucks:	63.8	62.4	4 53.4 54.6 63.0				63.1		
Vehicle Noise:	72.4	70.6	67.7		62.8	71.3	3	71.8	
Centerline Distance to Noise	Contour (in feet	t)							

70 dBA

123

132

Ldn: CNEL: 65 dBA

264

285

60 dBA

570

614

55 dBA

1,227

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141 Road Segment: w/o Sand Canyon. Av. Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	25,700 vehicle	s					Autos:	15			
Peak Hour	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15			
Peak H	lour Volume:	2,570 vehicle	s		Hea	avy Tru	cks (3+	Axles):	15			
Ve	ehicle Speed:	60 mph		V	ehicle N	/liv						
Near/Far La	ne Distance:	76 feet				cleType	è	Day	Evening	Night	Daily	
Site Data					• • • • • • • • • • • • • • • • • • • •		Autos:	77.5%	J	9.6%	-	
	wwiew Heierlet.	0.0 foot			Me	edium T		84.8%		10.3%	1.84%	
	rrier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%	
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet										
Centerline Dist.		100.0 feet		N	oise So	urce E	levatio	ns (in fe	eet)			
Barrier Distance		0.0 feet				Auto		2.000				
					Mediun	n Truck	s: 4	1.000				
Observer Height	ad Elevation:	5.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment	0.0	
	ad Elevation: ad Elevation:	0.0 feet 0.0 feet		1	ane Fai	ıivalen	t Distai	nce (in i	feet)			
	Road Grade:	0.0 feet 0.0%		_	uno Equ	Auto		2.547	1001)			
	Left View:				Mediun		-	2.504				
	Right View:	-90.0 degre				y Truck		2.547				
	Rigiti view.	90.0 degre	es		i icav	y IIUCK	S. 32	2.547				
FHWA Noise Mod	lel Calculation	ns										
VehicleType	REMEL	Traffic Flow	Distand	се	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	73.22	0.90	-	4.11		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	3 -16.34	-	4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-20.30	-	4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrier at	tenu	ation)							
VehicleType	Leq Peak Ho	our Leq Day	/ Le	q Eve	ening	Leq	Night		Ldn	C	VEL	
Autos:	6	8.8	66.9		65.1		59	.1	67.7	7	68.3	
Medium Trucks:	6	2.0	60.5		54.2		52	.6	61.1	1	61.3	
Heavy Trucks:	6	1.7	60.3		51.3		52	.5	60.9	9	61.0	
Vehicle Noise:	7	0.3	68.5		65.6		60	.7	69.2	2	69.7	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	89	192	413	890
CNEL:	96	207	445	959

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: ICD Job Number: 8141 Road Segment: e/o Sand Canyon Av. Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT D	ATA		NOISE MODEL INPUTS						
Highway Data					Site Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	19,400 v	ehicles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tri	ucks (2	Axles):	15		
Peak H	lour Volume:	1,940 v	ehicles		Heavy Trucks (3+ Axles): 15						
Ve	hicle Speed:	60 n	nph		Vehicle I	Miv					
Near/Far La	ne Distance:	76 f	eet			icleType	۵ .	Day	Evening	Night	Daily
Site Data					VOII		, Autos:	77.5%		9.6%	
		0.0	£1		Me	edium Tı		84.8%		10.3%	1.84%
	rrier Height:	0.0 0.0	reet			leavy Ti		86.5%		10.8%	0.74%
Barrier Type (0-W		100.0	foot								
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet				_	Noise Source Elevations (in feet)						
		0.0				Auto	s: 2	.000			
Barrier Distance					Mediui	n Truck	s: 4	.000			
Observer Height (Above Pad): 5.0 feet				Heavy Trucks: 8.006 Grade A				Grade Adj	justment.	0.0	
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet				Lane Eq	uivalen	t Dietar	nce (in i	foot)			
					Lane Ly	Auto		.547	CCI		
	Road Grade:	0.0%			Modiu		-	_			
	Left View:		degrees		Medium Trucks: 92.50 Heavy Trucks: 92.54						
	Right View:	90.0	degrees		пеач	y Truck	S. 92	.347			
FHWA Noise Mod	el Calculation	าร									
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22		-0.32	-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-	17.56	-4.1	1	-1.20		<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks:	87.33	-	21.52	-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Top	o and ba	rrier atte	nuation)						
VehicleType	Leq Peak Ho	ur Le	eq Day	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	67	7.6	65	.7	63.9	-	57.	9	66.5	5	67.1
Medium Trucks:	60	0.8	59	.3	52.9		51.	4	59.9	9	60.1
Heavy Trucks:	60	0.5	59	.1	50.0		51.	3	59.6	6	59.8
Vehicle Noise:	69	9.1	67	.3	64.4		59.	5	68.0)	68.5

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	74	159	343	738							
CNEL:	80	171	369	795							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Laguna Canyon Rd. and Discovery Analyst: B. Lawson

SITE S	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Condi	itions (Hard	l = 10, Se	oft = 15)				
Average Daily	Traffic (Adt):	17,700 vehicle	s			Autos:	15				
Peak Hour	Percentage:	10%		Medi	um Trucks (2 Axles):	15				
Peak H	our Volume:	1,770 vehicle	s	Heavy Trucks (3+ Axles): 15							
Vei	hicle Speed:	60 mph		Vehicle Mi	X						
Near/Far Lar	ne Distance:	76 feet	6 feet		еТуре	Day	Evening	Night	Daily		
Site Data					Autos:	77.5%	12.9%	9.6%	97.42%		
Bar	rier Height:	0.0 feet		Med	ium Trucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0		He	avy Trucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dis	,	100.0 feet		Noise Sou	rce Elevation	ons (in f	eet)				
Centerline Dist.	to Observer:	100.0 feet			Autos:	2.000	-				
Barrier Distance	to Observer:	0.0 feet		Medium		4.000					
Observer Height (tht (Above Pad): 5.0 feet Pad Elevation: 0.0 feet					8.006	Grade Ad	iustment:	0.0		
Pa				, , , , , , , , , , , , , , , , , , , ,							
Road Elevation: 0.0 feet				Lane Equi	valent Dista	ance (in	feet)				
F	Road Grade:	0.0%		Autos: 92.547 Medium Trucks: 92.504							
	Left View:	-90.0 degree	es								
	Right View:	90.0 degree	es	Heavy	Trucks: 9	2.547					
FHWA Noise Mode	el Calculation	1S									
VehicleType	REMEL	Traffic Flow	Distance	Finite R	oad Fre	esnel	Barrier Att	en Beri	m Atten		
Autos:	73.22	-0.72	-4.1	1 .	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-17.96	-4.1	1 .	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-21.91	-4.1	1 .	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	hout Topo and	barrier atten	uation)							
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq E	vening	Leq Night		Ldn	CI	VEL		
Autos:	6	7.2	65.3	63.5	5	7.5	66.1		66.7		
Medium Trucks:	60	0.4	58.9	52.5 51.0		51.0 59.5		5	59.7		
Heavy Trucks:	60	0.1	58.7	49.6	5	0.9	59.2	2	59.4		
Vehicle Noise:	68	8.7	66.9	64.0	5	9.1	67.6	3	68.1		

70 dBA

69

75

Ldn:

CNEL:

65 dBA

150

161

60 dBA

322

347

55 dBA

694

748

Centerline Distance to Noise Contour (in feet)

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: ICD Job Number: 8141 Road Segment: w/o Barranca Pkwy. Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 2	22,100 vehicle:	S					Autos:	15		
	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15		
Peak F	lour Volume:	2,210 vehicles	s		Hea	avy Tru	cks (3+	- Axles):	15		
Ve	hicle Speed:	60 mph		1/	'ehicle N	liv					
Near/Far La	ne Distance:	76 feet		V		riix cleType	a .	Day	Evening	Night	Daily
Site Data					Vern		Autos:	77.5%		9.6%	-
					Me	dium T		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-W	•	0.0			,	icavy I	rucks.	00.570	2.1 /0	10.070	0.7 4 70
Centerline Di		100.0 feet		٨	Noise Source Elevations (in feet)						
Centerline Dist.		100.0 feet				Auto	s: 2	2.000			
Barrier Distance		0.0 feet			Mediun	n Truck	s: 4	4.000			
	Observer Height (Above Pad): 5.0 feet				Heav	y Truck	s: 8	3.006	Grade Ad	iustment:	0.0
Pad Elevation: 0.0 feet											
Road Elevation: 0.0 feet				L	ane Equ			•	feet)		
	Road Grade:	0.0%				Auto		2.547			
	Left View:	-90.0 degree	es		Mediun	n Truck	s: 9:	2.504			
	Right View:	90.0 degree	es		Heav	y Truck	s: 9	2.547			
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.24		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.99		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.95		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r attenu	ıation)						
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	68	.2	66.3		64.5		58	3.4	67.1		67.7
Medium Trucks:	61	.4	59.9		53.5		52	2.0	60.4	ļ.	60.7
Heavy Trucks:	61	.1	59.6		50.6		51	.9	60.2	2	60.3
Vehicle Noise:	69	.6	67.9		65.0		60	0.0	68.6	3	69.1

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn: ¯	81	173	374	805							
CNEL:	87	187	403	867							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Barranca Pkwy. and Gateway Bl. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE	MODE	L INPUT	S		
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	10%			dium Trucks (avy Trucks (3	,				
Vehicle Speed: Near/Far Lane Distance:	60 mph		Vehicle l		Day	Evening	Night	Daily	
Site Data				Autos:			-	97.42%	
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer:	100.0 feet		ŀ	edium Trucks: Heavy Trucks: Durce Elevation Autos:	86.5%	2.7%	10.3% 10.8%	1.84% 0.74%	
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	5.0 feet 0.0 feet		Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0						
Road Elevation: Road Grade:			Lane Eq		2.547	reer)			
Left View: Right View:	-90.0 degree		Medium Trucks: 92.504 Heavy Trucks: 92.547						
FHWA Noise Model Calculation	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten	
Autos: 73.2	2 0.51	-4.	11	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 83.6 Heavy Trucks: 87.3		-4.′ -4.′		-1.20 -1.20	-4.97 -5.16		000	0.000	
Unmitigated Noise Levels (with	thout Topo and	barrier atte	nuation)						
VehicleType Leq Peak H	our Leq Day	Leq E	Evening	Leq Night		Ldn	CI	VEL	
Autos:	88.4	66.5	64.8	5	8.7	67.3	3	67.9	
		60.1			2.2	60.7		60.9	
Heavy Trucks: 6	61.3	59.9	50.9 52.1		2.1	60.5		60.6	
Vehicle Noise:	69.9	68.1	65.2	6	0.3	68.9	9	69.3	
Centerline Distance to Noise	Contour (in feet,)							

70 dBA

84

90

Ldn:

CNEL:

65 dBA

181

195

60 dBA

389

419

55 dBA 839

903

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Gateway Bl.and Alton Pkwy. Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				9	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 2	20,900 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,090 vehicle	S		Heavy Trucks (3+ Axles): 15						
Ve	hicle Speed:	60 mph		,	/ehicle l	liv					
Near/Far La	ne Distance:	76 feet				cleType	<u>د</u>	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	Ū	•	97.42%
	rrier Height:	0.0 feet							10.3%	1.84%	
Barrier Type (0-W	_	0.0 1661				leavy T		86.5%		10.8%	0.74%
Centerline Di	,	100.0 feet									
Centerline Dist.		100.0 feet		1	Noise Source Elevations (in feet)						
		0.0 feet				Auto	s: 2	2.000			
				Medium Trucks: 4.000							
•	•	5.0 feet			Heav	y Truck	s: 8	3.006	Grade Adj	iustment.	0.0
Pad Elevation: 0.0 feet			,	Lane Eq	uivələn	t Nicta	nce (in	foot)			
Road Elevation: 0.0 feet			-	Larie Ly				ieei)			
	Road Grade:	0.0%			Madiu	Auto		2.547			
	Left View:	-90.0 degre				n Truck		2.504			
	Right View:	90.0 degre	es		неач	y Truck	S. 92	2.547			
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.00		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-17.24		-4.11	l	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-21.19		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	vening	Leq	Night		Ldn	CI	VEL
Autos:	67	.9	66.0		64.2		58	.2	66.8	3	67.4
Medium Trucks:	61	.1	59.6		53.3		51	.7	60.2	2	60.4
Heavy Trucks:	60	.8	59.4		50.4		51	.6	60.0)	60.1
Vehicle Noise:	69	.4	67.6		64.7		59	.8	68.3	}	68.8

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	78	167	360	776							
CNEL:	84	180	388	836							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Alton Pkwy.and Spectrum Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt)	34,700 vehicle	s			Autos:	15				
Peak Hour Percentage			Me	dium Trucks (2 Axles):	15				
Peak Hour Volume	3,470 vehicle	s	He	avy Trucks (3	+ Axles):	15				
Vehicle Speed	60 mph		Vehicle Mix							
Near/Far Lane Distance	76 feet			icleType	Day	Evening	Night	Daily		
Site Data			VEII	Autos:	77.5%	J	9.6%	97.42%		
			Λ./.	.autos :edium Trucks	84.8%		10.3%	1.84%		
Barrier Height				-dium Trucks. Heavy Trucks:			10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm)			,	leavy Trucks.	2.1 /0	10.076	0.7476			
Centerline Dist. to Barrier			Noise So	ource Elevation	ons (in f	eet)				
Centerline Dist. to Observer				Autos:	2.000					
Barrier Distance to Observer			Mediui	m Trucks:	4.000					
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0		
Pad Elevation			1 5			£4\				
Road Elevation			Lane Eq	uivalent Dista Autos: 9	2.547	reet)				
Road Grade										
Left View	3 -		Medium Trucks: 92.504							
Right View	: 90.0 degre	es	Heavy Trucks: 92.547							
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten		
Autos: 73.2	22 2.20	-4.	.11	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 83.6	68 -15.04	-4.	.11	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 87.3	-18.99	-4.	.11	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)							
VehicleType Leq Peak F	lour Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL		
Autos:	70.1	68.2	66.4	6	0.4	69.0)	69.6		
Medium Trucks:	63.3	61.8		5	3.9	62.4	1	62.6		
Heavy Trucks:	63.0	61.6	52.6	5	3.8 62.2		2	62.3		
Vehicle Noise:	71.6	69.8	66.9	6.	2.0	70.5	5	71.0		
Centerline Distance to Noise	Contour (in feet	·)								

70 dBA

109

117

Ldn:

CNEL:

65 dBA

234

252

60 dBA

505

544

55 dBA 1,088

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Pacifica and Enterprise Dr. Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				S	ite Cond	ditions (F	<i>Hard</i> = 10, S	oft = 15)			
Average Daily	Traffic (Adt):	35,100 vehic	les				Autos	: 15			
	Percentage:	10%			Med	dium Truc	ks (2 Axles)	: 15			
Peak H	our Volume:	3,510 vehic	les		Hea	avy Truck	s (3+ Axles)	: 15			
Ve	ehicle Speed:	60 mph		V	ehicle N	Niy					
Near/Far La	ne Distance:	76 feet				cleType	Day	Evening	Night	Daily	
Site Data					VOITE		itos: 77.5%		•	97.42%	
	rrior Hoight	0.0 feet			Me	dium Tru			10.3%	1.84%	
Barrier Type (0-W	rrier Height:	0.0 1001				leavy Tru			10.8%	0.74%	
• • • •	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		Noise Source Elevations (in feet)							
Barrier Distance		0.0 feet				Autos:					
Observer Height		5.0 feet			Mediun	n Trucks:	4.000				
•	`				Heavy	/ Trucks:	8.006	Grade Ad	justment.	0.0	
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet			,	ane Fau	ıivalent [Distance (in	feet)				
	Road Grade:	0.0 feet		_	uno Equ	Autos:	•	1001)			
	Left View:				Modium						
		-90.0 deg									
	Right View:	90.0 deg	rees		пеач	y Trucks.	92.547				
FHWA Noise Mod	lel Calculatio	ns		1							
VehicleType	REMEL	Traffic Flow	/ Di	istance	Finite I	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos:	73.22	2 2.2	25	-4.11		-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	83.68	3 -14.9	9	-4.11		-1.20	<i>-4</i> .97	0.0	000	0.000	
Heavy Trucks:	87.33	-18.9	14	-4.11		-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (wit	hout Topo an	d barr	ier attenu	ation)						
VehicleType	Leq Peak Ho	our Leq D	ay	Leq Ev	ening	Leq N	ight	Ldn	CI	VEL	
Autos:	7	0.2	68.3		66.5		60.4	69.	1	69.7	
Medium Trucks:	6	3.4	61.9		55.5		54.0	62.4	4	62.7	
Heavy Trucks:	6	3.1	61.6		52.6		53.9	62.2	2	62.3	

67.0

70 dBA

110

118

62.0

65 dBA

236

254

70.6

60 dBA

509

548

71.1

55 dBA

1,096

1,180

Vehicle Noise:

71.6

Centerline Distance to Noise Contour (in feet)

69.9

Ldn: CNEL:

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Enterprise and I-405 SB Ramps Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				S	Site Conditio	ns (Hard	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	52,900 vehicle	es				Autos:	15				
Peak Hour	Percentage:	10%			Medium	Trucks (2	2 Axles):	15				
Peak H	lour Volume:	5,290 vehicle	es		Heavy Trucks (3+ Axles): 15							
Ve	hicle Speed:	60 mph		1	Vehicle Mix							
Near/Far La	ne Distance:	76 feet			VehicleT	vne	Day	Evening	Night	Daily		
Site Data								0	•	97.42%		
	wwiew Heierlet.	0.0 fact			Mediun	n Trucks:	84.8%		10.3%	1.84%		
	rrier Height:	0.0 feet 0.0				y Trucks:			10.8%	0.74%		
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet										
Centerline Dist.				٨	Noise Source Elevations (in feet)							
		100.0 feet			A	utos:	2.000					
Barrier Distance to Observer: 0.0 feet				Medium Tru	ıcks:	4.000						
Observer Height (Above Pad): 5.0 feet					Heavy Tru	ıcks:	8.006	Grade Adj	ustment:	0.0		
Pad Elevation: 0.0 feet			,	ana Equival	lant Diata	noo (in :	foot)					
Road Elevation: 0.0 feet					ane Equival.			eet)				
ı	Road Grade:	0.0%					2.547					
	Left View:	-90.0 degre			Medium Tru		2.504					
	Right View:	90.0 degre	ees		Heavy Tru	icks: 9	2.547					
FHWA Noise Mod	el Calculation	S										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite Road	d Fre	snel	Barrier Atte	en Ber	m Atten		
Autos:	73.22	4.03	3	-4.11	-1.2	20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-13.20)	-4.11	-1.2	20	<i>-4.</i> 97	0.0	000	0.000		
Heavy Trucks:	87.33	-17.16	6	-4.11	-1.2	20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Topo and	l barrie	er attenu	uation)							
VehicleType	Leq Peak Hou	ır Leq Da	У	Leq Ev	rening L	eq Night		Ldn	CI	VEL		
Autos:	71	.9	70.0		68.3	62	2.2	70.8	3	71.4		
Medium Trucks:	65	.2	63.7		57.3		55.8		<u> </u>	64.4		
Heavy Trucks:	64	.9	63.4		54.4 55.6 64.0)	64.1			
Vehicle Noise:	73	.4	71.7		68.8	63	3.8	72.4		72.9		

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	144	310	669	1,441							
CNEL:	155	334	720	1,552							

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: ICD Job Number: 8141 Analyst: B. Lawson Road Segment: b/w I-405 SB Ramps and Research Dr.

SITE	SPECIFIC IN	PUT DATA				NC	DISE N	/IODE	L INPUT	S	
Highway Data					Site Con	ditions (l	Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 1	13,300 vehicles	S				,	Autos:	15		
Peak Hour	Percentage:	10%			Ме	dium Truc	cks (2 A	(xles	15		
Peak H	lour Volume:	1,330 vehicles	S		He	avy Truck	rs (3+ A	(xles	15		
Ve	hicle Speed:	65 mph		,	Vehicle i	Miv					
Near/Far La	ne Distance:	175 feet				icleType		Day	Evening	Night	Daily
Site Data					7011			77.5%	J	9.6%	-
	vviov Uojashti	0.0 feet			М	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 reet 0.0				Heavy Tru		86.5%		10.8%	0.74%
Centerline Dis		0.0 100.0 feet									
Centerline Dist.		100.0 feet		1	Noise So	ource Ele	vation	s (in fe	eet)		
Barrier Distance		0.0 feet				Autos:		000			
Observer Height (5.0 feet				m Trucks:		000			
• ,	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Adj	iustment.	0.0
	ad Elevation:	0.0 feet		1	Lane Eg	uivalent l	Distand	e (in f	feet)		
	Road Grade:	0.0%				Autos:		•			
•	Left View:	-90.0 degree	25		Mediu	m Trucks:					
	Right View:	90.0 degree			Heav	y Trucks:	48.	506			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Di	stance		Road	Fresn		Barrier Atte		m Atten
Autos:	74.55	-2.31		0.09		-1.20		-4.87	0.0		0.000
Medium Trucks:	84.86	-19.55		0.1		-1.20		-4.97	0.0		0.000
Heavy Trucks:	88.18	-23.50		0.09	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	ier atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq E	/ening	Leq N	light		Ldn	CI	VEL
Autos:	71	.1	69.2		67.5		61.4		70.0)	70.6
Medium Trucks:	64	.2	62.7		56.4		54.8		63.3	3	63.5
Heavy Trucks:	63	.6	62.2		53.1		54.4		62.7	7	62.8
Vehicle Noise:	72	.5	70.8		67.9		62.9)	71.5	5	72.0
Centerline Distance	ce to Noise Co	ontour (in feet)								
<u> </u>		· · · · · · · · · · · · · · · · · · ·		70 c	dBA	65 di	BA	6	i0 dBA	55	dBA

126

135

Ldn:

CNEL:

270

292

583

628

1,255

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Research Dr. and Hubble Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS						
Highway Data			Site Con	ditions (Ha	ard = 10, Sc	oft = 15)			
Average Daily Traffic (Adt):	23,800 vehicle	es	Autos: 15						
Peak Hour Percentage:			Medium Trucks (2 Axles): 15						
Peak Hour Volume:	2,380 vehicle	es	He	avy Trucks	(3+ Axles):	15			
Vehicle Speed:	60 mph		Vehicle I	Viy					
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily	
Site Data				Auto	•		9.6%	97.42%	
Barrier Height:	0.0 feet		Ме	edium Truck	ks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):			ŀ	leavy Truck	ks: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier.		·				4)			
Centerline Dist. to Observer:			Noise Sc		ations (in fe	eet)			
Barrier Distance to Observer.				Autos:	2.000				
Observer Height (Above Pad):				n Trucks:	4.000				
Pad Elevation:			Heavy Trucks: 8.006 Grade Adjustm					0.0	
Road Elevation:		•	Lane Eq	uivalent Di	stance (in	feet)			
Road Grade:		•		Autos:	92.547				
Left View:		es	Mediui	n Trucks:	92.504				
Right View.	-		Heav	y Trucks:	92.547				
FHWA Noise Model Calculation									
VehicleType REMEL	Traffic Flow	Distance	Finite			Barrier Att		m Atten	
Autos: 73.2				-1.20	-4.87		000	0.000	
Medium Trucks: 83.6				-1.20	-4.97		000	0.000	
Heavy Trucks: 87.3	-20.63	-4.1	l1	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	nuation)						
VehicleType Leq Peak H	lour Leq Day	y Leq E	vening	Leq Nig	ht	Ldn	CI	VEL	
Autos:	68.5	66.6	64.8		58.8	67.4	4	68.0	
Medium Trucks:	61.7	60.2	53.8		52.3	60.7	7	61.0	
Heavy Trucks:	61.4	60.0	50.9		52.2	60.5	5	60.7	
Vehicle Noise:	70.0	68.2	65.3		60.4	68.9	9	69.4	

70 dBA

85

91

Ldn:

CNEL:

65 dBA

182

196

60 dBA

393

423

55 dBA

846

911

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Hubble and Bake Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA				N	OISE MOD	EL INPUT	S	
Highway Data				S	ite Cond	itions (Hard = 10,	Soft = 15)		
Average Daily	Traffic (Adt):	22,300 vehicle	s				Auto	s: 15		
Peak Hour	Percentage:	10%			Medi	um Tru	cks (2 Axles	s): 15		
Peak H	lour Volume:	2,230 vehicle	s		Heav	y Truci	ks (3+ Axles	s): 15		
Ve	hicle Speed:	60 mph		V	ehicle M	iy				
Near/Far La	ne Distance:	76 feet				leType	Day	Evening	Night	Daily
Site Data							utos: 77.5			97.42%
	rrier Height:	0.0 feet			Med	lium Tru	ucks: 84.8	3% 4.9%		
Barrier Type (0-W	_	0.0			Не	eavy Tru	ucks: 86.5	5% 2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet								
Centerline Dist.		100.0 feet		N	Noise Source Elevations (in feet)					
Barrier Distance		0.0 feet				Autos				
Observer Height (5.0 feet			Medium					
	ad Elevation:	0.0 feet			Heavy	Trucks	8.006	Grade Ad	ajustmen	t: 0.0
	ad Elevation:	0.0 feet		L	ane Equi	valent	Distance (i	n feet)		
	Road Grade:	0.0%				Autos	: 92.547			
	Left View:	-90.0 degre	es		Medium	Trucks	: 92.504			
	Right View:	90.0 degre			Heavy	Trucks	92.547			
FHWA Noise Mod	el Calculation	18								
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite R	Road	Fresnel	Barrier At	ten Be	rm Atten
Autos:	73.22	0.28		-4.11		-1.20	-4.8	7 0.	000	0.000
Medium Trucks:	83.68	-16.96		-4.11		-1.20	-4.9	7 0.	000	0.000
Heavy Trucks:	87.33	-20.91		-4.11		-1.20	-5.1	<i>6</i> 0.	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er attenu	ation)					
VehicleType	Leq Peak Ho	ur Leq Day	У	Leq Eve	ening	Leq N	light	Ldn	C	NEL
Autos:	68	3.2	66.3		64.5		58.5	67.	1	67.7
Medium Trucks:	61	1.4	59.9		53.5		52.0	60.	5	60.7
Heavy Trucks:	61	1.1	59.7		50.6		51.9	60.	2	60.4

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	81	175	376	810							
CNEL:	87	188	405	872							

65.0

60.1

68.6

69.1

67.9

Vehicle Noise:

69.7

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Bake Pkwy. and Muller Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (Ha	rd = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	21,300 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Med	dium Trucks	(2 Axles):	15		
Peak H	lour Volume:	2,130 vehicles	S	Hea	avy Trucks ((3+ <i>Axles</i>):	15		
Ve	hicle Speed:	60 mph		Vehicle I	/liv				
Near/Far La	ne Distance:	76 feet			cleType	Day	Evening	Night	Daily
Site Data					Auto	•	J	9.6%	
	rrier Height:	0.0 feet		Мє	edium Truck	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0		F.	łeavy Truck	s: 86.5%		10.8%	0.74%
Centerline Di	•	100.0 feet							
Centerline Dist.		100.0 feet	•	Noise So	urce Eleva	•	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height		5.0 feet		Mediur	n Trucks:	4.000			
-	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
-	ad Elevation:	0.0 feet		Lane Equ	uivalent Dis	tance (in	feet)		
	Road Grade:	0.0%			Autos:	92.547	,		
	Left View:	-90.0 degree	25	Mediun	n Trucks:	92.504			
	Right View:	90.0 degree			y Trucks:	92.547			
FHWA Noise Mod	el Calculation	าร							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.08	-4.′	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-17.15	-4.′	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-21.11	-4.1	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Nigh	nt	Ldn	CI	VEL
Autos:	6	8.0	66.1	64.3		58.3	66.9	9	67.5
Medium Trucks:	6	1.2	59.7	53.3		51.8	60.3	3	60.5
Heavy Trucks:	60	0.9	59.5	50.4		51.7	60.0)	60.2

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	79	169	365	786							
CNEL:	85	182	393	846							

64.8

59.9

68.4

68.9

67.7

Vehicle Noise:

69.5

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Muller and Tesla Analyst: B. Lawson

SITE	SPECIFIC II	NPUT D	ATA		NOISE MODEL INPUTS							
Highway Data					S	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	20,600	vehicles	3					Autos:	15		
	Percentage:	10%				Med	dium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	2,060	vehicles	5	Heavy Trucks (3+ Axles): 15							
Ve	ehicle Speed:	60	mph		V	ehicle N	/lix					
Near/Far La	ne Distance:	76	feet				cleType)	Day	Evening	Night	Daily
Site Data							,	Autos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0	feet			Me	dium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0				H	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0			M	oise So	urce F	levatio	ns (in fa	of)		
Centerline Dist.	to Observer:	100.0	feet			0/30 00	Auto		2.000	.01)		
Barrier Distance	to Observer:	0.0	feet			Madium						
Observer Height	(Above Pad):	5.0	feet		Medium Trucks: 4.000							
-	ad Elevation:		feet		Heavy Trucks: 8.006 Grade Adjustment: 0						. 0.0	
	ad Elevation:		feet		L	ane Equ	ıivalen	t Distai	nce (in f	feet)		
	Road Grade:	0.0					Auto	s: 92	2.547			
	Left View:		degree	es		Mediun	n Truck	s: 92	2.504			
	Right View:		degree			Heav	y Truck	s: 92	2.547			
FHWA Noise Mod	lel Calculatio	าร										
VehicleType	REMEL	Traffic	Flow	Distan	ce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	2	-0.06		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	3	-17.30		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3	-21.26		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Top	oo and l	barrier a	ttenu	ation)						
VehicleType	Leq Peak Ho	our L	eq Day	Le	q Eve	ening	Leq	Night		Ldn	C	NEL
Autos:	6	7.8	6	65.9		64.2		58	.1	66.7	7	67.4
Medium Trucks:	6	1.1	5	59.6		53.2		51	.7	60.	1	60.4
Heavy Trucks:	6	8.0	5	59.3		50.3		51	.5	59.9	9	60.0
Vehicle Noise:	6	9.3	(67.6		64.7		59	.7	68.3	3	68.8

70 dBA

77

83

Ldn: CNEL: 65 dBA

166

178

60 dBA

357

384

55 dBA

768

827

Sunday,	May 20	2012
ouriday,	IVIUY 20	, 2012

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD

Job Number: 8141

Road Segment: w/o Lake Forest Dr.

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA			NOISE MODEL INPUTS							
Highway Data				S	ite Condi	itions (Hard = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	20,100 vehicle	es				Autos	: 15				
Peak Hour	Percentage:	10%			Medi	um Trud	cks (2 Axles).	: 15				
Peak H	lour Volume:	2,010 vehicle	es		Heav	y Truck	ks (3+ Axles)	: 15				
Ve	hicle Speed:	60 mph		V	ehicle Mi	'v						
Near/Far La	ne Distance:	76 feet		_		eType	Day	Evening	Night	Daily		
Site Data							utos: 77.5%	J		97.42%		
Ra	rrier Height:	0.0 feet			Med	lium Tru	ıcks: 84.8%	6 4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0			He	avy Tru	ıcks: 86.5%	6 2.7%	10.8%	0.74%		
Centerline Di		100.0 feet			O			· - 4				
Centerline Dist.		100.0 feet		N	oise Sou		vations (in t	eet)				
Barrier Distance		0.0 feet				Autos:						
Observer Height	(Above Pad):	5.0 feet			Medium 			0		. 0.0		
,	ad Elevation:	0.0 feet			Heavy	Trucks:	8.006	Grade Ad	lustment	. 0.0		
Ro	ad Elevation:	0.0 feet		L	ane Equi	valent	Distance (in	feet)				
	Road Grade:	0.0%				Autos:	92.547					
	Left View:	-90.0 degre	es		Medium	Trucks:	92.504					
	Right View:	90.0 degre			Heavy	Trucks:	92.547					
FHWA Noise Mod	el Calculation	18										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite R	oad	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	73.22	-0.17	7	-4.11		-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-17.41		-4.11		-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-21.36	6	-4.11		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	l barri	er attenu	ation)							
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Eve	ening	Leq N	light	Ldn	C	NEL		
Autos:	67	7.7	65.8		64.1		58.0	66.6	3	67.2		
Medium Trucks:	61	1.0	59.5		53.1		51.6	60.0)	60.2		
Heavy Trucks:	60	0.6	59.2		50.2		51.4	59.8	3	59.9		

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	76	163	351	756							
CNEL:	81	175	378	814							

64.6

59.6

68.2

68.7

67.4

Vehicle Noise:

69.2

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Job Number: 8141
Road Segment: n/o Chapman/Santiago Cyn. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	20,400 vehicle 10% 2,040 vehicle				dium Tru avy Truc	icks (2	,			
Near/Far La	ehicle Speed: ane Distance:	55 mph 88 feet		Ve	ehicle I Vehi	cleType		Day	Evening	Night	Daily
Site Data Barrier Type (0-W	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium Tr Heavy Tr		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustn Lane Equivalent Distance (in feet) Autos: 89.850 Medium Trucks: 89.805 Heavy Trucks: 89.850					ijustment	. 0.0	
VehicleType Autos: Medium Trucks: Heavy Trucks:	71.78 82.40	Traffic Flow 0.27 -16.96	-:	3.92 3.92 3.92	Finite	Road -1.20 -1.20 -1.20	Fresi	-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Nois VehicleType	Leq Peak Ho	ur Leq Da	y Led		ening	Leq I	Night		Ldn		NEL
Autos: Medium Trucks: Heavy Trucks:	60	6.9 0.3 0.4	65.0 58.8 58.9		63.3 52.5 49.9		57.5 50.5 51.	9 1	65.8 59.4 59.5	4 5	66.4 59.6 59.6
Vehicle Noise:	68	8.5	66.7		63.8		58.	9	67.5	5	67.9

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	68	146	315	679							
CNEL:	73	157	339	730							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: s/o Chapman Av.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA			NOISE MODEL INPUTS						
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traf	• ,		5	1.4	." T	Autos:			
Peak Hour Per	•	10% 1,410 vehicles		Medium Trucks (2 Axles): 15					
Peak Hour				Heavy Trucks (3+ Axles): 15					
	e Speed:	•	55 mph		Mix				
Near/Far Lane D	Distance:	88 feet		Veh	icleType	Day	Evening	Night	Daily
Site Data					Auto	os: 77.5%	12.9%	9.6%	97.42%
Barrier	Height:	0.0 feet		Me	edium Truck	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall,	•	0.0		ŀ	leavy Truck	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to	Barrier:	100.0 feet		Noise So	ource Eleva	ations (in f	eet)		
Centerline Dist. to O	bserver:	100.0 feet			Autos:	2.000	,		
Barrier Distance to O	bserver:	0.0 feet		Mediu	m Trucks:	4.000			
Observer Height (Abo	ve Pad):	5.0 feet			ry Trucks:	8.006	Grade Ad	iustment:	0.0
Pad E	levation:	0.0 feet							0.0
Road E	0.0 feet		Lane Equivalent Distance (in feet)						
Road Grade:		0.0%			Autos:	89.850			
Left View:		-90.0 degrees		Medium Trucks: 89.805					
Rig	ght View:	90.0 degree	es	Heav	y Trucks:	89.850			
FHWA Noise Model Co	alculations								
VehicleType F	REMEL	Traffic Flow	Distance	Finite	Road F	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	-1.33	-3.	92	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-18.57	-3.	92	92 -1.20		0.0	000	0.000
Heavy Trucks:	86.40	-22.52	-3.	92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Le	vels (witho	ut Topo and I	barrier atte	nuation)					
VehicleType Leq	Peak Hour	Leq Day	Leq	Evening	Leq Nig	ht	Ldn	CI	VEL
Autos:	65.3	3 (63.4	61.7		55.6	64.2	2	64.8
Medium Trucks: 58		7	57.2		50.8 49		57.8	3	58.0
Heavy Trucks: 58		3	57.3	48.3 49		49.5 57.9		9	58.0
Vehicle Noise:	66.9) (65.1	62.2		57.3	65.9	9	66.3
Centerline Distance to	Noise Co	ntour (in feet)	<u> </u>						

Centerline Distance to Noise Contour (in feet)									
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	53	114	246	530					
CNEL:	57	123	265	571					

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: s/o Canyon View Av.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA			NOISE MODEL INPUTS						
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 24,200 vehicles Peak Hour Percentage: 10%		3	Autos: 15						
			Medium Trucks (2 Axles): 15						
Peak Hour Volume:	2,420 vehicles	3	Heavy Trucks (3+ Axles): 15						
Vehicle Speed:	55 mph		Vehicle Mix						
Near/Far Lane Distance: 88 feet				cleType	Day	Evening	Night	Daily	
Site Data				Aut	•		9.6%	-	
Barrier Height:	0.0 feet		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):	0.0		F	łeavy Truc	ks: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:	100.0 feet		Na: 0-		-4: (: f	4)			
Centerline Dist. to Observer:	100.0 feet	-	Noise Sc		ations (in fe	eet)			
Barrier Distance to Observer:	0.0 feet 5.0 feet 0.0 feet		Autos: 2.000 Medium Trucks: 4.000						
Observer Height (Above Pad):									
Pad Elevation:			Heavy Trucks: 8.006 Grade Adjustment: 0.0						
Road Elevation:	0.0 feet		Lane Equivalent Distance (in feet)						
Road Grade:	0.0%			Autos:	89.850				
Left View:	-90.0 degree	25	Medium Trucks: 89.805						
Right View:	90.0 degree		Heavy Trucks: 89.850						
			,						
FHWA Noise Model Calculatio				T					
VehicleType REMEL	Traffic Flow	Distance	Finite			Barrier Att		m Atten	
Autos: 71.78	_	-3.9	2	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 82.4	-16.22	-3.9	2	-1.20	<i>-4</i> .97	0.0	000	0.000	
Heavy Trucks: 86.4	-20.18	-3.9	2	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wit	uation)								
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nig	ght	Ldn	CI	VEL	
Autos: 67.7 65.8		65.8	64.0		58.0	66.6	6	67.2	
Medium Trucks: 6	1.1	59.6	53.2 51.		51.6	60.1	1	60.3	
Heavy Trucks: 6	1.1	59.7	50.6 5		51.9	60.2	2	60.4	
Vehicle Noise: 6	9.3	67.5	64.5		59.7	68.2	2	68.7	

70 dBA

76

82

Ldn:

CNEL:

65 dBA

164

176

60 dBA

353

380

55 dBA

760

818

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: n/o Tustin Ranch Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS					
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt): 26	6,400 vehicles				,	Autos:	15		
Peak Hour Percentage:	10%		Me	dium Truc	ks (2 A	(xles	15		
Peak Hour Volume: 2	2,640 vehicles		He	avy Truck	s (3+ A	(xles	15		
Vehicle Speed:	55 mph		ehicle	Miv					
Near/Far Lane Distance:	88 feet			icleType		Day	Evening	Night	Daily
Site Data			V 0//			77.5%			97.42%
	0.0 foot		М	edium Tru		84.8%		10.3%	
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			Heavy Tru		86.5%		10.8%	0.74%
	100.0 feet								
	100.0 feet	٨	loise So	ource Elev	vations	s (in fe	eet)		
Barrier Distance to Observer:	0.0 feet			Autos:	2.0	000			
	5.0 feet		Mediu	m Trucks:	4.0	000			
Observer Height (Above Pad): Pad Elevation:	0.0 feet		Heav	y Trucks:	8.0	006	Grade Ad	iustment	. 0.0
Road Elevation:	0.0 feet	L	Lane Equivalent Distance (in feet)						
Road Grade:	0.0 feet 0.0%	_	<u>_</u> q	Autos:	89.8				
Left View:	-90.0 degrees		Mediu	m Trucks:	89.8				
Right View:	90.0 degrees			y Trucks:	89.8				
Night view.	90.0 degrees	'	ricar	y Trucks.	00.0	550			
FHWA Noise Model Calculations									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos: 71.78	1.39	-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.40	-15.84	-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.40	-19.80	-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (withou	ut Topo and ba	arrier attenu	ıation)						
VehicleType Leq Peak Hour		Leq Ev		Leq N	ight		Ldn	CI	NEL
Autos: 68.1	66	6.2	64.4		58.3		67.0)	67.6

	Ommingated Nois	c Ecreis (manou					
VehicleType		Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
	Autos:	68.1	66.2	64.4	58.3	67.0	67.6
	Medium Trucks:	61.4	59.9	53.6	52.0	60.5	60.7
	Heavy Trucks:	61.5	60.1	51.0	52.3	60.6	60.7
	Vehicle Noise:	69.6	67.9	64.9	60.0	68.6	69.1

Centerline Distance to Noise Contour (in feet)								
	70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:	81	174	374	806				
CNEL:	87	187	402	867				

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: s/o Tustin Ranch Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA	\	NOISE MODEL INPUTS										
Highway Data				S	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)					
	Traffic (Adt): Percentage: Hour Volume:	26,000 vehic 10% 2,600 vehic				dium Tru avy Truc	•	,						
Near/Far La	ehicle Speed: ane Distance:	55 mph 88 feet		ν	Vehicle Mix Vehicle Type Day Evening Night						Daily			
Site Data						-	lutos:	77.5%		9.6%				
Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium Tr Ieavy Tr		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%			
Centerline D	ist. to Barrier:	100.0 feet		٨	Noise Source Elevations (in feet)									
Barrier Distance Observer Height F Ro	Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Left View: Right View: 100.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degrees						Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 89.850 Medium Trucks: 89.805 Heavy Trucks: 89.850							
FHWA Noise Mod	lel Calculation	าร												
VehicleType	REMEL	Traffic Flow	/ Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten			
Autos:	71.78	3 1.3	3	-3.92		-1.20		-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-15.9	1	-3.92		-1.20		-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-19.8	7	-3.92		-1.20		-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	hout Topo an	d barri	er attenu	uation)									
VehicleType	Leq Peak Ho	ur Leq D	ay	Leq Ev	ening	Leq	Night		Ldn	Ci	VEL			
Autos:	6	8.0	66.1		64.3		58.	3	66.9	9	67.5			
Medium Trucks:	6	1.4	59.9		53.5		52.0		52.0 60.4		60.7			
Heavy Trucks:	6	1.4	60.0		51.0	52.2 60.6			60.7					
Vehicle Noise:	6	9.6	67.8		64.8		60.	0	68.5	5	69.0			

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	80	172	370	798
CNEL:	86	185	398	858

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: n/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA								NOISE MODEL INPUTS						
Highway Data					S	ite Con	ditions ((Hard	= 10, Sc	oft = 15)				
Peak F Ve	Traffic (Adt): Percentage: Hour Volume: Phicle Speed: The Distance:	10° 2,690 55			V	He ehicle l	dium Tru avy Truc Vlix icleType	•	,		Night	Daily		
Site Data						V GI II		utos:	77.5%		9.6%	_		
Barrier Type (0-W Centerline Di Centerline Dist.	st. to Barrier:	0.0 100.0) feet) feet) feet		N	ŀ	edium Tro Heavy Tro Durce Ele	ucks: evatio		2.7%	10.3% 10.8%	1.84% 0.74%		
Barrier Distance Observer Height	to Observer:	0.0 5.0) feet) feet) feet			Heav	Autos m Trucks ry Trucks	o: 4 o: 8	2.000 1.000 3.006	Grade Ad	justment	0.0		
	ad Elevation:) feet		L	ane Eq	uivalent		•	feet)				
	Road Grade: Left View: Right View:)%) degrees) degrees				Autos m Trucks ry Trucks	s: 89	9.850 9.805 9.850					
FHWA Noise Mod	el Calculatio	ns												
VehicleType	REMEL	Traffi	c Flow	Dista	nce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	71.78	3	1.48		-3.92		-1.20		-4.87	0.0	000	0.000		
Medium Trucks: Heavy Trucks:			-15.76 -19.72		-3.92 -3.92		-1.20 -1.20		-4.97 -5.16		000	0.000		
Unmitigated Nois	e Levels (wit	hout To	po and b	arrier a	attenu	ation)								
VehicleType	Leq Peak Ho	our	Leq Day	L	eq Eve	ening	Leq l	Vight		Ldn	CI	VEL		
Autos:	6	8.1	6	6.2		64.5		58	.4	67.0)	67.6		
Medium Trucks:	6	1.5	60	0.0		53.7		52		60.6	6	60.8		
Heavy Trucks:	6	1.6	6	0.1		51.1		52	.3	60.7	7	60.8		
Vehicle Noise:		9.7		8.0		65.0		60	.1	68.7	7	69.2		
Centerline Distant	ce to Noise C	ontour	(in feet)											

70 dBA

82

88

Ldn:

CNEL:

65 dBA

176

189

60 dBA

379

407

55 dBA

816

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Job Number: 8141 Analyst: B. Lawson Road Segment: s/o Irvine Bl.

SITE	SPECIFIC IN	IPUT DATA				-	NOISE	MODE	L INPUT	S	
Highway Data				,	Site Con	ditions	(Hard	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	37,500 vehicles	3					Autos:	15		
,	Percentage:	10%			Ме	dium Tr	ucks (2	Axles).	15		
Peak H	our Volume:	3,750 vehicles	3		He	avy Tru	cks (3+	- Axles).	15		
Ve	hicle Speed:	65 mph			Vehicle I	Miv					
Near/Far Lai	ne Distance:	175 feet				icleType	2	Day	Evening	Night	Daily
Site Data					VEII		Autos:	77.5%	J	9.6%	_
		0.0 foot			Me	edium T		84.8%		10.3%	
	rier Height:	0.0 feet				Heavy T		86.5%		10.8%	
Barrier Type (0-W Centerline Dis		0.0 100.0 feet								10.070	011 170
Centerline Dist.		100.0 feet			Noise So	ource E	levatio	ns (in f	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height (5.0 feet			Mediu	m Truck	s: 4	4.000			
• ,	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justmen	t: 0.0
	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)		
	Road Grade:			Auto		8.505	,				
'	Left View:	0.0% -90.0 degree	26		Mediu	n Truck		8.423			
	Right View:	90.0 degree				ry Truck	_	8.506			
	rugin viow.	oo.o dogree	,,			<i>y</i>		0.000			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Be	rm Atten
Autos:	74.55	2.19		0.0	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	84.86	-15.05		0.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	88.18	-19.00		0.0	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	75	.6	73.7		72.0		65	5.9	74.5	5	75.1
Medium Trucks:	68	3.7	67.2		60.9		59	0.3	67.8	3	68.0
Heavy Trucks:	68	3.1	66.7		57.6		58	3.9	67.2	2	67.3
Vehicle Noise:	77	7.0	75.3		72.4		67	'.4	76.0)	76.5
Centerline Distance	e to Noise Co	ontour (in feet))								
					dBA		dBA		60 dBA		dBA
			Ldn:	25	51	5	40		1,163	2	,506

270

CNEL:

582

1,254

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: s/o Bryan Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN			NOISE MODEL INPUTS										
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)									
Average Daily	Traffic (Adt):	39,200 vehicle	s					Autos:	15					
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15					
Peak H	lour Volume:	3,920 vehicle	s		He	avy Tru	icks (3+	Axles):	15					
Ve	ehicle Speed:	65 mph		V	ehicle l	Mix								
Near/Far La	ne Distance:	175 feet		-		icleType	е	Day	Evening	Night	Daily			
Site Data							Autos:	77.5%	_	9.6%	-			
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0			H	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%			
	ist. to Barrier:	100.0 feet			/-: C	5	'laa4!a	(i f.	-41					
Centerline Dist.	to Observer:	100.0 feet		^	ioise Sc			ns (in fe	et)					
Barrier Distance	to Observer:	0.0 feet			Modiu	Auto m Truck		2.000						
Observer Height	(Above Pad):	5.0 feet					_	1.000 3.006	Grade Ad	liustmant	. 0 0			
P	ad Elevation:	0.0 feet			пеач	y Truck	(S. C	5.006	Grade Au	justin e nt	. 0.0			
Ro	ad Elevation:	0.0 feet		L	Lane Equivalent Distance (in feet)									
	Road Grade:	0.0%			Autos: 48.505									
	Left View:	-90.0 degre	es		Mediu	m Truck	rs: 48	3.423						
	Right View:	90.0 degre	es		Heav	y Truck	ks: 48	3.506						
FHWA Noise Mod	lel Calculation	S												
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten			
Autos:	74.55	2.38		0.09		-1.20		-4.87	0.0	000	0.000			
Medium Trucks:	84.86	-14.85		0.11		-1.20		-4.97	0.0	000	0.000			
Heavy Trucks:	88.18	-18.81		0.09		-1.20		-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Topo and	barri	ier attenu	uation)									
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	Ci	NEL			
Autos:	75	8.8	73.9		72.2		66	.1	74.7	7	75.3			
Medium Trucks:			67.4		61.0		59		68.0		68.2			
Heavy Trucks:			66.8		57.8		59		67.4		67.5			
Vehicle Noise:	77	7.2	75.4		72.6		67	.6	76.2	2	76.7			
Centerline Distan	ce to Noise Co	ontour (in feet)											
				70 d	BA	65	dBA	6	60 dBA	55	dBA			

258

278

556

599

Ldn:

CNEL:

1,198

1,291

2,581

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: b/w El Camino Real and I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Cor	nditions (H	ard = 10, Se	oft = 15)				
Average Daily	Traffic (Adt):	61,500 vehicles	6			Autos:	15				
• •	Percentage:	10%		Me	dium Truck	ks (2 Axles):	15				
Peak H	our Volume:	6,150 vehicles	3	He	avy Trucks	(3+ Axles):	15				
Ve	hicle Speed:	65 mph		Vehicle	Miv						
Near/Far Lai	ne Distance:	175 feet			icleType	Day	Evening	Night	Daily		
Site Data					Aut		•	9.6%			
	rier Height:	0.0 feet		М	edium Truc			10.3%	1.84%		
Barrier Type (0-W	•	0.0 1661		1	Heavy Truc	ks: 86.5%		10.8%	0.74%		
Centerline Dis		100.0 feet									
Centerline Dist.		100.0 feet		Noise So		ations (in f	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
Observer Height (5.0 feet			m Trucks:	4.000					
• ,	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Adjı	ustment:	0.0		
	ad Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)				
	Road Grade:	0.0%		<u>-</u>	Autos:	48.505					
	Left View:	-90.0 degree	es	Mediu	m Trucks:	48.423					
	Right View:	90.0 degree		Heav	y Trucks:	48.506					
FHWA Noise Mode	el Calculatior	15									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:	74.55	4.34	0.0	9	-1.20	-4.87	0.0	00	0.000		
Medium Trucks:	84.86	-12.90	0.1	1	-1.20	-4.97	0.0	00	0.000		
Heavy Trucks:	88.18	-16.85	0.0	9	-1.20	-5.16	0.0	00	0.000		
Unmitigated Noise	e Levels (with	out Topo and	barrier atter	uation)							
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Nig	ght	Ldn	CI	VEL		
Autos:	77	7.8	75.9	74.1		68.1	76.7		77.3		
Medium Trucks:	70	0.9	69.4	63.0 61.5 69.9					70.2		
Heavy Trucks:	70).2	8.86	59.8		61.0 69.4			69.5		
Vehicle Noise:	79	9.2	77.4	74.6		69.6	78.1		78.6		
Centerline Distanc	e to Noise C	ontour (in feet)									

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	348	751	1,617	3,485
CNEL:	376	809	1,744	3,757

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Job Number: 8141
Road Segment: n/o Michelle Dr. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DA	ATA		NOISE MODEL INPUTS					
Highway Data					Site Con	ditions (H	ard = 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	59,500 ve	ehicles				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truck	ks (2 Axles):	15		
Peak H	Hour Volume:	5,950 ve	ehicles		He	avy Trucks	(3+ <i>Axles</i>):	15		
Ve	ehicle Speed:	65 m	ıph	,	Vehicle I	Mix				
Near/Far La	ne Distance:	175 fe	eet			icleType	Day	Evening	Night	Daily
Site Data						Aut			9.6%	,
Ra	rrier Height:	0.0 f	oot		Ме	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0	CCI		F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 f	eet							
Centerline Dist.		100.0 f		_	voise Sc		ations (in f	eet)		
Barrier Distance		0.0 f				Autos:	2.000			
Observer Height		5.0 f				n Trucks:	4.000			
•	ad Elevation:	0.0 f			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
		Lane Eq	uivalent D	istance (in	feet)					
	ad Elevation: Road Grade:	0.0 f 0.0%				Autos:	48.505	,		
	Left View:		, degrees		Mediu	n Trucks:	48.423			
	Right View:		degrees			y Trucks:	48.506			
	ragin view.	30.0	acgrees	'	77047	y Traono.	10.000			
FHWA Noise Mod	lel Calculation	s								
VehicleType	REMEL	Traffic F	low	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	74.55		4.20	0.09	9	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	84.86	-1	13.04	0.1	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	88.18	-1	17.00	0.09	9	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo	and b	arrier atten	uation)					
VehicleType	Leq Peak Hou	ır Le	q Day	Leq E	ening/	Leq Nig	ght	Ldn	CI	VEL
Autos:	77	.6	75	5.7	74.0		67.9	76.5	5	77.1
Medium Trucks:	70	.7	69	9.2	62.9		61.3		3	70.0
Heavy Trucks:	70	.1	68	3.7	59.6		60.9	69.2		69.4
Vehicle Noise:	79	.0	77	7.3	74.4		69.4	78.0)	78.5
Contorlino Distan	co to Noiso C	ontour (ii	n foot)							

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	341	734	1,582	3,409
CNEL:	367	792	1,706	3,675

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: s/o Michelle Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	58,700 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	5,870 vehicle	s		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		,	Vehicle i	Miy					
Near/Far La	ne Distance:	76 feet				icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	_
	rrier Height:	0.0 feet			М	edium T		84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0 1661				leavy T		86.5%		10.8%	0.74%
'	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		1	Noise So			•	eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height		5.0 feet				m Truck		.000	0		
_	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	0.0
Ro	ad Elevation:	1	Lane Eq	uivalen	t Distar	nce (in i	feet)				
	Road Grade:	0.0%				Auto	s: 92	2.547			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	s: 92	2.547			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	4.49		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-12.75		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-16.71		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	У	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	72	2.4	70.5		68.7		62.	.7	71.3	3	71.9
Medium Trucks:	65	5.6	64.1		57.8		56.	.2	64.7	7	64.9
Heavy Trucks:	65	5.3	63.9		54.8		56.	.1	64.5	5	64.6
Vehicle Noise:	73	3.9	72.1		69.2		64.	.3	72.8	3	73.3
Centerline Distan	ce to Noise C	ontour (in feet	t)								
				70 c	dBA	65	dBA	ϵ	60 dBA	55	dBA

Ldn:

CNEL:

154

166

333

358

717

772

1,544

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: n/o Edinger Av.

Job Number: 8141

Analyst: B. Lawson

SITE SP	ECIFIC INF	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				,	Site Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily Tra	offic (Adt): 96	6,900 vehicles	3					Autos:	15		
Peak Hour Pe	rcentage:	10%			Me	dium Tru	ucks (2	Axles):	15		
Peak Hou	r Volume: 9	9,690 vehicles	3		He	avy Trud	cks (3+	Axles):	15		
Vehic	le Speed:	65 mph		-	Vehicle l	Mix					
Near/Far Lane	Distance:	175 feet				icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	,
	r Height:	0.0 feet			Me	edium Ti		84.8%		10.3%	1.84%
Barrier Type (0-Wall,	•	0.0			ŀ	Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. t	,	100.0 feet									
Centerline Dist. to (100.0 feet		1	Noise So			•	eet)		
Barrier Distance to (0.0 feet				Auto		.000			
Observer Height (Abo		5.0 feet				m Truck		.000	0 - 4 - 4 - 4		0.0
• ,	Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	justment.	0.0
	Elevation:	0.0 feet		1	Lane Eq	uivalent	t Distar	nce (in f	feet)		
	ad Grade:	0.0%				Auto	s: 48	.505	-		
I	Left View:	-90.0 degree	es		Mediui	m Truck	s: 48	.423			
Ri	ight View:	90.0 degree			Heav	y Truck	s: 48	.506			
FHWA Noise Model C	Calculations										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	74.55	6.32		0.0	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	84.86	-10.92		0.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	88.18	-14.88		0.0	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Lo	evels (witho	ut Topo and	barri	ier atten	uation)						
VehicleType Le	q Peak Hour	Leq Day	,	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	79.8	3	77.9		76.1		70.	0	78.7	7	79.3
Medium Trucks:	72.8	3	71.3		65.0		63.	4	71.9	9	72.1
Heavy Trucks:	72.2	<u>.</u>	70.8		61.7		63.	0	71.3	3	71.5
Vehicle Noise:	81.2	<u> </u>	79.4		76.6		71.	5	80.1	1	80.6
Centerline Distance t	to Noise Cor	ntour (in feet))								
				70 d	dBA	65	dBA	6	60 dBA	55	dBA

472

509

1,017

1,096

2,190

2,361

4,718

5,087

Ldn:

CNEL:

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: s/o Edinger Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT I	DATA				N	IOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	85,600	vehicles	3					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	8,560	vehicles	3		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	65	mph			Vehicle i	Mix					
Near/Far La	ne Distance:	175	feet				icleType	,	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	,
	rrier Height:	0.0) feet			M	edium T		84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0					leavy T		86.5%		10.8%	0.74%
	ist. to Barrier:		,) feet									
Centerline Dist.) feet			Noise Source Elevations (in feet)						
Barrier Distance) feet				Auto		2.000			
Observer Height) feet				m Truck		.000	0 1- 4-1		0.0
_	ad Elevation:) feet			Heav	y Truck	s: 8	3.006	Grade Adj	iustment	0.0
Ro	Road Elevation: 0.0 feet							t Distai	nce (in i	feet)		
	Road Grade:	0.0)%				Auto	s: 48	3.505			
	Left View:	-90.0) degree	es		Mediu	m Truck	s: 48	3.423			
	Right View:	90.0) degree	es		Heav	y Truck	s: 48	3.506			
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL		Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	74.55		5.78		0.0	9	-1.20		-4.87	0.0		0.000
Medium Trucks:	84.86		-11.46		0.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	88.18		-15.42		0.0	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and	barri	ier atter	nuation)						
VehicleType	Leq Peak Ho	ur l	Leq Day	,	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	79	9.2	•	77.3		75.6		69	.5	78.1		78.7
Medium Trucks:	72	2.3	•	70.8		64.4		62	.9	71.4	1	71.6
Heavy Trucks:	7′	1.7		70.2		61.2		62	.4	70.8	3	70.9
Vehicle Noise:	80	0.6		78.8		76.0		71	.0	79.6	3	80.1
Centerline Distan	ce to Noise C	ontour	(in feet))								
					70	dBA	65	dBA	ϵ	60 dBA	55	dBA

434

468

Ldn: CNEL: 936

1,009

2,016

2,174

4,344

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: e/o SR-241 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NOISE MODEL INPUTS										
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	4,100 vehicles	S			Autos	: 15					
Peak Hour	Percentage:	10%		Me	dium Tru	icks (2 Axles)	: 15					
Peak H	lour Volume:	410 vehicles	S	He	avy Truc	ks (3+ Axles)	: 15					
Ve	ehicle Speed:	55 mph		Vehicle I	Vix							
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily			
Site Data						utos: 77.5%		9.6%				
Ba	rrier Height:	0.0 feet		Me	edium Tr	ucks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	_	0.0		F	leavy Tr	ucks: 86.5%	6 2.7%	10.8%	0.74%			
Centerline Di		100.0 feet		Noiso Sa	urco El	evations (in i	foot)					
Centerline Dist.	to Observer:	100.0 feet		Noise St		-	eet)					
Barrier Distance	to Observer:	0.0 feet		Madium	Autos n Trucks							
Observer Height	(Above Pad):	5.0 feet					Grade Ad	iustmont				
_	ad Elevation:	0.0 feet		Heav	y Trucks	8.006	Grade Auj	usimeni.	0.0			
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent	Distance (in	feet)					
	Road Grade:	0.0%			Autos	s: 96.607						
	Left View:	-90.0 degree	es	Mediur	n Trucks	96.566						
	Right View:	90.0 degree	es	Heav	y Trucks	96.608						
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	71.78	-6.69	-4.	.39	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-23.93	-4.	.39	-1.20	<i>-4.</i> 97	0.0	000	0.000			
Heavy Trucks:	86.40	-27.89	-4.	.39	-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)								
VehicleType	Leq Peak Hou	ır Leq Day	Leq	Evening	Leq I	Night	Ldn	CI	VEL			
Autos:	59	.5	57.6	55.8		49.8	58.4	1	59.0			
Medium Trucks:	52	.9	51.4	45.0		43.5)	52.2			
Heavy Trucks:	52	.9	51.5	42.5		43.7	52.1		52.2			

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	22	47	101	217
CNEL:	23	50	108	233

56.4

51.5

60.0

59.3

60.5

61.1

Vehicle Noise:

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: n/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I		NOISE MODEL INPUTS									
Highway Data			Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt):	10,900 vehicle	S			Autos:	15					
Peak Hour Percentage:	10%		Me	dium Trucks ((2 Axles):	15					
Peak Hour Volume:	1,090 vehicle	S	He	avy Trucks (3	3+ Axles):	15					
Vehicle Speed:	55 mph		Vehicle Mix								
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily			
Site Data			Veri	Autos	•	J	9.6%	-			
			1.11	Autos edium Trucks			10.3%	1.84%			
Barrier Height:	0.0 feet			J aium Trucks Heavy Trucks			10.8%	0.74%			
Barrier Type (0-Wall, 1-Berm):			,	leavy Trucks	. 00.576	2.1 /0	10.076	0.7476			
Centerline Dist. to Barrier:			Noise Source Elevations (in feet)								
Centerline Dist. to Observer:			Autos: 2.000								
Barrier Distance to Observer:	0.0 feet		Medium Trucks: 4.000								
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0			
Pad Elevation:	0.0 feet		I ano Ea	uivalent Dist	anco (in	footl					
Road Elevation:	0.0 feet		Lane Ly		96.607	icel)					
Road Grade:			Madiu		96.566 96.566						
Left View:	3 -				96.608						
Right View:	90.0 degree	es	rieav	y Trucks.	90.000						
FHWA Noise Model Calculation	ns		L								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten			
Autos: 71.7	8 -2.45	-4.:	39	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 82.4	0 -19.69	-4.3	39	-1.20	<i>-4</i> .97	0.0	000	0.000			
Heavy Trucks: 86.4	0 -23.64	-4.3	39	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	nuation)								
VehicleType Leq Peak He	our Leq Day	/ Leq I	Evening	Leq Night	:	Ldn	CI	VEL			
Autos:	3.7	61.8	60.1	5	54.0	62.6	6	63.2			
Medium Trucks: 5	57.1	55.6	49.3	4	7.7	56.2		56.4			
Heavy Trucks: 5	55.7	46.7 48.0 56.3			56.4						
Vehicle Noise:	55.3	63.6	60.6	5	55.7	64.3	3	64.8			
Centerline Distance to Noise	Contour (in feet)	,								

70 dBA

42

45

Ldn:

CNEL:

65 dBA

90

96

60 dBA

193

207

55 dBA

416

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: n/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE S		NOISE MODEL INPUTS											
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily T Peak Hour I	, ,	33,700 vehicle	es		Med	dium Truc	cks (2	Autos: Axles):					
	our Volume:	3,370 vehicle	es		Hea	avy Truck	ks (3+	Axles):	15				
Ver Near/Far Lar	nicle Speed: ne Distance:	· ·			ehicle N	flix cleType		Day	Evening	Night	Daily		
Site Data					VOIN		utos:	77.5%	_	9.6%	,		
	•	0.0 feet 0.0 100.0 feet			Н	dium Tru leavy Tru	ıcks: ıcks:	84.8% 86.5%	4.9% 2.7%	10.3% 10.8%	1.84% 0.74%		
Centerline Dist. t		100.0 feet		Λ	loise So	urce Ele		•	eet)				
Barrier Distance t Observer Height (A	o Observer:	0.0 feet 5.0 feet 0.0 feet				Autos: n Trucks: y Trucks:	: 4	2.000 2.000 3.006	Grade Ad	justment.	0.0		
	d Elevation:	0.0 feet		L	ane Equ	ivalent l	Dista	nce (in	feet)				
	Road Grade: Left View: Right View:	0.0% -90.0 degre 90.0 degre			Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547								
FHWA Noise Mode	l Calculation	าร											
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite I	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	73.22	2.08		-4.11	I	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-15.16	;	-4.11		-1.20		<i>-4.</i> 97	0.0	000	0.000		
Heavy Trucks:	87.33	-19.12		-4.11		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	hout Topo and	barrier	attenu	iation)								
VehicleType	Leq Peak Ho	our Leq Da	y L	eq Ev	ening	Leq N	light		Ldn	CI	VEL		
Autos:	70	0.0			66.3		60	.3	68.9	9	69.5		
Medium Trucks:	6	61.7			55.3		53	.8	62.3	62.3			
Heavy Trucks:	62	2.9	61.5		52.4		53	.7	62.0)	62.2		
Vehicle Noise:	7	1.5	69.7		66.8		61	.9	70.4	4	70.9		
Centerline Distanc	e to Noise C	Contour (in fee	t)										

Contornio Dictarios to reside Contoar (in rect)					
	70 dBA	65 dBA	60 dBA	55 dBA	
Ldn:	107	230	495	1,067	
CNEL:	115	248	533	1,149	

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: n/o Bryan Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Hard = 10, Se	oft = 15)						
Average Daily	Traffic (Adt):	35,200 vehicles	3			Autos:	15						
Peak Hour	Percentage:	10%		Me	dium Tru	cks (2 Axles):	15						
Peak H	lour Volume:	3,520 vehicles	6	He	avy Truci	ks (3+ Axles):	15						
Ve	hicle Speed:	60 mph		Vehicle	Miv								
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily				
Site Data				Veri		utos: 77.5%	_	•	97.42%				
				Λ <i>1</i> .	ہ edium Tru			10.3%	1.84%				
	rrier Height:	0.0 feet			Heavy Tru			10.3%	0.74%				
Barrier Type (0-W		0.0		,	leavy III	ucks. 60.576	2.1/0	10.6 /6	0.7470				
Centerline Di		100.0 feet		Noise So	ource Ele	evations (in f	eet)						
Centerline Dist.		100.0 feet			Autos	2.000							
Barrier Distance		0.0 feet		Mediu	m Trucks	4.000							
Observer Height (Above Pad):		5.0 feet		Heav	y Trucks	8.006	Grade Adj	ustment:	0.0				
	ad Elevation:	0.0 feet		Long For	ivolont	Diotonos (in	foot)						
	ad Elevation:	0.0 feet		Lane Eq		Distance (in	ieei)						
	Road Grade:	0.0%		A 4 - 1'	Autos								
	Left View:	-90.0 degree			m Trucks								
	Right View:	90.0 degree	es	Heav	y Trucks	: 92.547							
FHWA Noise Mod	el Calculation												
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten				
Autos:	73.22	2.27	-4.	11	-1.20	-4.87	0.0	000	0.000				
Medium Trucks:	83.68	-14.97	-4.	11	-1.20	-4.97	0.0	000	0.000				
Heavy Trucks:	87.33	-18.93	-4.	11	-1.20	-5.16	0.0	000	0.000				
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)									
VehicleType	Leq Peak Hou			Evening	Leq N	Vight	Ldn	CI	VEL				
Autos:	70	.2	68.3	66.5		60.5	69.1		69.7				
Medium Trucks:	63	.4	61.9	55.5		54.0	62.4	ļ.	62.7				
Heavy Trucks:	63	.1	61.7	52.6		53.9	62.2	2	62.4				

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	110	237	510	1,098						
CNEL:	118	255	549	1,183						

67.0

62.1

70.6

71.1

69.9

Vehicle Noise:

71.7

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Con	ditions (l	Hard =	10, Sc	ft = 15)				
Average Daily	Traffic (Adt):	46,500 vehicle	S				,	Autos:	15				
Peak Hour	Percentage:	10%			Ме	dium Truc	cks (2 A	xles):	15				
Peak H	lour Volume:	4,650 vehicles	S		He	avy Truck	rs (3+ A	xles):	15				
Ve	ehicle Speed:	60 mph		,	Vehicle i	Miv							
Near/Far La	ne Distance:	76 feet				icleType		Day	Evening	Night	Daily		
Site Data								77.5%		9.6%	-		
	rrier Height:	0.0 feet			М	edium Tru		84.8%		10.3%	1.84%		
Barrier Type (0-W	•	0.0 leet 0.0				leavy Tru		86.5%		10.8%	0.74%		
Centerline Di		100.0 feet											
	Centerline Dist. to Observer: 100.0 feet						vations	•	et)				
Barrier Distance		0.0 feet				Autos:		000					
Observer Height		5.0 feet				m Trucks:		000					
	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Adj	iustment:	0.0		
	Road Elevation: 0.0 feet					uivalent l	Distand	e (in f	eet)				
	Road Grade:	0.0%				Autos:	92.5	547					
	Left View:	-90.0 degree	es		Mediu	m Trucks:	92.5	504					
	Right View:	90.0 degree			Heav	y Trucks:	92.5	547					
FHWA Noise Mod				· · · · · · · · ·		D 1		- 1	D ' A		A ((
VehicleType	<i>REMEL</i> 73.22	Traffic Flow	DI	stance -4.1	Finite		Fresn		Barrier Atte		m Atten		
Autos: Medium Trucks:	_	3.47 -13.76		-4.1 -4.1		-1.20 -1.20		-4.87 -4.97	0.0	000	0.000		
Heavy Trucks:		-13.70		-4.1 -4.1	-	-1.20 -1.20		-4.97 -5.16	0.0		0.000		
						-1.20		-5.70	0.0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.000		
Unmitigated Nois	•	-			,					1			
VehicleType	Leq Peak Hou			Leq E		Leq N	_		Ldn		VEL		
Autos:			69.5		67.7		61.7		70.3		70.9		
Medium Trucks:				56.7 55.2			63.7		63.9				
Heavy Trucks: 64.3 62.9 Vehicle Noise: 72.9 71.1					53.8		55.1		63.4		63.6		
Vehicle Noise:		2.9	71.1		68.2		63.3		71.8	3	72.3		
Centerline Distan	ce to Noise Co	ontour (in feet)										
				70 c	dBA	65 di	BA	6	0 dBA	55	dBA		

132

142

285

307

Ldn:

CNEL:

1,322

1,424

614

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: s/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt):	50,900 vehicles	3			Autos:	15					
Peak Hour Percentage:	10%		Mediu	ım Trucks (2	Axles):	15					
Peak Hour Volume:	5,090 vehicles	3	Heav	y Trucks (3+	- Axles):	15					
Vehicle Speed:	60 mph		Vehicle Mix	Υ							
Near/Far Lane Distance:	76 feet		Vehicle		Day	Evening	Night	Daily			
Site Data				Autos:	77.5%		9.6%	97.42%			
Barrier Height:	0.0 feet		Medi	ium Trucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-Wall, 1-Berm):	0.0		Hea	avy Trucks:	86.5%	2.7%	10.8%	0.74%			
Centerline Dist. to Barrier:	100.0 feet	_	M-' 0		(' f	4)					
Centerline Dist. to Observer:	100.0 feet		Noise Soul	rce Elevatio		eet)					
Barrier Distance to Observer:	0.0 feet		A 4 - 1' '		2.000						
Observer Height (Above Pad):	5.0 feet		Medium		4.000	Cuada Ad		0.0			
Pad Elevation:	0.0 feet		Heavy	Trucks: 8	3.006	Grade Ad	iustment.	0.0			
Road Elevation:	0.0 feet		Lane Equiv	valent Dista	nce (in i	feet)					
Road Grade:	0.0%			Autos: 92	2.547						
Left View:	-90.0 degree	es	Medium	Trucks: 9	2.504						
Right View:	90.0 degree	es	Heavy	Trucks: 92	2.547						
FHWA Noise Model Calculation	ns										
VehicleType REMEL	Traffic Flow	Distance	Finite Ro	oad Fre	snel	Barrier Att	en Ber	m Atten			
Autos: 73.2	2 3.87	-4.1	1 -	1.20	-4.87	0.0	000	0.000			
Medium Trucks: 83.6	8 -13.37	-4.1	1 -	1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 87.3	3 -17.33	-4.1	1 -	1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)								
VehicleType Leq Peak He	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL			
Autos: 7	1.8	69.9	68.1	62	.1	70.7	7	71.3			
Medium Trucks:	5.0	63.5		1 55.6		64.0		64.3			
Heavy Trucks:	64.7	63.3	54.2	55	5.5	63.8	3	64.0			
Vehicle Noise:	3.3	71.5	68.6	63	3.7	72.2	2	72.7			

70 dBA

140

151

Ldn:

CNEL:

65 dBA

303

326

60 dBA

652

702

55 dBA

1,404

1,512

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: b/w Roosevelt and I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt):	68,500 vehicles	S			Autos:	15					
Peak Hour Percentage:	10%		Me	dium Trucks (2 Axles):	15					
Peak Hour Volume:	6,850 vehicles	S	He	avy Trucks (3	+ Axles):	15					
Vehicle Speed:	60 mph		Vehicle I	Miv							
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily			
Site Data			Veri	Autos	_	J	9.6%	97.42%			
				Autos. edium Trucks			10.3%	1.84%			
Barrier Height:	0.0 feet			leavy Trucks.			10.8%	0.74%			
Barrier Type (0-Wall, 1-Berm):			,	leavy Trucks	00.576	2.1 /0	10.0 /0	0.7476			
Centerline Dist. to Barrier:			Noise Source Elevations (in feet)								
Centerline Dist. to Observer:				Autos:	2.000						
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000						
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0			
Pad Elevation:	0.0 feet				<i>(*</i>	C 4)					
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist		reet)					
Road Grade:					92.547						
Left View:					92.504						
Right View:	90.0 degree	es	Heav	ry Trucks:	92.547						
FHWA Noise Model Calculation	ns										
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fro	esnel	Barrier Att	en Ber	m Atten			
Autos: 73.2	2 5.16	-4	.11	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 83.6	8 -12.08	-4	.11	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 87.3	3 -16.04	-4	.11	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (with	hout Topo and	barrier att	enuation)								
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL			
Autos:	7 3.1	71.2	69.4	6	3.3	72.0)	72.6			
Medium Trucks:	66.3	64.8	58.4	5	6.9	65.3	3	65.6			
Heavy Trucks:	55.5 56.8 65.1			1	65.2						
Vehicle Noise:	74.5	72.8	69.9	6	4.9	73.5	5	74.0			
Centerline Distance to Noise	Contour (in feet)	,								

70 dBA

171

184

Ldn:

CNEL:

65 dBA

369

397

60 dBA

794

856

55 dBA

1,712

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: s/o Walnut Av./I-5 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS										
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	50,500 ve	hicles				Autos.	15				
Peak Hour	Percentage:	10%			Med	dium Truck	s (2 Axles).	15				
Peak H	Hour Volume:	5,050 ve	hicles		Hea	avy Trucks	(3+ Axles).	15				
Ve	ehicle Speed:	60 m	ph	V	ehicle N	/liy						
Near/Far La	ane Distance:	76 fe	et	•		cleType	Day	Evening	Night	Daily		
Site Data						Aut		J	•	97.42%		
	rrier Height:	0.0 fe	oot		Me	edium Truc			10.3%	1.84%		
Barrier Type (0-V	•	0.0	eel		H	leavy Truc	ks: 86.5%		10.8%	0.74%		
• • • •	ist. to Barrier:	100.0 fe	eet									
Centerline Dist.		100.0 fe		٨	loise So		ations (in f	eet)				
Barrier Distance		0.0 fe				Autos:	2.000					
Observer Height		5.0 fe				n Trucks:	4.000					
•	0.0 fe			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0			
	Pad Elevation: Pad Elevation:	0.0 fe		L	ane Equ	uivalent D	istance (in	feet)				
	Road Grade:	0.0%				Autos:	92.547	,				
	Left View:	-90.0 d			Mediun	n Trucks:	92.504					
	Right View:		legrees			y Trucks:	92.547					
	rugine view.	30.0 0	legiees		77047	y Tracker	02.0					
FHWA Noise Mod	lel Calculatio	ns										
VehicleType	REMEL	Traffic F	Flow L	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	73.22	2	3.83	-4.11		-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	8 -1	3.41	-4.11		-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	3 -1	7.36	-4.11		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (wit	hout Topo	and bar	rier attenu	ıation)							
VehicleType	Leq Peak Ho	our Led	q Day	Leq Ev	ening	Leq Ni	ght	Ldn	CI	VEL		
Autos:	7	1.7	69.8	3	68.1		62.0	70.6	3	71.2		
Medium Trucks:	. 6	5.0	63.	5	57.1		55.6	64.0)	64.2		
Heavy Trucks:	. 6	4.7	63.2	2	54.2		55.4	63.8	3	63.9		

Vehicle Noise:

73.2

Centerline Distance to Noise Contour (in feet)

71.4

Ldn: CNEL: 68.6

70 dBA

140

150

63.6

65 dBA

301

324

72.2

60 dBA

648

698

72.7

55 dBA 1,397

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: s/o Irvine Center Drive

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	49,500	vehicles					Autos:	15				
Peak Hour	Percentage:	10%	, 0			Medium Ti	rucks (2	Axles):	15				
Peak H	lour Volume:	4,950	vehicles			Heavy Tru	ıcks (3+	Axles):	15				
Ve	hicle Speed:	60	mph		V	ehicle Mix							
Near/Far La	ne Distance:	76	feet			VehicleTyp	e	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%		9.6%	,		
	rrier Height:	0.0	feet			Medium 7		84.8%		10.3%	1.84%		
Barrier Type (0-W	_	0.0	ieet			Heavy 7	Trucks:	86.5%		10.8%	0.74%		
Centerline Di	,	100.0	feet										
Centerline Dist.		100.0			Noise Source Elevations (in feet)								
Barrier Distance			feet			Auto		2.000					
Observer Height (feet			Medium Truck	_	.000					
	ad Elevation:		feet			Heavy Truck	ks: 8	3.006	Grade Ad	iustment:	0.0		
	ad Elevation:		feet		Lá	ane Equivaler	nt Dista	nce (in i	feet)				
	Road Grade:	0.0				Auto		2.547					
'	Left View:		degree	s		Medium Truck		2.504					
	Right View:		degree			Heavy Truck	ks: 92	2.547					
FHWA Noise Mod	el Calculation	ıs											
VehicleType	REMEL	Traffic	Flow	Distance	е	Finite Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	73.22		3.75	-4	1.11	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	83.68		-13.49	-4	1.11	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33		-17.45	-4	1.11	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Top	o and b	parrier att	enu	ation)							
VehicleType	Leq Peak Ho	ur L	eq Day	Leq	Eve	ening Leq	Night		Ldn	CI	VEL		
Autos:	71	1.7	6	9.8		68.0	61	.9	70.6	6	71.2		
Medium Trucks:	64	1.9	6	3.4		57.0	55	.5	63.9)	64.2		
Heavy Trucks:	64	1.6	6	3.1		54.1	55	.4	63.7	7	63.8		
Vehicle Noise:	73	3.1	7	'1.4		68.5	63	.5	72.1		72.6		

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	138	297	640	1,378							
CNEL:	148	320	689	1,485							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data					,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	47,70	0 vehicles	3					Autos:	15			
Peak Hour	Percentage:	1	0%			Me	dium Tr	ucks (2	Axles):	15			
Peak H	Hour Volume:	4,77	0 vehicles	3		He	avy Tru	cks (3+	Axles):	15			
Ve	ehicle Speed:	6	0 mph			Vehicle l	Miv						
Near/Far La	ne Distance:	7	6 feet				icleType	2	Day	Evening	Night	Daily	
Site Data						7 011		Autos:	77.5%	_	9.6%	-	
	vviav Haiahtı) O foot			Me	edium T		84.8%		10.3%		
Barrier Type (0-V	rrier Height:	_).0 feet).0				leavy T		86.5%		10.8%		
	ist. to Barrier:).0).0 feet										
Centerline Dist.).0 feet		1	Noise So			•	eet)			
Barrier Distance).0 feet				Auto		2.000				
Observer Height			5.0 feet				m Truck		1.000		-		
ŭ	ad Elevation:	_	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0	
-	ad Elevation:		0.0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)			
	Road Grade:).0%			•	Auto		2.547				
	Left View:).0 degree	es		Mediui	m Truck	s: 92	2.504				
	Right View:		0.0 degree			Heav	y Truck	s: 92	2.547				
							-						
FHWA Noise Mod													
VehicleType	REMEL		ffic Flow	Di	stance	Finite		Fres		Barrier Att		m Atten	
Autos:			3.58		-4.1		-1.20		-4.87		000	0.000	
Medium Trucks:		-	-13.65		-4.1		-1.20		-4.97		000	0.000	
Heavy Trucks:	87.33	3	-17.61		-4.1	1	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout T	opo and	barri	ier atten	uation)							
VehicleType	Leq Peak Ho	ur	Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL	
Autos:	7	1.5		69.6		67.8		61	.8	70.4	4	71.0	
Medium Trucks:	6	4.7	(63.2		56.9		55	.3	63.8	3	64.0	
Heavy Trucks:	6	4.4	(63.0		53.9		55	.2	63.5	5	63.7	
Vehicle Noise:	7	3.0		71.2		68.3		63	.4	71.9	9	72.4	
Centerline Distan	ce to Noise C	ontou	ır (in feet))									
			/		70 (dBA	65	dBA	6	60 dBA	55	dBA	
						-	-	-	-	-		-	

Ldn:

CNEL:

134

145

290

312

624

672

1,345

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: b/w Quailcreek and I-405 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				5	Site Con	ditions (H	ard = 10, S	oft = 15)			
Peak Hou	r Percentage:	10%					Autos	: 15			
	Hour Volume:	5,750 veł			He	avy Trucks	(3+ <i>Axles</i>)	: 15			
	ehicle Speed:	60 mp		١	/ehicle l	Mix					
Near/Far La	ane Distance:	76 fee	et		Veh	icleType	Day	Evening	Night	Daily	
Site Data						Aut	os: 77.5%	6 12.9%	9.6%	97.42%	
Barrier Type (0-V	•	0.0 fe				edium Truc Heavy Truc			10.3% 10.8%	1.84% 0.74%	
	ist. to Barrier:	100.0 fe		1	Voise So	ource Elev	ations (in	feet)			
Centerline Dist Barrier Distance Observer Height	e to Observer:	100.0 fe 0.0 fe 5.0 fe 0.0 fe	et et			Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	ljustment.	0.0	
	oad Elevation:	0.0 fe		L	ane Eq	uivalent D	istance (in	feet)			
	Road Grade:	0.0%				Autos:	92.547				
	Left View:	-90.0 de	egrees		Mediui	m Trucks:	92.504				
	Right View:	90.0 de	egrees		Heav	y Trucks:	92.547				
FHWA Noise Mod	del Calculatio	ns									
VehicleType	REMEL	Traffic Flo		istance			Fresnel	Barrier Att		m Atten	
Autos			1.40	-4.11		-1.20	-4.87		000	0.000	
Medium Trucks			2.84	-4.11		-1.20	-4.97		000	0.000	
Heavy Trucks	: 87.33	3 -16	6.80	-4.11		-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	se Levels (wit	hout Topo a	and barı	rier atten	uation)		,				
VehicleType	Leq Peak Ho		Day	Leq Ev		Leq Nig		Ldn		VEL	
Autos		2.3	70.4		68.6		62.6	71.2		71.8	
Medium Trucks		5.5	64.0		57.7		56.1	64.6		64.8	
Heavy Trucks		5.2	63.8		54.8		56.0	64.4		64.5	
Vehicle Noise	: 7	3.8	72.0)	69.1		64.2	72.	7	73.2	
Centerline Distar	nce to Noise C	Contour (in	feet)								

70 dBA

152

164

Ldn: CNEL: 65 dBA

328

353

60 dBA

707

761

55 dBA

1,523

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd.

Road Segment: e/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA				I	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	7,300 vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	730 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		,	Vehicle i	Wix					
Near/Far La	ne Distance:	52 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	,
	rrier Height:	0.0 feet			М	edium T		84.8%		10.3%	
Barrier Type (0-W	•	0.0			H	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		1	Noise So				eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height		5.0 feet				n Truck		.000	0		. 0.0
•	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	iustment.	. 0.0
Ro	ad Elevation:	0.0 feet		1	Lane Eq	uivalen	t Distaı	nce (in i	feet)		
	Road Grade:	0.0%				Auto	s: 96	5.607			
	Left View:	-90.0 degree	es		Mediu	n Truck	s: 96	5.566			
	Right View:	90.0 degree	es		Heav	y Truck	s: 96	8.608			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	-4.19		-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-21.43		-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-25.38		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq E	/ening	Leq	Night		Ldn	CI	NEL
Autos:	62	.0	60.1		58.3		52	.3	60.9	9	61.5
Medium Trucks:	55	.4	53.9		47.5		46	.0	54.4	1	54.7
Heavy Trucks:	avy Trucks: 55.4 54.0				45.0		46	.2	54.6	6	54.7
Vehicle Noise:	63	.6	61.8		58.9		54	.0	62.5	5	63.0
Centerline Distan	ce to Noise Co	ontour (in feet)								
				70 c	<i>IBA</i>	65	dBA	6	60 dBA	55	dBA

32

34

Ldn: CNEL: 69

74

148

159

318

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: Jeronimo Rd. Job Number: 8141 Road Segment: w/o Lake Forest Dr. Analyst: B. Lawson

SITE S Highway Data	PECIFIC IN	IPUT DATA		Si	te Con			MODE = 10, Sc	L INPUTS	S	
Average Daily T	raffic (Adt): 1	12 000 vehicle	.c	<u> </u>		annono	(//a/a	Autos:	15		
Peak Hour P	, ,	12,000 veriicie 10%	;5		Ma	dium Tri	ucke (2 Axles):			
	ur Volume:	1,200 vehicle	.c				•	+ Axles):			
		,	;5		1100	avy IIu	cho (o-	T AXICO).	10		
	icle Speed:	50 mph		Ve	ehicle I	Иiх					
Near/Far Lane	e Distance:	70 feet			Vehi	cleType)	Day	Evening	Night	Daily
Site Data						,	Autos:	77.5%	12.9%	9.6%	97.42%
Barr	ier Height:	0.0 feet			Мє	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wa	_	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist	•	100.0 feet		No	oise So	urce El	levatio	ons (in fe	eet)		
Centerline Dist. to	Observer:	100.0 feet				Auto		2.000			
Barrier Distance to	Observer:	0.0 feet			Mediur	n Truck		4.000			
Observer Height (A	bove Pad):	5.0 feet				y Truck	_	8.006	Grade Ad	iustment	. 0.0
Pad	d Elevation:	0.0 feet								GOLITIOTIC	. 0.0
Road	d Elevation:	0.0 feet		La	ne Equ	uivalent	t Dista	ance (in	feet)		
Re	oad Grade:	0.0%				Auto.	s: 9	3.723			
	Left View:	-90.0 degre	es		Mediur	n Truck	s: 9	3.680			
	Right View:	90.0 degre	es		Heav	y Truck	s: 9	3.723			
FHWA Noise Model	Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fre	snel	Barrier Att	en Bei	m Atten
Autos:	70.20	-1.62		-4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-18.86		-4.19		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-22.81		-4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier	attenua	ation)						
VehicleType L	.eq Peak Hou	ır Leq Day	y	Leq Eve	ening	Leq	Night		Ldn	C	NEL
Autos:	63	.2	61.3		59.5		53	3.5	62.1	1	62.7
Medium Trucks:	56	.8	55.2		48.9		4	7.3	55.8	3	56.0

Vehicle Noise:	64.9	63.1	60.1	55.3	63.9	64.3
Centerline Distance to	Noise Contour (in feet))				
			70 dBA	65 dBA	60 dBA	55 dBA
	I	Ldn:	39	84	181	389
	CN	VEL:	42	90	194	418

55.7

46.7

48.0

56.3

56.4

Heavy Trucks:

57.2

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd.

Road Segment: e/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS						
Highway Data				S	ite Con	ditions (F	Hard = 10,	Soft = 15)		
Average Daily	Traffic (Adt):	17,000 vehicles	S				Auto	s: 15		
= -	Percentage:	10%			Med	dium Truc	ks (2 Axles	s): 15		
Peak F	lour Volume:	1,700 vehicles	s		Hea	avy Truck	s (3+ Axles	s): 15		
Ve	hicle Speed:	50 mph		V	ehicle I	Mix				
Near/Far La	ne Distance:	70 feet				icleType	Day	Evening	Night	Daily
Site Data							itos: 77.5	_	9.6%	
Ba	rrier Height:	0.0 feet			Me	edium True	cks: 84.8	% 4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			H	leavy Tru	cks: 86.5	2.7%	10.8%	0.74%
Centerline Di	,	100.0 feet		M	oico So	vurco Elo	vations (in	foot)		
Centerline Dist.	to Observer:	100.0 feet		/4	UISE SU		2.000	reet)		
Barrier Distance	to Observer:	0.0 feet			N 4 = =15	Autos:				
Observer Height ((Above Pad):	5.0 feet				n Trucks:	4.000	Crada As	livotmont	
• ,	ad Elevation:	0.0 feet			Heav	y Trucks:	8.006	Grade Ad	ijusimeni.	0.0
	ad Elevation:	0.0 feet		La	ane Equ	uivalent [Distance (i	n feet)		
	Road Grade:	0.0%				Autos:	93.723			
	Left View:	-90.0 degree	es		Mediur	n Trucks:	93.680			
	Right View:	90.0 degree			Heav	y Trucks:	93.723			
FHWA Noise Mod	el Calculation	ıs								
VehicleType	REMEL	Traffic Flow	Distar	се	Finite	Road	Fresnel	Barrier At	ten Ber	m Atten
Autos:	70.20	-0.10		-4.20		-1.20	-4.8	7 0.	000	0.000
Medium Trucks:	81.00	-17.34		-4.19		-1.20	-4.9	7 0.	000	0.000
Heavy Trucks:	85.38	-21.30		-4.20		-1.20	-5.1	6 0.	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	ittenu	ation)					
VehicleType	Leq Peak Ho	ur Leq Day	/ Le	eq Eve	ening	Leq Ni	ight	Ldn	CI	VEL
Autos:	64	1.7	62.8		61.0		55.0	63.	6	64.2
Medium Trucks:	58	3.3	56.8		50.4		48.9	57.	3	57.5
Heavy Trucks:	58	3.7	57.3		48.2		49.5	57.	8	58.0
Vehicle Noise:		6.4	64.6		61.6		56.8	65.		65.8

70 dBA

49

53

Ldn:

CNEL:

65 dBA

106

114

60 dBA

228

245

55 dBA

491

527

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd.

Road Segment: e/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				Site Co	nditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	15,000 vehicle	s			A	lutos:	15		
Peak Hour	Percentage:	10%		М	edium Tr	ucks (2 A	xles):	15		
Peak F	lour Volume:	1,500 vehicle	es	Н	eavy Tru	cks (3+ A	xles):	15		
Ve	ehicle Speed:	50 mph		Vehicle	Mix					
Near/Far La	ne Distance:	70 feet			hicleType	è	Day	Evening	Night	Daily
Site Data							77.5%		9.6%	•
	wwiew Heierlet.	0.0 foot		Λ.	1edium T		34.8%		10.3%	1.84%
	rrier Height:	0.0 feet 0.0			Heavy T		36.5%		10.8%	0.74%
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet								
Centerline Dist.		100.0 feet		Noise S	Source E	levations	•	eet)		
Barrier Distance		0.0 feet			Auto					
Observer Height		5.0 feet		Media	ım Truck	s: 4.0	00			
	ad Elevation:	0.0 feet		Hea	vy Truck	s: 8.0	06	Grade Ad	iustment	0.0
	ad Elevation:	0.0 feet		Lane E	guivalen	t Distand	e (in	feet)		
	Road Grade:	0.0%			Auto		•	,		
	Left View:	-90.0 degre	00	Medii	ım Truck					
	Right View:	90.0 degre			vy Truck					
	ragin view.	90.0 degre	C 3	1100	ivy Traon	0. 00.1	20			
FHWA Noise Mod	lel Calculation	าร		"						
VehicleType	REMEL	Traffic Flow	Distance	e Finite	e Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos:	70.20	-0.65	-4	.20	-1.20	,	4.87	0.0	000	0.000
Medium Trucks:	81.00	-17.89	-4	.19	-1.20		4.97	0.0	000	0.000
Heavy Trucks:	85.38	-21.84	-4	.20	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier att	enuation)						
VehicleType	Leq Peak Ho			Evening	1	Night		Ldn	CI	VEL
Autos:	6	4.2	62.3	60.5	5	54.4		63.1	1	63.7
Medium Trucks:	5	7.7	56.2	49.9	9	48.3	48.3 56.8		3	57.0
Heavy Trucks:	5	8.1	56.7	47.7	7	48.9	48.9 57.3		3	57.4
Vehicle Noise:	6	5.9	64.1	61.	1	56.3		64.8	3	65.3

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	45	97	210	452
CNEL:	49	105	225	485

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeromino Rd.

Road Segment: w/o Los Alisos Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, S	oft = 15)		
Average Daily Traffic (Adt):	28,000 vehicle	S			Autos	: 15		
Peak Hour Percentage:			Me	dium Trucks	(2 Axles)	: 15		
Peak Hour Volume:	2,800 vehicle	S	He	avy Trucks (3+ Axles)	: 15		
Vehicle Speed:	50 mph		Vehicle	Miv				
Near/Far Lane Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data			1011	Autos		•	9.6%	•
Barrier Height:	0.0 feet		M	edium Trucks			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):				Heavy Trucks			10.8%	0.74%
Centerline Dist. to Barrier:								
Centerline Dist. to Observer:			Noise So	ource Elevat	ions (in f	eet)		
Barrier Distance to Observer:				Autos:	2.000			
			Mediu	m Trucks:	4.000			
Observer Height (Above Pad): Pad Elevation:			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Road Elevation:			Lane Equivalent Distance (in feet)					
Road Grade:			Lune Ly	Autos:	93.723	1001)		
Left View:			Modiu		93.680			
				ry Trucks:	93.723			
Right View:	90.0 degre	es	rieav	y Trucks.	93.723			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos: 70.2	2.06	-4	.20	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 81.0	0 -15.18	-4	.19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 85.3	-19.13	-4	.20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos:	66.9	65.0	63.2		57.2	65.8	3	66.4
Medium Trucks:	60.4	58.9	52.6		51.0	59.5	5	59.7
Heavy Trucks:	60.9	59.4			51.6 60.0)	60.1
Vehicle Noise:	68.6	66.8	63.8		59.0	67.5	5	68.0
Centerline Distance to Noise	Contour (in feet)						

70 dBA

68

74

Ldn:

CNEL:

65 dBA

147

158

60 dBA

318

341

55 dBA

685

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeromino Rd.

Road Segment: e/o Los Alisos Bl.

Job Number: 8141

Analyst: B. Lawson

		41 0 1 1	DATA		NOISE MODEL INPUTS							
Highway Data					Si	ite Con	ditions (F	lard = 1), Sc	oft = 15)		
Average Daily	Traffic (Adt):	23,800	vehicles	;				Αι	ıtos:	15		
Peak Hour	Percentage:	109	6			Med	dium Truc	ks (2 Ax	les):	15		
Peak H	lour Volume:	2,380	vehicles	i		Hea	avy Truck	s (3+ Ax	les):	15		
	hicle Speed:		mph		Ve	ehicle N	/lix					
Near/Far La	ne Distance:	70	feet				cleType	D	ay	Evening	Night	Daily
Site Data							Au	tos: 7	7.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0	feet			Me	dium Tru	cks: 84	1.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0				H	leavy Tru	cks: 86	6.5%	2.7%	10.8%	0.74%
Centerline Di	,	100.0			A/	oico So	urce Ele	vations	(in f	201		
Centerline Dist.	to Observer:	100.0	feet		/٧0	oise so				eu)		
Barrier Distance	to Observer:	0.0	feet			1 4 m alia and	Autos:	2.00				
Observer Height (Above Pad):	5.0	feet				n Trucks:	4.00		Orodo Ad		
• ,	ad Elevation:		feet			Heav	y Trucks:	8.00	6	Grade Adj	ustment.	0.0
	ad Elevation:		feet		Lá	ane Equ	ıivalent E	Distance	(in	feet)		
	Road Grade:	0.0					Autos:	93.72	3			
	Left View:		degree	S		Mediun	n Trucks:	93.68	0			
	Right View:		degree			Heav	y Trucks:	93.72	3			
FHWA Noise Mode	el Calculation	15										
VehicleType	REMEL	Traffic	Flow	Distanc	е	Finite	Road	Fresne	'	Barrier Att	en Ber	m Atten
Autos:	70.20)	1.36	-4	4.20		-1.20	-4	.87	0.0	000	0.000
Medium Trucks:	81.00)	-15.88	-4	4.19		-1.20	-4	.97	0.0	000	0.000
Heavy Trucks:	85.38	3	-19.84	-4	4.20		-1.20	-5	.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout To	oo and l	barrier at	tenu	ation)						
VehicleType	Leq Peak Ho	ur L	Leq Day	Lec	_i Eve	ening	Leq N	ight		Ldn	CI	VEL
Autos:	6	6.2	6	64.3		62.5		56.4		65.1		65.7
Medium Trucks:	59	9.7	5	58.2		51.9		50.3		58.8	3	59.0
Heavy Trucks:	6	0.1	5	58.7		49.7		50.9 59.3		3	59.4	
Vehicle Noise:	6	7.9	6	6.1		63.1		58.3		66.8	3	67.3

70 dBA

61

66

Ldn:

CNEL:

65 dBA

132

142

60 dBA

285

306

55 dBA

614

660

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd.

Road Segment: s/o Alicia Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)		
Average Daily Traffic (Adt):	25,600 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	2,560 vehicle	S	He	avy Trucks (3	3+ <i>Axles):</i>	15		
Vehicle Speed:	50 mph		Vehicle I	Miss				
Near/Far Lane Distance:	70 feet				Dov	- Cuonina	Nicht	Doily
Cita Data			ven	icleType	Day :: 77.5%	Evening	Night	Daily
Site Data			A 4.	Autos Autos Trusalsa			9.6%	
Barrier Height:				edium Trucks			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			, r	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:								
Road Elevation:	0.0 feet		Lane Eq	uivalent Dis		feet)		
Road Grade:	0.0%				93.723			
Left View:	-90.0 degree	es	Mediui	m Trucks:	93.680			
Right View:	90.0 degree	es	Heav	y Trucks:	93.723			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite		resnel	Barrier Att	en Ber	m Atten
Autos: 70.2	0 1.67	-4.	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 81.0	0 -15.56	-4.	19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 85.3	8 -19.52	-4.	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos:	66.5	64.6	62.8	į	56.8	65.4	4	66.0
Medium Trucks:	0.0	58.5	52.2	į	50.6	59.1	1	59.3
Heavy Trucks:	60.5	59.0	50.0	ļ	51.3	59.6	5	59.7
Vehicle Noise:	88.2	66.4	63.4		58.6	67.	1	67.6
Centerline Distance to Noise	Contour (in feet)	,					

70 dBA

64

69

Ldn:

CNEL:

60 dBA

299

322

55 dBA

645

693

65 dBA

139

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Job Number: 8141

Road Segment: b/w ICD and Discovery

Analyst: B. Lawson

SITE S	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS						
Highway Data				Site Cor	nditions (H	lard = 10, S	oft = 15)			
Average Daily	Traffic (Adt):	6,800 vehicles	3			Autos	: 15			
Peak Hour	Percentage:	10%		Me	dium Truc	ks (2 Axles)	: 15			
Peak He	our Volume:	680 vehicles	;	Heavy Trucks (3+ Axles): 15						
Vel	nicle Speed:	55 mph		Vehicle	Mix					
Near/Far Lar	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily	
Site Data						tos: 77.5%	_	9.6%		
	rior Hoight:	0.0 feet		M	edium Trud	cks: 84.8%	6 4.9%	10.3%	1.84%	
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0				ı	Heavy Truc	cks: 86.5%	6 2.7%	10.8%	0.74%	
Centerline Dis		100.0 feet		M-1 0	51		· - 4)			
	Centerline Dist. to Observer: 100.0 feet					ations (in f	eet)			
Barrier Distance t		0.0 feet			Autos:	2.000				
Observer Height (/		5.0 feet			m Trucks:	4.000				
Pa	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0		
Roa		Lane Eq	uivalent D	istance (in	feet)					
	Road Grade:	0.0 feet 0.0%		<u> </u>	Autos:	96.607				
	Left View:	-90.0 degree	es.	Mediu	m Trucks:	96.566				
	Right View:	90.0 degree		Heav	y Trucks:	96.608				
FHWA Noise Mode	l Calculation	s								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-4.50	-4.3	39	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-21.74	-4.3	89	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-25.69	-4.3	89	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (with	out Topo and I	barrier attei	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL	
Autos:	61	.7 5	59.8	58.0		52.0	60.6	3	61.2	
Medium Trucks:	55	.1 5	53.6	47.2		45.7	54.1	l	54.4	
Heavy Trucks:	55	.1 5	53.7	44.7 49		45.9	54.3	3	54.4	
Vehicle Noise:	63	.3 6	61.5	58.6 53.7				2	62.7	

,				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	30	65	141	303

 Ldn:
 30
 65
 141
 303

 CNEL:
 33
 70
 151
 326

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Job Number: 8141

Road Segment: b/w Waterworks Wy. and ICD

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	6,800 vehicle	S				Autos	15			
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Axles).	15			
Peak He	our Volume:	680 vehicles			Heavy Trucks (3+ Axles): 15						
Vel	hicle Speed:	55 mph	55 mph		ehicle l	Mix					
Near/Far Lar	ne Distance:	52 feet		-		icleType	Day	Evening	Night	Daily	
Site Data							utos: 77.5%	J	9.6%	97.42%	
	rier Height:	0.0 feet			Ме	edium Tru			10.3%	1.84%	
Barrier Type (0-Wa	_	0.0				leavy Tru			10.8%	0.74%	
Centerline Dis	,	100.0 feet									
	Centerline Dist. to Observer: 100.0 feet			N	oise Sc		vations (in f	eet)			
Barrier Distance t		0.0 feet				Autos:					
Observer Height (5.0 feet			Medium Trucks: 4.000						
	Pad Elevation: 0.0 feet			Heavy Trucks: 8.006 Grade Adjustment:					0.0		
	nd Elevation:	0.0 feet		Li	ane Egi	uivalent L	Distance (in	feet)			
	Road Grade:	0.0%				Autos:	•	,			
,	Left View:	-90.0 degree	29		Mediur	n Trucks:					
	Right View:	90.0 degree				y Trucks:					
	g	20.0 acg. c			,						
FHWA Noise Mode	el Calculation										
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-4.50		-4.39		-1.20	-4.87		000	0.000	
Medium Trucks:	82.40	-21.74		-4.39		-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-25.69		-4.39		-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (with	out Topo and	barrier a	attenu	ation)						
VehicleType	Leq Peak Hou	ır Leq Day	/ Le	eq Eve	ening	Leq N	light	Ldn	CI	VEL	
Autos:	61	.7	59.8		58.0		52.0	60.6	5	61.2	
Medium Trucks:	55	.1	53.6		47.2		45.7	54.	1	54.4	
Heavy Trucks:	55	.1	53.7		44.7		45.9	54.3	3	54.4	
Vehicle Noise:	63	.3	61.5		58.6		53.7	62.2	2	62.7	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	30	65	141	303
CNEL:	33	70	151	326

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPE	CIFIC INP	UT DATA			N	IOISE	MODE	L INPUT	S	
Highway Data				Site Co	nditions	(Hard :	= 10, Se	oft = 15)		
Average Daily Traf	fic (Adt): 6	,100 vehicles	3				Autos:	15		
Peak Hour Perd	, ,	10%		М	edium Tr	ucks (2	Axles):	15		
Peak Hour	Volume:	610 vehicles	3	Heavy Trucks (3+ Axles): 15						
Vehicle	Speed:	55 mph		Vehicle	Miv					
Near/Far Lane D	Distance:	52 feet			hicleType		Day	Evening	Night	Daily
Site Data				V G.		Autos:	77.5%	_	9.6%	-
				Λ	л Medium Ti		84.8%		10.3%	1.84%
	Height:	0.0 feet		,	Heavy T		86.5%		10.8%	0.74%
Barrier Type (0-Wall,	,	0.0			ricavy ri	ruons.	00.07	2.170	10.070	0.7 4 70
Centerline Dist. to		100.0 feet		Noise S	Source E	levatio	ns (in f	eet)		
Centerline Dist. to O		100.0 feet			Auto	s: 2	2.000			
Barrier Distance to O		0.0 feet		Media	um Truck	s: 4	.000			
Observer Height (Abo		5.0 feet		Heavy Trucks: 8.006 Grade Adjus					justment.	0.0
	levation:	0.0 feet				•				
	levation:	0.0 feet		Lane E	quivalen		•	teet)		
	d Grade:	0.0%			Auto		6.607			
Lo	eft View:	-90.0 degree	es		um Truck	-	6.566			
Rig	nht View:	90.0 degree	es	Hea	avy Truck	s: 96	8.608			
FHWA Noise Model Ca	alculations									
VehicleType F	REMEL	Traffic Flow	Distanc	e Finite	e Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-4.97	-2	1.39	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-22.21	-2	1.39	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-26.16	-2	1.39	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Le	vels (withou	ut Topo and	barrier att	enuation))					
VehicleType Leq	Peak Hour	Leq Day	Leq	Evening	Leq	Night		Ldn	CI	VEL
Autos:	61.2	:	59.3	57.6	6	51	.5	60.1	1	60.7
Medium Trucks:	54.6	!	53.1	46.7	7	45	.2	53.7	7	53.9
Heavy Trucks:	54.6		53.2	44.2			45.4 53.8		3	53.9
Vehicle Noise:	62.8		61.0	58.	1	53	.2	61.8	3	62.2
Centerline Distance to	Noise Con	tour (in feet))							

70 dBA

28

30

Ldn: CNEL: 65 dBA

61

65

60 dBA

131

141

55 dBA

282

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: s/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				9,	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	9,500 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak F	lour Volume:	950 vehicles	S		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	55 mph		1	/ehicle l	Mix					
Near/Far La	ane Distance:	52 feet				icleType	ė	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.6%	,
	rrier Height:	0.0 feet			М	edium T		84.8%		10.3%	1.84%
Barrier Type (0-V	_	0.0 leet 0.0			ŀ	Heavy T	rucks:	86.5%		10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet			Voise So				eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	_	1.000	0 - 4 - 4 - 4		0.0
_	Pad Elevation: 0.0 feet				Heav	y Truck	s: 8	3.006	Grade Ad	iustment.	0.0
Road Elevation: 0.0 feet				L	ane Eq	uivalen	t Dista	nce (in i	eet)		
Road Grade: 0.0%						Auto	s: 96	6.607			
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 96	6.566			
	Right View:	90.0 degree	es		Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-3.05		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-20.28		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-24.24		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier atteni	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	′	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	63	.1	61.2		59.5		53	.4	62.0)	62.6
Medium Trucks:	56	.5	55.0		48.7		47	.1	55.6	6	55.8
Heavy Trucks:	56	.6	55.1		46.1		47	.4	55.7	7	55.8
Vehicle Noise:	64	.7	63.0		60.0		55	.1	63.7	7	64.2
Centerline Distan	ce to Noise Co	ontour (in feet)								
				70 a	IBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

38

41

82

88

176

189

379

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: n/o Quail Hill Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data			Site Con	ditions (Har	d=10, S	oft = 15)					
Average Daily Traffic (Adt)	. 7,600 vehicle	es			Autos:	15					
Peak Hour Percentage	•		Ме	dium Trucks	(2 Axles).	15					
Peak Hour Volume	760 vehicle	s	Heavy Trucks (3+ Axles): 15								
Vehicle Speed	: 55 mph		Vehicle I	N <i>lis</i> e							
Near/Far Lane Distance	52 feet				Day	Funning	Niaht	Doily			
Site Date			ven	icleType	Day	Evening	Night	Daily			
Site Data			A 4.	Autos Autos Trusks			9.6% 10.3%				
Barrier Height								1.84%			
Barrier Type (0-Wall, 1-Berm)			ļ ,	Heavy Trucks	: 86.5%	2.7%	10.8%	0.74%			
Centerline Dist. to Barrier			Noise So	ource Elevati	ions (in f	eet)					
Centerline Dist. to Observer				Autos:	2.000						
Barrier Distance to Observer	: 0.0 feet		Mediui	m Trucks:	4.000						
Observer Height (Above Pad)	5.0 feet			y Trucks:	8.006	Grade Ad	justment:	0.0			
Pad Elevation			,								
Road Elevation	: 0.0 feet		Lane Eq	uivalent Dist		feet)					
Road Grade	: 0.0%				96.607						
Left View	: -90.0 degre	es	Mediui		96.566						
Right View	: 90.0 degre	es	Heav	y Trucks:	96.608						
FHWA Noise Model Calculation	ons										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten			
Autos: 71.7	78 -4.01	-4.	39	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 82.4	40 -21.25	-4.	39	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 86.4	40 -25.21	-4.	39	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (wi	ithout Topo and	barrier atte	nuation)								
VehicleType Leq Peak F	lour Leq Day	y Leq I	Evening	Leq Night	<u> </u>	Ldn	CI	VEL			
Autos:	62.2	60.3	58.5	5	52.5	61.1	1	61.7			
Medium Trucks:	55.6	54.1	47.7	4	16.1	54.6	6	54.8			
Heavy Trucks:	55.6	54.2	45.1 46		46.4 54.7		7	54.9			
Vehicle Noise:	63.8	62.0	59.0		54.2	62.7	7	63.2			
Centerline Distance to Noise	Contour (in feet	t)									

70 dBA

33

35

Ldn:

CNEL:

65 dBA

70

76

60 dBA

152

163

55 dBA

327

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: s/o Quail Hill Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				5	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	12,000 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	Axles):	15		
Peak H	lour Volume:	1,200 vehicle	s		He	avy Truc	ks (3+ A	Axles):	15		
Ve	hicle Speed:	55 mph		1	/ehicle l	Miv					
Near/Far La	ne Distance:	52 feet				icleType		Day	Evening	Night	Daily
Site Data					V 011		utos:	77.5%	J	9.6%	-
	rrior Hoimbt.	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 feet 0.0				Heavy Tru		86.5%		10.8%	0.74%
Centerline Di		0.0 100.0 feet									
Centerline Dist.		100.0 feet		^	Voise So	ource Ele	evation	s (in fe	eet)		
Barrier Distance		0.0 feet				Autos		000			
Observer Height (5.0 feet				m Trucks		000			
	ad Elevation:	0.0 feet			Heav	y Trucks	: 8.0	006	Grade Adj	iustment:	0.0
Road Elevation: 0.0 feet				L	ane Eq	uivalent	Distan	ce (in t	feet)		
Road Grade: 0.0%						Autos		•			
•	Left View:	-90.0 degree	es		Mediui	m Trucks		566			
	Right View:	90.0 degree			Heav	y Trucks	<i>:</i> 96.	608			
FHWA Noise Mod					1						
VehicleType	REMEL	Traffic Flow	Di	stance		Road	Fresr		Barrier Atte		m Atten
Autos:	71.78	-2.03		-4.39		-1.20		-4.87	0.0		0.000
Medium Trucks:	82.40	-19.27		-4.39		-1.20		-4.97	0.0		0.000
Heavy Trucks:	86.40	-23.22		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er atteni	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	rening	Leq N	Vight		Ldn	CI	VEL
Autos:	64	.2	62.3		60.5		54.4	ļ.	63.1		63.7
Medium Trucks:	57	.5	56.0		49.7		48.1		56.6	6	56.8
Heavy Trucks:	57	.6	56.2	47.1 48.4 56.7			7	56.9			
Vehicle Noise:	65	.7	64.0		61.0		56.1		64.7	7	65.2
Centerline Distant	ce to Noise Co	ontour (in feet)								
				70 d	IBA	65 a	IBA	6	i0 dBA	55	dBA

Ldn:

CNEL:

44

48

95

103

206

221

443

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: n/o SR-73 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data					Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	34,300 vehicl	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	3,430 vehicl	es		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	55 mph		,	Vehicle I	Miy					
Near/Far La	ne Distance:	52 feet				icleTyp	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		1	Noise So			•	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	_	1.000	0 1- 4-1		0.0
•	ad Elevation:	0.0 feet			Heavy Trucks: 8.006 Grade Adjustment: 0.0						0.0
Road Elevation: 0.0 feet				I	Lane Eq	uivalen	t Dista	nce (in t	eet)		
Road Grade: 0.0%						Auto	os: 96	6.607			
	Left View:	-90.0 degr	ees		Mediui	m Truck	ks: 96	6.566			
	Right View:	90.0 degr	ees		Heav	y Truck	ks: 96	6.608			
FHWA Noise Mod	lel Calculatior	1S									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	2.5	3	-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-14.7	1	-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-18.60	6	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout Topo and	d barr	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	ay	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	68	8.7	66.8		65.1		59	.0	67.6	3	68.2
Medium Trucks:	62	2.1	60.6		54.2		52	.7	61.2	2	61.4
Heavy Trucks:	62	2.1	60.7		51.7 52.9 61.3				61.4		
Vehicle Noise:	70	0.3	68.5		65.6		60	.7	69.3	3	69.7
Centerline Distan	ce to Noise C	ontour (in fee	et)		ı						
				70 c	dBA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

89

96

192

207

414

446

892

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Hills Dr.

Road Segment: s/o Paseo de Valencia

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt): 2	24,100 vehicle	S			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Truck	ks (2 Axles).	15				
Peak H	lour Volume:	2,410 vehicle	s	He	avy Trucks	s (3+ Axles).	15				
Ve	hicle Speed:	50 mph		Vehicle	Miv						
Near/Far La	ne Distance:	•			icleType	Day	Evening	Night	Daily		
Site Data					Aut	tos: 77.5%	6 12.9%	9.6%	97.42%		
Ba	rrier Height:	0.0 feet		M	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0		1	Heavy Truc	ks: 86.5%	6 2.7%	10.8%	0.74%		
Centerline Di	,	100.0 feet		Noise C	ouros Elov	rationa /in f	in a 4 l				
Centerline Dist.	to Observer:	100.0 feet		Noise 3		rations (in f	eet)				
Barrier Distance	to Observer:	0.0 feet		Modiu	Autos: m Trucks:	2.000 4.000					
Observer Height ((Above Pad):	5.0 feet				8.006	Grade Adj	iustmant			
Pa	ad Elevation:	0.0 feet		пеач	y Trucks:	0.000	Grade Adj	usunent	0.0		
Ros	ad Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)				
	Road Grade:	0.0%			Autos:	93.723					
	Left View:	-90.0 degre	es	Mediu	m Trucks:	93.680					
	Right View:	90.0 degre	es	Heav	y Trucks:	93.723					
FHWA Noise Mod	el Calculations	5									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:	70.20	1.41	-4.	20	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-15.83	-4.	19	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-19.78	-4.	20	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Hou	r Leq Day	/ Leq	Evening	Leq Ni	ght	Ldn	CI	NEL		
Autos:	66.	.2	64.3	62.6		56.5	65.1	l	65.7		

Un	mitigated Nois	e Levels (withou	t Topo and barr	ier attenuation)			
,	VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
	Autos:	66.2	64.3	62.6	56.5	65.1	65.7
/	Medium Trucks:	59.8	58.3	51.9	50.4	58.8	59.1
	Heavy Trucks:	60.2	58.8	49.7	51.0	59.3	59.5
	Vehicle Noise:	67.9	66.2	63.1	58.3	66.9	67.3

Centerline Distance to Noise Contour (in feet)	Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	62	133	288	619							
CNEL:	67	143	309	666							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Hills Dr. Job Number: 8141 Road Segment: w/o Moulton Pkwy. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	30,700 vehic	les					Autos:	15			
Peak Hour	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15			
Peak Hour Volume:		3,070 vehicles			Heavy Trucks (3+ Axles): 15							
Vehicle Speed: Near/Far Lane Distance: Site Data		55 mph		V	Vehicle Mix							
		88 feet				cleType	è	Day	Evening	Night	Daily	
					V 0111		Autos:	77.5%	J	9.6%	,	
	uuiau Ilaiadat.	0.0 foot			Ме	edium T		84.8%		10.3%	1.84%	
Barrier Height:		0.0 feet 0.0						86.5%		10.8%	0.74%	
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:		100.0 feet			•							
Centerline Dist. to Observer:		100.0 feet 0.0 feet 5.0 feet			Noise Source Elevations (in feet)							
					Autos: 2.000							
Barrier Distance to Observer:					Medium Trucks: 4.000							
Observer Height (Above Pad):					Heavy Trucks: 8.006 Grade Adjustment: 0.0						0.0	
Pad Elevation: Road Elevation:		0.0 feet 0.0 feet		,	ane Fai	uivalen	t Dista	nce (in i	foot)			
			0.0 feet 0.0%			Lane Equivalent Distance (in feet) Autos: 89.850						
Road Grade: Left View:					Medium Trucks: 89.805							
		-90.0 degrees			Heavy Trucks: 89.850							
	Right View: 90.0 degrees Heavy Trucks: 89.850											
FHWA Noise Mod	el Calculation	ns		l.								
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	3 2.0	5	-3.92		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-15.1	9	-3.92		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	Heavy Trucks: 86.40		-19.15 -3.9			-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	hout Topo an	d barri	ier attenu	ıation)							
VehicleType	Leq Peak Ho	our Leq D	ay	Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	6	68.7		66.8		65.0		.0	67.6	6	68.2	
Medium Trucks:	6:	2.1	1 60.6		54.2 52.7		.7	61.1		61.4		
Heavy Trucks:	Heavy Trucks: 62		.1 60.7		51.7 52.9		.9	61.3		61.4		
Vehicle Noise:	7	0.3	68.5		65.6		60	.7	69.2	2	69.7	

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	89	192	414	891								
CNEL:	96	207	445	959								

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: Lake Rd. Job Number: 8141 Road Segment: n/o Alton Pkwy. Analyst: B. Lawson

SITE			NOISE MODEL INPUTS								
Highway Data				S	Site Con	ditions (Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	5,800 vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	Axles):	15		
Peak H	lour Volume:	580 vehicles	3		He	avy Truci	ks (3+ A	Axles):	15		
Ve	hicle Speed:	35 mph		V	/ehicle l	Wiv					
Near/Far La	ne Distance:	20 feet				icleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%	Ŭ,	9.6%	-
	rrier Height:	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0 reet 0.0				leavy Tru		86.5%		10.8%	0.74%
Centerline Di		100.0 feet									
Centerline Dist.		100.0 feet		۸	Voise So	ource Ele		•	eet)		
Barrier Distance		0.0 feet				Autos		000			
Observer Height (5.0 feet				n Trucks		000			
	ad Elevation:	0.0 feet			Heav	y Trucks	: 8.0	006	Grade Adj	iustment.	0.0
	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distan	ce (in f	feet)		
	Road Grade:	0.0%				Autos	: 99.	544	-		
	Left View:	-90.0 degree	es		Mediui	n Trucks	<i>:</i> 99.	504			
	Right View:	90.0 degree			Heav	y Trucks	<i>:</i> 99.	544			
FHWA Noise Mod			D:-		F:	D /		- ,	D		A ((
VehicleType	REMEL	Traffic Flow	DIS	stance	Finite		Fresr		Barrier Att		m Atten
Autos: Medium Trucks:	64.30 75.75	-3.23 -20.46		-4.59 -4.59		-1.20 -1.20		-4.87 -4.97		000	0.000
Heavy Trucks:		-20.46 -24.42		-4.59 -4.59		-1.20 -1.20		-4.97 -5.16		000	0.000
						-1.20		-5.10	0.0)00	0.000
Unmitigated Noise	•										
VehicleType	Leq Peak Hou			Leq Ev		Leq N			Ldn		VEL
Autos:	55	_	53.4		51.6		45.6		54.2		54.8
Medium Trucks:	49	_	48.0		41.6		40.1		48.5		48.8
Heavy Trucks:	51		49.9		40.9		42.2		50.5		50.6
Vehicle Noise:	57	.5	55.8		52.4		48.0)	56.5	5	56.9
Centerline Distant	ce to Noise Co	ntour (in feet))								
				70 d	IBA	65 a	IBA	6	60 dBA	55	dBA

13

13

Ldn:

CNEL:

27

29

58

62

126

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				5	Site Con	ditions (H	lard = 1	0, Sc	oft = 15)			
Peak Hou Peak	r Traffic (Adt): r Percentage: Hour Volume:	18,000 vehice 10% 1,800 vehice				dium Truci avy Trucks	ks (2 Ax	,	15 15 15			
	ehicle Speed: ane Distance:	50 mph 70 feet		V	/ehicle I Veh	Mix icleType)ay	Evening	Night	Daily	
Site Data						Au	tos: 7	7.5%	12.9%	9.6%	97.42%	
Barrier Type (0-V	•	0.0 feet				edium Trud Heavy Trud		4.8% 6.5%		10.3% 10.8%	1.84% 0.74%	
Centerline L	ist. to Barrier:	100.0 feet 100.0 feet		٨	loise Sc	ource Elev	ations	(in fe	eet)			
Barrier Distance Observer Height	e to Observer:	0.0 feet 5.0 feet 0.0 feet				Autos: m Trucks: ry Trucks:	2.00 4.00 8.00	00	Grade Adj	iustment.	0.0	
	oad Elevation:	0.0 feet		L	ane Eq	uivalent D	istance	e (in t	feet)			
	Road Grade: Left View: Right View:	0.0% -90.0 deg 90.0 deg				Autos: m Trucks: ry Trucks:	93.72 93.68 93.72	30				
FHWA Noise Mod	del Calculation	าร										
VehicleType	REMEL	Traffic Flov	v Di	stance	Finite	Road	Fresne	I	Barrier Att	en Ber	m Atten	
Autos	70.20	0.	14	-4.20)	-1.20	-4	4.87	0.0	000	0.000	
Medium Trucks	<i>:</i> 81.00	-17.0)9	-4.19)	-1.20	-4	4.97	0.0	000	0.000	
Heavy Trucks	: 85.38	3 -21.0)5	-4.20)	-1.20	-{	5.16	0.0	000	0.000	
Unmitigated Nois	se Levels (with	hout Topo ai	d barri	ier atteni	uation)							
VehicleType	Leq Peak Ho	our Leq E	ay	Leq Ev	ening	Leq Ni	ght		Ldn	CI	VEL	
Autos	: 6	5.0	63.1		61.3		55.2		63.9)	64.5	
Medium Trucks	: 5	8.5	57.0		50.6		49.1		57.6	3	57.8	
Heavy Trucks	:5	8.9	57.5		48.5		49.7		58.1	1	58.2	
Vehicle Noise		6.6	64.9		61.8		57.1		65.6	3	66.1	
Centerline Distar	nce to Noise C	Contour (in fe	et)									

70 dBA

51

55

Ldn:

CNEL:

65 dBA

110

118

60 dBA

237

254

55 dBA

510

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o SR-241 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE			NOISE MODEL INPUTS										
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	28,000 vehicle	es					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tru	ucks (2	Axles):	15				
Peak H	lour Volume:	2,800 vehicle	es		He	avy Trud	cks (3+	Axles):	15				
Ve	ehicle Speed:	50 mph		V	ehicle l	Mix							
Near/Far La	ne Distance:	70 feet				icleType)	Day	Evening	Night	Daily		
Site Data						-	Autos:	77.5%	12.9%	9.6%	97.42%		
Ba	rrier Height:	0.0 feet			Me	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0			F	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Di	st. to Barrier:	100.0 feet		N	Noise Source Elevations (in feet)								
Centerline Dist.	to Observer:	100.0 feet				Autos		2.000					
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks		.000					
Observer Height	(Above Pad):	5.0 feet								justment	. 0.0		
P	ad Elevation:	0.0 feet			Heav	y Trucks	s. c	.000	Orado Maj	dountone	0.0		
Ro	ad Elevation:	0.0 feet		L	Lane Equivalent Distance (in feet)								
	Road Grade:	0.0%			Autos: 93.723								
	Left View:	-90.0 degre	es		Mediur	n Trucks	s: 93	3.680					
	Right View:	90.0 degre			Heav	y Truck	s: 93	3.723					
FHWA Noise Mod	lel Calculation	าร											
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	70.20	2.06	;	-4.20		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-15.18	}	-4.19		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-19.13	}	-4.20		-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	l barrier a	attenu	ation)								
VehicleType	Leq Peak Ho	our Leq Da	y Le	eq Eve	ening	Leq	Night		Ldn	C	VEL		
Autos:	60	6.9	65.0		63.2		57	.2	65.8	3	66.4		
Medium Trucks:	60	0.4	58.9		52.6		51	.0	59.5	5	59.7		
Heavy Trucks:	60	0.9	59.4		50.4		51	.6	60.0)	60.1		
Vehicle Noise:	68	8.6	66.8		63.8		59	.0	67.5	5	68.0		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	68	147	318	685
CNEL:	74	158	341	736

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Rancho Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA	A NOISE MODEL INPUTS											
Highway Data			Site Con	ditions (Ha	ard = 10, Sc	oft = 15)							
Average Daily Traffic (Adt):	36,000 vehicles	S			Autos:	15							
Peak Hour Percentage:	10%		Me	dium Truck	s (2 Axles):	15							
Peak Hour Volume:	3,600 vehicles	S	Hea	avy Trucks	(3+ Axles):	15							
Vehicle Speed:	50 mph		Vehicle I	Vix									
Near/Far Lane Distance:	70 feet	-		cleType	Day	Evening	Night	Daily					
Site Data				Auto		-	9.6%	97.42%					
Barrier Height:	0.0 feet		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%					
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%					
Centerline Dist. to Barrier:	100.0 feet		M-: 0-	= [1	-4: /: f:	4)							
Centerline Dist. to Observer:	100.0 feet	-	Noise Sc		ations (in fe	eet)							
Barrier Distance to Observer:	0.0 feet			Autos:	2.000								
Observer Height (Above Pad):	5.0 feet			n Trucks:	4.000	0 , 4 ,		0.0					
Pad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment:										
Road Elevation:	0.0 feet	=	Lane Equ	uivalent Di	istance (in	feet)							
Road Grade:	0.0%	-	Autos: 93.723										
Left View:	-90.0 degree	es	Mediur	n Trucks:	93.680								
Right View:	90.0 degree		Heav	y Trucks:	93.723								
FHWA Noise Model Calculation	ne												
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten					
Autos: 70.2		-4.2		-1.20	-4.87		000	0.000					
Medium Trucks: 81.0	0 -14.08	-4.1	19	-1.20	-4.97	0.0	000	0.000					
Heavy Trucks: 85.3	8 -18.04	-4.2	20	-1.20	-5.16	0.0	000	0.000					
Unmitigated Noise Levels (with	hout Topo and	barrier atte	nuation)										
VehicleType Leq Peak H			vening	Leq Nig	ght	Ldn	CI	VEL					
Autos: 6	88.0	66.1	64.3	<u> </u>	58.2	66.9	9	67.5					
Medium Trucks: 6	61.5	60.0	53.7		52.1	60.6	6	60.8					
Heavy Trucks:	61.9	60.5	51.5		52.7	61.1	1	61.2					
Vehicle Noise:	69.7	67.9	64.9		60.1	68.6	5	69.1					

70 dBA

81

87

Ldn:

CNEL:

65 dBA

174

187

60 dBA

376

404

55 dBA

809

870

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Cond	ditions ((Hard = '	10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	35,800 vehic	cles				A	utos:	15			
Peak Hour	Percentage:	10%			Med	lium Tru	icks (2 A	xles):	15			
Peak H	lour Volume:	3,580 vehic	cles		Hea	vy Truc	ks (3+ A	xles):	15			
Ve	hicle Speed:	50 mph		V	ehicle N	liy						
Near/Far La	ne Distance:	70 feet				cleType		Day	Evening	Night	Daily	
Site Data								77.5%	•		97.42%	
Ra	rrier Height:	0.0 fee	•		Me	dium Tr	ucks: 8	34.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0	•		Н	eavy Tr	ucks: 8	36.5%	2.7%	10.8%	0.74%	
Centerline Di	,	100.0 feet			O-	- /		/: £	4)			
Centerline Dist.	to Observer:	100.0 feet	•	N	oise so		evations	•	eet)			
Barrier Distance	to Observer:	0.0 feet				Autos	_					
Observer Height ((Above Pad):	5.0 feet			Mediun		_		Orodo Ad			
	ad Elevation:	0.0 feet			Heavy	/ Trucks	8: 8.0	06	Grade Ad	usimeni	. 0.0	
Roa	ad Elevation:	0.0 feet		L	ane Equ	iivalent	Distanc	e (in	feet)			
	Road Grade:	0.0%				Autos	s: 93.7	23				
	Left View:	-90.0 deg	rees		Medium	n Trucks	s: 93.6	80				
	Right View:	90.0 deg	rees		Heavy	/ Trucks	s: 93.7	23				
FHWA Noise Mod	el Calculation	าร										
VehicleType	REMEL	Traffic Flov	v Di	istance	Finite I	Road	Fresne	e/	Barrier Att	en Ber	m Atten	
Autos:	70.20	3.	13	-4.20		-1.20	-	4.87	0.0	000	0.000	
Medium Trucks:	81.00	-14.	11	-4.19		-1.20	-	4.97	0.0	000	0.000	
Heavy Trucks:	85.38	-18.0	06	-4.20		-1.20	-	5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	hout Topo ai	nd barr	ier attenu	ation)							
VehicleType	Leq Peak Ho	ur Leq E	Day	Leq Ev	ening	Leq I	Vight		Ldn	C	NEL	
Autos:	67	7.9	66.0		64.3		58.2		66.8	3	67.4	
Medium Trucks:	6	1.5	60.0		53.6		52.1		60.5	5	60.8	
Heavy Trucks:	6	1.9	60.5		51.5		52.7		61.1		61.2	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	81	174	374	806
CNEL:	87	187	402	866

64.8

60.1

68.6

69.1

67.9

Vehicle Noise:

69.6

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DA	TA							
Highway Data				S	Site Cond	ditions (H	ard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	41,000 ve	hicles				Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Truck	s (2 Axles):	15		
Peak H	lour Volume:	4,100 ve	hicles		Hea	avy Trucks	(3+ Axles):	15		
Ve	hicle Speed:	55 m	ph	V	ehicle N	/lix				
Near/Far La	ne Distance:	88 fe	et	-		cleType	Day	Evening	Night	Daily
Site Data						Aut	•	_	9.6%	97.42%
Ra	rrier Height:	0.0 fe	oot		Me	dium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0	CCI		Н	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 fe	eet		<i> </i>		- ('- · · ·	4)		
Centerline Dist.		100.0 fe		^	ioise So		ations (in f	eet)		
Barrier Distance		0.0 fe				Autos:	2.000			
Observer Height	(Above Pad):	5.0 fe				n Trucks:	4.000	0 - 4 - 4 - 4		0.0
	ad Elevation:	0.0 fe			Heav	y Trucks:	8.006	Grade Adj	ustment:	0.0
	ad Elevation:	0.0 fe		L	ane Equ	ıivalent D	istance (in	feet)		
	Road Grade:	0.0%				Autos:	89.850			
	Left View:	-90.0 d			Mediun	n Trucks:	89.805			
	Right View:		legrees		Heav	y Trucks:	89.850			
FHWA Noise Mod	el Calculatio	ns								
VehicleType	REMEL	Traffic F	low D	istance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	71.78	3	3.31	-3.92		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40) -1	3.93	-3.92		-1.20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks:	86.40	0 -1	7.89	-3.92		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (wit	hout Topo	and barr	ier attenu	uation)					
VehicleType	Leq Peak Ho	our Lea	q Day	Leq Ev	ening	Leq Nig	ght	Ldn	CI	VEL
Autos:	7	0.0	68.1		66.3		60.2	68.9)	69.5
Medium Trucks:	6	3.4	61.8		55.5		53.9	62.4	ļ.	62.6
Heavy Trucks:	6	3.4	62.0		52.9		54.2	62.5	5	62.7
Vehicle Noise:	7	1.5	69.8		66.8		62.0	70.5	5	71.0

70 dBA

108

116

Ldn:

CNEL:

65 dBA

233

250

60 dBA

502

540

55 dBA

1,081

1,163

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: n/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPE	CIFIC IN	PUT DATA				N	IOISE	E MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)						
Average Daily Trafi	fic (Adt): 3	9,000 vehicle	s					Autos:	15						
Peak Hour Perd	. ,	10%			Me	dium Tru	ucks (2	Axles):	15						
Peak Hour	Volume:	3,900 vehicle	S		He	avy Truc	cks (3+	Axles):	15						
Vehicle	Speed:	55 mph		1	'ehicle l	Miv									
Near/Far Lane D	istance:	88 feet				icleType		Day	Evening	Night	Daily				
Site Data					Vern		Autos:	77.5%		9.6%	-				
					1/1	ر edium Tı		84.8%		10.3%	1.84%				
	Height:	0.0 feet				deavy Tr		86.5%		10.8%	0.74%				
Barrier Type (0-Wall, 1	,	0.0			,	icavy 11	ucno.	00.070	2.1 /0	10.070	0.7 4 70				
Centerline Dist. to		100.0 feet		٨	loise Sc	ource El	evatio	ns (in fe	eet)						
Centerline Dist. to O		100.0 feet				Autos	s: 2	.000							
Barrier Distance to O		0.0 feet			Mediui	n Trucks	s: 4	.000							
Observer Height (Abo		5.0 feet			Heav	y Trucks	s: 8	.006	Grade Adj	iustment:	0.0				
	levation:	0.0 feet					· Diata	(4)							
	levation:	0.0 feet		L	Lane Equivalent Distance (in feet)										
	d Grade:	0.0%			Autos: 89.850 Medium Trucks: 89.805										
	eft View:	-90.0 degre													
Rig	ıht View:	90.0 degre	es		Heav	y Trucks	s: 89	0.850							
FHWA Noise Model Ca	alculations	5													
VehicleType R	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten				
Autos:	71.78	3.09		-3.92		-1.20		-4.87	0.0	000	0.000				
Medium Trucks:	82.40	-14.15		-3.92		-1.20		-4.97	0.0	000	0.000				
Heavy Trucks:	86.40	-18.11		-3.92		-1.20		-5.16	0.0	000	0.000				
Unmitigated Noise Le	vels (with	out Topo and	barrie	r attenu	ıation)										
VehicleType Leq	Peak Hou	r Leq Day	′	Leq Ev	ening	Leq	Night		Ldn	CI	VEL				
Autos:	69.	7	67.8		66.1		60	.0	68.6	6	69.3				
Medium Trucks:	63.	1	61.6		55.3		53	.7	62.2	2	62.4				
Heavy Trucks:	63.	2	61.7		52.7		54.	.0	62.3	3	62.4				
Vehicle Noise:	71.	3	69.6		66.6		61	.7	70.3	3	70.8				
Centerline Distance to	Noise Co	ntour (in feet)												

70 dBA

105

112

Ldn: CNEL: 65 dBA

225

242

60 dBA

485

522

55 dBA

1,045

1,124

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	ATA	NOISE MODEL INPUTS								
Highway Data					Si	ite Con	ditions (Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	40,000 v	vehicles	i					Autos:	15		
Peak Hour	Percentage:	10%	, D			Med	dium Tru	cks (2	Axles):	15		
Peak H	lour Volume:	4,000 \	vehicles			Hea	avy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	55 ı	mph		Ve	ehicle I	Mix					
Near/Far La	ne Distance:	88 f	eet				cleType		Day	Evening	Night	Daily
Site Data								utos:	77.5%	-	9.6%	-
Ra	rrier Height:	0.0	feet			Ме	edium Tru	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	icci			F	leavy Tru	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0	feet			- ' O-		<i>1</i> •	· · · · · · · · · · · · · · · · · · ·	4)		
Centerline Dist.		100.0			N	oise So	urce Ele			eet)		
Barrier Distance			feet				Autos		.000			
Observer Height			feet				n Trucks		.000			
•	ad Elevation:		feet			Heav	y Trucks	: 8	.006	Grade Ad	<i>justment</i>	: 0.0
	ad Elevation:		feet		Lá	ane Eal	uivalent	Distai	nce (in i	feet)		
	Road Grade:	0.09					Autos		0.850			
	Left View:		degree	c		Mediur	n Trucks		0.805			
	Right View:		degree				y Trucks).850			
	ragin view.	30.0	degree	3		77007	y Traono	. 00				
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic	Flow	Distance	,	Finite	Road	Fres	nel	Barrier Att	ten Ber	m Atten
Autos:	71.78		3.20	-3	.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	•	-14.04	-3	.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40		-18.00	-3	.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	o and b	parrier atte	enua	ation)						
VehicleType	Leq Peak Hou	ır L	eq Day	Leq	Eve	ening	Leq N	Vight		Ldn	C	NEL
Autos:	69	.9	6	8.0		66.2	-	60	.1	68.8	8	69.4
Medium Trucks:	63	.2	6	31.7		55.4		53	.8	62.3	3	62.5
Heavy Trucks:	63	.3	6	61.9		52.8		54	.1	62.4	4	62.6
Vehicle Noise:	71	.4	6	9.7		66.7		61	.8	70.4	4	70.9
Contorlino Distan	co to Noiso C	ontour (in foot)									

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	106	229	493	1,063
CNEL:	114	246	531	1,144

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: n/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS									
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	31,000 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tri	ucks (2	Axles):	15		
Peak H	Hour Volume:	3,100 vehicle	es		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		V	ehicle l	Mix					
Near/Far La	ane Distance:	88 feet				cleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	•	9.6%	-
Ra	rrier Height:	0.0 feet			Ме	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0			F	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		A.	loine Ca	uroo El	lovotio	no (in f	2041		
Centerline Dist.	to Observer:	100.0 feet		/4	orse sc	urce El		•	et)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height		5.0 feet				n Truck		.000			
_	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	justment.	0.0
	ad Elevation:	0.0 feet		Lá	ane Eq	uivalent	t Distar	nce (in i	feet)		
	Road Grade:	0.0%				Auto		0.850			
	Left View:	-90.0 degre	200		Mediur	n Truck		0.805			
	Right View:	90.0 degre				y Truck		0.850			
	rugine view.	00.0 009.0	.00			,					
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distanc	e	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	_	3 2.09	-3	3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.15	-3	3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.10	-(3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier at	tenu	ation)						
VehicleType	Leq Peak Ho	our Leq Da	y Led	g Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	68	8.8	66.9		65.1		59.	.0	67.7	7	68.3
Medium Trucks:	62	2.1	60.6		54.3		52.	.7	61.2	2	61.4
Heavy Trucks:	62	2.2	60.8		51.7		53	.0	61.3	3	61.4
Vehicle Noise:	70	0.3	68.6		65.6		60	.7	69.3	3	69.8

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	90	193	416	897
CNEL:	96	208	448	965

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: n/o Rockfield Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT D	ATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (H	ard = 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	47,000	vehicles				Autos:	15		
Peak Hour Percentage	10%	6		Me	dium Truck	ks (2 Axles):	15		
Peak Hour Volume	4,700	vehicles		He	avy Trucks	(3+ Axles):	15		
Vehicle Speed	55	mph		Vehicle I	Mix				
Near/Far Lane Distance	88	feet			icleType	Day	Evening	Night	Daily
Site Data					Aut			9.6%	97.42%
Barrier Height	. 00	feet		Ме	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)				F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier									
Centerline Dist. to Observer				Noise So		ations (in f	eet)		
Barrier Distance to Observer		feet			Autos:	2.000			
Observer Height (Above Pad)		feet			n Trucks:	4.000			
Pad Elevation		feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Road Elevation		feet		Lane Eg	uivalent D	istance (in	feet)		
Road Grade					Autos:	89.850	,		
Left View		degrees	3	Mediui	n Trucks:	89.805			
Right View		degrees			y Trucks:	89.850			
		g							
FHWA Noise Model Calculation									
VehicleType REMEL	Traffic		Distance	Finite			Barrier Att		m Atten
Autos: 71.	78	3.90	-3.9)2	-1.20	<i>-4.87</i>	0.0	000	0.000
Medium Trucks: 82.	10	-13.34	-3.9)2	-1.20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks: 86.	10	-17.30	-3.9)2	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	thout Top	oo and b	arrier atter	nuation)					
VehicleType Leq Peak F	lour L	eq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL
Autos:	70.6	6	8.7	66.9		60.8	69.5	5	70.1
Medium Trucks:	63.9	6	2.4	56.1		54.5	63.0)	63.2
Heavy Trucks:	64.0	6	2.6	53.5		54.8	63.1	1	63.3
Vehicle Noise:	72.1	7	0.4	67.4		62.5	71.′	1	71.6

70 dBA

118

127

Ldn:

CNEL:

65 dBA

255

274

60 dBA

549

591

55 dBA

1,184

1,273

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: b/w Rockfield Bl. and I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT I	DATA		NOISE MODEL INPUTS							
Highway Data					S	ite Con	ditions (H	lard = 1	0, Sc	oft = 15)		
Average Daily	Traffic (Adt):	76,000	vehicles	S				Αι	ıtos:	15		
	r Percentage:	109				Me	dium Truci	ks (2 Ax	les):	15		
Peak I	Hour Volume:	7,600	vehicles	5		He	avy Trucks	s (3+ Ax	les):	15		
Ve	ehicle Speed:	55	mph		V	ehicle l	Mix					
Near/Far La	ane Distance:	88	feet				icleType	D	ay	Evening	Night	Daily
Site Data									7.5%		9.6%	_
Rs	nrrier Height:	0.0) feet			Me	edium Truc	cks: 8	4.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0				ŀ	Heavy Truc	cks: 80	6.5%	2.7%	10.8%	0.74%
	ist. to Barrier:) feet			• •			<i>/</i> · ·			
Centerline Dist.) feet		N	oise Sc	ource Elev			eet)		
Barrier Distance) feet				Autos:	2.00				
Observer Height) feet				n Trucks:	4.00				
_	Pad Elevation:					Heav	y Trucks:	8.00	6	Grade Ad	iustment	: 0.0
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet				Li	ane Ea	uivalent D	istance	(in	feet)			
710	Road Grade:	0.0				•	Autos:	89.85	•	,		
	Left View:) degree	26		Mediui	n Trucks:	89.80				
	Right View:) degree				y Trucks:	89.85				
	ragne view.	50.0	degree			77047	y Traction	00.00				
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic	Flow	Distar	nce	Finite	Road	Fresne	'	Barrier Att	en Bei	m Atten
Autos	71.78	3	5.99		-3.92		-1.20	-4	1.87	0.0	000	0.000
Medium Trucks:	82.40)	-11.25		-3.92		-1.20	-4	1.97	0.0	000	0.000
Heavy Trucks:	86.40)	-15.21		-3.92		-1.20	-5	5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout To	po and	barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	ur I	Leq Day	L	eq Eve	ening	Leq Ni	ght		Ldn	C	NEL
Autos:	7:	2.6		70.7		69.0		62.9		71.5	5	72.2
Medium Trucks:	6	6.0	(64.5		58.2		56.6		65.1	I	65.3
Heavy Trucks:	6	6.1		64.6		55.6		56.9		65.2	2	65.3
Vehicle Noise:	7-	4.2		72.5		69.5		64.6		73.2	2	73.7

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	163	351	757	1,631
CNEL:	175	378	814	1,754

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Avenida Carlota/I-5 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS					
Highway Data				Sit	e Conditions (F	dard = 10, So	oft = 15)		
Average Daily	Traffic (Adt):	22,700 vehicle	es			Autos:	15		
= -	Percentage:	10%			Medium Truc	ks (2 Axles):	15		
Peak H	lour Volume:	2,270 vehicle	es		Heavy Truck	s (3+ Axles):	15		
Ve	hicle Speed:	60 mph		Ve	hicle Mix				
Near/Far La	ne Distance:	76 feet			VehicleType	Day	Evening	Night	Daily
Site Data					Au	itos: 77.5%		9.6%	
Ba	rrier Height:	0.0 feet			Medium Tru	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			Heavy Tru	cks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet		No	ise Source Ele	votione (in f	0041		
Centerline Dist.	to Observer:	100.0 feet		NO		•	eet)		
Barrier Distance	to Observer:	0.0 feet		١,	Autos:				
Observer Height (Above Pad):	5.0 feet		/	Medium Trucks:		Cup do Ad		0.0
•	ad Elevation:	0.0 feet			Heavy Trucks:	8.006	Grade Adj	ustment:	0.0
Ros	ad Elevation:	0.0 feet		Lai	ne Equivalent L	Distance (in	feet)		
	Road Grade:	0.0%			Autos:	92.547			
	Left View:	-90.0 degre	es	1	Medium Trucks:	92.504			
	Right View:	90.0 degre			Heavy Trucks:	92.547			
FHWA Noise Mod	el Calculatio	ns							
VehicleType	REMEL	Traffic Flow	Distanc	е	Finite Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.36	-	4.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.88	-	4.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.83	-	4.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo and	l barrier at	tenua	tion)				
VehicleType	Leq Peak Ho	our Leq Da	y Le	q Ever	ning Leq N	ight	Ldn	CI	VEL
Autos:	6	8.3	66.4		64.6	58.5	67.2	2	67.8
Medium Trucks:	6	1.5	60.0		53.6	52.1	60.5	j	60.8
Heavy Trucks:	6	1.2	59.8		50.7	52.0	60.3	3	60.5
Vehicle Noise:	6	9.7	68.0		65.1	60.1	68.7	,	69.2

70 dBA

82

88

Ldn:

CNEL:

65 dBA

177

190

60 dBA

380

410

55 dBA

820

883

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: Lake Forest Dr. Job Number: 8141 Road Segment: s/o ICD Analyst: B. Lawson

SITE S	PECIFIC IN	PUT DATA					NOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily T	raffic (Adt): 1	2,500 vehicles	3					Autos:	15		
Peak Hour F	Percentage:	10%			Me	dium Ti	rucks (2	Axles):	15		
Peak Ho	our Volume:	1,250 vehicles	3		He	avy Tru	icks (3+	Axles):	15		
Veh	icle Speed:	60 mph		,	/ehicle l	Miv					
Near/Far Land	e Distance:	76 feet				icleTyp	e	Day	Evening	Night	Daily
Site Data					V 011		Autos:	77.5%	J	•	97.42%
	ior Hoimbt.	0.0 foot			Me	edium 7		84.8%		10.3%	1.84%
	rier Height:	0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%
Barrier Type (0-Wa Centerline Dist		0.0 100.0 feet									011 170
Centerline Dist. to		100.0 feet		^	Voise So	ource E	levatio	ns (in fe	et)		
Barrier Distance to		0.0 feet				Auto	os: 2	2.000			
Observer Height (A		5.0 feet			Mediui	n Truck	ks: 4	1.000			
- ,	d Elevation:	0.0 feet			Heav	y Truck	ks: 8	3.006	Grade Ad	justment:	0.0
	d Elevation:	0.0 feet		,	Lane Eq	uivalen	t Dista	nce (in t	eet)		
	oad Grade:	0.0 feet 0.0%		_	zano zq	Auto		2.547	001)		
N	Left View:	-90.0 degree	20		Mediu	n Truck		2.504			
	Right View:	90.0 degree				y Truck		2.547			
•	ragin view.	90.0 degree	53		Hoav	y Traor	10. 02	0-17			
FHWA Noise Model	l Calculations	;		 							
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	-2.23		-4.11]	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-19.47		-4.11	l	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-23.43		-4.11	I	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (witho	out Topo and	barri	er atteni	uation)						
	Leq Peak Houi			Leg Ev		Leg	Night		Ldn	CI	VEL
Autos:	65.	7 (63.8	· · · · · · · · · · · · · · · · · · ·	62.0		56	.0	64.6	6	65.2
Medium Trucks:	58.	9	57.4		51.0		49	.5	58.0)	58.2
Heavy Trucks:	58.	6	57.2		48.1		49	.4	57.7	7	57.9
Vehicle Noise:	67.	2	65.4		62.5		57	.6	66.′	1	66.6
Centerline Distance	e to Noise Co	ntour (in feet))								
				70 a	IBA	65	dBA	6	0 dBA	55	dBA

55

59

Ldn:

CNEL:

119

128

256

275

551

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: b/w Scientific Way and Tesla

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	d = 10, So	oft = 15)		
Average Daily Traffic (Adt):	21,600 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks ((2 Axles):	15		
Peak Hour Volume:	2,160 vehicles	S	He	avy Trucks (3	3+ Axles):	15		
Vehicle Speed:	60 mph		Vehicle	Mix				
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data			Veri	Autos		J	9.6%	-
				Autos. edium Trucks			10.3%	1.84%
Barrier Height:				J aium Trucks. J eavy Trucks.			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm):			'	leavy Trucks.	. 00.576	2.1 /0	10.076	0.7476
Centerline Dist. to Barrier:			Noise So	ource Elevati	ons (in fe	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:			Mediui	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:			Lano Ea	uivalent Dist	anco (in	footl		
Road Elevation:			Lane Ly		92.547	ieel)		
Road Grade:			Modiu		92.54 <i>1</i> 92.504			
Left View:	3 -				92.504 92.547			
Right View:	90.0 degree	es	пеач	y Trucks.	92.547			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fro	esnel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 0.14	-4	.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	8 -17.09	-4	.11	-1.20	<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks: 87.3	3 -21.05	-4	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	88.1	66.2	64.4	5	8.3	67.0)	67.6
Medium Trucks:	61.3	59.8	53.4	5	1.9	60.3	3	60.6
Heavy Trucks:	61.0	59.5	50.5	5	1.8	60.1	1	60.2
Vehicle Noise:	69.5	67.8	64.9	5	9.9	68.5	5	69.0
Centerline Distance to Noise	Contour (in feet)						

70 dBA

79

85

Ldn:

CNEL:

65 dBA

171

184

60 dBA

368

396

55 dBA

793

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: e/o Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA				ı	NOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	23,500 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	2,350 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		1	/ehicle l	Mix					
Near/Far La	ne Distance:	76 feet				icleTyp	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	J	•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			F	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	,	100.0 feet			Noise So	ourco E	lovatio	ns (in fo	not)		
Centerline Dist.	to Observer:	100.0 feet		<u>'</u>	VOISE SC	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auic m Truck		1.000			
Observer Height	(Above Pad):	5.0 feet					_		Crada Ad	iuotmont	0.0
•	ad Elevation:	0.0 feet			неач	y Truck	(S. E	3.006	Grade Ad	justinent.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediui	m Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.51		-4.11	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.73		-4.11	l	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.68		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hou	ur Leq Day	/	Leq Ev	ening/	Leq	Night		Ldn	CI	VEL
Autos:	68	3.4	66.5		64.8		58	.7	67.3	3	67.9
Medium Trucks:	61	1.6	60.1		53.8		52	.2	60.7	7	60.9
Heavy Trucks:	61	1.3	59.9		50.9		52	.1	60.5	5	60.6
Vehicle Noise:	69	9.9	68.1		65.2		60	.3	68.9	9	69.3
Centerline Distan	ce to Noise C	ontour (in feet)								
				70 a	<i>IBA</i>	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

84

90

181

195

389

419

839

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: w/o Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

Highway Data Average Daily Traffic (Adt): 22,300 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,230 vehicles		Site Con	ditions (Hard	= 10, Sc	of $t = 15$)		
Peak Hour Percentage: 10%							
Peak Hour Percentage: 10%				Autos:	15		
Peak Hour Volume: 2,230 vehicles		Ме	dium Trucks (2	2 Axles):	15		
		He	avy Trucks (3	+ Axles):	15		
Vehicle Speed: 55 mph		Vehicle I	Miv				
Near/Far Lane Distance: 52 feet			icleType	Day	Evening	Night	Daily
Site Data		V 0111	Autos:	77.5%		9.6%	97.42%
		Me	edium Trucks:	84.8%		10.3%	1.84%
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0			leavy Trucks:	86.5%		10.8%	0.74%
Centerline Dist. to Barrier: 100.0 feet						. 0.070	
Centerline Dist. to Observer: 100.0 feet		Noise So	ource Elevation		eet)		
Barrier Distance to Observer: 0.0 feet				2.000			
Observer Height (Above Pad): 5.0 feet		Mediui	m Trucks:	4.000			
Pad Elevation: 0.0 feet		Heav	y Trucks:	8.006	Grade Adj	ustment:	0.0
Road Elevation: 0.0 feet		Lane Equivalent Distance (in feet)					
Road Grade: 0.0%				6.607	,		
Left View: -90.0 degrees		Mediui		6.566			
Right View: 90.0 degrees			-	6.608			
FHWA Noise Model Calculations							
VehicleType REMEL Traffic Flow	Distance	Finite		snel	Barrier Atte		m Atten
Autos: 71.78 0.66	-4.3	-	-1.20	<i>-4.</i> 87	0.0		0.000
Medium Trucks: 82.40 -16.58	-4.3	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.40 -20.53	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (without Topo and ba	arrier atte	nuation)					
VehicleType Leq Peak Hour Leq Day	Leq E	Evening	Leq Night		Ldn	CI	VEL
Autos: 66.8 64	4.9	63.2	5	7.1	65.8	3	66.4
Medium Trucks: 60.2 58	3.7	52.4 50.8 59.3		3	59.5		
Heavy Trucks: 60.3 58	3.8	49.8 51.1		1.1	59.4	ļ	59.5
Vehicle Noise: 68.4 66	6.7	63.7	55	3.8	67.4		67.9
Centerline Distance to Noise Contour (in feet)							

70 dBA

67

72

Ldn:

CNEL:

65 dBA

144

155

60 dBA

311

334

55 dBA

670

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS						
Highway Data				Site Con	ditions (H	lard = 10, S	oft = 15)			
Average Daily	Traffic (Adt):	22,600 vehicle	S			Autos:	15			
Peak Hour	Percentage:	10%		Me	dium Truc	ks (2 Axles).	15			
Peak H	lour Volume:	2,260 vehicle	S	He	avy Truck	s (3+ Axles).	15			
Ve	ehicle Speed:	50 mph		Vehicle I	Miy					
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily	
Site Data						tos: 77.5%	_	9.6%	97.42%	
	vviov Hoimbt.	0.0 foot		Me	edium Trud			10.3%	1.84%	
	rrier Height:	0.0 feet 0.0			leavy Truc			10.8%	0.74%	
Barrier Type (0-W Centerline Di	,	0.0 100.0 feet								
Centerline Di		100.0 feet		Noise So	ource Elev	ations (in f	eet)			
		0.0 feet			Autos:	2.000				
Barrier Distance				Mediui	n Trucks:	4.000				
Observer Height	(Above Pad): ad Elevation:	5.0 feet 0.0 feet		Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0	
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)						
	Road Grade:	0.0 feet 0.0%		Lano Lq	Autos:	93.723	10019			
	Left View:			Modiu	n Trucks:	93.680				
		-90.0 degre			y Trucks:	93.723				
	Right View:	90.0 degre	es	Tieav	y Trucks.	90.720				
FHWA Noise Mod	lel Calculation	ns		1						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos:	70.20	1.13	-4.	20	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	81.00	-16.11	-4.	19	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	85.38	-20.06	-4.	20	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	enuation)						
VehicleType	Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq Ni	ight	Ldn	CI	VEL	
Autos:	6	5.9	64.0	62.3		56.2	64.8	3	65.4	
Medium Trucks:	5	9.5	58.0	51.6		50.1	58.5		58.8	
Heavy Trucks:	5	9.9	58.5	49.5		50.7	59.1		59.2	

Vehicle Noise:	67.6 65	5.9 62.	8 58	3.1 66.	6 67.1
Centerline Distance to	Noise Contour (in feet)				
		70 dBA	65 dBA	60 dBA	55 dBA
	La	dn: 59	128	275	593
	CNE	EL: 64	137	296	638

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: s/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS						
Highway Data				Site Co	nditions ((Hard = 10), So	ft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	28,100 vehicle 10% 2,810 vehicle				Au icks (2 Axi iks (3+ Axi	,	15 15 15		
	ehicle Speed: ane Distance:	55 mph 88 feet		Vehicle Vei	hicleType		ay 7.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0			Aedium Tr Heavy Tr	rucks: 84	.5% 1.8% 3.5%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height F	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 90.0 degre		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 89.850 Medium Trucks: 89.805 Heavy Trucks: 89.850						0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	71.78 82.40	Traffic Flow 1.66 1.57	' -3	e Finite 3.92 3.92 3.92	-1.20 -1.20 -1.20	-4	.87 .97	0.0	en Ber 000 000	<i>m Atten</i> 0.000 0.000 0.000
Unmitigated Nois VehicleType	Leq Peak Ho	our Leq Da	y Leq	Evening	Leq I	Night		Ldn		VEL
Autos: Medium Trucks: Heavy Trucks:	6	8.3 1.7 1.7	66.4 60.2 60.3	64.7 53.8 51.3	3 3	58.6 52.3 52.5		67.2 60.8 60.9	3 9	67.8 61.0 61.0
Vehicle Noise:	69	9.9	68.1	65.2	2	60.3		68.9	9	69.3

Centerline Distance to Noise Contour (in feet)	Interline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 84 181 390 840									
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	84	181	390	840						
CNEL:	90	195	419	904						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: e/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			N	IOISE	MODE	L INPUT	S	
Highway Data				Site C	onditions	(Hard =	= 10, Sc	oft = 15)		
Peak Hour	Percentage:	41,000 vehicle 10%			Medium Tru Heavy Trud	•	,			
	lour Volume: hicle Speed: ne Distance:	4,100 vehicle 55 mph 88 feet	S	Vehic		`	Day	Evening	Night	Daily
Site Data						Autos:	77.5%	_	9.6%	
Bairier Type (0-W Centerline Dis Centerline Dist. Barrier Distance Observer Height (Barrier Height: 0.0 feet type (0-Wall, 1-Berm): 0.0 terline Dist. to Barrier: 100.0 feet line Dist. to Observer: 100.0 feet Distance to Observer: 0.0 feet Theight (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Medium Tr Heavy Tr Source El Autos dium Trucks eavy Trucks Equivalent Autos dium Trucks	rucks: levation s: 2 s: 4 s: 8 t Distar s: 89 s: 89	.000 .000 .006	eet) Grade Ad	10.3% 10.8% justment:	1.84% 0.74%
FHWA Noise Mode	el Calculation	18								
VehicleType	REMEL	Traffic Flow	Distanc	e Fin	ite Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	3.31	-3	3.92	-1.20		-4.87	0.0	000	0.000
Medium Trucks: Heavy Trucks:	82.40 86.40			3.92 3.92	-1.20 -1.20		-4.97 -5.16		000	0.000
Unmitigated Noise	e Levels (with	nout Topo and	barrier att	enuatio	1)					
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq	Evening	Leq	Night		Ldn	CI	VEL
Autos:			68.1	66		60.		68.9		69.5
Medium Trucks:			61.8	55		53.		62.4		62.6
Heavy Trucks:	60	3.4	62.0	52	2.9	54.	2	62.5	5	62.7
Vehicle Noise:	7	1.5	69.8	66	5.8	62.	0	70.5	5	71.0

70 dBA

108

116

Ldn:

CNEL:

65 dBA

233

250

60 dBA

502

540

55 dBA

1,081

1,163

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl. Job Number: 8141 Road Segment: w/o Muirlands Bl. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			N	OISE N	IODE	L INPUT	S	
Highway Data				Site Con	ditions (Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	36,000 vehicle	S			A	lutos:	15		
Peak Hour	Percentage:	10%		Me	dium Tru	cks (2 A	xles):	15		
Peak H	Hour Volume:	3,600 vehicle	S	He	avy Truci	ks (3+ A	xles):	15		
Ve	ehicle Speed:	50 mph		Vehicle	Miv					
Near/Far La	ne Distance:	70 feet			icleType		Day	Evening	Night	Daily
Site Data				V 0//			77.5%		•	97.42%
	wiew Heierbt.	0.0 foot		M	edium Tru		34.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 feet 0.0			Heavy Tru		36.5%		10.8%	0.74%
Centerline Di	•	100.0 feet								
Centerline Dist.		100.0 feet		Noise So	ource Ele	evations	(in fe	eet)		
Barrier Distance		0.0 feet			Autos	: 2.0	00			
				Mediu	m Trucks	: 4.0	00			
Observer Height	(Above Pad): ad Elevation:	5.0 feet		Heav	y Trucks	: 8.0	06	Grade Adj	iustment.	0.0
	ad Elevation: ad Elevation:	0.0 feet 0.0 feet		I ane Fo	uivalent	Distanc	e (in	feet)		
	Road Grade:	0.0 Teet 0.0%		Lanc Lq	Autos			1001)		
				Modiu	Autos. m Trucks		_			
	Left View:	-90.0 degre								
	Right View:	90.0 degre	es	Heav	y Trucks	: 93.7	23			
FHWA Noise Mod	lel Calculation	าร								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos:	70.20	3.15	-4.	20	-1.20		4.87	0.0	000	0.000
Medium Trucks:	81.00	-14.08	-4.	19	-1.20		4.97	0.0	000	0.000
Heavy Trucks:	85.38	-18.04	-4.	20	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)						
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq	Evening	Leq N	light		Ldn	CI	VEL
Autos:	68	3.0	66.1	64.3		58.2		66.9)	67.5
Medium Trucks:	6′	1.5	60.0	53.7		52.1		60.6	6	60.8

Ommagatou more	0 201010 (11111100	it rope and ban	ior accorraacion,			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	68.0	66.1	64.3	58.2	66.9	67.5
Medium Trucks:	61.5	60.0	53.7	52.1	60.6	60.8
Heavy Trucks:	61.9	60.5	51.5	52.7	61.1	61.2
Vehicle Noise:	69.7	67.9	64.9	60.1	68.6	69.1

Centerline Distance to Noise Contour (in feet)	70 dBA 65 dBA 60 dBA 55 dBA Ldn: 81 174 376 809									
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	81	174	376	809						
CNEL:	87	187	404	870						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: s/o Rockfield Bl./Fordview St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS					L INPUT	S	
Highway Data				3	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	31,000 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tri	ucks (2	2 Axles):	15		
Peak H	lour Volume:	3,100 vehicle	s		He	avy Trud	cks (3-	+ Axles):	15		
Ve	hicle Speed:	55 mph		1	/ehicle l	Wiy					
Near/Far La	ne Distance:	88 feet		-		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		_	97.42%
Ra	rrier Height:	0.0 feet			Me	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet		_							
Centerline Dist.		100.0 feet		^	Voise So			ons (in f	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height (5.0 feet			Mediui	n Truck	s:	4.000			
	ad Elevation:	0.0 feet			Heav	y Truck	s:	8.006	Grade Ad	justment:	0.0
	ad Elevation: ad Elevation:	0.0 feet		1	ane Eq	uivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto		9.850	,		
•	Left View:	-90.0 degre	00		Mediu	n Truck		9.805			
	Right View:	90.0 degre				y Truck		9.850			
	rugne view.	oo.o dogic	00			<i>y</i>	0. 0	0.000			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	2.09		-3.92	<u> </u>	-1.20		<i>-4.87</i>	0.0	000	0.000
Medium Trucks:	82.40	-15.15		-3.92	<u> </u>	-1.20		<i>-4.97</i>	0.0	000	0.000
Heavy Trucks:	86.40	-19.10		-3.92	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er atteni	uation)						
VehicleType	Leq Peak Hou	ur Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	68	3.8	66.9		65.1		59	9.0	67.7	7	68.3
Medium Trucks:	62	2.1	60.6		54.3		5	2.7	61.2	2	61.4
Heavy Trucks:	62	2.2	60.8		51.7		5	3.0	61.3	3	61.4
Vehicle Noise:	70).3	68.6		65.6		6	0.7	69.3	3	69.8

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	90	193	416	897
CNEL:	96	208	448	965

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: b/w Avenida Carlota and Paseo de Valencia

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS					
Highway Data			Site Con	ditions (Ha	$rd = \overline{10, Sc}$	oft = $\overline{15}$)		
Average Daily Traffic (Adt):	25,100 vehicle	s			Autos:	15		
Peak Hour Percentage:			Med	dium Trucks	s (2 Axles):	15		
Peak Hour Volume:	2,510 vehicle	s	Hea	avy Trucks	(3+ <i>Axles</i>):	15		
Vehicle Speed:	55 mph		Vehicle I	/lix				
Near/Far Lane Distance:	88 feet			cleType	Day	Evening	Night	Daily
Site Data				Auto		_	9.6%	
Barrier Height:	0.0 feet		Ме	dium Truck	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			H	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:			M-1 0-	=1		4)		
Centerline Dist. to Observer:		-	Noise So	urce Eleva	•	eet)		
Barrier Distance to Observer:				Autos:	2.000			
Observer Height (Above Pad):				n Trucks:	4.000			
Pad Elevation:			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Road Elevation:			Lane Equ	ivalent Dis	stance (in	feet)		
Road Grade:			-	Autos:	89.850	•		
Left View:		es	Mediun	n Trucks:	89.805			
Right View:				y Trucks:	89.850			
FHWA Noise Model Calculation VehicleType REMEL	Traffic Flow	Distance	Finite	Dood F	resnel	Barrier Att	on Pon	m Atten
VehicleType REMEL Autos: 71.7				-1.20	-4.87		000	0.000
Medium Trucks: 82.4	_			-1.20 -1.20	-4.87 -4.97		000	0.000
Heavy Trucks: 86.4				-1.20 -1.20	-4.97 -5.16		000	0.000
-				1.20	0.70	0.0		0.000
Unmitigated Noise Levels (wi								·
VehicleType Leq Peak H	, ,		vening	Leq Nigl		Ldn		VEL 07.0
		65.9	64.2		58.1	66.7		67.3
		59.7	53.4		51.8	60.3		60.5
		59.8	50.8		52.0	60.4		60.5
Vehicle Noise:	69.4	67.6	64.7		59.8	68.4	4	68.9

70 dBA

78

84

Ldn:

CNEL:

65 dBA

168

181

60 dBA

362

389

55 dBA 779

838

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: w/o O St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS						
Highway Data				Site Con	ditions (Ha	ord = 10, Sc	oft = 15)			
Peak Hou	Traffic (Adt): Percentage: Hour Volume:	21,000 vehicles 10% 2,100 vehicles			dium Trucks avy Trucks	,				
Ve	ehicle Speed: ane Distance:	55 mph 52 feet		Vehicle I		Day	Evening	Night	Daily	
Site Data					Auto	os: 77.5%	12.9%	9.6%	97.42%	
B a Barrier Type (0-V	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0			edium Truck Heavy Truck			10.3% 10.8%	1.84% 0.74%	
Centerline D Centerline Dist. Barrier Distance		100.0 feet 100.0 feet 0.0 feet		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000						
-	(Above Pad): Pad Elevation: Pad Elevation:	5.0 feet 0.0 feet 0.0 feet		Heav	ry Trucks: uivalent Dis	8.006	Grade Ad	justment:	0.0	
	Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree			Autos: m Trucks: ry Trucks:	96.607 96.566 96.608				
FHWA Noise Mod	lel Calculation	s		I .						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten	
Autos: Medium Trucks: Heavy Trucks:	82.40		-4.: -4.: -4.:	39	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	000 000 000	0.000 0.000 0.000	
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)						
VehicleType	Leq Peak Ho			Evening	Leq Nig	ht	Ldn	CI	VEL	
Autos:	66	5.6	64.7	62.9		56.9	65.5	5	66.1	
Medium Trucks:	60	0.0	58.5	52.1		50.6	59.0)	59.3	
Heavy Trucks:	60).0	58.6	49.6		50.8	59.2	2	59.3	
Vehicle Noise:	68	3.2	66.4	63.4		58.6	67.	1	67.6	

70 dBA

64

69

Ldn:

CNEL:

65 dBA

139

149

60 dBA

299

321

55 dBA

643

692

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: e/o O St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DAT	Α			NOISE	MODE	L INPUT	S	
Highway Data				S	ite Conditio	ons (Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	23,800 vehi	cles				Autos:	15		
Peak Hour	Percentage:	10%			Mediun	n Trucks (2	2 Axles):	15		
Peak H	lour Volume:	2,380 vehi	cles		Heavy	Trucks (3-	+ Axles):	15		
Ve	hicle Speed:	55 mph		V	ehicle Mix					
Near/Far La	ne Distance:	52 feet		•	Vehicle 7	Tvpe	Day	Evening	Night	Daily
Site Data						Autos:	77.5%		9.6%	
	rrier Height:	0.0 fee	4		Mediu	m Trucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0			Heav	y Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 fee	ŀ							
Centerline Dist.		100.0 fee		N	oise Sourc			eet)		
Barrier Distance		0.0 fee					2.000			
Observer Height		5.0 fee			Medium Tr		4.000			
•	ad Elevation:	0.0 fee			Heavy Tr	rucks:	8.006	Grade Ad	iustment:	0.0
	ad Elevation:	0.0 fee		Lane Equivalent Distance (in feet)						
	Road Grade:	0.0 166	L				6.607			
	Left View:	-90.0 deg	rooc		Medium Tr		6.566			
	Right View:	90.0 deg			Heavy Tr		6.608			
	rigiti view.	90.0 deg	jiees		ricavy ii	ucks. 3	0.000			
FHWA Noise Mod	el Calculation	ns								
VehicleType	REMEL	Traffic Flor	N Di	stance	Finite Roa	ad Fre	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3 0.	94	-4.39	-1.	.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.	30	-4.39	-1,	.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.	25	-4.39	-1.	.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo a	nd barri	ier attenu	ation)					
VehicleType	Leq Peak Ho	our Leq E	Day	Leq Eve	ening l	Leq Night		Ldn	CI	VEL
Autos:	6	7.1	65.2		63.5	57	7.4	66.0)	66.6
Medium Trucks:	6	0.5	59.0		52.6	5′	l.1	59.6	6	59.8
Heavy Trucks:	6	0.6	59.1		50.1	5′	1.3	59.7	7	59.8
Vehicle Noise:	6	8.7	66.9		64.0	59	9.1	67.7	7	68.1
Contouling Distan	aa ta Naisa C) t (! f:	41							

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	70	151	325	699
CNEL:	75	162	349	752

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: w/o D St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions ((Hard =	10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	23,100 vehicle 10% 2,310 vehicle				dium Tru avy Truc	icks (2 /	,			
	ehicle Speed: ane Distance:	55 mph 52 feet		V	ehicle I Vehi	cleType	utos:	<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
Barrier Type (0-V	•	0.0 feet 0.0				edium Tro leavy Tro	ucks:	84.8% 86.5%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): lad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre 90.0 degre			Mediur Heav ane Equ Mediur	Autos Trucks y Trucks uivalent Autos n Trucks y Trucks	2. 4. 2. 8. Distanda 96. 96. 96.	000 000 006	Grade Ad	ijustment	: 0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 71.78 82.40	Traffic Flow 0.81 -16.42		<i>ce</i> -4.39 -4.39 -4.39		Road -1.20 -1.20 -1.20	Fresr	-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Nois VehicleType	e Levels (with Leq Peak Ho		1	ttenu eq Eve		Leq N	Vight		Ldn	C	NEL
Autos: Medium Trucks: Heavy Trucks:	60 60).4).4	65.1 58.9 59.0		63.3 52.5 50.0		57.3 51.0 51.2) <u>2</u>	65.9 59.4 59.6	4 6	66.5 59.7 59.7
Vehicle Noise:	68	3.6	66.8		63.9		59.0)	67.5	5	68.0

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	69	148	318	686
CNEL:	74	159	342	738

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: e/o D St.

Job Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions ((Hard =	= 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: our Volume:	20,200 vehicle 10% 2,020 vehicle				dium Tru avy Truc	•	,			
	hicle Speed:	55 mph 52 feet	,,	V	Vehicle Mix VehicleType Day Evening Night L						
Site Data							utos:	77.5%	_	9.6%	
Barrier Type (0-W Centerline Dist Centerline Dist. Barrier Distance Observer Height (Pa	st. to Barrier: to Observer: to Observer:	0.0 feet 0.0 100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 90.0 degree								10.3% 10.8% justment:	1.84% 0.74%
FHWA Noise Mode	el Calculation	1S									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.23		-4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks: Heavy Trucks:	82.40 86.40			-4.39 -4.39		-1.20 -1.20		-4.97 -5.16		000	0.000
Unmitigated Noise	Levels (with	nout Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	y L	eq Eve	ening	Leq I	Vight		Ldn	CI	VEL
Autos:		6.4	64.5		62.8		56.		65.3		65.9
Medium Trucks:		9.8	58.3		51.9		50.		58.9		59.1
Heavy Trucks:	59	9.8	58.4		49.4		50.		59.0)	59.1
Vehicle Noise:	68	8.0	66.2		63.3		58.	.4	67.0)	67.4

70 dBA

63

67

Ldn:

CNEL:

65 dBA

135

145

60 dBA

291

313

55 dBA

627

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy
Road Segment: w/o Great Park Blvd East
Job Number: 8141
Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NO	ISE MODE	L INPUT	S			
Highway Data				Site Con	ditions (H	ard = 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	20,500 vehicle	S			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Truck	s (2 Axles):	15				
Peak H	lour Volume:	2,050 vehicle	S	He	avy Trucks	(3+ Axles):	15				
Ve	hicle Speed:	55 mph		Vehicle I	Mix						
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data					Aut	-	-	9.6%			
Ra	rrier Height:	0.0 feet		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0		ŀ	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Di		100.0 feet		M-1 0		- ('- · ·	4)				
Centerline Dist.		100.0 feet		Noise So		ations (in f	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
Observer Height		5.0 feet			m Trucks:	4.000	0 - 4 - 4 - 4		0.0		
•	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment.	0.0		
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0%		Autos: 96.607							
	Left View:	-90.0 degre	es	Mediui	n Trucks:	96.566					
	Right View:	90.0 degre		Heav	y Trucks:	96.608					
FHWA Noise Mod	el Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	0.30	-4.3	39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-16.94	-4.3	39	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-20.90	-4.3	39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Ho	our Leq Day	/ Leq E	Evening	Leq Nig	ght	Ldn	CI	VEL		
Autos:	60	6.5	64.6	62.8		56.8	65.4	1	66.0		
Medium Trucks:	59	9.9	58.4	52.0		50.5	58.9	9	59.1		
Heavy Trucks:	59	9.9	58.5	49.4		50.7	59.1	<u> </u>	59.2		
Vehicle Noise:	68	8.1	66.3	63.3		58.5	67.0)	67.5		
Contouling Distan	aa ta Naisa C	\									

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	63	136	294	633
CNEL:	68	147	316	681

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy
Road Segment: w/o B St
Job Number: 8141
Analyst: B. Lawson

SITE	SPECIFIC II	NPUT I	DATA				NO	ISE MC	DE	L INPUT	s	
Highway Data					S	ite Con	ditions (H	lard = 10), Sc	oft = 15)		
Average Daily	Traffic (Adt):	20,400	vehicles	3				Au	tos:	15		
Peak Hour	Percentage:	109	%			Med	dium Truc	ks (2 Axl	es):	15		
Peak H	lour Volume:	2,040	vehicles	3		Hea	avy Truck	s (3+ Axi	es):	15		
Ve	ehicle Speed:	55	mph		V	ehicle I	Mix					
Near/Far La	ne Distance:	52	feet				cleType	Da	ay	Evening	Night	Daily
Site Data							Au	tos: 77	.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0) feet			Me	edium Truc	cks: 84	.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0				F	leavy Trud	cks: 86	5.5%	2.7%	10.8%	0.74%
	ist. to Barrier:) feet		M	oico Sa	urce Elev	rations /	in f	not)		
Centerline Dist.	to Observer:	100.0) feet		/	UISE SU		2.00		ee t)		
Barrier Distance	to Observer:	0.0) feet			1.4 m alii	Autos:					
Observer Height	(Above Pad):	5.0) feet				n Trucks:	4.00		Orodo Ad		4. 0.0
•	ad Elevation:) feet			Heav	y Trucks:	8.00	6	Grade Ad	justmen	r: 0.0
	ad Elevation:) feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0					Autos:	96.60	7			
	Left View:) degree	es		Mediur	n Trucks:	96.56	6			
	Right View:) degree			Heav	y Trucks:	96.60	8			
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic	Flow	Distan	ce	Finite	Road	Fresnel		Barrier Att	en Be	rm Atten
Autos:	71.78	3	0.27		-4.39		-1.20	-4	.87	0.0	000	0.000
Medium Trucks:	82.40)	-16.96	•	-4.39		-1.20	-4	.97	0.0	000	0.000
Heavy Trucks:	86.40)	-20.92		-4.39		-1.20	-5	.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout To	po and	barrier a	ttenu	ation)						
VehicleType	Leq Peak Ho	ur	Leq Day	Le	q Eve	ening	Leq Ni	ght		Ldn	C	NEL
Autos:	66	6.5	(64.6		62.8		56.7		65.4	1	66.0
Medium Trucks:	59	9.8		58.3		52.0		50.4		58.9	9	59.1
Heavy Trucks:	59	9.9		58.5		49.4		50.7		59.0)	59.2
Vehicle Noise:	68	8.0	(66.3		63.3		58.4		67.0)	67.5
Vehicle Noise:	68	8.0	(66.3		63.3		58.4		67.0)	

70 dBA

63

68

Ldn:

CNEL:

65 dBA

136

146

60 dBA

293

315

55 dBA

631

679

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy
Road Segment: e/o B St
Job Number: 8141
Analyst: B. Lawson

SITE SPECIFIC	INP	UT DATA				N	OISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 19	,500 vehicles	3					Autos:	15		
Peak Hour Percentage	:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak Hour Volume	: 1	,950 vehicles	S		He	avy Truc	ks (3+	Axles):	15		
Vehicle Speed	:	55 mph		-	Vehicle I	Miy					
Near/Far Lane Distance	:	52 feet				icleType		Day	Evening	Night	Daily
Site Data					V 011		lutos:	77.5%		9.6%	
		0.0 foot			Me	edium Tr		84.8%		10.3%	1.84%
Barrier Height		0.0 feet 0.0				leavy Tr		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm, Centerline Dist. to Barrie		0.0 100.0 feet							,0	. 0.070	011 170
Centerline Dist. to Observe		100.0 feet		1	Noise So	ource El	evatio	ns (in fe	eet)		
Barrier Distance to Observe		0.0 feet				Autos	s: 2	.000			
					Mediui	m Trucks	s: 4	.000			
Observer Height (Above Pad, Pad Elevatior		5.0 feet			Heav	y Trucks	s: 8	.006	Grade Adj	iustment.	0.0
Road Elevation	-	0.0 feet 0.0 feet		,	Lane Eq	uivalent	Distar	nce (in t	feet)		
Road Grade		0.0 Teet 0.0%		-	zano zy	Autos		.607	001)		
Left View		-90.0 degree	20		Mediu	n Trucks		5.566			
Right View		90.0 degree				y Trucks		.608			
Night view	•	30.0 degree	50		ricav	y Traone	<i>.</i> 50	.000			
FHWA Noise Model Calculati	ons			<u> </u>							
VehicleType REMEL	-	Traffic Flow	Di	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos: 71.	78	0.08		-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.	40	-17.16		-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.	40	-21.12		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithou	ut Topo and	barr	ier atten	uation)						
VehicleType Leq Peak I	lour	Leq Day	,	Leq Ev	ening /	Leq	Night		Ldn	CI	VEL
Autos:	66.3		64.4		62.6		56.	5	65.2	2	65.8
Medium Trucks:	59.7	•	58.1		51.8		50.	2	58.7	7	58.9
Heavy Trucks:	59.7	·	58.3		49.2		50.	5	58.8	3	59.0
Vehicle Noise:	67.8		66.1		63.1		58.	3	66.8	3	67.3
Centerline Distance to Noise	Con	tour (in feet)								
		· · · · ·		70 c	dBA	65 (dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

61

66

132

142

284

306

612

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: n/o Barranca Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				N	OISE	MODE	DEL INPUTS			
Highway Data				Si	ite Con	ditions	(Hard	= 10, So	oft = 15)			
Average Daily	Traffic (Adt):	22,300 vehicle	S					Autos:	15			
Peak Hour	Percentage:	10%			Med	dium Tru	ıcks (2	Axles):	15			
Peak H	lour Volume:	2,230 vehicle	S		Hea	avy Truc	ks (3+	Axles):	15			
Ve	hicle Speed:	55 mph		V	ehicle I	/liv						
Near/Far La	ne Distance:	52 feet				cleType		Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	-	9.6%		
	rrier Height:	0.0 feet			Ме	edium Tr	ucks:	84.8%		10.3%	1.84%	
Barrier Type (0-W	_	0.0 feet 0.0			H	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dis	•	100.0 feet										
Centerline Dist.		100.0 feet		N	oise So			ns (in fe	eet)			
Barrier Distance		0.0 feet				Autos		.000				
Observer Height (5.0 feet				n Trucks		.000	0 , 4 ,		0.0	
• ,	ad Elevation:	0.0 feet			Heav	y Trucks	s: 8	.006	Grade Ad	justment	: 0.0	
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)								
	Road Grade:	0.0%				Autos	s: 96	5.607				
	Left View:	-90.0 degre	es		Mediun	n Trucks	s: 96	5.566				
	Right View:	90.0 degre			Heav	y Trucks	s: 96	6.608				
FHWA Noise Mode								_				
VehicleType	REMEL	Traffic Flow	Distan		Finite		Fres		Barrier Att		m Atten	
Autos:	71.78			-4.39		-1.20		-4.87		000	0.000	
Medium Trucks:	82.40			-4.39		-1.20		-4.97		000	0.000	
Heavy Trucks:	86.40	-20.53	•	-4.39		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	nout Topo and	barrier a	ttenu	ation)							
VehicleType	Leq Peak Ho	ur Leq Day	/ Le	q Eve	ening	Leq	Night		Ldn	C	NEL	
Autos:	66	6.8	64.9		63.2		57	.1	65.8	3	66.4	
Medium Trucks:	60	0.2	58.7		52.4		50	.8	59.3	3	59.5	
Heavy Trucks:	60	0.3	58.8		49.8		51	.1	59.4	1	59.5	
Vehicle Noise:	68	3.4	66.7		63.7		58	.8	67.4	4	67.9	

Ldn:

CNEL:

70 dBA

67

72

65 dBA

144

155

60 dBA

311

334

55 dBA 670

720

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: s/o Barranca Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				5	Site Con	ditions (Hard =	10, Sc	oft = 15)			
Average Daily Traffic	c (Adt): 14	1,400 vehicles	3				,	Autos:	15			
Peak Hour Perce	entage:	10%			Me	dium Tru	cks (2 A	(xles	15			
Peak Hour V	olume: 1	1,440 vehicles	3		He	avy Truck	ks (3+ A	(xles	15			
Vehicle S	Speed:	55 mph		,	/ehicle l	Miv						
Near/Far Lane Dis	stance:	52 feet				icleType		Day	Evening	Night	Daily	
Site Data					• • • • • • • • • • • • • • • • • • • •			77.5%	J	9.6%	-	
	Joinett	0.0 feet			Ме	edium Tru		84.8%		10.3%	1.84%	
Barrier F Barrier Type (0-Wall, 1-	•	0.0 reet 0.0				leavy Tru		86.5%		10.8%	0.74%	
Centerline Dist. to E	,	100.0 feet										
Centerline Dist. to Ob		100.0 feet		^	Voise Sc	ource Ele	vation	s (in fe	eet)			
Barrier Distance to Ob.		0.0 feet				Autos.		000				
Observer Height (Above		5.0 feet			Mediui	n Trucks.	: 4.0	000				
Pad Ele	•	0.0 feet			Heav	y Trucks.	: 8.0	006	Grade Adj	iustment:	0.0	
Road Ele		0.0 feet		1	ane Fo	uivalent i	Distano	ce (in t	feet)			
	Grade:	0.0 Teet 0.0%		-	zano zy	Autos.		•	000			
	t View:	-90.0 degree			Mediu	n Trucks.						
	t View:	90.0 degree				ry Trucks.						
Nigit	t view.	90.0 degree	55		ricav	y Trucks.	. 50.	300				
FHWA Noise Model Cal	culations											
VehicleType RE	MEL	Traffic Flow	Dis	stance	Finite	Road	Fresn	el	Barrier Atte	en Ber	m Atten	
Autos:	71.78	-1.24		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-18.48		-4.39)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-22.43		-4.39	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Leve	els (withou	ut Topo and	barri	er atten	uation)							
	Peak Hour			Leq Ev		Leq N	light		Ldn	CI	VEL	
Autos:	64.9) (63.0	· · · · · · · · · · · · · · · · · · ·	61.3	· ·	55.2		63.9)	64.5	
Medium Trucks:	58.3	3 !	56.8		50.5		48.9)	57.4	1	57.6	
Heavy Trucks:	58.4	ļ (56.9		47.9		49.2	<u>.</u>	57.5	5	57.6	
Vehicle Noise:	66.5	5 (64.8		61.8		56.9)	65.5	5	66.0	
Centerline Distance to	Noise Cor	ntour (in feet))									
				70 a	IBA	65 d	BA .	6	0 dBA	55	dBA	

Ldn:

CNEL:

50

54

232

250

500

538

108

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: n/o Rockfield Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			N	IOISE N	ИODE	L INPUT	S	
Highway Data				Site Cor	nditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	26,500 vehicle	S				Autos:	15		
Peak Hour	Percentage:	10%		Me	edium Tru	icks (2 A	Axles):	15		
Peak H	lour Volume:	2,650 vehicle	S	He	avy Truc	cks (3+ A	Axles):	15		
Ve	hicle Speed:	55 mph		Vehicle	Mix					
Near/Far La	ne Distance:	52 feet			icleType	,	Day	Evening	Night	Daily
Site Data				10.			77.5%	Ū	9.6%	•
	rrier Height:	0.0 feet		M	edium Tr		84.8%		10.3%	
Barrier Type (0-W	•	0.0			Heavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet								
Centerline Dist.		100.0 feet		Noise S				eet)		
Barrier Distance		0.0 feet			Autos		000			
Observer Height (5.0 feet			m Trucks		000		_	
•	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment:					t: 0.0	
	ad Elevation:	0.0 feet		Lane Eq	uivalent	Distan	ce (in	feet)		
	Road Grade:	0.0%			Autos		607			
•	Left View:	-90.0 degree	es	Mediu	m Trucks		566			
	Right View:	90.0 degree		Hea	vy Trucks		608			
FHWA Noise Mod										
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresr	nel	Barrier Att	en Be	rm Atten
Autos:	71.78		-4	.39	-1.20		-4.87		000	0.000
Medium Trucks:	82.40	-15.83	-4	.39	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.78	-4	.39	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	nout Topo and	barrier att	enuation)						
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq	Evening	Leq	Night		Ldn	C	NEL
Autos:	67	7.6	65.7	63.9		57.9)	66.5		67.1
Medium Trucks:	6′	1.0	59.5	53.1		51.6	6	60.0)	60.3

Vehicle Noise:	69.2	67.4	64.5 59.		68.1	68.6
Centerline Distance to	Noise Contour (in feet))				
			70 dBA	65 dBA	60 dBA	55 dBA
	L	Ldn:	75	162	349	751
	CV	JFI ·	81	174	375	808

50.6

60.2

51.8

60.3

59.6

61.0

Heavy Trucks:

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: s/o Rockfield Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA			NOI	SE MODE	L INPUT	S	
Highway Data				Site Con	ditions (Ha	ard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	20,800 vehicles	3			Autos.	15		
Peak Hour	Percentage:	10%		Me	dium Truck	s (2 Axles).	15		
Peak H	lour Volume:	2,080 vehicles	6	He	avy Trucks	(3+ Axles).	15		
Ve	hicle Speed:	55 mph	-	Vehicle i	Mix				
Near/Far La	ne Distance:	52 feet	-		icleType	Day	Evening	Night	Daily
Site Data					Auto			9.6%	_
Ra	rrier Height:	0.0 feet		М	edium Truck	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0 leet 0.0		ŀ	Heavy Truck	ks: 86.5%		10.8%	0.74%
Centerline Di	•	100.0 feet	_	M-1- 0			' 4\		
Centerline Dist.		100.0 feet	_	Noise So	ource Eleva	-	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height		5.0 feet			m Trucks:	4.000			
,	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0					0.0
	ad Elevation:	0.0 feet	-	Lane Eq	uivalent Di	stance (in	feet)		
	Road Grade:	0.0%	-		Autos:	96.607	<u> </u>		
	Left View:	-90.0 degree	es	Mediu	m Trucks:	96.566			
	Right View:	90.0 degree		Heav	y Trucks:	96.608			
FHWA Noise Mod									
VehicleType	REMEL	Traffic Flow	Distance			-resnel	Barrier Atte		m Atten
Autos:			-4.3		-1.20	-4.87		000	0.000
Medium Trucks:			-4.3		-1.20	-4.97		000	0.000
Heavy Trucks:	86.40	-20.84	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nig	ht	Ldn	CI	NEL
Autos:	6	6.5	64.6	62.9		56.8	65.4	1	66.1
Medium Trucks:	5	9.9	58.4	52.1		50.5	59.0)	59.2
Heavy Trucks:	6	0.0	58.5	49.5		50.8	59.1		59.2

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	64	138	297	639						
CNEL:	69	148	319	688						

63.4

66.4

67.1

58.5

67.6

Vehicle Noise:

68.1

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Meridian

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	1,000 vehicles	3					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15			
Peak F	Hour Volume:	100 vehicles	S		He	avy Tru	cks (3+	Axles):	15			
Ve	ehicle Speed:	55 mph		1	/ehicle l	Miy						
Near/Far La	ane Distance:	52 feet		-		icleType		Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		9.6%	_	
	nrrier Height:	0.0 feet			Me	edium T	rucks:	84.8%		10.3%		
Barrier Type (0-V	_	0.0 1661			ŀ	leavy T	rucks:	86.5%		10.8%		
• • •	ist. to Barrier:	100.0 feet		_								
Centerline Dist.		100.0 feet		^	loise So			ns (in fe	eet)			
Barrier Distance		0.0 feet				Auto		2.000				
Observer Height		5.0 feet				m Truck	_	1.000	0 1- 4-1		0.0	
_	Pad Elevation:	0.0 feet			Heav	y Truck	s: E	3.006	Grade Ad	justment	: 0.0	
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in i	feet)			
	Road Grade:	0.0%				Auto	s: 96	6.607				
Left View: -90.0 degrees					Medium Trucks: 96.566							
	Right View:	90.0 degree	es		Heav	y Truck	rs: 96	6.608				
FHWA Noise Mod	lel Calculation	S										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-12.82		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-30.06		-4.39)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-34.02		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	rening	Leq	Night		Ldn	C	NEL	
Autos:		.4	51.5		49.7		43	.6	52.3	3	52.9	
Medium Trucks:			45.2		38.9		37		45.8		46.0	
Heavy Trucks:	46	.8	45.4		36.3		37.6		3 45.9		46.1	
Vehicle Noise:	54	.9	53.2		50.2		45	.4	53.9	9	54.4	
Centerline Distan	ce to Noise Co	ontour (in feet)									
				70 d	BA	65	dBA	6	60 dBA	55	dBA	

Ldn:

CNEL:

8

9

39

42

85

91

18

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Modjeska Job Number: 8141
Road Segment: n/o Irvine Bl. Analyst: B. Lawson

SITE SPECIFIC	INP	UT DATA				N	IOISE	MODE	L INPUT	S		
Highway Data				•	Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt).	13,	900 vehicles	3					Autos:	15			
Peak Hour Percentage.		10%			Ме	dium Tr	ucks (2	Axles):	15			
Peak Hour Volume.	1,	390 vehicles	3		He	avy Trud	cks (3+	Axles):	15			
Vehicle Speed.		35 mph		,	Vehicle l	Wix						
Near/Far Lane Distance.		20 feet				icleType	,	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		9.6%	,	
		0.0 feet			Ме	edium Ti		84.8%		10.3%	1.84%	
Barrier Height Barrier Type (0-Wall, 1-Berm)		0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%	
Centerline Dist. to Barrier		0.0 100.0 feet										
Centerline Dist. to Observer		100.0 feet		1	Noise So				eet)			
Barrier Distance to Observer		0.0 feet				Auto		.000				
Observer Height (Above Pad)		5.0 feet			Mediui	n Truck	s: 4	.000				
Pad Elevation		0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	0.0	
Road Elevation		0.0 feet			Lane Eq	uivalen	t Distar	nce (in i	feet)			
Road Grade		0.0%				Auto		.544				
Left View					Mediu	n Truck		.504				
Left View: -90.0 degrees Right View: 90.0 degrees				Heavy Trucks: 99.544								
ragin view		50.0 degree	,,,		77047	y maon	o. 00					
FHWA Noise Model Calculation	ns			-								
VehicleType REMEL	7	raffic Flow	Di	istance	Finite	Road	Fres	nel	Barrier Atte	en Ber	m Atten	
Autos: 64.3	0	0.57		-4.59	9	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 75.7	5	-16.67		-4.59	9	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 81.5	7	-20.62		-4.5	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thou	t Topo and I	barri	ier atten	uation)							
VehicleType Leq Peak H		Leq Day			vening	Leq	Night		Ldn	CI	VEL	
Autos:	59.1	Ę	57.2		55.4	49.4		4	58.0		58.6	
Medium Trucks:	53.3	51.8			45.4		43.9		52.3		52.6	
Heavy Trucks:	55.2	53.7			44.7	45.9		9	54.3		54.4	
Vehicle Noise:	51.3	ţ	59.6		56.2 51.		.8	60.3		60.7		
Centerline Distance to Noise	Cont	tour (in feet))									
		, , , , ,		70 (dBA	65	dBA	6	60 dBA	55	dBA	

23

24

Ldn: CNEL: 49

52

105

112

225

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: e/o (s/o) Lake Forest

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S					
Highway Data			Site Con	ditions (Har	d = 10, S	oft = 15)						
Average Daily Traffic (Adt):	31,500 vehicle	S			Autos.	15						
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles).	15						
Peak Hour Volume:	3,150 vehicle	S	Heavy Trucks (3+ Axles): 15									
Vehicle Speed:	55 mph		Vehicle I	Miy								
Near/Far Lane Distance:	88 feet			icleType	Day	Evening	Night	Daily				
Site Data				Autos	_	•	9.6%	97.42%				
Barrier Height:	0.0 feet		Me	edium Trucks			10.3%	1.84%				
Barrier Type (0-Wall, 1-Berm):			ŀ	Heavy Trucks	: 86.5%	6 2.7%	10.8%	0.74%				
Centerline Dist. to Barrier:												
Centerline Dist. to Observer:			Noise So	ource Elevat	•	eet)						
Barrier Distance to Observer:				Autos:	2.000							
Observer Height (Above Pad):				m Trucks:	4.000							
Pad Elevation:			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0				
Road Elevation:			Lane Eg	uivalent Dis	tance (in	feet)						
Road Grade:			Autos: 89.850									
Left View:		es	Medium Trucks: 89.805									
Right View:					Heavy Trucks: 89.850							
g	2010 G0g.0			,								
FHWA Noise Model Calculation	ons											
VehicleType REMEL	Traffic Flow	Distance			resnel	Barrier Att	en Ber	m Atten				
Autos: 71.7	8 2.16	-3.			<i>-4</i> .87			0.000				
Medium Trucks: 82.4	0 -15.08	-3.	92	-1.20	<i>-4</i> .97	<i>4.97</i> 0.000		0.000				
Heavy Trucks: 86.4	0 -19.03	-3.	92	-1.20	-5.16	0.0	000	0.000				
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)									
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Nigh	t	Ldn		VEL				
Autos:	8.8	66.9		65.2 5		59.1 67.7		68.3				
Medium Trucks:	62.2	60.7		54.3 52		52.8 61.3		61.5				
Heavy Trucks:	62.2	60.8		51.8 53		3.0 61.4		61.5				
Vehicle Noise:	70.4	68.6	65.7 60.8			69.4 69						
Centerline Distance to Noise	Contour (in feet)										

70 dBA

91

98

Ldn:

CNEL:

65 dBA

195

210

60 dBA

421

453

55 dBA

906

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: e/o (s/o) Ridge Route

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (H	lard = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	38,900 vehicle	S			Autos:	: 15				
Peak Hour	Percentage:	10%		Me	dium Truc	ks (2 Axles).	: 15				
Peak H	Hour Volume:	3,890 vehicle	S	He	avy Truck	s (3+ Axles).	: 15				
Ve	ehicle Speed:	55 mph		Vehicle	Miv						
Near/Far La	ne Distance:	88 feet			icleType	Day	Evening	Night	Daily		
Site Data				VEII		tos: 77.5%	_	9.6%			
				1/1	مر edium Truc			10.3%	1.84%		
	rrier Height:	0.0 feet			Heavy Truc			10.8%	0.74%		
Barrier Type (0-V	•	0.0		,	leavy IIu	UNS. 00.07	0 2.770	10.070	0.7470		
	ist. to Barrier:	100.0 feet		Noise So	ource Elev	vations (in f	eet)				
Centerline Dist.		100.0 feet			Autos:	2.000					
Barrier Distance		0.0 feet		Mediu	m Trucks:	4.000					
Observer Height	•	5.0 feet		Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0		
	Pad Elevation: 0.0 feet				uivalant F	Distance (in	foot				
	ad Elevation:	0.0 feet		Lane Eq		89.850	reet)				
	Road Grade:	0.0%		Modiu	Autos: m Trucks:						
	Left View:	-90.0 degree				89.805					
	Right View:	90.0 degree	es	пеач	y Trucks:	89.850					
FHWA Noise Mod	lel Calculatio	ns									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	3.08	-3.	92	-1.20	<i>-4.</i> 87	0.0	000	0.000		
Medium Trucks:			-3.	92	-1.20	<i>-4</i> .97	0.0	000	0.000		
Heavy Trucks:	86.40	-18.12	-3.	92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	enuation)							
VehicleType	Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq Ni	ight	Ldn	CI	VEL		
Autos:	6	9.7	67.8	66.1		60.0	68.6	6	69.2		
Medium Trucks:	6	3.1	61.6	55.3		53.7	62.2	2	62.4		
Heavy Trucks:	6	3.2	61.7	52.7		53.9	62.3	3	62.4		

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	104	225	484	1,043						
CNEL:	112	242	521	1,123						

66.6

69.6

70.3

61.7

70.8

Vehicle Noise:

71.3

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: w/o (n/o) El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS								
Highway Data				Si	ite Con	ditions ((Hard =	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	44,100 vehicle	es					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tru	icks (2	Axles):	15			
Peak H	lour Volume:	4,410 vehicle	es		He	avy Truc	ks (3+	Axles):	15			
Ve	ehicle Speed:	55 mph		V	ehicle l	Miy						
Near/Far La	ne Distance:	88 feet				cleType		Day	Evening	Night	Daily	
Site Data					V 0///		utos:	77.5%	_	9.6%	97.42%	
	unio u Hoiodata	0.0 foot			Me	edium Tr		84.8%		10.3%	1.84%	
	rrier Height:	0.0 feet 0.0				leavy Tr		86.5%		10.8%	0.74%	
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet									011 170	
Centerline Di		100.0 feet		N	oise Sc	urce Ele	evatio	ns (in fe	eet)			
Barrier Distance		0.0 feet				Autos	s: 2	.000				
					Medium Trucks: 4.000							
=	Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet			Heav	y Trucks	s: 8	.006	Grade Ad	justment.	0.0		
			1 :	ane Fai	uivalent	Distar	nce (in t	feet)				
	au Elevalion. Road Grade:	0.0 feet 0.0%			arie Eq.	Autos		.850	1001)			
	Left View:				Modium	n Trucks		.805				
		-90.0 degre				n Trucks y Trucks		.850				
	Right View:	90.0 degre	es		i icav	y Trucks	. OS	.030				
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Distanc	ce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	3.62	-	3.92		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-13.62	-	3.92		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-17.57	-	3.92		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrier at	ttenu	ation)							
VehicleType	Leq Peak Ho	our Leq Da	y Le	q Eve	ening	Leq I	Night		Ldn	CI	VEL	
Autos:	70	0.3	68.4		66.6		60.	6	69.2	2	69.8	
Medium Trucks:	6	3.7	62.2		55.8		54.	3	62.7	7	62.9	
Heavy Trucks:	6	3.7	62.3		53.2		54.	5	62.8	3	63.0	
Vehicle Noise:	7	1.9	70.1		67.1		62.	3	70.8	3	71.3	

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	113	244	527	1,134						
CNEL:	122	263	566	1,220						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Job Number: 8141

Road Segment: e/o (s/o) El Toro Rd.

Analyst: B. Lawson

SITE SPECIFIC	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data			Site Con	ditions (Hard	d = 10, So	oft = 15)						
Average Daily Traffic (Adt).	44,800 vehicle	es			Autos:	15						
Peak Hour Percentage.	*		Me	dium Trucks ((2 Axles):	15						
Peak Hour Volume:	4,480 vehicle	es	He	avy Trucks (3	3+ Axles):	15						
Vehicle Speed:	55 mph		Vehicle Mix									
Near/Far Lane Distance.	88 feet				Dov	Evenina	Night	Doily				
Site Date			veri	icleType	Day : 77.5%	Evening 12.9%	Night 9.6%	Daily				
Site Data			A 4	Autos edium Trucks				97.42%				
Barrier Height.							10.3%	1.84%				
Barrier Type (0-Wall, 1-Berm).			<i>'</i>	Heavy Trucks	: 86.5%	2.7%	10.8%	0.74%				
Centerline Dist. to Barrier			Noise So	ource Elevati	ons (in f	eet)						
Centerline Dist. to Observer				Autos:	2.000							
Barrier Distance to Observer	0.0 feet		Mediu	m Trucks:	4.000							
Observer Height (Above Pad)				y Trucks:	8.006	Grade Ad	iustment:	0.0				
Pad Elevation												
Road Elevation.	0.0 feet		Lane Eq	uivalent Dist		feet)						
Road Grade.	0.0%				89.850							
Left View	-90.0 degre	es	Medium Trucks: 89.805									
Right View	90.0 degre	es	Heav	ry Trucks:	89.850							
FHWA Noise Model Calculation	ons											
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fro	esnel	Barrier Att	en Ber	m Atten				
Autos: 71.7	78 3.69	-3.	92	-1.20	-4.87	0.0	000	0.000				
Medium Trucks: 82.4	10 -13.55	-3.	92	-1.20	-4.97	0.0	000	0.000				
Heavy Trucks: 86.4	10 -17.50	-3.	92	-1.20	-5.16	0.0	000	0.000				
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)									
VehicleType Leq Peak H	lour Leq Day	•	Evening	Leq Night	1	Ldn	CI	VEL				
Autos:	70.3	68.5	66.7	6	60.6	69.3	3	69.9				
	63.7	62.2	55.9	5	54.3	62.8		63.0				
Heavy Trucks:	63.8	62.3	53.3 54.6			62.9		63.0				
Vehicle Noise:	71.9	70.2	67.2		52.3	70.9	9	71.4				
Centerline Distance to Noise	Contour (in feet	t)										

70 dBA

115

123

Ldn:

CNEL:

65 dBA

247

266

60 dBA

532

572

55 dBA

1,146

1,233

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: b/w Glenwood/Indian Creek and Laguna Hills

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA			NOISE MODEL INPUTS						
Highway Data				Si	ite Con	ditions (H	lard = 10, S	oft = 15)			
Average Daily	Traffic (Adt):	41,300 vehicle	s				Autos	: 15			
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Axles).	: 15			
Peak F	lour Volume:	4,130 vehicle	S		He	avy Truck	s (3+ Axles)	: 15			
Ve	ehicle Speed:	55 mph		Ve	ehicle i	Mix					
Near/Far La	ne Distance:	88 feet				icleType	Day	Evening	Night	Daily	
Site Data							tos: 77.5%	•	9.6%	-	
Ba	rrier Height:	0.0 feet			Me	edium Trud	cks: 84.8%	6 4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			ŀ	Heavy Truc	cks: 86.5%	6 2.7%	10.8%	0.74%	
	st. to Barrier:	100.0 feet		N	oise So	ource Flev	vations (in f	eet)			
Centerline Dist.	to Observer:	100.0 feet		7.0	0,00 0	Autos:	2.000	001)			
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucks:	4.000				
Observer Height	(Above Pad):	5.0 feet					8.006	Grade Ad	iustmant:	. 0.0	
P	Pad Elevation: 0.0 feet			пеач	y Trucks:	6.006	Grade Auj	iusiiii c iii.	0.0		
Ro	Road Elevation: 0.0 feet		Lá	ane Eq	uivalent D	istance (in	feet)				
	Road Grade:	0.0%				Autos:	89.850				
	Left View:	-90.0 degre	es		Mediu	m Trucks:	89.805				
	Right View:	90.0 degre	es		Heav	y Trucks:	89.850				
FHWA Noise Mod	lel Calculation	ne									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten	
Autos:	71.78	3.34		-3.92		-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-13.90		-3.92		-1.20	<i>-4</i> .97	0.0	000	0.000	
Heavy Trucks:	86.40	-17.86		-3.92		-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	our Leq Day	/ L	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL	
Autos:	7	0.0	68.1		66.3		60.3	68.9)	69.5	
Medium Trucks:	6	3.4	61.9		55.5		54.0	62.4	1	62.7	
Heavy Trucks:	6	3.4	62.0		53.0		54.2	62.6	6	62.7	
Vehicle Noise:	7	1.6	69.8		66.9		62.0	70.5	5	71.0	

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn: ¯	109	234	504	1,086						
CNEL:	117	252	542	1,168						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: s/o Laguna Hills Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				Site Cor	nditions (F	lard = 10, S	oft = 15)					
Average Daily	Traffic (Adt):	30,200 vehicles	S			Autos:	15					
• •	Percentage:	10%		Me	edium Truc	ks (2 Axles).	15					
Peak H	our Volume:	3,020 vehicles	3	He	eavy Truck	s (3+ Axles).	15					
Ve	hicle Speed:	55 mph		Vehicle	Miv							
Near/Far Lai	ne Distance:	88 feet			icleType	Day	Evening	Night	Daily			
Site Data						tos: 77.5%	•	9.6%				
	rier Height:	0.0 feet		М	edium Tru			10.3%	1.84%			
Barrier Type (0-W	•	0.0 leet 0.0			Heavy True			10.8%	0.74%			
Centerline Dis		100.0 feet										
Centerline Dist.		100.0 feet		Noise S		vations (in f	eet)					
Barrier Distance		0.0 feet		Autos: 2.000								
Observer Height (5.0 feet 0.0 feet		Medium Trucks: 4.000							
• ,	ad Elevation:				vy Trucks:	8.006	Grade Adjı	ustment:	0.0			
	Road Elevation: 0.0 feet				uivalent E	Distance (in	feet)					
	Road Grade:	0.0%			Autos:	89.850	<u>, </u>					
	Left View:	-90.0 degree	es	Mediu	m Trucks:	89.805						
	Right View:	90.0 degree		Heavy Trucks: 89.850								
FHWA Noise Mode	el Calculation	15										
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten			
Autos:	71.78	1.98	-3.9	2	-1.20	-4.87	0.0	00	0.000			
Medium Trucks:	82.40	-15.26	-3.9	2	-1.20	-4.97	0.0	00	0.000			
Heavy Trucks:	86.40	-19.22	-3.9	2	-1.20	-5.16	0.0	00	0.000			
Unmitigated Noise	Levels (with	out Topo and	barrier atten	uation)								
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Ni	ight	Ldn	CI	VEL			
Autos:	68	3.6	66.7	65.0		58.9	67.5		68.1			
Medium Trucks:	62	2.0	60.5			52.6	61.1		61.3			
Heavy Trucks:	62	2.1	60.6		51.6 52		52.9 61.2		61.3			
Vehicle Noise:	70	70.2 68.5				60.6	69.2		69.7			
Centerline Distance	e to Noise C	ontour (in feet)									

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	88	190	409	881
CNEL:	95	204	440	948

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: s/o Alicia Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE :	SPECIFIC II	NPUT I	DATA		NOISE MODEL INPUTS						
Highway Data					Site Cor	nditions (F	Hard = 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	26,200	vehicles	3			Autos:	15			
Peak Hour	Percentage:	109	%		Ме	edium Truc	ks (2 Axles):	15			
Peak H	our Volume:	2,620	vehicles	;	He	avy Truck	s (3+ Axles):	15			
Ve	hicle Speed:	55	mph		Vehicle	Miy					
Near/Far Lai	ne Distance:	88	feet			icleType	Day	Evening	Night	Daily	
Site Data							itos: 77.5%	J	_	97.42%	
	rier Height:	0.0) feet		М	edium Tru	cks: 84.8%		10.3%	1.84%	
Barrier Type (0-W	_	0.0				Heavy Tru	cks: 86.5%	2.7%	10.8%	0.74%	
Centerline Dis	,) feet								
Centerline Dist.) feet		Noise S		vations (in f	eet)			
Barrier Distance) feet			Autos:	2.000				
Observer Height () feet			m Trucks:	4.000		_		
• .	Pad Elevation: 0.0 feet		Hear	y Trucks:	8.006	Grade Adj	ustment:	0.0			
	Road Elevation: 0.0 feet				Lane Eq	uivalent E	Distance (in	feet)			
	Road Grade:	0.0				Autos:	89.850				
,	Left View:) degree	95	Mediu	m Trucks:	89.805				
	Right View:) degree			y Trucks:	89.850				
	g	0010	aug.uu			,					
FHWA Noise Mode	el Calculation	าร									
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten	
Autos:	71.78	3	1.36	-3.	92	-1.20	<i>-4.</i> 87	0.0	000	0.000	
Medium Trucks:	82.40)	-15.88	-3.	92	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40)	-19.83	-3.	92	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (with	hout To	po and l	barrier atte	enuation)						
VehicleType	Leq Peak Ho	ur	Leq Day	Leq	Evening	Leq N	ight	Ldn	CI	VEL	
Autos:	68	8.0	6	66.1	64.4		58.3	66.9)	67.5	
Medium Trucks:	6	1.4	5	59.9	53.5		52.0	60.5	5	60.7	
Heavy Trucks:	6	1.4	6	60.0	51.0		52.2	60.6	3	60.7	
Vehicle Noise:	69	9.6	(67.8	64.9		60.0	68.6	3	69.0	

70 dBA

80

86

Ldn:

CNEL:

65 dBA

173

186

60 dBA

372

400

55 dBA

802

862

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: w/o Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				5	Site Con	ditions	(Hard	= 10, Sc	ft = 15)			
Average Daily Traffic (Adt)	16,60	00 vehicles	3					Autos:	15			
Peak Hour Percentage	1	10%			Me	dium Ti	rucks (2	Axles):	15			
Peak Hour Volume	1,66	30 vehicles	3		He	avy Tru	icks (3+	- Axles):	15			
Vehicle Speed	5	55 mph		1	/ehicle l	Miv						
Near/Far Lane Distance	5	52 feet				icleTyp	e	Day	Evening	Night	Daily	
Site Data					V 011		Autos:	77.5%		•	97.42%	
		0.0.6004			Me	edium 7		84.8%		10.3%	1.84%	
Barrier Height		0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%	
Barrier Type (0-Wall, 1-Berm) Centerline Dist. to Barrier		0.0 0.0 feet									011 170	
Centerline Dist. to Observer		0.0 feet		^	Voise So	ource E	levatio	ns (in fe	et)			
Barrier Distance to Observer		0.0 feet				Auto	os: 2	2.000				
Observer Height (Above Pad)		5.0 feet			Mediui	n Truck	ks: 4	4.000				
Pad Elevation		o.0 feet			Heav	y Truck	ks: 8	3.006	Grade Adj	justment:	0.0	
Road Elevation		0.0 feet		,	ane Fo	uivalen	nt Dista	nce (in f	eet)			
Road Grade		0.0%		_	zano zq	Auto		6.607	000			
Left View		0.0	20		Mediu	n Truck		6.566				
Right View		0.0 degree 0.0 degree				y Truck		6.608				
Ngh view	90	J.U degree	55		ricav	y ITUCI	10.	3.000				
FHWA Noise Model Calculation	ons											
VehicleType REMEL	Tra	ffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos: 71.7	'8	-0.62		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 82.4	-0	-17.86		-4.39)	-1.20		<i>-4.</i> 97	0.0	000	0.000	
Heavy Trucks: 86.4	0	-21.82		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout 1	Topo and	barri	er atteni	uation)							
VehicleType Leq Peak F		Leq Day		Leg Ev		Leg	Night		Ldn	CI	VEL	
	35.6		63.7	·	61.9		55	5.8	64.5	5	65.1	
Medium Trucks:	59.0		57.4		51.1		49	.5	58.0)	58.2	
Heavy Trucks:	59.0	!	57.6		48.5		49	8.0	58.1	1	58.3	
Vehicle Noise:	67.1	(65.4	5.4 62.4 57.6 66.1				1	66.6			
Centerline Distance to Noise	Conto	ur (in feet))									
		·		70 a	IBA	65	dBA	6	0 dBA	55	dBA	

Ldn:

CNEL:

55

59

119

127

255

275

550

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: e/o Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data			Site Con	ditions (Har	d = 10, Sc	oft = 15)						
Average Daily Traffic (Adt):	20,000 vehicles	S			Autos:	15						
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15						
Peak Hour Volume:	2,000 vehicles	S	He	avy Trucks (3	3+ Axles):	15						
Vehicle Speed:	50 mph		Vehicle Mix									
Near/Far Lane Distance:	70 feet			icleType	Day	Evening	Night	Daily				
Site Data			Veri	Autos	_	J	9.6%	-				
			Λ/ι	edium Trucks			10.3%	1.84%				
Barrier Height:				leavy Trucks			10.8%	0.74%				
Barrier Type (0-Wall, 1-Berm):			,	icavy Tracks	. 00.070	2.1 /0	10.070	0.7 4 70				
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)						
Centerline Dist. to Observer:						Autos: 2.000						
Barrier Distance to Observer:			Medium Trucks: 4.000									
Observer Height (Above Pad):			Heavy Trucks: 8.006 Grade Adjustment: 0.0									
Pad Elevation:						feet)						
	Road Elevation: 0.0 feet					i cc i)						
Road Grade:			Modiu		93.723 93.680							
Left View:	3 -		Heavy Trucks: 93.723									
Right View:	90.0 degree	es	пеач	y Trucks.	93.723							
FHWA Noise Model Calculation	ns											
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	resnel	Barrier Att	en Ber	m Atten				
Autos: 70.2	0 0.60	-4.	20	-1.20	-4.87	0.0	000	0.000				
Medium Trucks: 81.0	0 -16.64	-4.	19	-1.20	-4.97	0.0	000	0.000				
Heavy Trucks: 85.3	8 -20.59	-4.	20	-1.20	-5.16	0.0	000	0.000				
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)									
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Night	t	Ldn	CI	VEL				
Autos:	65.4	63.5	61.7	ţ	55.7	64.3	3	64.9				
Medium Trucks:	59.0	57.5		4	49.6 58.0)	58.2				
Heavy Trucks:	59.4	58.0	48.9 50.2 58			58.5	3.5 58					
Vehicle Noise:	67.1	65.4	62.3		57.5	66.	1	66.5				
Centerline Distance to Noise	Contour (in feet)										

70 dBA

55

59

Ldn:

CNEL:

65 dBA

118

127

60 dBA

254

273

55 dBA

547

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: w/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA			NOIS	SE MODE	L INPUT	S	
Highway Data				Site Con	ditions (Ha	rd = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	27,000 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak H	lour Volume:	2,700 vehicles	S	He	avy Trucks (3+ <i>Axles):</i>	15		
Ve	hicle Speed:	50 mph		Vehicle I	Mix				
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data					Auto	_	J	9.6%	
Ra	rrier Height:	0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0		ŀ	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet					- 41		
Centerline Dist.		100.0 feet		Noise Sc	ource Eleva	•	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height (5.0 feet			n Trucks:	4.000			
<u> </u>	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)		
	Road Grade:	0.0%			Autos:	93.723	-		
	Left View:	-90.0 degree	es	Mediui	m Trucks:	93.680			
	Right View:	90.0 degree		Heav	y Trucks:	93.723			
FHWA Noise Mod	el Calculation	ıs							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	70.20	1.91	-4.2	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-15.33	-4.	19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-19.29	-4.2	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	ening	Leq Nigh	nt	Ldn	CI	VEL
Autos:	66	6.7	64.8	63.0		57.0	65.6	6	66.2
Medium Trucks:	60).3	58.8	52.4		50.9	59.3	3	59.6
Heavy Trucks:	60).7	59.3	50.2		51.5	59.8	3	60.0

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	67	144	310	668							
CNEL:	72	155	333	718							

63.6

58.8

67.4

67.8

66.7

Vehicle Noise:

68.4

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: e/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SP	ECIFIC IN	PUT DATA			NOI	SE MODE	L INPUTS	S	
Highway Data				Site Con	ditions (Ha	ard = 10, S	oft = 15)		
Average Daily Tra	affic (Adt): 2	27,000 vehicles	5			Autos:	15		
Peak Hour Pe	rcentage:	10%		Me	dium Truck	s (2 Axles):	15		
Peak Hour	r Volume:	2,700 vehicles	3	He	avy Trucks	(3+ Axles):	15		
Vehic	le Speed:	50 mph		Vehicle I	Miy				
Near/Far Lane	Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data				• • • • • • • • • • • • • • • • • • • •	Auto	,		9.6%	97.42%
	r Hoiabtı	0.0 feet		Ме	edium Truck			10.3%	1.84%
Barrier Type (0-Wall,	er Height:	0.0 reet 0.0			leavy Truck			10.8%	0.74%
Centerline Dist. t	•	100.0 feet	•						
Centerline Dist. to (100.0 feet	·	Noise So	ource Eleva		eet)		
Barrier Distance to (0.0 feet			Autos:	2.000			
Observer Height (Abo		5.0 feet			n Trucks:	4.000		_	
• ,	Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Adj	iustment.	0.0
	Elevation:	0.0 feet		Lane Eq	uivalent Di	stance (in	feet)		
	ad Grade:	0.0%		-	Autos:	93.723			
	Left View:	-90.0 degree	es	Mediui	n Trucks:	93.680			
Ri	ight View:	90.0 degree		Heav	y Trucks:	93.723			
FHWA Noise Model C									
,,	REMEL	Traffic Flow	Distance	Finite		Fresnel	Barrier Atte		m Atten
Autos:	70.20	1.91	-4.2		-1.20	-4.87	0.0		0.000
Medium Trucks:	81.00	-15.33	-4.		-1.20	-4.97	0.0		0.000
Heavy Trucks:	85.38	-19.29	-4.2	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Lo	evels (with	out Topo and	barrier atte	nuation)					
VehicleType Le	q Peak Hou	ır Leq Day	Leq E	vening	Leq Nig	ht	Ldn	CI	VEL
Autos:	66	.7	64.8	63.0		57.0	65.6	6	66.2
Medium Trucks:	60.	.3	58.8	52.4		50.9	59.3	3	59.6
Heavy Trucks:	60	.7	59.3	50.2		51.5	59.8	3	60.0

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	67	144	310	668						
CNEL:	72	155	333	718						

63.6

66.7

67.4

58.8

67.8

Vehicle Noise:

68.4

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: e/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS						
Highway Data		3	Site Conditions (Hard = 10, Soft = 15)						
Average Daily Traffic (Adt).	29,000 vehicle	s		Autos:	15				
Peak Hour Percentage.	10%		Medium Tru	cks (2 Axles):	15				
Peak Hour Volume.	2,900 vehicle	s	Heavy Truc	ks (3+ Axles):	15				
Vehicle Speed:	•	1	/ehicle Mix						
Near/Far Lane Distance.	70 feet		VehicleType	Day	Evening	Night	Daily		
Site Data			Α	utos: 77.5%	12.9%	9.6%	97.42%		
Barrier Height.	0.0 feet		Medium Tro	ucks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm).			Heavy Tro	ucks: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier		,	Noise Source Ele	evations (in f	eet)				
Centerline Dist. to Observer.	: 100.0 feet		Autos	•					
Barrier Distance to Observer	0.0 feet		Medium Trucks						
Observer Height (Above Pad).	5.0 feet				Grade Adj	iustmant:			
Pad Elevation	: 0.0 feet		Heavy Trucks	. 6.006	Grade Auj	usimeni.	0.0		
Road Elevation.	: 0.0 feet	L	ane Equivalent	Distance (in	feet)				
Road Grade.	0.0%		Autos	: 93.723					
Left View	: -90.0 degre	es	Medium Trucks	<i>:</i> 93.680					
Right View	•		Heavy Trucks	93.723					
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos: 70.2	20 2.22	-4.20	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 81.0	00 -15.02	-4.19	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 85.3	-18.98	-4.20	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier attent	uation)						
VehicleType Leq Peak H	lour Leq Day	/ Leq Ev	rening Leq N	Night	Ldn	CI	VEL		
Autos:	67.0	65.1	63.4	57.3	65.9)	66.5		
Medium Trucks:	60.6	59.1	52.7	51.2	59.6	3	59.9		
Heavy Trucks:	61.0	59.6	50.5	51.8	60.1	l	60.3		
Vehicle Noise:	68.7	67.0	63.9	59.1	67.7	7	68.2		

70 dBA

70

75

Ldn:

CNEL:

65 dBA

151

162

60 dBA

325

349

55 dBA

701

753

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: s/o Los Alisos Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISI	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	d=10, So	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	10%			dium Trucks (avy Trucks (3	•			
Vehicle Speed: Near/Far Lane Distance:	50 mph		Vehicle i	· ·	Day	Evening	Night	Daily
Site Data				Autos			-	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer:	100.0 feet		I	edium Trucks. Heavy Trucks.	86.5%	2.7%	10.3% 10.8%	1.84% 0.74%
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	0.0 feet 5.0 feet		Heav	Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist		feet)		
Road Grade: Left View: Right View:	-90.0 degree			m Trucks:	93.723 93.680 93.723			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 70.2	0 1.47	-4.2	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 81.0 Heavy Trucks: 85.3		-4.2 -4.2	-	-1.20 -1.20	-4.97 -5.16		000	0.000
Unmitigated Noise Levels (wit	thout Topo and	barrier atte	nuation)					
VehicleType Leq Peak H		Leq E	vening	Leq Night		Ldn		VEL
		64.4	62.6		6.6	65.2		65.8
		58.3	52.0		0.4	58.9		59.1
		58.8	49.8		1.0	59.4		59.5
Vehicle Noise:	88.0	66.2	63.2	5	8.4	66.9	9	67.4
Centerline Distance to Noise	Contour (in feet,)						

Contonino Dictanico de Maios Contoni (in 1995)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	62	135	290	625
CNEL:	67	145	311	671

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: e/o Alicia Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NO	ISE MODE	L INPUT	S	
Highway Data			Site Cor	nditions (H	ard = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	19,900 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Me	edium Truck	s (2 Axles):	15		
Peak Hour Volume:	1,990 vehicle	S	He	avy Trucks	(3+ Axles):	15		
Vehicle Speed:	50 mph		Vehicle	Miv				
Near/Far Lane Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data				Aut		Ū	9.6%	•
Barrier Height:	0.0 feet		М	edium Truc			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):				Heavy Truc			10.8%	0.74%
Centerline Dist. to Barrier:								
Centerline Dist. to Observer:			Noise S		ations (in f	eet)		
Barrier Distance to Observer:				Autos:	2.000			
Observer Height (Above Pad):			Mediu	m Trucks:	4.000			
Pad Elevation:			Heav	vy Trucks:	8.006	Grade Ad	iustment:	0.0
Road Elevation:			Lane Equivalent Distance (in feet)					
Road Grade:				Autos:	93.723	,		
Left View:		29	Mediu	m Trucks:	93.680			
Right View:				vy Trucks:	93.723			
rugin view.	Join degle	00		.,	0020			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos: 70.2	0 0.58	-4.	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 81.0	0 -16.66	-4.	19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 85.3	8 -20.61	-4.	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Nig	ght	Ldn	CI	VEL
Autos:	5.4	63.5	61.7		55.7	64.3	3	64.9
Medium Trucks:	58.9	57.4	51.1		49.5	58.0)	58.2
Heavy Trucks:	59.4	57.9	48.9		50.2	58.5	5	58.6
Vehicle Noise:	67.1	65.3	62.3		57.5	66.0)	66.5
Centerline Distance to Noise	Contour (in feet)						

70 dBA

55

59

Ldn: CNEL: 65 dBA

117

126

60 dBA

253

272

55 dBA

545

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Oak Cyn./Laguna Cyn. Rd.

Road Segment: w/o Sand Canyon. Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Cond	ditions (Ha	rd = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	6,400 vehicles	;			Autos.	15				
Peak Hour	Percentage:	10%		Med	dium Trucks	(2 Axles).	15				
Peak H	lour Volume:	640 vehicles	;	Hea	avy Trucks (3+ <i>Axles</i>).	15				
Ve	hicle Speed:	35 mph		Vehicle N	Лiy						
Near/Far La	ne Distance:	20 feet			cleType	Day	Evening	Night	Daily		
Site Data					Auto		_	9.6%	_		
Ra	rrier Height:	0.0 feet		Ме	edium Truck	s: 84.8%	6 4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0		H	łeavy Truck	s: 86.5%	6 2.7%	10.8%	0.74%		
Centerline Di	•	100.0 feet		Noisa Sa	uroo Elovo	tions (in t	innet)				
Centerline Dist.	to Observer:	100.0 feet		Noise 30	urce Eleva	•	eet)				
Barrier Distance	to Observer:	0.0 feet		N 4 = =15	Autos:	2.000					
Observer Height ((Above Pad):	5.0 feet			n Trucks:	4.000	Cua da Ad		. 0 0		
,	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Adj	usimeni	. 0.0		
Roa	ad Elevation:	0.0 feet		Lane Equ	uivalent Dis	tance (in	feet)				
	Road Grade:	0.0%			Autos:	99.544					
	Left View:	-90.0 degree	s	Mediun	n Trucks:	99.504					
	Right View:	90.0 degree	es	Heav	y Trucks:	99.544					
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Atte	en Ber	m Atten		
Autos:	64.30	-2.80	-4.5	9	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	75.75	-20.04	-4.5	9	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	81.57	-23.99	-4.5	9	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Topo and k	barrier atter	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Nigh	nt	Ldn	CI	NEL		
Autos:	55	.7 5	53.8	52.1		46.0	54.6	6	55.2		
Medium Trucks:	49	.9 4	18.4	42.1		40.5	49.0)	49.2		
Heavy Trucks:	51	.8 5	50.4	41.3		42.6	50.9)	51.1		

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	13	29	62	134							
CNEL:	14	31	67	144							

52.8

48.4

56.9

56.2

57.4

57.9

Vehicle Noise:

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Orchard Hills/PA 1 Loop

Road Segment: n/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	6,900 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	690 vehicles	3	He	avy Trucks (3	3+ Axles):	15		
Vehicle Speed:	35 mph		Vehicle I	Mix				
Near/Far Lane Distance:	20 feet			icleType	Day	Evening	Night	Daily
Site Data			Veri	Autos		J	9.6%	-
			Λ./.	edium Trucks			10.3%	1.84%
Barrier Height:	0.0 feet			J aium Trucks J eavy Trucks			10.3%	0.74%
Barrier Type (0-Wall, 1-Berm):	0.0		'	leavy Trucks	. 00.57	2.1/0	10.0 /6	0.7470
Centerline Dist. to Barrier:	100.0 feet		Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist. to Observer:	100.0 feet			Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:	0.0 feet				· · · · · · · · · · · · · · · · · · ·	C ()		
Road Elevation:	0.0 feet		Lane Eq	uivalent Dis		reet)		
Road Grade:	0.0%				99.544			
Left View:	-90.0 degree	es			99.504			
Right View:	90.0 degree	es	Heav	ry Trucks:	99.544			
FHWA Noise Model Calculatio	ns		1					
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	resnel	Barrier Att	en Ber	m Atten
Autos: 64.30	0 -2.47	-4.	59	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 75.75	5 -19.71	-4.	59	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 81.5	7 -23.67	-4.	59	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	nuation)					
VehicleType Leq Peak Ho	our Leq Day	Leq	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos: 5	6.0	54.1	52.4	4	46.3	54.9	9	55.6
Medium Trucks: 5	0.3	48.7	42.4	4	40.8	49.3	3	49.5
Heavy Trucks: 5	2.1	50.7 41.7 42.9 51.3						51.4
Vehicle Noise: 5	8.3	56.5	53.1		48.7	57.3	3	57.7
Centerline Distance to Noise (Contour (in feet))						

70 dBA

14

15

Ldn:

CNEL:

65 dBA

30

33

60 dBA

66

70

55 dBA

141

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Pacifica Job Number: 8141
Road Segment: w/o Fortune Dr. Analyst: B. Lawson

SITE SPECIFIC	INPUT DAT	A			NC)ISE I	MODE	L INPUT	S	
Highway Data			S	ite Con	ditions (F	Hard =	: 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 10,800 vehi	cles					Autos:	15		
Peak Hour Percentage				Me	dium Truc	ks (2)	Axles):	15		
Peak Hour Volume	: 1,080 vehi	cles		He	avy Truck	s (3+)	Axles):	15		
Vehicle Speed	: 55 mph			'ehicle l	Miss					
Near/Far Lane Distance	: 52 feet		V				Day	Funning	Niaht	Doily
Site Date				verii	icleType	14001	Day	Evening	Night	Daily
Site Data				N 1.		itos:	77.5%		9.6%	
Barrier Height		t			edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)				F	leavy Tru	CKS:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier			۸	loise Sc	ource Elev	vation	s (in fe	eet)		
Centerline Dist. to Observer					Autos:	2.	.000			
Barrier Distance to Observer	: 0.0 fee	t		Mediur	n Trucks:		000			
Observer Height (Above Pad)	: 5.0 fee	t			y Trucks:		006	Grade Ad	justment.	0.0
Pad Elevation	: 0.0 fee	t								
Road Elevation	: 0.0 fee	t	L	ane Eq	uivalent E			feet)		
Road Grade	: 0.0%				Autos:		.607			
Left View	: -90.0 deg	grees		Mediur	n Trucks:		.566			
Right View	: 90.0 deg	grees		Heav	y Trucks:	96.	.608			
FHWA Noise Model Calculati	ons									
VehicleType REMEL	Traffic Flo	N Dist	tance	Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten
<i>Autos:</i> 71.	78 -2.	49	-4.39		-1.20		<i>-4.</i> 87	0.0	000	0.000
Medium Trucks: 82.	40 -19.	73	-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.	40 -23.	68	-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout Topo a	nd barrie	r attenu	ıation)						
VehicleType Leq Peak F	Hour Leq L	Day	Leq Ev	ening	Leq N	ight		Ldn	CI	VEL
Autos:	63.7	61.8		60.0		54.0	0	62.6	3	63.2
Medium Trucks:	57.1	55.6		49.2		47.	7	56.1	1	56.4
Heavy Trucks:	57.1	55.7		46.7		47.9	9	56.3	3	56.4
Vehicle Noise:	65.3	63.5		60.6		55.	7	64.2	2	64.7
Centerline Distance to Noise	Contour (in fo	eet)								

70 dBA

41

44

Ldn:

CNEL:

65 dBA

89

96

60 dBA

192

206

55 dBA

413

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Pacifica Job Number: 8141
Road Segment: w/o (n/o) Alton Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Ha	rd = 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	7,400 vehicles	6			Autos:	15				
	Percentage:	10%		Me	dium Trucks	(2 Axles):	15				
Peak H	Hour Volume:	740 vehicles	3	Heavy Trucks (3+ Axles): 15							
Ve	ehicle Speed:	55 mph		Vehicle I	Miy						
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data					Auto		J	9.6%			
	rrier Height:	0.0 feet		Ме	edium Truck			10.3%	1.84%		
Barrier Type (0-V	•	0.0 reet 0.0			leavy Truck			10.8%	0.74%		
• • •	ist. to Barrier:	0.0 100.0 feet									
Centerline Dist.				Noise So	ource Eleva	tions (in f	eet)				
		100.0 feet			Autos:	2.000					
Barrier Distance		0.0 feet		Mediui	m Trucks:	4.000					
Observer Height	. ,	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
	ad Elevation:	0.0 feet 0.0 feet					- · · ·				
Ro		Lane Eq	uivalent Dis		teet)						
	Road Grade:	0.0%			Autos:	96.607					
	Left View:	-90.0 degree	es	Mediui	m Trucks:	96.566					
	Right View:	90.0 degree	es	Heav	y Trucks:	96.608					
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	-4.13	-4.3	9	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-21.37	-4.3	9	-1.20	<i>-4</i> .97	0.0	000	0.000		
Heavy Trucks:	86.40	-25.32	-4.3	9	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atter	nuation)							
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Nigl	ht	Ldn	CI	VEL		
Autos:	62	.1 (60.2	58.4		52.3	61.0)	61.6		
Medium Trucks:	55	.4	53.9	47.6		46.0	54.5	5	54.7		
Heavy Trucks:	55	.5	54.1	45.0		46.3	54.6	3	54.8		
Vehicle Noise:		.6	61.9	58.9		54.0	62.6	6	63.1		
Contorlino Distan	co to Noiso Co	ontour (in foot	1								

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	32	69	149	321
CNEL:	35	74	160	345

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Job Number: 8141

Road Segment: e/o El Toro Rd.

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT D	DATA				NO	OISE	MODE	L INPUT	S	
Highway Data					Sit	te Cond	ditions (l	Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	36,400	vehicles	;					Autos:	15		
Peak Hour	Percentage:	10%	6			Med	lium Truc	cks (2	Axles):	15		
Peak H	Hour Volume:	3,640	vehicles	5	Heavy Trucks (3+ Axles): 15							
Ve	ehicle Speed:	50	mph		Va	hicle N	Niy					
Near/Far La	ne Distance:	70	feet				cleType		Day	Evening	Night	Daily
Site Data								utos:	77.5%	J	9.6%	_
	rrier Height:	0.0	feet			Me	dium Tru	ıcks:	84.8%		10.3%	
Barrier Type (0-W	•	0.0					leavy Tru		86.5%		10.8%	
• • • •	ist. to Barrier:	100.0										
Centerline Dist.					No	oise So	urce Ele	vatio	ns (in f	eet)		
		100.0					Autos:	: 2	.000			
Barrier Distance			feet			Mediun	n Trucks:	: 4	.000			
Observer Height	. ,		feet			Heavy	/ Trucks:	: 8	.006	Grade Ad	ljustment	: 0.0
Pad Elevation: 0.0 feet					-							
Road Elevation: 0.0 feet					La	ne Equ	iivalent l			teet)		
	Road Grade:	0.0	%				Autos:		3.723			
	Left View:	-90.0	degree	es .		Mediun	n Trucks:	: 93	3.680			
	Right View:	90.0	degree	es .		Heavy	/ Trucks:	: 93	3.723			
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traffic	Flow	Distance)	Finite I	Road	Fres	nel	Barrier At	ten Bei	m Atten
Autos:	70.20		3.20	-4.	.20		-1.20		-4.87	0.	000	0.000
Medium Trucks:	81.00		-14.04	-4.	.19		-1.20		-4.97	0.	000	0.000
Heavy Trucks:	85.38		-17.99	-4.	.20		-1.20		-5.16	0.	000	0.000
Unmitigated Nois	e Levels (with	out Top	oo and l	barrier atte	enua	ation)						
VehicleType	Leq Peak Ho	ur L	eq Day	Leq	Eve	ning	Leq N	light		Ldn	С	NEL
Autos:	68	3.0	(66.1		64.3		58.	.3	66.	9	67.5
Medium Trucks:	61	.6	6	60.1		53.7		52.	.2	60.	6	60.9
Heavy Trucks:	62	2.0	6	60.6		51.5		52.	.8	61.	1	61.3
Vehicle Noise:).7	(68.0		64.9		60.	.1	68.	7	69.1
Contorlino Distan	co to Noisa C	ontour	(in foot)									

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	82	176	379	815
CNEL:	88	189	407	876

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Road Segment: w/o Los Alisos Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPEC	CIFIC INF	PUT DATA				N	OISE	MODE	L INPUT	S			
Highway Data				S	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)				
Average Daily Traffic	c (Adt): 31	1,000 vehicle	S					Autos:	15				
Peak Hour Perce	. ,	10%			Me	dium Tru	ıcks (2	Axles):	15				
Peak Hour V	olume: 3	3,100 vehicles	S		He	avy Truc	ks (3+	Axles):	15				
Vehicle 3	Speed:	55 mph		V	'ehicle l	Miv							
Near/Far Lane Dis	stance:	88 feet				icleType		Day	Evening	Night	Daily		
Site Data					VOIII		lutos:	77.5%		9.6%	-		
	la indata	0.0 fast			Me	, edium Tr		84.8%		10.3%	1.84%		
Barrier Fund (O. Woll, 1	•	0.0 feet 0.0								10.8%	0.74%		
Barrier Type (0-Wall, 1- Centerline Dist. to I	,	100.0 feet								. 0.070	011 170		
Centerline Dist. to Ob		100.0 feet		٨	loise Sc	ource El	evatio	ns (in fe	eet)				
Barrier Distance to Ob		0.0 feet				Autos	s: 2	.000					
					Medium Trucks: 4.000								
Observer Height (Above Pad Ele		5.0 feet			Heavy Trucks: 8.006 Grade Adjustment: 0						0.0		
Road Ele		0.0 feet 0.0 feet		1	Lane Equivalent Distance (in feet)								
	Grade:	0.0 feet 0.0%		_	une Eq	Autos		0.850	1001)				
	t View:				Medium Trucks: 89.805								
	t View. t View:	-90.0 degree				y Trucks		.850					
Ngn	t view.	90.0 degree	7 5		Heav	y Trucks	s. 03	.000					
FHWA Noise Model Cal	culations												
VehicleType RE	EMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	71.78	2.09		-3.92		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-15.15		-3.92		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-19.10		-3.92		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Leve	els (witho	ut Topo and	barrie	r attenu	ıation)								
VehicleType Leq I	Peak Hour	Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL		
Autos:	68.8	3	66.9		65.1		59.	.0	67.7	7	68.3		
Medium Trucks:	62.1		60.6		54.3		52.	.7	61.2	2	61.4		
Heavy Trucks:	62.2	2	8.06		51.7		53.	.0	61.3	3	61.4		
Vehicle Noise:	70.3	3	68.6		65.6		60.	.7	69.3	3	69.8		
Centerline Distance to	Noise Cor	ntour (in feet)										

70 dBA

90

96

Ldn:

CNEL:

65 dBA

193

208

60 dBA

416

448

55 dBA

897

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Road Segment: e/o Los Alisos Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA				NO	DISE M	ODE	L INPUT	S		
Highway Data				S	ite Con	ditions (Hard = 1	0, Sc	oft = 15)			
Average Daily	Traffic (Adt): 4	17,000 vehicle	es				Α	utos:	15			
	Percentage:	10%			Med	dium Trud	cks (2 A	des):	15			
Peak H	lour Volume:	4,700 vehicle	es		Heavy Trucks (3+ Axles): 15							
Ve	ehicle Speed:	55 mph		V	Vehicle Mix							
Near/Far La	ne Distance:	88 feet		-		icleType		Day	Evening	Night	Daily	
Site Data								7.5%	J	9.6%		
Ra	rrier Height:	0.0 feet			Me	edium Tru	ıcks: 8	4.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			F	leavy Tru	ıcks: 8	6.5%	2.7%	10.8%	0.74%	
• • • •	st. to Barrier:	100.0 feet						<i>(</i> : c				
Centerline Dist.		100.0 feet		N	oise So	ource Ele			eet)			
Barrier Distance		0.0 feet				Autos:	_					
Observer Height		5.0 feet				n Trucks:	_					
-	ad Elevation:	0.0 feet			Heav	y Trucks:	8.00	06	Grade Ad	iustment.	0.0	
	ad Elevation: ad Elevation:	0.0 feet		Li	ane Eqi	uivalent l	Distance	e (in :	feet)			
	Road Grade:	0.0%				Autos:		•	,			
	Left View:	-90.0 degre	00		Mediur	n Trucks:						
	Right View:	•				y Trucks:						
	Rigiti view.	90.0 degre	es		i icav	y Trucks.	. 09.0	50				
FHWA Noise Mod	lel Calculation	s		I								
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite	Road	Fresne	·/	Barrier Att	en Ber	m Atten	
Autos:	71.78	3.90	-	3.92		-1.20	_	4.87	0.0	000	0.000	
Medium Trucks:	82.40	-13.34	-	3.92		-1.20	-	4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-17.30	-	3.92		-1.20	-,	5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barrier a	ttenu	ation)							
VehicleType	Leq Peak Hou	ır Leq Daj	y Le	q Eve	ening	Leq N	light		Ldn	CI	VEL	
Autos:	70	.6	68.7		66.9		60.8		69.5	5	70.1	
Medium Trucks:	63	.9	62.4		56.1		54.5		63.0)	63.2	
Heavy Trucks:	64	.0	62.6		53.5		54.8		63.1	I	63.3	
Vehicle Noise:	72	.1	70.4		67.4		62.5		71.1	1	71.6	
Contorlino Distan	co to Noisa Ca	ntour (in foo	<i>-</i>									

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	118	255	549	1,184							
CNEL:	127	274	591	1,273							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Job Number: 8141

Road Segment: w/o Alicia Pkwy.

Analyst: B. Lawson

SITE S	SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS						OISE N	ИODE	L INPUT		
Highway Data				5	Site Con	ditions (Hard =	10, So	oft = 15)		
Average Daily Ti	raffic (Adt): 3	6,100 vehicles	3					Autos:	15		
Peak Hour P	Percentage:	10%			Me	dium Tru	cks (2 A	Axles):	15		
Peak Ho	ur Volume:	3,610 vehicles	6		He	avy Truci	ks (3+ A	Axles):	15		
Vehi	icle Speed:	55 mph		,	/ehicle	Miv					
Near/Far Lane	e Distance:	88 feet				icleType		Day	Evening	Night	Daily
Site Data					***		utos:	77.5%	J	9.6%	-
	ior Usiaht.	0.0 feet			М	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-Wa	ier Height:	0.0 feet 0.0				Heavy Tru		86.5%		10.8%	0.74%
Centerline Dist.	,	100.0 feet									
Centerline Dist. to		100.0 feet		^	Voise So	ource Ele	evation	s (in fe	eet)		
Barrier Distance to		0.0 feet				Autos		000			
Observer Height (A		5.0 feet				m Trucks		000			
• ,	d Elevation:	0.0 feet			Heav	y Trucks	: 8.0	006	Grade Adj	iustment:	0.0
	d Elevation:	0.0 feet		L	Lane Eq	uivalent	Distan	ce (in t	feet)		
	oad Grade:	0.0%				Autos		**************************************			
,	Left View:	-90.0 degree	es.		Mediu	m Trucks					
1	Right View:	90.0 degree			Heav	y Trucks	: 89.	850			
FHWA Noise Model											
VehicleType	REMEL	Traffic Flow	Dis	stance		Road	Fresr		Barrier Atte		m Atten
Autos:	71.78	2.75		-3.92		-1.20		-4.87	0.0		0.000
Medium Trucks:	82.40	-14.49		-3.92		-1.20		-4.97	0.0		0.000
Heavy Trucks:	86.40	-18.44		-3.92	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (witho	ut Topo and	barri	er atten	uation)						
VehicleType L	eq Peak Hour	Leq Day		Leq Ev	ening '	Leq N	light		Ldn	CI	VEL
Autos:	69.4	4 (37.5		65.7		59.7	7	68.3	3	68.9
Medium Trucks:	62.8	3 (31.3		54.9		53.4	ļ	61.8	3	62.1
Heavy Trucks:	62.8	3 (31.4		52.4		53.6	3	62.0)	62.1
Vehicle Noise:	71.0) (59.2		66.3		61.4	1	70.0)	70.4
Centerline Distance	e to Noise Co	ntour (in feet))								
		. ,		70 a	IBA	65 d	IBA .	6	60 dBA	55	dBA

Ldn:

CNEL:

99

107

214

230

461

496

993

1,068

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Job Number: 8141

Road Segment: e/o Alicia Pkwy.

Analyst: B. Lawson

SITE SPECIFIC	INP	UT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				•	Site Con	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	14,	,000 vehicles	6					Autos:	15		
Peak Hour Percentage:		10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume:	1,	,400 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Vehicle Speed:		50 mph		,	Vehicle i	Mix					
Near/Far Lane Distance:		70 feet				icleType	ę	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
		0.0 feet			Me	edium T		84.8%		10.3%	1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm).		0.0 reet				leavy T		86.5%		10.8%	0.74%
Centerline Dist. to Barrier.		100.0 feet									
Centerline Dist. to Observer.		100.0 feet			Noise So				eet)		
Barrier Distance to Observer.		0.0 feet				Auto		.000			
Observer Height (Above Pad).		5.0 feet				m Truck		.000			
Pad Elevation.		0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment	: 0.0
Road Elevation.		Lane Eq	uivalen	t Distai	nce (in i	feet)					
Road Grade.								3.723			
Left View.		-90.0 degree	es		Mediu	m Truck	s: 93	3.680			
Right View.		90.0 degree			Heav	y Truck	s: 93	3.723			
FHWA Noise Model Calculation											
VehicleType REMEL		raffic Flow	Di	istance		Road	Fres		Barrier Att		m Atten
Autos: 70.2		-0.95		-4.20		-1.20		-4.87		000	0.000
Medium Trucks: 81.0		-18.19		-4.19		-1.20		-4.97		000	0.000
Heavy Trucks: 85.3	8	-22.14		-4.20	0	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thou	it Topo and I	barri	ier atten	uation)						
VehicleType Leq Peak H	our	Leq Day		Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	3.9	(52.0		60.2		54	.1	62.8	3	63.4
Medium Trucks:	57.4		55.9		49.6		48		56.5	5	56.7
	57.8	Į	6.4		47.4		48		57.0)	57.1
Vehicle Noise:	55.6	(3.8		60.8		56	.0	64.5	5	65.0
Centerline Distance to Noise	Con	tour (in feet))								
				70 d	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

43

46

93

100

431

463

200

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Jamboree Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS								
Highway Data				Sit	te Conditions	(Hard = 10	, Sc	oft = 15)					
Average Daily	Traffic (Adt):	15,500 vehicle	s			Au	tos:	15					
Peak Hour	Percentage:	10%			Medium Tr	ucks (2 Axl	es):	15					
Peak H	lour Volume:	1,550 vehicle	s		Heavy Tru	icks (3+ Axl	es):	15					
Ve	ehicle Speed:	50 mph		Ve	hicle Mix								
Near/Far La	ne Distance:	70 feet			VehicleType	e Da	av	Evening	Night	Daily			
Site Data							.5%	_	9.6%	-			
Ba	rrier Height:	0.0 feet			Medium 7	rucks: 84	.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	_	0.0			Heavy 7	rucks: 86	.5%	2.7%	10.8%	0.74%			
Centerline Di		100.0 feet		Ne	oise Source E	ilovations (in f	201					
Centerline Dist.	to Observer:	100.0 feet		/٧0				et)					
Barrier Distance	to Observer:	0.0 feet			Auto Medium Truck		_						
Observer Height	(Above Pad):	5.0 feet					_	Grade Adj	iustmont				
P	ad Elevation:	0.0 feet			Heavy Truck	is. 0.000	5	Grade Adj	ustinent	0.0			
Ro	ad Elevation:	0.0 feet		La	ne Equivalen	t Distance	(in i	feet)					
	Road Grade:	0.0%			Auto	os: 93.72	3						
	Left View:	-90.0 degre	es		Medium Truck	(s: 93.68	0						
	Right View:	90.0 degre	es		Heavy Truck	(s: 93.72	3						
FHWA Noise Mod	lel Calculation	ıs											
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite Road	Fresnel		Barrier Atte	en Ber	m Atten			
Autos:	70.20	-0.51		-4.20	-1.20	-4.	.87	0.0	000	0.000			
Medium Trucks:	81.00	-17.74		-4.19	-1.20	-4.	.97	0.0	000	0.000			
Heavy Trucks:	85.38	-21.70		-4.20	-1.20	-5.	.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenua	ation)								
VehicleType	Leq Peak Hot	ur Leq Day	/ Le	eq Eve	ning Leq	Night		Ldn	CI	VEL			
Autos:	64	1.3	62.4		60.6	54.6		63.2	2	63.8			
Medium Trucks:	57	7.9	56.4		50.0	48.4		56.9)	57.1			
Heavy Trucks:	58	3.3	56.9		47.8	49.1		57.4	ļ	57.6			

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	46	99	214	462
CNEL:	50	107	230	496

61.2

64.2

65.0

56.4

65.4

Vehicle Noise:

66.0

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o SR-261 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site	Conditions	(Hard :	= 10, So	oft = 15)			
Average Daily	Traffic (Adt):	25,800 vehicle	S				Autos:	15			
Peak Hour	Percentage:	10%			Medium T	rucks (2	Axles):	15			
Peak H	lour Volume:	2,580 vehicle	S	Heavy Trucks (3+ Axles): 15							
Ve	hicle Speed:	60 mph		Veh	icle Mix						
Near/Far La	ne Distance:	76 feet		1011	VehicleTyp	е	Day	Evening	Night	Daily	
Site Data					,,	Autos:	77.5%		9.6%	•	
Ra	rrier Height:	0.0 feet			Medium	Trucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	_	0.0			Heavy 1	Trucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Di		100.0 feet		Noi	se Source E	Ilovatio	ns (in fa	not)			
Centerline Dist.	to Observer:	100.0 feet		7407	Auto		.000				
Barrier Distance	to Observer:	0.0 feet		Λ.	Auti ledium Truci		.000				
Observer Height ((Above Pad):	5.0 feet				-		Crada Ad	iuotmont		
•	ad Elevation:	0.0 feet			Heavy Truc	ks: 8	.006	Grade Adj	iustment.	0.0	
Roa	ad Elevation:	0.0 feet		Lan	e Equivaler	nt Distai	nce (in f	eet)			
	Road Grade:	0.0%			Auto	os: 92	2.547				
	Left View:	-90.0 degre	es	N	ledium Truci	ks: 92	2.504				
	Right View:	90.0 degre			Heavy Truc	ks: 92	2.547				
FHWA Noise Mod	el Calculation REMEL	ns Traffic Flow	Distanc	o 1	Finite Road	Fres	nol	Barrier Atte	on Pon	m Atton	
VehicleType				<i>⊎ 1</i> I.11						m Atten	
Autos:					-1.20		-4.87 4.07		000	0.000	
Medium Trucks:				1.11	-1.20		-4.97		000	0.000	
Heavy Trucks:	87.33	3 -20.28	-2	l.11	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (witl	hout Topo and	barrier att	enuat	ion)						
VehicleType	Leq Peak Ho	our Leq Day	/ Leq	Even	ing Led	n Night		Ldn	CI	VEL	
Autos:	6	8.8	66.9		65.2	59.	.1	67.7	7	68.3	
Medium Trucks:	6	2.1	60.5		54.2	52	.6	61.1	l	61.3	
Heavy Trucks:	6	1.7	60.3		51.3	52.	.5	60.9)	61.0	
Vehicle Noise:	7	0.3	68.5		65.7	60	.7	69.3	3	69.7	

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	89	192	414	893							
CNEL:	96	207	446	961							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o SR-261 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPE	CIFIC INF	PUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffi	ic (Adt): 21	,400 vehicles	3					Autos:	15		
Peak Hour Perc	. ,	10%			Medium Trucks (2 Axles): 15						
Peak Hour \	/olume: 2	2,140 vehicles	3		Heavy Trucks (3+ Axles): 15						
Vehicle	Speed:	60 mph		1	/ehicle l	Miv					
Near/Far Lane Di	istance:	76 feet		-		icleType		Day	Evening	Night	Daily
Site Data					VOIII		Autos:	77.5%		9.6%	-
	11-1-1-1-	0.0 foot			Me	, edium Tr		84.8%		10.3%	1.84%
Barrier	•	0.0 feet 0.0				leavy Tr		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1	,						GONO.		2 70	101070	0.1 170
Centerline Dist. to Centerline Dist. to Ol		100.0 feet		٨	loise Sc	ource El	evatio	ns (in fe	eet)		
		100.0 feet				Autos	s: 2	.000			
Barrier Distance to Ol		0.0 feet			Mediui	n Trucks	s: 4	.000			
Observer Height (Abov		5.0 feet			Heavy Trucks: 8.006 Grade Adjustmer					iustment:	0.0
	evation:	0.0 feet		,	Lane Equivalent Distance (in feet)						
Road El		0.0 feet			arie Eq	Autos		2.547	icei)		
	Grade:	0.0%			Modiuu	Autos n Trucks		54 <i>1</i> 2.504			
	eft View:	-90.0 degree						504 2.547			
Rigi	ht View:	90.0 degree	es		пеач	y Trucks	s. 92	547			
FHWA Noise Model Ca	lculations			Į.							
VehicleType R	EMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.10		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-17.13		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-21.09		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Lev	els (witho	ut Topo and	barrie	er attenu	uation)						
VehicleType Leq	Peak Hour	Leq Day	,	Leq Ev	ening	Leq I	Night		Ldn	CI	VEL
Autos:	68.0) (66.1		64.3		58.	.3	66.9)	67.5
Medium Trucks:	61.2	2	59.7	53.4 51.8 60.3			3	60.5			
Heavy Trucks:	60.9) :	59.5		50.5		51.	.7	60.1	<u> </u>	60.2
Vehicle Noise:	69.5	5	67.7		64.8		59.	.9	68.4	1	68.9
Centerline Distance to	Noise Cor	ntour (in feet))								

70 dBA

79

85

Ldn:

CNEL:

65 dBA

170

183

60 dBA

366

394

55 dBA

788

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

Highway Data				14013	E MODE	L INPUT	3	
			Site Con	ditions (Har	d = 10, Sc	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage:	10%			dium Trucks	. ,	15		
Peak Hour Volume: Vehicle Speed:	,	S	Vehicle I	avy Trucks (3	3+ Axies).	15		
Near/Far Lane Distance:	•	•		Vlix icleType	Day	Evening	Night	Daily
Site Data				Autos	•	_	9.6%	
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist, to Barrier:	0.0		F	edium Trucks Heavy Trucks	: 86.5%	2.7%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Observer:			Noise Sc	ource Elevat	•	eet)		
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	0.0 feet 5.0 feet	0.0 feet 5.0 feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adj				
Road Elevation:			Lane Eq	uivalent Dis	tance (in	feet)		
Road Grade: Left View: Right View:	-90.0 degree		Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547					
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 0.38	-4.	11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	8 -16.86	-4.	11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.3	3 -20.82	-4.	11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	nuation)		,			
VehicleType Leq Peak H			Evening	Leq Nigh		Ldn		VEL
		66.4	64.6		58.6	67.2		67.8
		60.0	53.6 52.1 60.6				60.8	
		59.8	50.7 52.0 60.3				60.5	
Vehicle Noise:	59.8	68.0	65.1	(50.2	68.7	7	69.2

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	82	177	382	822								
CNEL:	89	191	411	885								

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data				Si	te Con	ditions ((Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	26,000 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tru	icks (2	Axles):	15		
Peak H	lour Volume:	2,600 vehicle	s		Hea	avy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph	60 mph			Лix					
Near/Far La	ne Distance:	76 feet				cleType		Day	Evening	Night	Daily
Site Data					VOIII		utos:	77.5%	_	9.6%	97.42%
	io	0.0 foot			Me	edium Tri		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet 0.0				leavy Tri		86.5%		10.8%	0.74%
Barrier Type (0-W Centerline Di	,	0.0 100.0 feet									011 170
Centerline Di		100.0 feet		No	oise So	urce Ele	evatio	ns (in fe	eet)		
Barrier Distance		0.0 feet				Autos	: 2	.000			
					Mediun	n Trucks	: 4	.000			
Observer Height	(Above Pau). ad Elevation:	5.0 feet			Heav	y Trucks	: 8	.006	Grade Ad	justment.	0.0
	ad Elevation: ad Elevation:	0.0 feet 0.0 feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0 feet 0.0%			ino Equ	Autos		.547	1001)		
	Left View:				Modium	n Trucks		.504			
		-90.0 degre				n Trucks y Trucks		.547			
	Right View:	90.0 degre	es		i ieav	y Trucks	. 92	.547			
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distanc	е	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.95		4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.29		4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.24		4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (witl	hout Topo and	barrier at	tenua	ation)						
VehicleType	Leq Peak Ho	our Leq Day	/ Led	q Eve	ning	Leq N	Vight		Ldn	CI	VEL
Autos:	6	8.9	67.0		65.2		59.	1	67.8	3	68.4
Medium Trucks:	6:	2.1	60.6		54.2		52.	7	61.1	1	61.4
Heavy Trucks:	6	1.8	60.3		51.3		52.	6	60.9	9	61.0
Vehicle Noise:	7	0.3	68.6		65.7		60.	7	69.3	3	69.8

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn: ¯	90	193	416	897							
CNEL:	97	208	449	966							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Sand Canyon. Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS							
Highway Data				;	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	27,600 vehicle	:S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,760 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		-	Vehicle l	liv					
Near/Far La	ne Distance:	52 feet				cleType	2	Day	Evening	Night	Daily
Site Data					VCIII		Autos:	77.5%		•	97.42%
					Mε	, edium T		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-W	*	0.0				roavy r	raono.	00.070	2.1 70	10.070	0.7 170
Centerline Di		100.0 feet		1	Noise Sc	urce E	levatio	ns (in fe	eet)		
Centerline Dist.		100.0 feet				Auto	s: 2	2.000			
Barrier Distance		0.0 feet			Mediur	n Truck	s: 4	.000			
Observer Height (•	5.0 feet			Heav	y Truck	rs: 8	3.006	Grade Adj	iustment:	0.0
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
	ad Elevation:	0.0 feet		-	Lane Eq				eet)		
,	Road Grade:	0.0%				Auto		6.607			
	Left View:	-90.0 degre				n Truck		5.566			
	Right View:	90.0 degre	es		Heav	y Truck	s: 96	8.608			
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Atte	en Ber	m Atten
Autos:	71.78	1.59		-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.65		-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.61		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Da	/	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	67	['] .8	65.9		64.1		58	.1	66.7	7	67.3
Medium Trucks:	61	.2	59.7		53.3		51	.7	60.2	2	60.4
Heavy Trucks:	61	.2	59.8		50.7		52	.0	60.3	3	60.5
Vehicle Noise:	69).4	67.6		64.6		59	.8	68.3	3	68.8

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	77	166	358	772								
CNEL:	83	179	385	830								

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Sand Canyon. Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				N	IOISE	MODE	L INPUT	s	
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	23,100 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak F	lour Volume:	2,310 vehicle	es		He	avy Truc	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		V	ehicle l	Иix					
Near/Far La	ane Distance:	52 feet				cleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet			Ме	edium Tr	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			F	leavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		N	nise Sc	urce El	evatio	ns (in fa	2et)		
Centerline Dist.	to Observer:	100.0 feet		-	0/30 00	Autos		.000	<i></i>		
Barrier Distance	to Observer:	0.0 feet			Modiur	n Trucks		.000			
Observer Height	(Above Pad):	5.0 feet							Grade Ad	liustmant	
P	ad Elevation:	0.0 feet			пеач	y Trucks	S. C	.006	Grade Au	justin o nt	0.0
Ro	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0%				Autos	s: 96	6.607			
	Left View:	-90.0 degre	es		Mediur	n Trucks	s: 96	5.566			
	Right View:	90.0 degre			Heav	y Trucks	s: 96	6.608			
FHWA Noise Mod	lel Calculation	กร									
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.81	-	-4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.42	-	-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.38	-	-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier a	ttenu	ation)						
VehicleType	Leq Peak Ho	our Leq Day	y Le	q Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	6	7.0	65.1		63.3		57	.3	65.9	9	66.5
Medium Trucks:	6	0.4	58.9		52.5		51	.0	59.4	4	59.7
Heavy Trucks:	6	0.4	59.0		50.0		51	.2	59.6	3	59.7
Vehicle Noise:	6	8.6	66.8		63.9		59	.0	67.5	5	68.0

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	69	148	318	686								
CNEL:	74	159	342	738								

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Ridge Valley

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOIS	SE MODE	L INPUT	S		
Highway Data				Site Con	ditions (Ha	rd = 10, So	oft = 15)			
Average Daily	Traffic (Adt):	24,400 vehicle	S			Autos:	15			
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15			
Peak F	lour Volume:	2,440 vehicle	S	He	avy Trucks ((3+ <i>Axles</i>):	15			
Ve	ehicle Speed:	55 mph		Vehicle Mix						
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily	
Site Data					Auto		J	9.6%	•	
Ra	rrier Height:	0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	_	0.0		H	Heavy Truck	s: 86.5%	2.7%	10.8%	0.74%	
Centerline Di	•	100.0 feet		Noisa Sa	ource Eleva	tions (in f	not)			
Centerline Dist.	to Observer:	100.0 feet		140136 30	Autos:	2.000	, c ()			
Barrier Distance	to Observer:	0.0 feet		Modiu	m Trucks:	4.000				
Observer Height	(Above Pad):	5.0 feet				8.006	Grade Ad	iustmont:		
P	ad Elevation:	0.0 feet		пеач	y Trucks:	0.000	Grade Au	justin o nt.	0.0	
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)			
	Road Grade:	0.0%			Autos:	96.607				
	Left View:	-90.0 degre	es	Mediu	m Trucks:	96.566				
	Right View:	90.0 degre	es	Heav	y Trucks:	96.608				
FHWA Noise Mod	lel Calculatio	ns								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten	
Autos:	71.78	3 1.05	-4	.39	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-16.19	-4	.39	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-20.14	-4	.39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (witl	hout Topo and	barrier att	enuation)						
VehicleType	Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq Nigl	nt	Ldn	CI	VEL	
Autos:	6	7.2	65.3	63.6		57.5	66.1	1	66.7	
Medium Trucks:	6	0.6	59.1	52.8		51.2	59.7	7	59.9	
Heavy Trucks:	6	0.7	59.2	50.2		51.5	59.8	3	59.9	
Vehicle Noise:	6	8.8	67.1	64.1		59.2	67.8	3	68.3	

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn: ¯	71	153	330	711							
CNEL:	76	165	355	765							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Ridge Valley

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOI	SE MODE	L INPUT	S	
Highway Data				Site Con	ditions (Ha	ard = 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	25,400 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Truck	s (2 Axles):	15		
Peak H	lour Volume:	2,540 vehicles	S	He	avy Trucks	(3+ Axles):	15		
Ve	hicle Speed:	55 mph		Vehicle	Miy				
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data					Auto			9.6%	•
Ra	rrier Height:	0.0 feet		М	edium Truck	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0		ı	Heavy Truck	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet		M-' 0		· (' (' f	' 4\		
Centerline Dist.		100.0 feet		Noise So	ource Eleva	•	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height	(Above Pad):	5.0 feet			m Trucks:	4.000	Crada Ad		
	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
Roa	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)					
	Road Grade:	0.0%			Autos:	96.607			
	Left View:	-90.0 degree	es	Mediu	m Trucks:	96.566			
	Right View:	90.0 degree	es	Heav	y Trucks:	96.608			
FHWA Noise Mod	el Calculation	15							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road I	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.23	-4.	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.01	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.97	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	nout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	Leq	Evening	Leq Nig	ht	Ldn	CI	VEL
Autos:	6	7.4	65.5	63.7		57.7	66.3	3	66.9
Medium Trucks:	60	0.8	59.3	52.9		51.4	59.8	3	60.1
Heavy Trucks:	60	0.8	59.4	50.4		51.6	60.0)	60.1

Vehicle Noise:	69.0 67.2	2 64.3	3 59.4	68.0	68.4
Centerline Distance to	Noise Contour (in feet)				
		70 dBA	65 dBA	60 dBA	55 dBA
	Ldn	: 73	157	339	730
	CNEL	: 79	169	365	786

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: b/w Silverado and Portola Springs

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT I	DATA			NOISE MODEL INPUTS						
Highway Data					S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	27,200	vehicles	s					Autos:	15		
	Percentage:	109				Me	dium Tru	ıcks (2	Axles):	15		
Peak H	Hour Volume:	2,720	vehicles	S		He	avy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	55	mph		ν	'ehicle l	Vix					
Near/Far La	ane Distance:	52	feet				icleType		Day	Evening	Night	Daily
Site Data								Autos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0	feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0				F	leavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:		feet			laisa Sa	ource El	ovotio	no (in f	204)		
Centerline Dist.	to Observer:	100.0) feet			ioise sc			•	ei)		
Barrier Distance	to Observer:	0.0) feet			N 4 = -12	Autos		2.000			
Observer Height	(Above Pad):	5.0) feet				n Trucks		.000	Cuada Ad	li a 4 ma a m	
_	Pad Elevation:) feet			Heav	y Trucks	s: 8	3.006	Grade Ad	justment	. 0.0
Ro	ad Elevation:) feet		L	ane Eq	uivalent	Dista	nce (in i	feet)		
	Road Grade:	0.0					Autos	s: 96	6.607	-		
	Left View:		degree	es		Mediur	n Trucks	s: 96	6.566			
	Right View:) degree			Heav	y Trucks	s: 96	6.608			
FHWA Noise Mod		_	- ,			F: "	5 /			D ' 4"		A
VehicleType	REMEL		Flow	Dis	tance	Finite		Fres		Barrier Att		rm Atten
Autos:			1.52		-4.39		-1.20		-4.87		000	0.000
Medium Trucks:			-15.72		-4.39		-1.20		-4.97		000	0.000
Heavy Trucks:	86.40)	-19.67		-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout To	po and	barrie	er attenu	ıation)						
VehicleType	Leq Peak Ho	ur I	Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	С	NEL
Autos:	6	7.7	-	65.8		64.0		58	.0	66.6	6	67.2
Medium Trucks:	6	1.1	:	59.6		53.2		51	.7	60.1	1	60.4
Heavy Trucks:	6	1.1		59.7		50.7		51	.9	60.3	3	60.4
Vehicle Noise:	69	9.3		67.5		64.6		59	.7	68.3	3	68.7

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	76	165	355	764							
CNEL:	82	177	382	822							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Portola Springs

Job Number: 8141

Analyst: B. Lawson

SITE SPE	CIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S		
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)			
Average Daily Traf	fic (Adt): 2	2,900 vehicle	S					Autos:	15			
Peak Hour Per	. ,	10%			Me	dium Tru	ıcks (2	Axles):	15			
Peak Hour	Volume:	2,290 vehicles	S		Heavy Trucks (3+ Axles): 15							
Vehicle	e Speed:	55 mph		V	ehicle l	Miv						
Near/Far Lane D	Distance:	52 feet		-		icleType		Day	Evening	Night	Daily	
Site Data					V 011		Autos:	77.5%		9.6%	-	
		0.0 foot			Me	, edium Tr		84.8%		10.3%	1.84%	
	Height:	0.0 feet 0.0				Heavy Trucks:				10.8%	0.74%	
Barrier Type (0-Wall, Centerline Dist. to	,	0.0 100.0 feet								. 0.070	011 170	
Centerline Dist. to C				٨	oise So	ource El	evatio	ns (in fe	eet)			
		100.0 feet				Autos	s: 2	2.000				
Barrier Distance to C		0.0 feet			Mediui	m Trucks	s: 4	.000				
Observer Height (Abo		5.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	iustment:	0.0	
	levation:	0.0 feet		Lane Equivalent Distance (in feet)								
	levation:	0.0 feet		Autos: 96.607								
	d Grade:	0.0%			Modiuu	Autos m Trucks		5.566				
	eft View:	-90.0 degree				y Trucks		5.608				
KIÇ	ght View:	90.0 degree	es		пеач	y Trucks	s. 90	0.000				
FHWA Noise Model C	alculations	1										
VehicleType F	REMEL	Traffic Flow	Distar	се	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	0.78		-4.39		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-16.46		-4.39		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-20.42		-4.39		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Le	vels (witho	ut Topo and	barrier a	ttenu	ation)							
VehicleType Led	g Peak Houl	Leq Day	' Le	eq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	67.	0	65.1		63.3		57	.2	65.9	9	66.5	
Medium Trucks:	60.	4	58.8		52.5		50	.9	59.4	1	59.6	
Heavy Trucks:	60.	4	59.0		49.9		51.	.2	59.5	5	59.7	
Vehicle Noise:	68.	5	66.8		63.8		58	.9	67.5	5	68.0	
Centerline Distance to	Noise Co	ntour (in feet)									

70 dBA

68

73

Ldn:

CNEL:

65 dBA

147

158

60 dBA

316

340

55 dBA

682

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA			NO	ISE MODE	L INPUT	s			
Highway Data				Site Cor	nditions (Ha	ard = 10, Sc	oft = 15)				
	Traffic (Adt): Percentage: Hour Volume:	5,000 vehicles 10% 500 vehicles				Autos: (s (2 Axles): (3+ Axles):	15 15 15				
Near/Far La	ehicle Speed: ane Distance:	50 mph 70 feet		Vehicle Veh	icleType	Day	Evening	Night	Daily		
Site Data					Aut			9.6%			
Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 feet 0.0			edium Truc Heavy Truc			10.3% 10.8%	1.84% 0.74%		
Centerline D	ist. to Barrier:	100.0 feet		Noise S	ource Elev	ations (in fe	eet)				
Ro	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723							
FHWA Noise Mod VehicleType	lel Calculation REMEL	s Traffic Flow	Distance	Einito	Road	Fresnel	Barrier Atte	on Por	m Atten		
Veriicie rype Autos:				.20	-1.20	-4.87		000	0.000		
Medium Trucks:				.19	-1.20	-4.97		000	0.000		
Heavy Trucks:				.20	-1.20	-5.16		000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)							
VehicleType	Leq Peak Ho	ur Leq Day	Leq	Evening	Leq Nig	ght	Ldn	CI	VEL		
Autos:			57.5	55.7		49.7	58.3		58.9		
Medium Trucks:			51.4	45.1		43.5	52.0		52.2		
Heavy Trucks:	53	3.4	51.9	42.9		44.2	52.5	5	52.6		
Vehicle Noise:	61	1.1	59.3	56.3		51.5	60.0)	60.5		

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	22	47	101	217								
CNEL:	23	50	108	233								

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOISE MODEL INPUTS						
Highway Data				S	ite Con	ditions (l	Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	22,000 vehicl	es					Autos:	15		
• •	Percentage:	10%			Me	dium Truc	cks (2)	Axles):	15		
Peak H	our Volume:	2,200 vehicl	es		He	avy Truck	ks (3+)	Axles):	15		
Ve	hicle Speed:	55 mph		V	ehicle l	Miv					
Near/Far Lai	ne Distance:	88 feet	eet			icleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%	-	9.6%	
Barrier Height: 0.0 feet					М	edium Tru		84.8%		10.3%	
Barrier Type (0-W	•	0.0 1661				Heavy Tru		86.5%		10.8%	
Centerline Dis		100.0 feet									
Centerline Dist.		100.0 feet		N	loise So	ource Ele			eet)		
Barrier Distance		0.0 feet				Autos:		000			
Observer Height (5.0 feet			Medium Trucks: 4.000						
• ,	ad Elevation:	0.0 feet			Heav	y Trucks:	8.	006	Grade Ad	justmen	t: 0.0
	ad Elevation:	0.0 feet		L	ane Ea	uivalent l	Distan	ce (in	feet)		
	Road Grade:	0.0%				Autos:		.850			
,	Left View:	-90.0 degr	200		Mediu	m Trucks:		.805			
	Right View:	90.0 degr				y Trucks:		.850			
FHWA Noise Mode	el Calculation	18									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresi	nel	Barrier Att	en Be	rm Atten
Autos:	71.78	0.60)	-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.6	4	-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.59	9	-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	nout Topo and	d barrie	er attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	ay	Leq Eve	ening	Leq N	light		Ldn	С	NEL
Autos:	67	7.3	65.4		63.6		57.	5	66.2	2	66.8
Medium Trucks:	60	0.6	59.1		52.8		51.2	2	59.	7	59.9
Heavy Trucks:	60	0.7	59.3		50.2		51.	5	59.8	3	60.0
Vehicle Noise:	68	8.8	67.1		64.1		59.2	2	67.8	8	68.3
Centerline Distanc	e to Noise C	ontour (in fee	of)								

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	71	154	331	714							
CNEL:	77	165	356	768							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Co.	nditions (H	lard = 10, S	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	32,000 vehicle 10% 3,200 vehicle				Autos: ks (2 Axles): s (3+ Axles):	15		
	ehicle Speed: ane Distance:	55 mph 88 feet		Vehicle Vel	nicleType	Day tos: 77.5%	Evening 12.9%	Night 9.6%	Daily 97.42%
Barrier Type (0-V	*	0.0 feet 0.0			Au Iedium Trud Heavy Trud	cks: 84.8%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): lad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 90.0 degree		Mediu Hea Lane Ec Mediu	Autos: Im Trucks: Im Trucks: In Trucks: In Trucks: In Autos: Im Trucks: In Trucks: In Trucks:	Grade Ad	justment:	0.0	
VehicleType Autos: Medium Trucks: Heavy Trucks:	71.78 82.40	Traffic Flow 2.23 -15.01	-3	e Finite 3.92 3.92 3.92	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	en Ber 000 000	<i>m Atten</i> 0.000 0.000 0.000
Unmitigated Nois VehicleType	e Levels (witl Leq Peak Ho			t enuation) Evening	Leq Ni	ght	Ldn	CI	VEL
Autos: Medium Trucks: Heavy Trucks:	62	8.9 2.3 2.3	67.0 60.8 60.9	65.2 54.4 51.9	ŀ	59.2 52.9 53.1	67.8 61.3 61.5	3	68.4 61.6 61.6
Vehicle Noise:	70	0.5	68.7	65.7	,	60.9	69.4	4	69.9

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	92	197	425	916							
CNEL:	99	212	457	985							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Glenn Ranch Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Con	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt): 50,0	000 vehicles	6					Autos:	15				
Peak Hour Percentage) <i>:</i>	10%			Me	dium Tr	ucks (2	Axles):	15				
Peak Hour Volume	e: 5,0	000 vehicles	6		He	avy Trud	cks (3+	Axles):	15				
Vehicle Speed	d:	55 mph		V	/ehicle l	Wiy							
Near/Far Lane Distance) <i>:</i>	88 feet		-		icleType	,	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%	Ū	9.6%			
Barrier Heigh	٠.	0.0 feet			Ме	edium T		84.8%		10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm		0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrie		00.0 feet		_									
Centerline Dist. to Observe		00.0 feet		^	loise Sc			•	eet)				
Barrier Distance to Observe		0.0 feet				Auto		2.000					
Observer Height (Above Pad		5.0 feet				n Truck		.000					
Pad Elevation		0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0		
Road Elevation		0.0 feet		L	ane Eq	uivalen	t Distai	nce (in i	feet)				
Road Grade		0.0%				Auto	s: 89	9.850					
Left Viev	v: -	90.0 degree	es		Mediui	n Truck	s: 89	9.805					
Right Viev		90.0 degree			Heav	y Truck	s: 89	9.850					
FHWA Noise Model Calculat	ions												
VehicleType REMEL	Tr	raffic Flow	Distar	nce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 71	78	4.17		-3.92		-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 82	40	-13.07		-3.92		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 86	40	-17.03		-3.92		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (w	ithout	t Topo and	barrier a	atteni	uation)								
VehicleType Leq Peak	Hour	Leq Day	L	eq Ev	ening	Leq	Night		Ldn	Ci	NEL		
Autos:	70.8	(68.9		67.2		61	.1	69.7	7	70.3		
Medium Trucks:	64.2	62.7			56.3		54	54.8 63.3		3	63.5		
Heavy Trucks:	64.2	(53.8 55.0			63.4		63.5				
Vehicle Noise:	72.4		70.6		67.7		62	.8	71.4	4	71.8		
Centerline Distance to Noise	Conte	our (in feet))										

70 dBA

123

133

Ldn:

CNEL:

65 dBA

266

286

60 dBA

573

616

55 dBA

1,233

1,327

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Glenn Ranch Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I		NOISE MODEL INPUTS								
Highway Data			Site Con	ditions (Ha	ard = 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	35,000 vehicles	3			Autos:	15				
Peak Hour Percentage:	10%		Me	dium Truck	s (2 Axles):	15				
Peak Hour Volume:	3,500 vehicles	S	He	avy Trucks	(3+ Axles):	15				
Vehicle Speed:	55 mph		Vehicle I	Mix						
Near/Far Lane Distance:	88 feet			icleType	Day	Evening	Night	Daily		
Site Data				Auto			9.6%	97.42%		
Barrier Height:	0.0 feet		Me	edium Truci	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Truck	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet									
Centerline Dist. to Observer:	100.0 feet		Noise So		ations (in fe	eet)				
Barrier Distance to Observer:	0.0 feet			Autos:	2.000					
Observer Height (Above Pad):	5.0 feet			n Trucks:	4.000					
= '	Pad Elevation: 0.0 feet			Heavy Trucks: 8.006 Grade Adjustment: 0.0						
Road Elevation:		Lane Eq	uivalent Di	stance (in	feet)					
Road Grade:	0.0 feet 0.0%		<u> </u>	Autos:	89.850	,				
Left View:	-90.0 degree	26	Mediu	n Trucks:	89.805					
Right View:	90.0 degree			y Trucks:	89.850					
rugik viou.	oo.o degree	,		,	00.000					
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos: 71.78	3 2.62	-3.9	92	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.40	-14.62	-3.9	92	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.40	-18.58	-3.9	92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	hout Topo and	barrier atte	nuation)							
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nig	ıht	Ldn	CI	VEL		
Autos: 6	9.3	67.4			59.6	68.2	2	68.8		
Medium Trucks: 6	2.7	61.2		54.8 53		53.3 61.7		61.9		
Heavy Trucks:6	2.7	61.3		52.2 53.5		61.8		62.0		
Vehicle Noise: 7	0.9	69.1	66.1	66.1 61.3 69.8			70.3			

70 dBA

97

105

Ldn:

CNEL:

65 dBA

210

225

60 dBA

451

486

55 dBA

972

1,046

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy. East

Road Segment: s/o SR-241 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				5	Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traf	fic (Adt): 3	5,000 vehicle	S					Autos:	15			
Peak Hour Per	. ,	10%			Me	dium Tru	ıcks (2	Axles):	15			
Peak Hour	Volume:	3,500 vehicle	s		He	avy Truc	cks (3+	Axles):	15			
Vehicle	e Speed:	55 mph		1	/ehicle l	Wiy						
Near/Far Lane D	Distance:	88 feet				icleType		Day	Evening	Night	Daily	
Site Data					V 011		Autos:	77.5%		9.6%	-	
	. I la la la la t	0.0 foot			Me	, edium Tr		84.8%		10.3%	1.84%	
	Height:	0.0 feet				leavy Tr		86.5%		10.8%	0.74%	
Barrier Type (0-Wall,	•	0.0			<u> </u>		GONO.		2,0	10.070	0.1 170	
Centerline Dist. to Centerline Dist. to O		100.0 feet		٨	loise Sc	ource El	evatio	ns (in fe	eet)			
		100.0 feet				Autos	s: 2	2.000				
Barrier Distance to O		0.0 feet			Mediui	n Trucks	s: 4	.000				
Observer Height (Abo		5.0 feet			Heav	y Trucks	s: 8	3.006	Grade Adj	iustment:	0.0	
	levation:	0.0 feet		,	Lane Equivalent Distance (in feet)							
	levation:	0.0 feet			arie Eq				ieei)			
	d Grade:	0.0%			1.4 m alii	Autos		9.850				
	eft View:	-90.0 degre				n Trucks		9.805				
Rig	ght View:	90.0 degre	es		Heav	y Trucks	s: 85	9.850				
FHWA Noise Model Co	alculations	;										
VehicleType F	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	2.62		-3.92		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-14.62		-3.92		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-18.58		-3.92		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Le	vels (witho	out Topo and	barrie	er atteni	uation)							
VehicleType Leq	Peak Hou	r Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	69.	3	67.4		65.6		59	.6	68.2	2	68.8	
Medium Trucks:	62.	7	61.2		54.8		53.	.3	61.7	7	61.9	
Heavy Trucks:	62.	7 61.3			52.2 53.5			61.8		62.0		
Vehicle Noise:	70.	9	69.1		66.1		61	.3	69.8	3	70.3	
Centerline Distance to	Noise Co	ntour (in feet)									

70 dBA

97

105

Ldn:

CNEL:

65 dBA

210

225

60 dBA

451

486

55 dBA

972

1,046

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: s/o Rancho Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Har	d = 10, S	oft = 15)					
Average Daily	Traffic (Adt):	60,000 vehicles	S			Autos:	15					
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles).	15					
Peak F	Hour Volume:	6,000 vehicles	S	He	avy Trucks (3+ <i>Axles).</i>	15					
Ve	ehicle Speed:	55 mph		Vehicle i	Mix							
Near/Far La	ane Distance:	88 feet			icleType	Day	Evening	Night	Daily			
Site Data					Autos		_	9.6%	_			
Ra	rrier Height:	0.0 feet		Me	edium Trucks	s: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-V	•	0.0		ŀ	Heavy Trucks	s: 86.5%	2.7%	10.8%	0.74%			
• • • •	ist. to Barrier:	100.0 feet										
Centerline Dist.		100.0 feet		Noise So	ource Elevat		eet)					
Barrier Distance		0.0 feet			Autos:	2.000						
Observer Height		5.0 feet			m Trucks:	4.000						
	Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	: 0.0			
	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)					
	Road Grade:	0.0%			Autos:	89.850						
	Left View:	-90.0 degree	es	Mediu	m Trucks:	89.805						
	Right View:	90.0 degree		Heav	y Trucks:	89.850						
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten			
Autos:	71.78	4.96	-3.	92	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-12.28	-3.	92	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-16.24	-3.	92	-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)								
VehicleType	Leq Peak Ho	ur Leq Day	Leq I	Evening	Leq Nigh	t	Ldn	CI	NEL			
Autos:	7	1.6	69.7	68.0		61.9	70.5		71.1			
Medium Trucks:	6	5.0	63.5	57.1		55.6	64.1	1	64.3			
Heavy Trucks:	6	5.0	63.6	54.6		55.8	64.2	2	64.3			

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	139	300	647	1,393						
CNEL:	150	323	696	1,498						

68.5

72.2

63.6

72.6

71.4

Vehicle Noise:

73.2

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy./S. Margarita Pkwy.

Job Number: 8141

Road Segment: e/o El Toro Rd.

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	50,300 v	vehicles	;					Autos:	15		
Peak Hour	Percentage:	10%	, D			Med	ium Tri	ucks (2 A	Axles):	15		
Peak H	lour Volume:	5,030 \	vehicles	;		Hea	vy Trud	cks (3+ A	Axles):	15		
Ve	hicle Speed:	55 ı	mph		Va	hicle M	liy					
Near/Far La	ne Distance:	88 1	feet		VCI	VehicleType Day			Dav	Evening	Night	Daily
Site Data					,, ,						97.42%	
	rrier Height:	0.0	feet			Med	dium Ti		84.8%		10.3%	
Barrier Type (0-W	•	0.0	ieel			Н	eavy Ti	rucks:	86.5%		10.8%	
Centerline Di		100.0	feet									
Centerline Dist.		100.0			No	ise Sou		levation		eet)		
Barrier Distance			feet				Auto		000			
	Observer Height (Above Pad): 5.0 feet			/	Medium	Truck	s: 4.	000				
Pad Elevation: 0.0 feet				Heavy	Truck	s: 8.	006	Grade Ad	ustment	: 0.0		
	ad Elevation: ad Elevation:		feet		Lai	ne Eau	ivalent	t Distan	ce (in	feet)		
	Road Grade:	0.0					Auto		850	,		
•	Left View:				١,	Medium			805			
			degree		'		Truck		850			
	Right View:	90.0	degree	S		Heavy	TTUCK	s. 09.	000			
FHWA Noise Mod	el Calculation	ıs										
VehicleType	REMEL	Traffic	Flow	Distance	9	Finite F	Road	Fresr		Barrier Att	en Bei	m Atten
Autos:	71.78		4.19	-3	.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40		-13.05	-3	.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40		-17.00	-3	.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Top	o and l	barrier atte	enua	tion)						
VehicleType	Leq Peak Ho	ur L	eq Day	Leq	Ever	ning	Leq	Night		Ldn	C	NEL
Autos:	70).9	6	69.0		67.2		61.1		69.8	3	70.4
Medium Trucks:	64	1.2	6	62.7		56.4	56.4 54		54.8 63.3		3	63.5
Heavy Trucks:	64	1.3	6	62.9		53.8		55.1		63.4	ļ	63.5

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	124	267	575	1,238						
CNFI ·	133	287	618	1 332						

67.7

62.8

71.4

71.9

70.7

Vehicle Noise:

72.4

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Springs

Job Number: 8141

Road Segment: s/o Portola Pkwy.

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Ha	ard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,600 vehicle	s			Autos:	15		
Peak Hou	r Percentage:	10%		Ме	dium Truck	s (2 Axles):	15		
Peak I	Hour Volume:	660 vehicle	s	Heavy Trucks (3+ Axles): 15					
Ve	ehicle Speed:	55 mph		Vehicle	Mix				
Near/Far La	ane Distance:	52 feet	52 feet		icleType	Day	Evening	Night	Daily
Site Data					Auto	os: 77.5%	12.9%	9.6%	97.42%
Ba	nrrier Height:	0.0 feet		M	edium Truck	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0		/	Heavy Truck	ks: 86.5%	2.7%	10.8%	0.74%
Centerline D	ist. to Barrier:	100.0 feet		Noise Source Elevations (in feet)					
Centerline Dist.	to Observer:	100.0 feet			Autos:	2.000	,		
Barrier Distance	to Observer:	0.0 feet		Mediu	m Trucks:	4.000			
Observer Height	(Above Pad):	5.0 feet			ry Trucks:	8.006	Grade Ad	iustment	. 0 0
F	Pad Elevation:	0.0 feet		Tical	y Trucks.	0.000	Orado riaj	jaoti i ioi it.	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Di	stance (in	feet)		
	Road Grade:	0.0%			Autos:	96.607			
	Left View:	-90.0 degre	es	Mediu	m Trucks:	96.566			
	Right View:	90.0 degre	es	Heav	y Trucks:	96.608			
FHWA Noise Mod	lel Calculation	ıs							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road I	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	-4.63	-4.	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-21.87	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-25.82	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)					
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq	Evening	Leq Nig	ht	Ldn	CI	VEL
Autos:	61	.6	59.7	57.9		51.8	60.5	5	61.1
Medium Trucks:	54	l.9	53.4	47.1		45.5	54.0)	54.2
Heavy Trucks:	55	5.0	53.6	44.5		45.8	54.	1	54.3
Vehicle Noise.	63	3.1	61.4	58.4		53.5	62.	1	62.6

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	30	64	138	297						
CNEL:	32	69	149	320						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Quail Hill Pkwy.

Road Segment: e/o Shady Canyon Dr.

Job Number: 8141

Analyst: B. Lawson

SITE S	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions (Hard =	10, So	oft = 15)				
Average Daily T	raffic (Adt): 1	9,500 vehicles	6				,	Autos:	15				
Peak Hour P	Percentage:	10%			Me	dium Trud	cks (2 A	(xles	15				
Peak Ho	our Volume:	1,950 vehicles	6		He	avy Truck	rs (3+ A	(xles	15				
Veh	icle Speed:	55 mph		1/	'ehicle l	Miy							
Near/Far Land	e Distance:	52 feet				icleType		Day	Evening	Night	Daily		
Site Data					* 0111			77.5%	J	9.6%	-		
	ior Usiabti	0.0 feet			Ме	edium Tru		84.8%		10.3%	1.84%		
Barrier Type (0-Wa	rier Height:	0.0 reet 0.0				leavy Tru		86.5%		10.8%	0.74%		
Centerline Dist		100.0 feet											
Centerline Dist. to		100.0 feet		Λ	loise Sc	ource Ele	vation	s (in fe	eet)				
Barrier Distance to		0.0 feet				Autos:		000					
Observer Height (A		5.0 feet				n Trucks.		000					
- ,	d Elevation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Adj	iustment:	0.0		
	d Elevation:	0.0 feet		L	ane Eg	uivalent i	Distand	ce (in f	feet)				
	oad Grade:	0.0%			<u> </u>	Autos:							
, ,	Left View:	-90.0 degree	es.		Mediur	n Trucks.							
	Right View:	90.0 degree			Heav	y Trucks:	96.0	808					
FHWA Noise Model													
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite		Fresn		Barrier Atte		m Atten		
Autos:	71.78	0.08		-4.39		-1.20		-4.87	0.0		0.000		
Medium Trucks:	82.40	-17.16		-4.39		-1.20		-4.97	0.0		0.000		
Heavy Trucks:	86.40	-21.12		-4.39		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (witho	ut Topo and	barrie	r attenu	ation)								
VehicleType L	Leq Peak Hour	Leq Day		Leq Ev	ening	Leq N	light		Ldn	CI	VEL		
Autos:	66.3	3 (64.4		62.6		56.5		65.2	2	65.8		
Medium Trucks:	59.	7 .	58.1		51.8		50.2	<u>.</u>	58.7	7	58.9		
Heavy Trucks:	59.	7 .	58.3		49.2		50.5	<u> </u>	58.8	3	59.0		
Vehicle Noise:	67.8	3 (66.1		63.1		58.3	3	66.8	3	67.3		
Centerline Distance	e to Noise Co	ntour (in feet))										
L		<u> </u>		70 di	BA	65 d	BA	6	0 dBA	55	dBA		

Ldn:

CNEL:

61

66

132

142

284

306

612

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Rancho Pkwy. S Job Number: 8141
Road Segment: w/o Bake Pkwy. Analyst: B. Lawson

SITE SPECIFIC	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data			Site Cor	ditions (Hard	l = 10, Sc	oft = 15)							
Average Daily Traffic (Adt).	10,000 vehicle	S			Autos:	15							
Peak Hour Percentage.			Ме	dium Trucks (2 Axles):	15							
Peak Hour Volume:	1,000 vehicle	S	He	avy Trucks (3	+ Axles):	15							
Vehicle Speed:	50 mph		Vehicle	Mix									
Near/Far Lane Distance.	70 feet			icleType	Day	Evening	Night	Daily					
Site Data			Ven	Autos:	•	J	9.6%	97.42%					
			1.1	.Autos :edium Trucks			10.3%	1.84%					
Barrier Height.				Heavy Trucks:			10.8%	0.74%					
Barrier Type (0-Wall, 1-Berm).			'	leavy Trucks.	00.570	2.1 /0	10.076	0.7470					
Centerline Dist. to Barrier			Noise S	ource Elevation	ons (in f	eet)							
Centerline Dist. to Observer				Autos:	2.000								
Barrier Distance to Observer			Mediu	m Trucks:	4.000								
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0					
Pad Elevation			1 and 5	·	(:	£4\							
Road Elevation.			Lane Eq	uivalent Dista		reet)							
Road Grade					3.723								
Left View					93.680								
Right View	90.0 degre	es	Heav	y Trucks: 9	93.723								
FHWA Noise Model Calculation	ons												
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten					
Autos: 70.2	20 -2.41	-4	.20	-1.20	-4.87	0.0	000	0.000					
Medium Trucks: 81.0	00 -19.65	-4	.19	-1.20	-4.97	0.0	000	0.000					
Heavy Trucks: 85.3	-23.60	-4	.20	-1.20	-5.16	0.0	000	0.000					
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)										
VehicleType Leq Peak H	lour Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL					
Autos:	62.4	60.5	58.7	5	2.7	61.3	3	61.9					
Medium Trucks:	56.0	54.5		48.1 46		46.5 55.0		55.2					
Heavy Trucks:	56.4	55.0	45.9 47.2			55.5		55.7					
Vehicle Noise:	64.1	62.3	59.3	5	4.5	63.1		63.5					
Centerline Distance to Noise	Contour (in feet)											

70 dBA

34

37

Ldn:

CNEL:

65 dBA

74

80

60 dBA

160

172

55 dBA

345

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Rancho Pkwy.

Job Number: 8141

Road Segment: w/o Lake Forest Dr.

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data					Site Cor	nditions (Hard = 10,	Soft = 15)				
Average Daily	Traffic (Adt):	30,000	vehicles				Auto	os: 15				
Peak Hour	Percentage:	10	%		Me	dium Tru	cks (2 Axle	s): 15				
Peak I	Hour Volume:	3,000	vehicles		He	avy Truc	ks (3+ Axle	s): 15				
Ve	ehicle Speed:	50	mph		Vehicle	Mix						
Near/Far La	ane Distance:	70	feet			icleType	Day	Evening	Night	Daily		
Site Data							utos: 77.			_		
	rrier Height:	0.0) feet		M	edium Tri	ucks: 84.8	3% 4.9%	10.3%	1.84%		
Barrier Type (0-V	•	0.0			1	Heavy Tri	ucks: 86.	5% 2.7%	10.8%	0.74%		
	ist. to Barrier:) feet		Noise Source Elevations (in feet)							
Centerline Dist.	to Observer:	100.0) feet		NOISE S	Autos	•	i ieeij				
Barrier Distance	to Observer:	0.0) feet		Modiu	Autos m Trucks						
Observer Height	Observer Height (Above Pad): 5.0 feet							Grado A	djustment			
Pad Elevation: 0.0 feet					Heat	y Trucks	: 8.006	Grade A	ијизинени	. 0.0		
Ro	ad Elevation:	0.0) feet		Lane Eq	uivalent	Distance (in feet)				
	Road Grade:	0.0	0%		Autos: 93.723							
	Left View:	-90.0) degree	S	Mediu	m Trucks	: 93.680					
	Right View:) degree		Heav	y Trucks	93.723					
FHWA Noise Mod	lel Calculatio	ns										
VehicleType	REMEL	Traffi	c Flow	Distance	Finite	Road	Fresnel	Barrier A	tten Ber	rm Atten		
Autos:	70.2	0	2.36	-4.	20	-1.20	-4.8	B7 0	.000	0.000		
Medium Trucks:	81.0	0	-14.88	-4.	19	-1.20	-4.9	7 0	.000	0.000		
Heavy Trucks:	85.3	8	-18.83	-4.	20	-1.20	-5.1	6 0	.000	0.000		
Unmitigated Nois	e Levels (wit	hout To	po and b	parrier atte	nuation)							
VehicleType	Leq Peak Ho	our	Leq Day	Leq	Evening	Leq N	Vight	Ldn	C	NEL		
Autos:	6	7.2	6	5.3	63.5		57.5	66	.1	66.7		
Medium Trucks:	. 6	0.7	5	9.2	52.9		51.3	59	.8	60.0		
Heavy Trucks:	6	51.2	5	9.7	50.7		51.9	60	.3	60.4		
1//// 1//				7 4					_	20.0		

64.1

70 dBA

72

77

59.3

65 dBA

154

166

67.8

60 dBA

333

357

68.3

55 dBA

717

770

Sunday, Ma	y 20, 2012
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Vehicle Noise:

68.9

Centerline Distance to Noise Contour (in feet)

67.1

Ldn: CNEL:

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Rancho Pkwy.

Road Segment: e/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DA	ATA		NOISE MODEL INPUTS					
Highway Data					Site Con	ditions (H	ard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	20,000 v	ehicles				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truck	s (2 Axles):	15		
Peak H	lour Volume:	2,000 v	ehicles		He	avy Trucks	(3+ Axles):	15		
Ve	ehicle Speed:	50 m	nph		Vehicle I	Mix				
Near/Far La	ne Distance:	70 fe	eet			icleType	Day	Evening	Night	Daily
Site Data						Aut	•		9.6%	
Ra	rrier Height:	0.0	foot		Ме	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	icci			Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
• • • •	ist. to Barrier:	100.0	feet							
Centerline Dist.		100.0			Noise Source Elevations (in feet)					
Barrier Distance		0.0				Autos:	2.000			
Observer Height		5.0				m Trucks:	4.000			
-	ad Elevation:	0.0			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0			Lane Eq	uivalent D	istance (in	feet)		
	Road Grade:		0.0% Autos:					,		
	Left View:		degree:		Mediu	m Trucks:	93.723 93.680			
	Right View:		degree			y Trucks:	93.723			
	ragin view.	30.0	uegree	5	77007	y Truono.	00.720			
FHWA Noise Mod	lel Calculation	s								
VehicleType	REMEL	Traffic I	Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20		0.60	-4.2	0	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-	16.64	-4.1	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-:	20.59	-4.2	0	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo	o and b	arrier atter	nuation)					
VehicleType	Leq Peak Hou	ır Le	eq Day	Leq E	vening	Leq Nig	ght	Ldn	CI	VEL
Autos:	65	5.4	6	3.5	61.7		55.7	64.3	3	64.9
Medium Trucks:	59	0.0	5	7.5	51.1		49.6	58.0)	58.2
Heavy Trucks:	59	.4	5	8.0	48.9		50.2	58.5	5	58.7
Vehicle Noise:	67	'.1	6	5.4	62.3		57.5	66.	1	66.5
Contorlino Distan	co to Noiso C	ontour (i	n foot)							

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	55	118	254	547								
CNEL:	59	127	273	588								

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Research Dr.

Road Segment: e/o ICD

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Cond	itions (Haro	= 10, Sc	oft = 15)		
Average Daily Peak Hour	Traffic (Adt): Percentage:	9,000 vehicles 10%	3	Medi	um Trucks (Autos: 2 Axles):			
Peak H	lour Volume:	900 vehicles	3	Heav	vy Trucks (3	+ Axles):	15		
Ve	hicle Speed:	55 mph	· •		ix				
Near/Far La	ne Distance:	52 feet			leType	Day	Evening	Night	Daily
Site Data					Autos:	77.5%	12.9%	9.6%	97.42%
Bai	rrier Height:	0.0 feet		Med	lium Trucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0		He	eavy Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		100.0 feet		Noise Source Elevations (in feet)					
Centerline Dist.		100.0 feet			Autos:	2.000			
Barrier Distance		0.0 feet		Medium	Trucks:	4.000			
Observer Height (•	5.0 feet		Heavy	Trucks:	8.006	Grade Adj	iustment:	0.0
	ad Elevation:	0.0 feet		lana Farri	ivalant Diat	/!	faat)		
	ad Elevation:	0.0 feet	-	Lane Equi	valent Dista	•	reet)		
1	Road Grade:	0.0%		Autos: 96.607					
	Left View: -90.0 degrees Medium Trucks: 96.566								
	Right View:	90.0 degree	es	Heavy	Trucks: 9	6.608			
FHWA Noise Mode	el Calculation	s							
VehicleType	REMEL	Traffic Flow	Distance	Finite R	Road Fre	esnel	Barrier Att	en Beri	m Atten
Autos:	71.78	-3.28	-4.39	_	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-20.52	-4.39	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-24.47	-4.39	9	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and I	barrier atten	uation)					
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL
Autos:	62	.9	61.0	59.2	5	3.2	61.8	3	62.4
Medium Trucks:	56		54.8	48.4		6.9	55.3		55.6
Heavy Trucks:	56	.3 5	54.9	45.9	4	7.1	55.5	5	55.6
Vehicle Noise:	64	.5	62.7	59.8	5	4.9	63.4	1	63.9

70 dBA

37

39

Ldn:

CNEL:

65 dBA

79

85

60 dBA

170

183

55 dBA

366

393

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Research Dr.

Road Segment: w/o (n/o) Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS						
Highway Data			Site Con	ditions (Har	d=10, So	oft = $\overline{15}$)			
Average Daily Traffic (Adt):	11,900 vehicle	S			Autos:	15			
Peak Hour Percentage:	10%		Med	dium Trucks	(2 Axles):	15			
Peak Hour Volume:	1,190 vehicle	S	Hea	avy Trucks (3+ <i>Axles):</i>	15			
Vehicle Speed:	55 mph	· .		/lix					
Near/Far Lane Distance:	52 feet			cleType	Day	Evening	Night	Daily	
Site Data				Autos	,	_	9.6%		
Barrier Height:	0.0 feet		Мє	edium Trucks			10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):			H	leavy Trucks	s: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:									
Centerline Dist. to Observer:			Noise So	urce Elevat	-	eet)			
Barrier Distance to Observer:				Autos:	2.000				
Observer Height (Above Pad):				n Trucks:	4.000			(. 0.0	
Pad Elevation:			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0	
Road Elevation:			Lane Equivalent Distance (in feet)						
Road Grade:			Autos: 96.607						
Left View:		es	Medium Trucks: 96.566						
Right View:	•		Heav	y Trucks:	96.608				
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten	
Autos: 71.7	8 -2.07	-4.:	39	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 82.4	0 -19.31	-4.	39	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 86.4	0 -23.26	-4.3	39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (with	thout Topo and	barrier atte	nuation)						
VehicleType Leq Peak H	our Leq Day	/ Leq I	Evening	Leq Nigh	t	Ldn	CI	VEL	
Autos:	64.1	62.2	60.5	;	54.4	63.0)	63.6	
Medium Trucks:	57.5	56.0	49.6	•	48.1	56.6	6	56.8	
Heavy Trucks:	57.5	56.1	47.1		48.3	56.7	7	56.8	
Vehicle Noise:	65.7	63.9	61.0		56.1	64.7	7	65.1	

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	44	95	204	441							
CNEL:	47	102	220	474							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Research Dr.

Road Segment: n/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPL	JT DATA		NOISE MODEL INPUTS						
Highway Data				Site Cor	nditions (F	lard = 10, S	Soft = 15)			
Average Daily Traffic (Adt,	: 12,2	200 vehicles				Autos	s: 15			
Peak Hour Percentage		10%		Ме	edium Truc	ks (2 Axles) <i>:</i> 15			
Peak Hour Volume		220 vehicles		Heavy Trucks (3+ Axles): 15						
Vehicle Speed	<u>:</u>	55 mph		Vehicle	Mix					
Near/Far Lane Distance	:	52 feet	feet			Dov	Evening	Niaht	Doily	
Site Data				veri	nicleType	tos: 77.5	Evening // 12.9%	Night 9.6%	<i>Daily</i> 97.42%	
Barrier Heigh		0.0 feet			ledium Tru			10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm,	:	0.0		Heavy Trucks: 86.			% 2.7%	10.8%	0.74%	
Centerline Dist. to Barrie	: 1	00.0 feet		Noise Source Elevations (in feet)						
Centerline Dist. to Observe	: 1	00.0 feet			Autos:	2.000				
Barrier Distance to Observe	:	0.0 feet		Mediu	m Trucks:	4.000				
Observer Height (Above Pad) <u>:</u>	5.0 feet			vy Trucks:	8.006	Grade Ad	iustment:	0.0	
Pad Elevation) <i>:</i>	0.0 feet								
Road Elevation) <i>:</i>	0.0 feet		Lane Eq	uivalent E	Distance (ir	feet)			
Road Grade	:	0.0%			Autos:	96.607				
Left View	<i>':</i> -	90.0 degrees	S	Mediu	m Trucks:	96.566				
Right View	<i>':</i>	90.0 degree	S	Hear	vy Trucks:	96.608				
FHWA Noise Model Calculate	ons									
VehicleType REMEL	Tı	raffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos: 71.	78	-1.96	-4.	39	-1.20	-4.87	7 0.0	000	0.000	
Medium Trucks: 82.	40	-19.20	-4.	39	-1.20	-4.97	7 0.0	000	0.000	
Heavy Trucks: 86.	40	-23.15	-4.	39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (w	ithout	t Topo and b	parrier atte	nuation)						
VehicleType Leq Peak I	lour	Leq Day	Leq	Evening	Leq N	ight	Ldn	CI	VEL	
Autos:	64.2	6	2.3	60.6		54.5	63.1	1	63.7	
Medium Trucks:	57.6	5	6.1	49.7		48.2	56.7	7	56.9	
Heavy Trucks:	57.6	5	6.2	47.2		48.4	56.8		56.9	
Vehicle Noise:	65.8	6	4.0	61.1 56.2 64.8				65.2		

(
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	45	97	208	448
CNEL:	48	104	224	482

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NOI	SE MODE	L INPUT	S	
Highway Data				Site Con	ditions (Ha	ard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	9,000 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Truck	s (2 Axles):	15		
Peak H	lour Volume:	900 vehicles	6	He	avy Trucks	(3+ Axles):	15		
Ve	hicle Speed:	50 mph	50 mph 70 feet		Mix				
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data				70111	Auto	,	U	9.6%	_
	rrier Height:	0.0 feet		Me	edium Truci			10.3%	1.84%
Barrier Type (0-W	•	0.0 leet 0.0		F	leavy Truck	ks: 86.5%		10.8%	0.74%
Centerline Di	•	100.0 feet							
Centerline Dist.		100.0 feet		Noise Sc		ations (in f	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height (5.0 feet			n Trucks:	4.000			
•	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustme				iustment.	: 0.0
	ad Elevation:	0.0 feet	<u> </u>	Lane Equivalent Distance (in feet)					
	Road Grade:	0.0%	<u> </u>		Autos:	93.723	<u> </u>		
	Left View:	-90.0 degree	es	Mediur	n Trucks:	93.680			
	Right View:	90.0 degree		Heav	y Trucks:	93.723			
FHWA Noise Mod									•
VehicleType	REMEL	Traffic Flow	Distance	Finite		Fresnel	Barrier Atto		m Atten
Autos:	70.20	-2.87	-4.2		-1.20	-4.87	0.0		0.000
Medium Trucks:	81.00	-20.10	-4.1		-1.20	-4.97	0.0		0.000
Heavy Trucks:	85.38	-24.06	-4.2	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Nig	ıht	Ldn	CI	NEL
Autos:	61	.9	60.0	58.3		52.2	60.8	3	61.4
Medium Trucks:	55		54.0	47.6		46.1	54.5		54.8
Heavy Trucks:	55	.9	54.5	45.5		46.7	55.1		55.2

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	32	69	149	321							
CNEL:	35	74	160	345							

58.8

54.1

61.9

63.1

62.6

Vehicle Noise:

63.6

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: n/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS						
Highway Data				Site C	onditions	(Hard =	= 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	7,000 vehicle: 10% 700 vehicle:			Medium Ti Heavy Tru	•	,	15 15 15		
Near/Far La	ehicle Speed: ane Distance:	50 mph 70 feet	•		le Mix 'ehicleTyp		Day	Evening	Night	Daily
Site Data Barrier Type (0-W	e rrier Height: Vall, 1-Berm):	0.0 feet 0.0			Medium 1 Heavy 1		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): lad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade A Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723				Grade Ad	ijustment.	0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	70.20 81.00	7raffic Flow -3.96 -21.20 -25.15	-2	e Fir 4.20 4.19 4.20	ite Road -1.20 -1.20 -1.20	Fres	-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Nois VehicleType Autos:	Leq Peak Hou	ır Leq Day		g Evening	,	Night 51.	1	<i>Ldn</i> 59.8		VEL 60.4
Medium Trucks: Heavy Trucks: Vehicle Noise:	54	8	52.9 53.4 60.8	44	6.5 1.4 7.7	45. 45. 53.	6	53.5 54.0 61.5)	53.7 54.1 62.0

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	27	59	126	272
CNEL:	29	63	135	292

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NO	ISE MODE	L INPUT	S			
Highway Data				Site Con	ditions (H	lard = 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	10,000 vehicles	S			Autos:					
Peak Hour	r Percentage:	10%		Me	dium Truc	ks (2 Axles):	15				
Peak H	Hour Volume:	1,000 vehicles	S	He	avy Truck	s (3+ Axles):	15				
	ehicle Speed:	50 mph		Vehicle I	Mix						
Near/Far La	ane Distance:	70 feet		Veh	icleType	Day	Evening	Night	Daily		
Site Data					Au	tos: 77.5%	12.9%	9.6%	97.42%		
Ва	rrier Height:	0.0 feet		Me	edium Trud	cks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-V	•	0.0		ŀ	Heavy Truc	cks: 86.5%	2.7%	10.8%	0.74%		
Centerline D	ist. to Barrier:	100.0 feet		Noise So	ource Flev	ations (in f	eet)				
Centerline Dist.	to Observer:	100.0 feet			Autos:	2.000					
Barrier Distance	to Observer:	0.0 feet		Modiu	m Trucks:	4.000					
Observer Height	bserver Height (Above Pad): 5.0 feet			Heavy Trucks: 8.006 Grade Adjustment: 0.0							
P	Pad Elevation: 0.0 feet			,							
Road Elevation: 0.0 feet				Lane Eq	uivalent D	Distance (in	feet)				
	Road Grade:	0.0%			Autos:	93.723					
	Left View:	-90.0 degree	es	Mediu	m Trucks:	93.680					
	Right View:	90.0 degree		Heav	y Trucks:	93.723					
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	70.20	-2.41	-4.2	20	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-19.65	-4.1	19	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-23.60	-4.2	20	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Hou	ur Leq Day	Leq E	vening	Leq Ni	ight	Ldn	CI	VEL		
Autos:	62	2.4	60.5	58.7		52.7	61.3	3	61.9		
Medium Trucks:	56	5.0	54.5	48.1 46.5 55.0					55.2		
Heavy Trucks:	56	5.4	55.0	45.9		47.2	55.5	5	55.7		
Vehicle Noise:	64	1.1	62.3	59.3		54.5	63.1	1	63.5		

70 dBA

34

37

Ldn:

CNEL:

65 dBA

74

80

60 dBA

160

172

55 dBA

345

370

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA	NOISE MODEL INPUTS								
Highway Data				3	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	8,000 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	800 vehicle	S		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		1	/ehicle	Wiy					
Near/Far La	ne Distance:	70 feet				icleType	ė	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		_	97.42%
	rrier Height:	0.0 feet			Medium Trucks: 84.8%				10.3%	1.84%	
Barrier Type (0-W	_	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet									
Centerline Dist.		100.0 feet			Voise So			•	eet)		
	Barrier Distance to Observer: 0.0 feet					Auto		2.000			
	Observer Height (Above Pad):					n Truck	_	1.000			
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet				Heav	y Truck	rs: 8	3.006	Grade Ad	justment:	0.0	
Road Elevation: 0.0 feet				1	ane Eq	uivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto		3.723	,		
,	Left View:	-90.0 degree	00		Mediu	n Truck	-	3.680			
	Right View:	90.0 degree				ry Truck		3.723			
	ragni view.	50.0 degree	03		7.007	y mach		J., 20			
FHWA Noise Mod	el Calculation	s		'							
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	70.20	-3.38		-4.20)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-20.62		-4.19)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-24.57		-4.20)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er atteni	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	61	.4	59.5		57.8		51	.7	60.3	3	60.9
Medium Trucks:	55	5.0	53.5		47.1		45	.6	54.0)	54.3
Heavy Trucks:	55	5.4	54.0		45.0		46	.2	54.6	6	54.7
Vehicle Noise:	63	3.1	61.4		58.3		53	.5	62.1	1	62.6

CNEL:	32	69	148	319

Ldn:

70 dBA

30

65 dBA

64

60 dBA

138

55 dBA

297

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o Rockfield B.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Si	ite Con	ditions ((Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	18,100 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tru	icks (2	Axles):	15		
Peak H	Hour Volume:	1,810 vehicle	es		Hea	avy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		1/4	ehicle I	liv					
Near/Far La	ne Distance:	70 feet		76		cleType		Day	Evening	Night	Daily
Site Data					V GI II		utos:	77.5%	_	9.6%	97.42%
					Me	edium Tri		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet				leavy Tri		86.5%		10.8%	0.74%
Barrier Type (0-W	•	0.0				iouvy in	uono.	00.070	2.170	10.070	0.7 4 70
Centerline Di		100.0 feet		N	oise So	urce Ele	evatio	ns (in fe	eet)		
Centerline Dist.		100.0 feet				Autos	: 2	.000			
Barrier Distance		0.0 feet			Mediun	n Trucks	: 4	.000			
Observer Height		5.0 feet			Heav	y Trucks	: 8	.006	Grade Ad	justment.	0.0
	ad Elevation:	0.0 feet			Fai		Dieter	(: !	faa4)		
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0%				Autos		.723			
	Left View:	-90.0 degre				n Trucks		.680			
	Right View:	90.0 degre	es		Heav	y Trucks	: 93	.723			
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distanc	се	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	0.17	-	4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-17.07	-	4.19		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-21.03	-	4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier at	tenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	y Le	q Eve	ening	Leq N	Vight		Ldn	CI	VEL
Autos:	6	5.0	63.1		61.3		55.	3	63.9	9	64.5
Medium Trucks:	58	8.5	57.0	50.7 49.1 57.6				57.8			
Heavy Trucks:	5	9.0	57.5	48.5 49.7 58.1						58.2	
Vehicle Noise:	60	6.7	64.9		61.9		57.	.1	65.6	6	66.1

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	51	110	238	512
CNEL:	55	118	255	550

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o (w/o) Avenida Carlota

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Co.	nditions	(Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt): 1	14,900 vehicle	S			Autos	: 15		
	Percentage:	10%		Me	edium Tru	ucks (2 Axles)	: 15		
Peak H	lour Volume:	1,490 vehicle	S	He	avy Truc	cks (3+ Axles)	: 15		
Ve	hicle Speed:	50 mph		Vehicle	Miv				
Near/Far La	ne Distance:	70 feet			icleType	e Day	Evening	Night	Daily
Site Data				VCI		Autos: 77.5%	J		97.42%
	rrier Height:	0.0 feet		- M	edium Ti			10.3%	1.84%
Barrier Type (0-W	•	0.0 leet 0.0			Heavy Ti			10.8%	0.74%
Centerline Di		100.0 feet							
Centerline Dist.		100.0 feet		Noise S	ource El	levations (in t	eet)		
Barrier Distance		0.0 feet			Auto				
Observer Height		5.0 feet			m Truck				
Pad Elevation: 0.0 feet				Hea	vy Truck	s: 8.006	Grade Ad	justment.	: 0.0
	ad Elevation:	0.0 feet		Lane Ed	uivalent	t Distance (in	feet)		
	Road Grade:	0.0%			Auto	s: 93.723	<u> </u>		
	Left View:	-90.0 degree	25	Mediu	m Truck				
	Right View:	90.0 degree			vy Truck				
FHWA Noise Mod	el Calculations	s							
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20	-0.68	-4	.20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-17.92	-4	.19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-21.87	-4	.20	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier att	enuation)					
VehicleType	Leq Peak Hou	ır Leq Day	/ Leq	Evening	Leq	Night	Ldn	CI	NEL
Autos:	64.	.1	62.2	60.5		54.4	63.0)	63.6
Medium Trucks:	57.	.7	56.2	49.8		48.3	56.7	7	57.0
Heavy Trucks:	58.	.1	56.7	47.7		48.9	57.3	3	57.4

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	45	97	209	450						
CNEL:	48	104	224	483						

61.0

56.2

64.8

65.3

64.1

Vehicle Noise:

65.8

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o (w/o) Moulton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NO	ISE MODE	L INPUTS	S	
Highway Data			,	Site Con	ditions (F	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt): 1	1,000 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Truc	ks (2 Axles):	15		
Peak H	lour Volume:	1,100 vehicles	3	He	avy Truck	s (3+ Axles):	15		
Ve	hicle Speed:	50 mph		Vehicle i	Miv				
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data					• • •	tos: 77.5%	_	9.6%	•
Ba	rrier Height:	0.0 feet		Me	edium Tru	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0		ŀ	Heavy True	cks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet		Noiss C	ouroo Elo	vations (in f	2004)		
Centerline Dist.	to Observer:	100.0 feet	-	voise so		•	eet)		
Barrier Distance	to Observer:	0.0 feet		Modiu	Autos: m Trucks:	2.000 4.000			
Observer Height ((Above Pad):	5.0 feet					Grade Adj	iustmont	
Pa	ad Elevation:	0.0 feet		пеач	y Trucks:	8.006	Orace Auj	ustinent.	0.0
Ros	ad Elevation:	0.0 feet		Lane Eq	uivalent E	Distance (in	feet)		
	Road Grade:	0.0%			Autos:	93.723			
	Left View:	-90.0 degree	es	Mediu	m Trucks:	93.680			
	Right View:	90.0 degree	es	Heav	y Trucks:	93.723			
FHWA Noise Mod	el Calculations	S							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	70.20	-1.99	-4.2	0	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-19.23	-4.1	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-23.19	-4.2	0	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier atten	uation)					
VehicleType	Leq Peak Hou	r Leq Day	Leq E	vening	Leq Ni	ight	Ldn	CI	VEL
Autos:	62.	.8 (60.9	59.1		53.1	61.7	7	62.3

Unmitigated Nois	e Levels (withou	it Topo and barri	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	62.8	60.9	59.1	53.1	61.7	62.3
Medium Trucks:	56.4	54.9	48.5	47.0	55.4	55.7
Heavy Trucks:	56.8	55.4	46.3	47.6	55.9	56.1
Vehicle Noise:	64.5	62.8	59.7	54.9	63.5	63.9

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	37	79	170	367
CNEL:	39	85	183	395

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: e/o Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Ha	rd = 10, So	oft = 15)				
Average Daily	Traffic (Adt):	9,400 vehicles	S			Autos:	15				
Peak Hour	Percentage:	10%		Ме	dium Trucks	(2 Axles):	15				
Peak I	Hour Volume:	940 vehicles	S	He	avy Trucks (3+ <i>Axles):</i>	15				
Ve	ehicle Speed:	50 mph		Vehicle	Mix						
Near/Far La	ane Distance:	70 feet			icleType	Day	Evening	Night	Daily		
Site Data				7011	Auto		J	9.6%	•		
		0.0 foot		M	edium Truck			10.3%	1.84%		
	rrier Height:	0.0 feet 0.0			Heavy Truck			10.8%	0.74%		
Barrier Type (0-V	,				Today Traon	3. 00.07	2.170	10.070	0.7 170		
	ist. to Barrier:	100.0 feet		Noise Source Elevations (in feet)							
Centerline Dist.		100.0 feet		Autos: 2.000							
Barrier Distance		0.0 feet		Medium Trucks: 4.000							
Observer Height		5.0 feet		Heav	y Trucks:	8.006	Grade Adj	justment:	0.0		
	Pad Elevation:	0.0 feet		Lana Ea	uivalent Dis	tongo (in	foot)				
Ro	Road Elevation: 0.0 feet					93.723	ieei)				
	Road Grade:	0.0%		Modiu	Autos: m Trucks:						
	Left View:	-90.0 degree				93.680					
	Right View:	90.0 degree	es	Heat	y Trucks:	93.723					
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos:	70.20	-2.68	-4	.20	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-19.92	-4	.19	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-23.87	-4	.20	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)							
VehicleType	Leq Peak Hou	ır Leq Day	Leq	Evening	Leq Nigh	nt	Ldn	CI	VEL		
Autos:	62	.1	60.2	58.5		52.4	61.0)	61.6		
Medium Trucks:	55	.7	54.2	47.8		46.3	54.7	7	55.0		
Heavy Trucks:	56	.1	54.7	45.7		46.9	55.3	3	55.4		
Vehicle Noise:	63	.8	62.1	59.0		54.2	62.8	3	63.3		
Centerline Distan	ce to Noise Co	ontour (in feet,)								

70 dBA

33

36

Ldn: CNEL: 65 dBA

71

77

60 dBA

153

165

55 dBA

331

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Valley

Road Segment: s/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS											
Highway Data				9,	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	10,000 vehicle	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	1,000 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		1	/ehicle	Miy					
Near/Far La	ne Distance:	52 feet				icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
	rriar Haiahtı	0.0 feet			Me	edium Ti		84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 reet 0.0				leavy T		86.5%		10.8%	0.74%
Centerline Di	•	0.0 100.0 feet									
Centerline Dist.		100.0 feet		^	Voise So			•	eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height (5.0 feet			Mediu	m Truck	s: 4	.000			
<u> </u>	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	: 0.0
	Road Elevation: 0.0 feet					uivalen	t Distar	nce (in i	feet)		
	Road Elevation. 0.0 feet Road Grade: 0.0%					Auto		5.607			
	Left View:	-90.0 degree	00		Mediu	m Truck		5.566			
	Right View:	90.0 degree				y Truck		5.608			
	ragne view.	50.0 degree	00		7.000	y maon	o. 00				
FHWA Noise Mod	el Calculation	s		•							
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	-2.82		-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-20.06		-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-24.02		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	ier atteni	uation)						
VehicleType	Leq Peak Hou			Leg Ev		Leq	Night		Ldn	CI	NEL
Autos:	63	.4	61.5		59.7		53.	.6	62.3	3	62.9
Medium Trucks:	56	.8	55.2		48.9		47.	.3	55.8	3	56.0
Heavy Trucks:	56	.8	55.4		46.3		47.	.6	55.9	9	56.1
Vehicle Noise:	64	.9	63.2		60.2		55.	.4	63.9)	64.4
Centerline Distan	ce to Noise Co	ontour (in feet)								
				70 a	IBA .	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

39

42

85

91

182

196

392

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: e/o Marine Wy

Job Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS											
Highway Data				Sit	te Con	ditions	(Hard	= 10, Sc	oft = 15)						
Average Daily	Traffic (Adt):	6,400 vehicles	3					Autos:	15						
	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	s): 15						
	our Volume:	640 vehicles	6		He	avy Trud	cks (3+	Axles):	15						
Vel	hicle Speed:	55 mph		1/0	hiala l	1/1:52									
Near/Far Lar	•	52 feet	52 feet			Vehicle Mix VehicleType Day Evening Night Da									
0'4- 0-4-					veni			Day	Evening	Night	Daily				
Site Data							Autos:	77.5%		9.6%					
Bar	rier Height:	0.0 feet	0.0 feet			edium T		84.8%		10.3%	1.84%				
Barrier Type (0-Wa	all, 1-Berm):	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%				
Centerline Dis		100.0 feet		No	ise Sc	urce E	levatio	ns (in fe	eet)						
Centerline Dist. t		100.0 feet				Auto	s: 2	2.000							
Barrier Distance t	to Observer:	0.0 feet			Mediur	n Truck		.000							
Observer Height (/	Above Pad):	5.0 feet		Heavy Trucks: 8.006 Grade Adjustmer				iustment.	t: 0.0						
Pa	nd Elevation:	0.0 feet		,											
Roa	nd Elevation:	0.0 feet		Lane Equivalent Distance (in feet)											
F	Road Grade:	0.0%		Autos: 96.607											
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 96	6.566							
	Right View:	90.0 degree	es		Heav	y Truck	s: 96	8.608							
FHWA Noise Mode	el Calculations	3													
VehicleType	REMEL	Traffic Flow	Distanc	е	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten				
Autos:	71.78	-4.76		4.39		-1.20		-4.87	0.0	000	0.000				
Medium Trucks:	82.40	-22.00	-	4.39		-1.20		-4.97	0.0	000	0.000				
Heavy Trucks:	86.40	-25.95	-	4.39		-1.20		-5.16	0.0	000	0.000				
Unmitigated Noise	Levels (with	out Topo and	barrier at	tenua	tion)										
VehicleType	Leq Peak Hou	r Leq Day	Led	q Evei	ning	Leq	Night		Ldn	CI	VEL				
Autos:	61.	4	59.5		57.8		51	.7	60.3	3	60.9				
Medium Trucks:	54.	8	53.3	46.9 45.4		.4	53.9	9	54.1						
Heavy Trucks:	54.	8	53.4	44.4 45.6 54.0				54.1							
Vehicle Noise:	63.	0	61.2		58.3		53	.4	62.0)	62.4				
Centerline Distance	e to Noise Co	ntour (in feet)												

70 dBA

29

31

Ldn:

CNEL:

65 dBA

63

68

60 dBA

135

145

55 dBA

291

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: e/o Sterling

Job Number: 8141

Analyst: B. Lawson

SITE SPEC	IFIC INP	UT DATA		NOISE MODEL INPUTS						
Highway Data				Site Con	ditions (Ha	rd = 10, S	oft = 15)			
Average Daily Traffic Peak Hour Percer Peak Hour Vo	ntage:	400 vehicles 10% 540 vehicles			dium Trucks avy Trucks (. ,	15			
Vehicle S Near/Far Lane Dist		55 mph 52 feet	-	Vehicle Veh	Mix icleType	Day	Evening	Night	Daily	
Site Data					Auto		_		97.42%	
Barrier Ho Barrier Type (0-Wall, 1-E Centerline Dist. to Bo	Berm):	0.0 feet 0.0 100.0 feet		F	edium Truck Heavy Truck Durce Eleva	s: 86.5%	6 2.7%	10.3% 10.8%	1.84% 0.74%	
Centerline Dist. to Obs Barrier Distance to Obs Observer Height (Above Pad Elev	erver: Pad):	0.0 feet 0.0 feet 5.0 feet 0.0 feet		Mediui	Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	ijustment:	0.0	
Road Elev		0.0 feet		Lane Equivalent Distance (in feet)						
		0.0% -90.0 degree 90.0 degree		Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608						
FHWA Noise Model Calc	ulations									
VehicleType REI		raffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-5.50	-4.3	39	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: Heavy Trucks:	82.40 86.40	-22.74 -26.69	-4.3 -4.3		-1.20 -1.20	-4.97 -5.16		000	0.000 0.000	
Unmitigated Noise Level	ls (withou	t Topo and I	barrier atte	nuation)						
VehicleType Leq Pe	eak Hour	Leq Day	Leq E	vening	Leq Nigh	nt	Ldn	CI	VEL	
Autos:	60.7	5	8.8	57.0		51.0	59.6	3	60.2	
Medium Trucks:	54.1		52.6	46.2		44.7	53.1		53.4	
Heavy Trucks:	54.1	5	52.7	43.7 44.9 53.3				53.4		
Vehicle Noise:	62.3	6	60.5	57.5		52.7	61.2	2	61.7	
Centerline Distance to N	loise Cont	tour (in feet)								

70 dBA

26

28

Ldn:

CNEL:

65 dBA

56

60

60 dBA

121

130

55 dBA

260

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: w/o Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions (H	lard = 10, Se	oft = 15)					
Average Daily	Traffic (Adt):	10,600 vehicle	es				Autos:	15					
Peak Hour	Percentage:	10%			Me	dium Truci	ks (2 Axles):	les): 15					
Peak H	lour Volume:	1,060 vehicle	es		Heavy Trucks (3+ Axles): 15								
Ve	hicle Speed:	55 mph	•			Mix							
Near/Far La	ne Distance:	52 feet				icleType	Day	Evening	Night	Daily			
Site Data							tos: 77.5%	J	9.6%				
Ra	rrier Height:	0.0 foot	0.0 feet 0.0			edium Truc	cks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•					Heavy Truc			10.8%	0.74%			
Centerline Di	,	100.0 feet											
Centerline Dist.		100.0 feet		N	oise So	ource Elev	ations (in f	eet)					
Barrier Distance		0.0 feet				Autos:	2.000						
			5.0 feet			Medium Trucks: 4.000							
Observer Height	•					Heavy Trucks: 8.006 Grade Adjustr							
	ad Elevation:	0.0 feet Lane Equivalent Distance (i						foot)					
	ad Elevation:	0.0 feet		L	arre Eq		-	ieei)					
	Road Grade:	0.0%				Autos:	96.607						
	Left View:	-90.0 degre				m Trucks:	96.566						
	Right View:	90.0 degre	ees		Heav	y Trucks:	96.608						
FHWA Noise Mod	el Calculation	S											
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	71.78	-2.57	•	-4.39		-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-19.81		-4.39		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-23.76	5	-4.39		-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Topo and	l barri	er attenu	ation)								
VehicleType	Leq Peak Hou	ır Leq Da	У	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL			
Autos:	63	.6	61.7		60.0		53.9	62.	5	63.1			
Medium Trucks:	57	.0	55.5		49.1		47.6	56.	1	56.3			
Heavy Trucks:	57	.0	55.6	46.6 47.8 56.2		2	56.3						
Vehicle Noise:	65	.2	63.4		60.5		55.6	64.2	2	64.6			
Contarlina Distan	co to Noiso Ca	antour (in foo	<i>+</i> 1										

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	41	88	189	408							
CNEL:	44	95	204	439							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: w/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA	ATA NOISE MODEL INPUTS								
Highway Data				5	Site Con	ditions (Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	15,700 vehicle	s				,	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	(xles	15		
Peak H	lour Volume:	1,570 vehicle	s		He	avy Truci	ks (3+ A	(xles	15		
Ve	hicle Speed:	55 mph		,	/ehicle	Miv					
Near/Far La	ne Distance:	52 feet		<u> </u>		icleType		Day	Evening	Night	Daily
Site Data					***			77.5%	J	9.6%	-
	rrior Hoimbt.	0.0 feet			М	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 feet 0.0				Heavy Tru		86.5%		10.8%	0.74%
Centerline Dis		0.0 100.0 feet									
Centerline Dist.		100.0 feet		^	Voise So	ource Ele	evation	s (in fe	eet)		
Barrier Distance		0.0 feet				Autos		000			
Observer Height (5.0 feet				m Trucks		000			
• ,	ad Elevation:	0.0 feet			Heav	y Trucks	: 8.0	006	Grade Adj	iustment:	0.0
	ad Elevation:	0.0 feet	L	Lane Eq	uivalent	Distan	ce (in t	eet)			
	Road Grade:	0.0%			Autos		•				
•	Left View:		-90.0 degrees			m Trucks					
	Right View:	90.0 degree			Heav	y Trucks.	: 96.0	808			
FHWA Noise Mod											
VehicleType	REMEL	Traffic Flow	Di	stance		Road	Fresn		Barrier Atte		m Atten
Autos:	71.78	-0.86		-4.39		-1.20		-4.87		000	0.000
Medium Trucks:	82.40	-18.10		-4.39		-1.20		-4.97	0.0		0.000
Heavy Trucks:	86.40	-22.06		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	rening	Leq N	light		Ldn	CI	VEL
Autos:	65	5.3	63.4		61.7		55.6	j	64.2	2	64.8
Medium Trucks:	58	3.7	57.2	2 50			49.3	}	57.8	3	58.0
Heavy Trucks:	58	5.7	57.3	48.3 49.5 57.9			58.0				
Vehicle Noise:	66	5.9	65.1	.1 62.2 57.3 65.9 66					66.3		
Centerline Distant	ce to Noise Co	ontour (in feet)								
				70 a	IBA	65 d	BA	6	0 dBA	55	dBA

Ldn:

CNEL:

53

57

114

123

246

265

530

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: w/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA	NOISE MOD					MODE	L INPUTS			
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	24,000 vehicle	s					Autos:	15			
Peak Hour	Percentage:	10%			Med	ium Tru	ıcks (2	Axles):	15			
Peak H	lour Volume:	2,400 vehicle	2,400 vehicles 50 mph			vy Truc	ks (3+	Axles):	15			
Ve	hicle Speed:	50 mph				Vehicle Mix						
Near/Far La	ne Distance:	70 feet		•		leType		Day	Evening	Night	Daily	
Site Data					Vorne		Autos:	77.5%	J	9.6%	_	
	uuiau Haiadat.	0.0 foot			Med	dium Tr		84.8%		10.3%	1.84%	
	rrier Height:	0.0 feet 0.0				eavy Tr		86.5%		10.8%		
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet										
Centerline Dist.		100.0 feet		No	oise Soi	urce El		•	eet)			
Barrier Distance		0.0 feet				Autos		.000				
Observer Height		5.0 feet		Medium Trucks: 4.000								
	ad Elevation:	0.0 feet	Heavv Trucks: 8			s: 8	.006	Grade Ad	iustment	: 0.0		
	ad Elevation:	0.0 feet						ce (in i	feet)			
	Road Grade:	0.0%		Autos: 93.723								
	Left View:	-90.0 degre	00		Medium			.680				
	Right View:	90.0 degre				Trucks		.723				
	ragin view.	90.0 degre	C S		ricary	Traone	<i>.</i> 00	., 20				
FHWA Noise Mod	el Calculation	าร										
VehicleType	REMEL	Traffic Flow	Distanc	е	Finite F	Road	Fres	nel	Barrier Att	en Bei	m Atten	
Autos:	70.20	1.39	-4	1.20		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	81.00	-15.84	-4	4.19		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	85.38	-19.80	-4	4.20		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrier att	tenua	ation)							
VehicleType	Leq Peak Ho					С	NEL					
Autos:	6	6.2	64.3		62.5		56.	5	65.1	l	65.7	
Medium Trucks:	5	9.8	58.3		51.9		50.	3	58.8	3	59.0	
Heavy Trucks:	6	0.2	58.8	49.7			51.	0	59.3	3	59.5	
Vehicle Noise:	6	7.9	66.1		63.1		58.	3	66.9	9	67.3	

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	62	133	287	618							
CNEL:	66	143	308	664							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: e/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)					
Average Daily Traffic (Adt):	24,000 vehicles	S			Autos:	15					
Peak Hour Percentage:	10%		Ме	dium Trucks	(2 Axles):	15					
Peak Hour Volume:	2,400 vehicles	S	He	avy Trucks (3+ <i>Axles):</i>	15					
Vehicle Speed:	50 mph		Vehicle Mix								
Near/Far Lane Distance:	70 feet			icleType	Day	Evening	Night	Daily			
Site Data			Vern	Autos		J	9.6%	97.42%			
			1.//	edium Trucks			10.3%	1.84%			
Barrier Height:	_			leavy Trucks			10.8%	0.74%			
Barrier Type (0-Wall, 1-Berm):			,	leavy Trucks	5. 00.070	2.1 /0	10.070	0.7470			
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)					
Centerline Dist. to Observer:				Autos:	2.000						
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000						
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0			
Pad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)								
Road Elevation:	0.0 feet										
Road Grade:			Autos: 93.723 Medium Trucks: 93.680								
Left View:					93.680						
Right View:	90.0 degree	es	неач	y Trucks:	93.723						
FHWA Noise Model Calculation	ns										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten			
Autos: 70.2	0 1.39	-4.	20	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 81.0	0 -15.84	-4.	19	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 85.3	8 -19.80	-4.	20	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)								
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Nigh	t	Ldn	CI	VEL			
Autos:	6.2	64.3	62.5	;	56.5	65.1	1	65.7			
Medium Trucks:	59.8	58.3	51.9 50.3 58.8			3	59.0				
Heavy Trucks:	60.2	58.8	49.7 51.0 59.3				59.5				
Vehicle Noise:	67.9	66.1	63.1		58.3	66.9	9	67.3			
Centerline Distance to Noise	Contour (in feet)									

70 dBA

62

66

Ldn:

CNEL:

65 dBA

133

143

60 dBA

287

308

55 dBA

618

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: e/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SE	PECIFIC IN	IPUT DATA		NOISE MODEL INPUTS								
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily Tr	affic (Adt):	20,000 vehicle	S			Autos	: 15					
Peak Hour Pe	. ,	10%		Medium Trucks (2 Axles): 15								
Peak Hou	ır Volume:	2,000 vehicle	s		Heavy Truck	s (3+ Axles)	: 15					
Vehic	cle Speed:	50 mph		Vehicle Mix								
Near/Far Lane	Distance:	70 feet		verii	VehicleType	Day	Evening	Night	Daily			
Site Data						utos: 77.5%	J	-				
					Medium Tru			10.3%				
	er Height: 0.0 feet							10.8%	6% 97.42% 3% 1.84% 8% 0.74%			
Barrier Type (0-Wal	•	0.0			Heavy Tru	cks: 86.5%	0 2.1%	10.6%	0.74%			
Centerline Dist.		100.0 feet		Nois	e Source Ele	vations (in f	eet)					
Centerline Dist. to		100.0 feet			Autos:	2.000						
Barrier Distance to		0.0 feet		Medium Trucks: 4.000								
Observer Height (Al	•	5.0 feet	5.0 feet Heavy Trucks: 8.006					iustment:	0.0			
	Elevation:	0.0 feet		•								
Road	Elevation:	0.0 feet		Lane Equivalent Distance (in feet)								
Ro	ad Grade:	0.0%		Autos: 93.723								
	Left View:	-90.0 degre	es	Me	edium Trucks:	93.680						
F	Right View:	90.0 degre	es	F	leavy Trucks:	93.723						
FHWA Noise Model	Calculation	ıs										
VehicleType	REMEL	Traffic Flow	Distanc	e F	inite Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	70.20	0.60	-4	4.20	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	81.00	-16.64	-4	4.19	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	85.38	-20.59	-4	4.20	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise L	evels (with	out Topo and	barrier at	tenuati	on)							
VehicleType L	eq Peak Ho	ur Leq Day	y Lec	g Evenir	ng Leq N	ight	Ldn	CI	VEL			
Autos:	65	5.4	63.5		61.7	55.7	64.3	3	64.9			
Medium Trucks:	59	9.0	57.5	Ę	51.1	49.6	58.0)	58.2			
Heavy Trucks:	59	9.4	58.0	48.9 50.2 58.5				58.7				
Vehicle Noise:	67	7.1	65.4	4 62.3 57.5 66.1 66					66.5			

70 dBA

55

59

Ldn:

CNEL:

65 dBA

118

127

60 dBA

254

273

55 dBA

547

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Roosevelt Job Number: 8141
Road Segment: w/o Jeffrey Rd. Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)				
Average Daily Traffic (Adt):	10,300 vehicles	3			Autos:	15				
Peak Hour Percentage:	10%		Medium Trucks (2 Axles): 15							
Peak Hour Volume:	1,030 vehicles	S	Heavy Trucks (3+ Axles): 15 Vehicle Mix							
Vehicle Speed:	55 mph									
Near/Far Lane Distance:	52 feet			cleType	Day	Evening	Night	Daily		
Site Data				Autos			9.6%			
Barrier Height:	0.0 feet		Ме	edium Trucks	s: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet									
Centerline Dist. to Observer:	100.0 feet		Noise Sc	urce Elevat		eet)				
Barrier Distance to Observer:	0.0 feet			Autos:	2.000					
Observer Height (Above Pad):	5.0 feet		Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Pad Elevation:	0.0 feet									
Road Elevation:	0.0 feet		Lane Equ	uivalent Dis	tance (in	feet)				
Road Grade:	0.0%			Autos:	96.607					
Left View:	-90.0 degree	es	Medium Trucks: 96.566							
Right View:	90.0 degree		Heav	y Trucks:	96.608					
FHWA Noise Model Calculatio	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten		
Autos: 71.78	3 -2.69	-4.3	9	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -19.93	-4.3	9	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	-23.89	-4.3	9	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)							
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL		
Autos: 6	3.5	61.6	59.8		53.8	62.4	4	63.0		
Medium Trucks: 5	6.9	55.4	49.0	4	47.5	55.9	9	56.2		
Heavy Trucks: 5	6.9	55.5	5 46.5 47.7 56.1			1	56.2			
Vehicle Noise: 6	55.1	63.3	60.4		55.5	64.0)	64.5		

70 dBA

40

43

Ldn:

CNEL:

65 dBA

86

93

60 dBA

186

200

55 dBA 400

430

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Roosevelt Job Number: 8141
Road Segment: e/o Jeffrey Rd. Analyst: B. Lawson

SITE S	SPECIFIC II	NPUT DA	ΙΤΑ		NOISE MODEL INPUTS								
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Peak Hour I Peak Ho	Percentage: our Volume:	10% 2,040 ve	20,400 vehicles 10% 2,040 vehicles 55 mph 52 feet			Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15							
	nicle Speed:					Vehicle Mix							
Near/Far Lar	ie Distance:	52 TE				icleType		Day	Evening	Night	Daily		
Site Data						A	utos:	77.5%	12.9%	9.6%	97.42%		
Barrier Type (0-Wa	•	0.0				edium Tru Heavy Tru		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%		
Centerline Dis		100.0 f			Noise So	ource Ele	evatio	ns (in f	eet)				
Centerline Dist. t Barrier Distance t Observer Height (A	o Observer:	0.0 f 5.0 f	100.0 feet 0.0 feet 5.0 feet 0.0 feet			Autos m Trucks y Trucks	: 4	2.000 4.000 3.006	Grade Adjustment: 0.0				
	d Elevation:	0.0 feet Lane Equivalent Distance (in feet)											
F	Road Grade: Left View: Right View:		degrees degrees		Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608								
FHWA Noise Mode	l Calculation	าร											
VehicleType	REMEL	Traffic F	low	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	71.78	3	0.27	-4.3	9	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	82.40) -1	16.96	-4.3	9	-1.20		<i>-4.</i> 97	0.0	000	0.000		
Heavy Trucks:	86.40) -2	20.92	-4.3	9	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	hout Topo	and ba	rrier atten	uation)								
VehicleType	Leq Peak Ho	ur Le	q Day	Leq E	vening	Leq N	Vight		Ldn	CI	VEL		
Autos:	66	6.5	64.	.6	62.8		56	.7	65.4	4	66.0		
Medium Trucks:	59	9.8	58.	.3	52.0 50.4 58			58.9	9	59.1			
Heavy Trucks:	59	9.9	58.	.5	49.4 50.7 59.0				59.2				
Vehicle Noise:	68	8.0	66	.3	63.3		58	.4	67.0)	67.5		
Centerline Distanc	e to Noise C	ontour (ir	feet)										

70 dBA

63

68

Ldn: CNEL: 65 dBA

136

146

60 dBA

293

315

55 dBA

631

Sunday,	May	20,	2012

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Roosevelt Job Number: 8141
Road Segment: w/o Sand Canyon Av. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
	Traffic (Adt): Percentage: Hour Volume:	8,600 vehicles 10% 860 vehicles			edium Tru eavy Truc	ıcks (2 A	,	15 15 15			
Near/Far La	ehicle Speed: ane Distance:	55 mph 52 feet	•		Mix nicleType		Day	Evening	Night	Daily	
Barrier Type (0-W	•	0.0 feet 0.0			ء ledium Tr Heavy Tr	rucks:	77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%	
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): lad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree 90.0 degree		Mediu Hea Lane Ec Mediu	Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608						
VehicleType Autos: Medium Trucks: Heavy Trucks:	71.78 82.40	7raffic Flow -3.48 -20.72 -24.67	-2	e Finite 1.39 1.39 1.39	-1.20 -1.20 -1.20		-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000	
Unmitigated Nois VehicleType Autos:	Leq Peak Hou	ır Leq Day		t enuation) Evening 59.0	Leq	Night 53.0		<i>Ldn</i> 61.6		NEL 62.2	
Medium Trucks: Heavy Trucks: Vehicle Noise:	56	i.1	54.6 54.7 62.5	48.2 45.7 59.6	,	46.7 46.9 54.7		55.1 55.3 63.2	3	55.4 55.4 63.7	

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	35	76	165	355							
CNEL:	38	82	177	382							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Job Number: 8141

Road Segment: n/o Irvine Bl.

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	27,100 veh	nicles				Auto	s: 15				
Peak Hour	Percentage:	10%			Med	lium Truc	cks (2 Axles) <i>:</i> 15				
Peak H	our Volume:	2,710 veh	nicles		Hea	vy Truck	as (3+ Axles): 15				
Ve	hicle Speed:	55 mp	h	V	ehicle M	lix						
Near/Far Lai	ne Distance:	52 fee	t			cleType	Day	Evening	Night	Daily		
Site Data							utos: 77.5	•	9.6%	-		
Rai	rier Height:	0.0 fe	et		Me	dium Tru	cks: 84.8	% 4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0			H	eavy Tru	cks: 86.5	% 2.7%	10.8%	0.74%		
Centerline Dis	•	100.0 fe	et	A	laina Car	uroo Elo	votiono (in	footl				
Centerline Dist.	to Observer:	100.0 fe	et	//	oise soi		vations (in	reet)				
Barrier Distance	to Observer:	0.0 fe	et		Madium	Autos:						
Observer Height (Above Pad):	5.0 fe	et			Trucks:		Crada Aa	liuotmont			
	ad Elevation:	0.0 fe	et		Heavy	Trucks:	8.006	Grade Ad	jusimeni.	0.0		
Roa	ad Elevation:	0.0 fe	et	L	Lane Equivalent Distance (in feet)							
ı	Road Grade:	0.0%			Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608							
	Left View:	-90.0 de	egrees									
	Right View:	90.0 de	egrees									
FHWA Noise Mode	el Calculatio	าร										
VehicleType	REMEL	Traffic Flo	ow Dis	stance	Finite F	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	3 1	1.51	-4.39		-1.20	-4.8	7 0.0	000	0.000		
Medium Trucks:	82.40) -15	5.73	-4.39		-1.20	-4.9	7 0.0	000	0.000		
Heavy Trucks:	86.40) -19	9.69	-4.39		-1.20	-5.10	6 0.0	000	0.000		
Unmitigated Noise	e Levels (with	hout Topo a	and barri	er attenu	ation)							
VehicleType	Leq Peak Ho	ur Leq	Day	Leq Eve	ening	Leq N	light	Ldn	CI	VEL		
Autos:	6	7.7	65.8		64.0		58.0	66.	6	67.2		
Medium Trucks:	6	1.1	59.6		53.2		51.7	60.1		60.4		
Heavy Trucks:	6	1.1	59.7		50.7		51.9	60.3	3	60.4		
Vehicle Noise:	6	9.3	67.5		64.6		59.7	68.	2	68.7		

70 dBA

76

82

Ldn:

CNEL:

65 dBA

164

177

60 dBA

354

381

55 dBA

763

820

Centerline Distance to Noise Contour (in feet)

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: Sand Canyon. Av. Job Number: 8141 Road Segment: s/o Irvine Bl. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)						
Average Daily Ti	raffic (Adt): 3	2,200 vehicles	;				A	Autos:	15		
Peak Hour P	Percentage:	10%			Me	dium Truc	cks (2 A	xles):	15		
Peak Ho	ur Volume:	3,220 vehicles	;		He	avy Truck	rs (3+ A	xles):	15		
Vehi	icle Speed:	60 mph		,	Vehicle l	Miv					
Near/Far Lane	e Distance:	76 feet				icleType		Day	Evening	Night	Daily
Site Data					V 011			77.5%	J	9.6%	-
	ior Usiabt	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-Wa	ier Height:	0.0 reet 0.0				leavy Tru		36.5%		10.8%	0.74%
Centerline Dist.		100.0 feet									
Centerline Dist. to		100.0 feet		1	Noise So	ource Ele		•	eet)		
Barrier Distance to		0.0 feet				Autos:					
Observer Height (A		5.0 feet				n Trucks:					
- ,	d Elevation:	0.0 feet			Heav	y Trucks:	8.0	06	Grade Adj	iustment:	0.0
	d Elevation:	0.0 feet			Lane Eq	uivalent l	Distand	e (in f	feet)		
	oad Grade:	0.0%				Autos:		•	,		
7.0	Left View:	-90.0 degree	10		Mediui	n Trucks:					
,	Right View:	90.0 degree				y Trucks:					
	g	00.0 dog.00				,					
FHWA Noise Model											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresn	el	Barrier Atte	en Ber	m Atten
Autos:	73.22	1.88		-4.11	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-15.36		-4.1	1	-1.20	•	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-19.32		-4.11	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (witho	ut Topo and I	barri	er atten	uation)						
	.eq Peak Houi			Leq E		Leq N	light		Ldn	CI	VEL
Autos:	69.	8 (57.9		66.1		60.1		68.7	7	69.3
Medium Trucks:	63.	0 6	31.5		55.1		53.6		62.1	l	62.3
Heavy Trucks:	62.	7 (31.3		52.2		53.5		61.8	3	62.0
Vehicle Noise:	71.3	3 (9.5		66.6		61.7		70.2	2	70.7
Centerline Distance	to Noise Co	ntour (in feet)									
		, - 7		70 c	dBA	65 d	BA	6	60 dBA	55	dBA

103

111

Ldn:

CNEL:

223

240

480

517

1,035

1,115

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data			Site Cor	nditions ((Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt): 2	8,100 vehicles	S				Autos:	15				
Peak Hour Percentage:	10%		Me	edium Tru	icks (2	Axles):	15				
Peak Hour Volume:	2,810 vehicles	3	He	eavy Truc	ks (3+	Axles):	15				
Vehicle Speed:	60 mph	,	Vehicle	Mix							
Near/Far Lane Distance:	76 feet			nicleType		Day	Evening	Night	Daily		
Site Data				Α	utos:	77.5%	12.9%	9.6%	97.42%		
Barrier Height:	0.0 feet		M	ledium Tr	ucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet		Noise S	ource Ele	evatio	ns (in fa	20t)				
Centerline Dist. to Observer:	100.0 feet		10/30 0	Autos		2.000	,,,,				
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks		1.000					
Observer Height (Above Pad):	5.0 feet			vy Trucks		3.006	Grade Ad	iustment	. 0 0		
Pad Elevation:	0.0 feet		,								
Road Elevation:	0.0 feet	1	Lane Equivalent Distance (in feet)								
Road Grade:	0.0%			Autos	: 92	2.547					
Left View:	-90.0 degree	es	Medium Trucks: 92.504								
Right View:	90.0 degree	es	Hea	vy Trucks	: 92	2.547					
FHWA Noise Model Calculations	3										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 73.22	1.29	-4.1	1	-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 83.68	-15.95	-4.1	1	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 87.33	-19.91	-4.1	1	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	out Topo and	barrier atten	uation)								
VehicleType Leq Peak Hou	r Leq Day	Leq E	/ening	Leq I	Vight		Ldn	CI	VEL		

Unmitigated Nois	Unmitigated Noise Levels (without Topo and barrier attenuation)												
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL							
Autos:	69.2	67.3	65.5	59.5	68.1	68.7							
Medium Trucks:	62.4	60.9	54.6	53.0	61.5	61.7							
Heavy Trucks:	62.1	60.7	51.6	52.9	61.3	61.4							
Vehicle Noise:	70.7	68.9	66.0	61.1	69.6	70.1							

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	94	204	439	945							
CNFI ·	102	219	472	1 018							

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: Sand Canyon. Av. Job Number: 8141 Road Segment: s/o Trabuco Rd. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	50,400 vehicle	es					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15			
Peak H	lour Volume:	5,040 vehicle	es		He	avy Tru	icks (3+	Axles):	15			
Ve	ehicle Speed:	65 mph			Vehicle I	Mix						
Near/Far La	ne Distance:	175 feet				icleType	е	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	•	•	97.42%	
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	_	0.0			ŀ	Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%	
• • •	ist. to Barrier:	100.0 feet			Noise Ca	a. E	lovotio	no (in fo				
Centerline Dist.	to Observer:	100.0 feet			Noise So			•	et)			
Barrier Distance	to Observer:	0.0 feet			Madiuu	Auto m Truck		2.000 1.000				
Observer Height	(Above Pad):	5.0 feet					_		Grade Ad	iustmont:	0.0	
P	ad Elevation:	0.0 feet			пеач	y Truck	(S. C	3.006	Grade Auj	iusiiii c iii.	0.0	
Ro	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in f	eet)			
	Road Grade:	0.0%				Auto	os: 48	3.505				
	Left View:	-90.0 degre	ees		Medium Trucks: 48.423							
	Right View:	90.0 degre	ees		Heav	y Truck	rs: 48	3.506				
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	74.55	3.48	3	0.0	9	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	84.86	-13.76	3	0.1	1	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	88.18	-17.72	2	0.0	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	l barr	ier atten	uation)							
VehicleType	Leq Peak Ho	ur Leq Da	y	Leq E	vening	Leq	Night		Ldn	CI	VEL	
Autos:	76	6.9	75.0		73.3		67	.2	75.8	3	76.4	
Medium Trucks:	70	0.0	68.5		62.1		60	.6	69.1	1	69.3	
Heavy Trucks:	69	9.4	67.9		58.9		60	.1	68.5	5	68.6	
Vehicle Noise:	78	8.3	76.5		73.7		68	.7	77.3	3	77.8	
Centerline Distan	ce to Noise C	ontour (in fee	t)		ı							
				70	dBA	65	dBA	6	0 dBA	55	dBA	

305

329

Ldn:

CNEL:

657

709

1,416

1,527

3,052

3,290

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: s/o Roosevelt

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (Ha	rd = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 5	3,300 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Ме	dium Trucks	s (2 Axles):	15		
Peak H	lour Volume:	5,330 vehicles	3	He	avy Trucks	(3+ Axles):	15		
Ve	ehicle Speed:	65 mph		Vehicle I	Vix				
Near/Far La	ne Distance:	175 feet			icleType	Day	Evening	Night	Daily
Site Data					Auto	-	_	9.6%	
Ba	rrier Height:	0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0		F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet		Noiso Sa	ource Eleva	tions (in f	201		
Centerline Dist.	to Observer:	100.0 feet		Noise St		2.000	ee t)		
Barrier Distance	to Observer:	0.0 feet		N 4 = =15	Autos:				
Observer Height	(Above Pad):	5.0 feet			m Trucks:	4.000	O		
•	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment.	0.0
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)					
	Road Grade:	0.0%			Autos:	48.505			
	Left View:	-90.0 degree	es	Mediui	n Trucks:	48.423			
	Right View:	90.0 degree		Heav	y Trucks:	48.506			
FHWA Noise Mod	el Calculations	3							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	74.55	3.72	0.	09	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	84.86	-13.52	0.	11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	88.18	-17.47	0.	09	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Hou	r Leq Day	Leq	Evening	Leq Nigi	ht	Ldn	CI	VEL
Autos:	77.	2	75.3	73.5		67.4	76.1	1	76.7
Medium Trucks:	70.	2	68.7	62.4		60.8	69.3	3	69.5
Heavy Trucks:	69.	6 (68.2	59.1		60.4	68.7	7	68.9
Vehicle Noise:	78.	6	76.8	74.0		68.9	77.5	5	78.0
0 1 1 5 1									

70 dBA

317

341

Ldn:

CNEL:

65 dBA

682

736

60 dBA

1,470

1,585

55 dBA

3,168

3,415

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: n/o I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT	DATA		NOISE MODEL INPUTS							
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	62,600	vehicles	3					Autos:	15		
Peak Hour	Percentage:	10	%			Me	dium Tr	ucks (2	Axles):	15		
Peak F	lour Volume:	6,260	vehicles	S		He	avy Tru	cks (3+	- Axles):	15		
Ve	ehicle Speed:	65	mph		-	Vehicle	Mix					
Near/Far La	ne Distance:	175	feet				icleType	Э	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	-
Ra	rrier Height:	0.0) feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0				I	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:) feet			Noise C		'laa4!a	/: f-	4\		
Centerline Dist.	to Observer:	100.0) feet		-	Noise So			•	et)		
Barrier Distance	to Observer:	0.0) feet			Madiu	Auto m Truck		2.000			
Observer Height	(Above Pad):	5.0) feet					_	4.000	Crada Ad	liuotmont	
_	ad Elevation:	0.0) feet			Heal	y Truck	(S.)	3.006	Grade Ad	justinent	. 0.0
Ro	ad Elevation:	0.0) feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0	0%				Auto	s: 48	3.505			
	Left View:	-90.0) degree	es		Mediu	m Truck	s: 48	3.423			
	Right View:	90.0) degree	es		Heav	y Truck	rs: 48	3.506			
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traffi	c Flow	Di	istance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos:	74.55		4.42		0.0	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	84.86		-12.82		0.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	88.18		-16.78		0.0	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and	barri	ier atter	nuation)						
VehicleType	Leq Peak Ho	ur	Leq Day	,	Leq E	vening	Leq	Night		Ldn	Ci	NEL
Autos:	77	7.9	•	76.0		74.2		68	3.1	76.8	3	77.4
Medium Trucks:	70).9	(69.4		63.1		61	.5	70.0)	70.2
Heavy Trucks:	70).3	(68.9		59.8		61	.1	69.4	4	69.6
Vehicle Noise:	79	9.3		77.5		74.7		69	0.6	78.2	2	78.7
Centerline Distan	ce to Noise C	ontour	(in feet))								
					70	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

353

380

760

819

1,637

1,764

3,526

3,801

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Job Number: 8141

Road Segment: b/w I-5 SB Ramps and Burt Rd.

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	52,500	vehicles	3					Autos:	15			
Peak Hour	Percentage:	109	%			Me	dium Tr	rucks (2	Axles):	15			
Peak H	lour Volume:	5,250	vehicles	3		He	avy Tru	cks (3+	Axles):	15			
Ve	hicle Speed:	60	mph		-	/ehicle l	Mix						
Near/Far La	ne Distance:	76	feet				icleType	9	Day	Evening	Night	Daily	
Site Data								Autos:	77.5%		9.6%	,	
	rrier Height:	0.0) feet			Me	edium T		84.8%		10.3%	1.84%	
Barrier Type (0-W	•	0.0				F	leavy T	rucks:	86.5%		10.8%	0.74%	
Centerline Di	•	100.0											
Centerline Dist.) feet		Noise Source Elevations (in feet)								
Barrier Distance) feet				Auto		2.000				
Observer Height () feet			Mediur	n Truck	(s: 4	.000				
	ad Elevation:) feet			Heav	y Truck	rs: 8	3.006	Grade Ad	iustment:	0.0	
	ad Elevation:) feet		1	Lane Eq	uivalen	t Dista	nce (in i	feet)			
	Road Grade:	0.0					Auto		2.547	,			
•	Left View:) degree	25		Mediur	n Truck		2.504				
	Right View:		degree				y Truck		2.547				
FHWA Noise Mod	el Calculation	าร											
VehicleType	REMEL		Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	73.22	2	4.00		-4.1		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	3	-13.24		-4.11	I	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	3	-17.19		-4.11	l	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	hout To	po and	barrie	er atten	uation)							
VehicleType	Leq Peak Ho	our I	Leq Day	,	Leq E	vening	Leq	Night		Ldn	CI	VEL	
Autos:	7	1.9	-	70.0		68.2		62	.2	70.8	3	71.4	
Medium Trucks:	6	5.1	(63.6		57.3		55	.7	64.2	2	64.4	
Heavy Trucks:	64	4.8	(63.4		54.4		55	.6	64.0)	64.1	
Vehicle Noise:	7:	3.4		71.6		68.7		63	.8	72.3	3	72.8	

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	143	309	665	1,433							
CNEL:	154	333	717	1,544							

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Job Number: 8141

Road Segment: b/w Burt Rd. and Oak Cyn./Laguna Cyn. Rd.

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DAT	4		NOISE MODEL INPUTS					
Highway Data				S	ite Conditio	ons (Har	d=10, So	oft = 15)		
Average Daily	Traffic (Adt):	53,500 vehi	cles				Autos:	15		
= -	Percentage:	10%			Mediun	n Trucks	(2 Axles):	15		
Peak H	lour Volume:	5,350 vehi	cles		Heavy	Trucks (3	3+ Axles):	15		
Ve	hicle Speed:	60 mph		V	ehicle Mix					
Near/Far La	ne Distance:	76 feet			Vehicle1	уре	Day	Evening	Night	Daily
Site Data						Autos			9.6%	
Bai	rrier Height:	0.0 fee	ŀ		Mediui	m Trucks	: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0	•		Heav	y Trucks	: 86.5%	2.7%	10.8%	0.74%
Centerline Dis		100.0 fee		_	laina Carre	- Flavet	iono (in f	41		
Centerline Dist.	to Observer:	100.0 fee			loise Sourc		•	et)		
Barrier Distance	to Observer:	0.0 fee				utos:	2.000			
Observer Height (5.0 fee			Medium Tr		4.000	0 1- 4-1		0.0
• ,	ad Elevation:	0.0 fee			Heavy Tr	ucks:	8.006	Grade Ad	ustment:	0.0
	ad Elevation:	0.0 fee		L	ane Equiva	lent Dist	ance (in	feet)		
	Road Grade:	0.0%			Autos: 92.547					
·	Left View:	-90.0 deg	rees		Medium Tr	ucks:	92.504			
	Right View:	90.0 deg			Heavy Tr	ucks:	92.547			
FHWA Noise Mode	el Calculation	ns								
VehicleType	REMEL	Traffic Flor	v D	istance	Finite Roa	d Fr	esnel	Barrier Att	en Ber	m Atten
Autos:	73.22	2 4.	08	-4.11	-1.	20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	3 -13.	16	-4.11	-1.	20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3 -17.	11	-4.11	-1.	20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo ai	nd barr	ier atteni	uation)					
VehicleType	Leq Peak Ho	our Leq E	Day	Leq Ev	ening l	Leq Night		Ldn	CI	VEL
Autos:	7	2.0	70.1		68.3	6	52.3	70.9)	71.5
Medium Trucks:	6	5.2	63.7		57.3	5	55.8	64.3	3	64.5
Heavy Trucks:	6	4.9	63.5		54.4	5	55.7	64.0)	64.2
Vehicle Noise:	7	3.5	71.7		68.8	6	33.9	72.4	1	72.9

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	145	313	674	1,452
CNEL:	156	337	726	1,563

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: n/o ICD

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOI	SE MODE	EL INPUT	S	
Highway Data			Site Cor	nditions (Ha	rd = 10, S	oft = 15)		
Average Daily Traffic (Adt):	42,800 vehicles	S			Autos	: 15		
Peak Hour Percentage:	10%		Me	edium Truck	s (2 Axles)	: 15		
Peak Hour Volume:	4,280 vehicles	S	He	eavy Trucks	(3+ Axles)	: 15		
Vehicle Speed:	60 mph		Vehicle	Mix				
Near/Far Lane Distance:	76 feet			iicleType	Day	Evening	Night	Daily
Site Data			Ven	Auto	_	J	9.6%	-
				Auic ledium Truck			10.3%	1.84%
Barrier Height:				ediam Truci Heavy Truci			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm):			1	ileavy iluci	13. 00.57	0 2.1/0	10.076	0.7476
Centerline Dist. to Barrier:			Noise S	ource Eleva	ations (in t	feet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:			Mediu	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	vy Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:			Lano Fo	uivalent Di	stanco (in	foot)		
Road Elevation:			Lane Ly	Autos:	92.547	ieei)		
Road Grade:			Modiu	m Trucks:	92.547 92.504			
Left View:	3 -			nn Trucks. vy Trucks:	92.504			
Right View:	90.0 degree	es	пеа	vy Trucks.	92.347			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 3.11	-4	1.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	8 -14.12	-2	1.11	-1.20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks: 87.3	3 -18.08	-4	1.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier att	tenuation)					
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Nig	ht	Ldn	CI	VEL
Autos:	71.0	69.1	67.4		61.3	69.9	9	70.5
Medium Trucks:	64.2	62.7	56.4		54.8	63.3	3	63.5
Heavy Trucks:	3.9	62.5	53.5		54.7	63.1	1	63.2
Vehicle Noise:	72.5	70.7	67.9		62.9	71.	5	71.9
Centerline Distance to Noise	Contour (in feet)						

70 dBA

125

135

Ldn:

CNEL:

65 dBA

270

290

60 dBA

581

625

55 dBA

1,251

1,347

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Job Number: 8141

Road Segment: s/o Waterworks Wy.

Analyst: B. Lawson

SITE S	PECIFIC IN	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				5	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily T	raffic (Adt):	38,800 vehicle	s					Autos:	15		
Peak Hour F	. ,	10%			Me	dium Tru	ıcks (2	Axles):	15		
	our Volume:	3,880 vehicle	S		He	avy Truc	cks (3+	Axles):	15		
Veh	icle Speed:	60 mph		,	/ehicle l	1/1:52					
Near/Far Lan	e Distance:	76 feet		<u> </u>				Day	Funning	Niosht	Doilu
Cita Data					ven	icleType		Day 77.50/	Evening	Night	Daily
Site Data					1.4		Autos:	77.5%		9.6%	
	ier Height:	0.0 feet				edium Tr		84.8%		10.3%	1.84%
Barrier Type (0-Wa		0.0			,	l eavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist		100.0 feet		^	Voise So	ource El	evatio	ns (in fe	eet)		
Centerline Dist. to		100.0 feet				Autos	s: 2	.000			
Barrier Distance to	Observer:	0.0 feet			Mediui	m Trucks		.000			
Observer Height (A	bove Pad):	5.0 feet				y Trucks		.006	Grade Ad	iustment:	0.0
Pad	d Elevation:	0.0 feet									
Road	d Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
R	oad Grade:	0.0%				Autos		2.547			
	Left View:	-90.0 degre	es		Mediui	m Trucks	s: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Trucks	s: 92	2.547			
FHWA Noise Model	l Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.69		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.55		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.51		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barri	er atten	uation)						
VehicleType L	Leq Peak Ho	ur Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	70	0.6	68.7		66.9		60.	.9	69.5	5	70.1
Medium Trucks:	63	3.8	62.3	3 56.0 54.4 62.9						63.1	
Heavy Trucks:	63	3.5	62.1		53.0		54.	.3	62.7	7	62.8
Vehicle Noise:	72	2.1	70.3		67.4		62.	.5	71.0)	71.5
Centerline Distance	e to Noise C	ontour (in feet	')								

70 dBA

117

126

Ldn:

CNEL:

65 dBA

252

272

60 dBA

544

586

55 dBA

1,172

1,262

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Job Number: 8141

Road Segment: s/o Barranca Pkwy.

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS								
Highway Data				Si	ite Con	ditions (H	lard = 10, S	oft = 15)				
	Traffic (Adt): Percentage:	39,100 vehicle:	S		Me	dium Truck	Autos ks (2 Axles)					
	Hour Volume:	3,910 vehicles	\$				s (3+ Axles)					
Ve	ehicle Speed: ane Distance:	60 mph 76 feet	3	Ve	ehicle l	Иiх	, ,					
	The Biotarios.	70 1000			Vehi	cleType	Day	Evening	Night	Daily		
Site Data							tos: 77.5°		9.6%	97.42%		
Ва	rrier Height:	0.0 feet				edium Truc			10.3%	1.84%		
Barrier Type (0-V	Vall, 1-Berm):	0.0			F	leavy Truc	ks: 86.5°	% 2.7%	10.8%	0.74%		
	ist. to Barrier:	100.0 feet		N	Noise Source Elevations (in feet)							
Centerline Dist. Barrier Distance Observer Height F	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet				Autos: m Trucks: y Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0		
Ro	ad Elevation:	0.0 feet	Lá	ane Eq	uivalent D	istance (in	feet)					
	Road Grade:	0.0%				Autos:	92.547					
	Left View:	-90.0 degree	es		Mediur	n Trucks:	92.504					
	Right View:	90.0 degree	es		Heav	y Trucks:	92.547					
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Distanc		Finite		Fresnel	Barrier Att	en Ber	m Atten		
Autos:				4.11		-1.20	-4.87	_	000	0.000		
Medium Trucks:				4.11		-1.20	-4.97		000	0.000		
Heavy Trucks:	87.33	-18.47		4.11		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	barrier at	tenu	ation)							
VehicleType	Leq Peak Ho			q Eve	ening	Leq Ni	ght	Ldn		VEL		
Autos:			68.7		67.0		60.9	69.		70.1		
Medium Trucks:			62.3						63.1			
Heavy Trucks:	63	3.5	62.1		53.1		54.3	62.	7	62.8		
Vehicle Noise:	72	2.1	70.3		67.5		62.5	71.	1	71.5		

70 dBA

118

127

Ldn:

CNEL:

65 dBA

254

273

60 dBA

547

589

55 dBA 1,178

1,269

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Job Number: 8141

Road Segment: b/w Alton Pkwy.and I-405 NB Ramps

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DA	ATA			NOIS	E MODE	L INPUT	S	
Highway Data					Site Con	ditions (Har	d = 10, So	oft = 15)		
Peak Hou	Traffic (Adt): r Percentage: Hour Volume:	41,300 vo 10% 4,130 vo				dium Trucks avy Trucks (:	,	15		
V	ehicle Speed: ane Distance:	4,130 vi 60 m 76 fe	nph	_	Vehicle l		Day	Evening	Night	Daily
Site Data						Autos	3: 77.5%	12.9%	9.6%	97.42%
Barrier Type (0-V		0.0 1				edium Trucks Heavy Trucks			10.3% 10.8%	1.84% 0.74%
	ist. to Barrier:	100.0 1			Noise Sc	ource Elevat	ions (in f	eet)		
Centerline Dist Barrier Distance Observer Height	to Observer:	100.0 f 0.0 f 5.0 f 0.0 f	feet feet			Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 1			Lane Eq	uivalent Dis	tance (in	feet)		
	Road Grade: Left View: Right View:		degrees degrees			m Trucks:	92.547 92.504 92.547			
FHWA Noise Mod	del Calculatio	ns								
VehicleType	REMEL	Traffic I	Flow	Distance	Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten
Autos	73.22	2	2.96	-4.1	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks	: 83.68	3 -	14.28	-4.1	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks	87.33	3 -	18.24	-4.1	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	hout Topo	and ba	rrier atten	uation)					
VehicleType	Leq Peak Ho	our Le	eq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL
Autos	7	0.9	69	.0	67.2		61.1	69.8	3	70.4
Medium Trucks		4.1	62		56.2		54.7	63.1		63.4
Heavy Trucks	6	3.8	62	.4	53.3	,	54.6	62.9	9	63.1
Vehicle Noise		2.3	70	.6	67.7	-	62.7	71.3	3	71.8
Centerline Distar	ice to Noise C	Contour (ii	n feet)							

70 dBA

122

132

Ldn:

CNEL:

65 dBA

263

283

60 dBA

567

611

55 dBA

1,222

1,316

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Santa Maria Av.

Road Segment: s/o Moulton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INP	UT DATA		NOISE MODEL INPUTS							
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Add): 8	,900 vehicles	3					Autos:	15		
Peak Hour Percentage		10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume	ə <i>:</i>	890 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Vehicle Speed	d:	50 mph		-	Vehicle I	l <i>dise</i>					
Near/Far Lane Distance	ə <i>:</i>	70 feet						Dov	- Cyoning	Niaht	Doile
Site Date					ven	icleType		Day	Evening	Night	Daily
Site Data					A 4.		Autos:	77.5%		9.6%	
Barrier Heigh		0.0 feet				edium T		84.8%		10.3%	
Barrier Type (0-Wall, 1-Berm	•	0.0			r	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrie		100.0 feet		1	Noise Sc	ource E	levatio	ns (in fe	eet)		
Centerline Dist. to Observe		100.0 feet				Auto	s: 2	2.000			
Barrier Distance to Observe	r:	0.0 feet			Mediui	n Truck		1.000			
Observer Height (Above Pac	<i>):</i>	5.0 feet				y Truck		3.006	Grade Ad	justment	: 0.0
Pad Elevation	n:	0.0 feet				-					
Road Elevation	n:	0.0 feet		1	Lane Eq				feet)		
Road Grad	e <i>:</i>	0.0%				Auto		3.723			
Left View	v:	-90.0 degree	es		Mediui	n Truck	s: 93	3.680			
Right View	V:	90.0 degree	es		Heav	y Truck	s: 93	3.723			
FHWA Noise Model Calculate	ions										
VehicleType REMEL	7	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Bei	m Atten
Autos: 70	.20	-2.91		-4.20)	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 81	.00	-20.15		-4.19	9	-1.20		<i>-4</i> .97	0.0	000	0.000
Heavy Trucks: 85	.38	-24.11		-4.20)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (v	vithou	ıt Topo and	barri	er atten	uation)						
VehicleType Leq Peak	Hour	Leq Day	,	Leq E	/ening	Leq	Night		Ldn	С	NEL
Autos:	61.9		60.0		58.2		52	.2	60.8	3	61.4
Medium Trucks:	55.5		53.9		47.6		46	.0	54.5	5	54.7
Heavy Trucks:	55.9		54.5		45.4		46	.7	55.0)	55.1
Vehicle Noise:	63.6	-	61.8		58.8		54	.0	62.6	6	63.0
Centerline Distance to Noise	Con	tour (in feet))								

Ldn:	32	69	148	319
CNEL:	34	74	159	343

70 dBA

65 dBA

60 dBA

55 dBA

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Santa Maria Av.

Road Segment: e/o Laguna Canyon Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Conditions	(Hard =	10, Sc	oft = 15)				
Average Daily Traffic (Adt):	6,000 vehicles	3			Autos:	15				
Peak Hour Percentage:	10%		Medium Tr	rucks (2 A	Axles):	15				
Peak Hour Volume:	600 vehicles	;	Heavy Tru	cks (3+ A	Axles):	15				
Vehicle Speed:	45 mph		Vehicle Mix							
Near/Far Lane Distance:	36 feet		VehicleType	Э	Day	Evening	Night	Daily		
Site Data					77.5%	•	9.6%	•		
Barrier Height:	0.0 feet		Medium T	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet		Noise Source E	lovotion	o /in fo	2041				
Centerline Dist. to Observer:	100.0 feet	-			5 (<i>III 1</i> 6 000	et)				
Barrier Distance to Observer:	0.0 feet		Auto Medium Truck		000					
Observer Height (Above Pad):	5.0 feet			_	006 006	Grade Adj	iustmant:			
Pad Elevation:	0.0 feet		Heavy Truck	.5. 0.0	JU6	Orace Auj	ustinent.	0.0		
Road Elevation:	0.0 feet		Lane Equivalen	t Distan	ce (in f	feet)				
Road Grade:	0.0%		Auto	s: 98.	412					
Left View:	-90.0 degree	es	Medium Truck	s: 98.	372					
Right View:	90.0 degree	es	Heavy Truck	rs: 98.	413					
FHWA Noise Model Calculations	s									
VehicleType REMEL	Traffic Flow	Distance	Finite Road	Fresn	nel	Barrier Atte	en Ber	m Atten		
Autos: 68.46	-4.17	-4.5	1 -1.20		<i>-4.87</i>	0.0	000	0.000		
Medium Trucks: 79.45	-21.41	-4.5	1 -1.20		<i>-4.</i> 97	0.0	000	0.000		
Heavy Trucks: 84.25	-25.36	-4.5	-4.51 -1.20 -5.16 0.000 (
Unmitigated Noise Levels (with	out Topo and I	barrier atten	uation)							
VehicleType Leq Peak Hou	ır Leq Day	Leq E	vening Leq	Night		Ldn	CI	VEL		
Autos: 58	.6 5	56.7	54.9	48.9)	57.5	5	58.1		

Unmitigated Nois	e Levels (withou	t Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	58.6	56.7	54.9	48.9	57.5	58.1
Medium Trucks:	52.3	50.8	44.5	42.9	51.4	51.6
Heavy Trucks:	53.2	51.8	42.7	44.0	52.3	52.4
Vehicle Noise:	60.4	58.7	55.5	50.8	59.4	59.8

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	20	42	91	196						
CNEL:	21	45	98	210						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Santiago Canyon Rd.

Road Segment: e/o SR-241 NB Ramp

Job Number: 8141

Analyst: B. Lawson

0 0 0 0 .	NPUT DATA			NO	ISE MODE	L INPUT	S		
Highway Data			Site Cor	nditions (H	ard = 10, S	oft = 15)			
Average Daily Traffic (Adt): Peak Hour Percentage:	23,200 vehicles	3	Me	edium Truck	Autos: (s (2 Axles):				
Peak Hour Volume:	2,320 vehicles	3	Heavy Trucks (3+ Axles): 15						
Vehicle Speed:	50 mph		Vehicle	Mix					
Near/Far Lane Distance:	70 feet		Veh	icleType	Day	Evening	Night	Daily	
Site Data				Aut	os: 77.5%	6 12.9%	9.6%	97.42%	
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			edium Truc Heavy Truc			10.3% 10.8%	1.84% 0.74%	
Centerline Dist. to Barrier: Centerline Dist. to Observer:	100.0 feet		Noise S	ource Elev	ations (in f	eet)			
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet 0.0 feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment:						
Road Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)			
Road Grade:	0.0%			Autos:	93.723				
Left View:	-90.0 degree	es	Mediu	m Trucks:	93.680				
Right View:	90.0 degree	es	Heav	vy Trucks:	93.723				
FHWA Noise Model Calculatio	ns								
VehicleType REMEL	Traffic Flow	Distance	e Finite		Fresnel	Barrier Att	en Ber	m Atten	
Autos: 70.20	1.25	-4	.20	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 81.00	-15.99	-4	.19	-1.20	-4.97		000	0.000	
Heavy Trucks: 85.38	3 -19.95	-4	.20	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wit	hout Topo and	barrier att	enuation)						
VehicleType Leq Peak Ho	our Leq Day	Leq	Evening	Leq Nig	ght	Ldn	CI	VEL	
Autos: 6	6.1	64.2	62.4		56.3	65.0)	65.6	
Medium Trucks: 5	9.6	58.1	51.7		50.2	58.7	7	58.9	
Heavy Trucks:6	0.0	58.6	49.6		50.8	59.2	2	59.3	
Vehicle Noise: 6	7.7	66.0	63.0		58.2	66.7	7	67.2	

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	60	130	280	604
CNEL:	65	140	301	649

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Scientific Wy.

Road Segment: s/o ICD

Job Number: 8141

Analyst: B. Lawson

SITE SP	ECIFIC IN	PUT DATA				NC	DISE MODI	MODEL INPUTS				
Highway Data				S	ite Con	ditions (F	Hard = 10, S	oft = 15)				
Average Daily Tra	affic (Adt):	1,700 vehicles	3				Autos	: 15				
Peak Hour Pe	ercentage:	10%			Me	dium Truc	ks (2 Axles)	: 15				
Peak Hou	r Volume:	170 vehicles	S		He	avy Truck	s (3+ Axles)	: 15				
Vehic	le Speed:	55 mph		V	ehicle l	Vix						
Near/Far Lane	Distance:	52 feet				icleType	Day	Evening	Night	Daily		
Site Data							itos: 77.5%	J	9.6%	97.42%		
	er Height:	0.0 feet			Ме	edium Tru			10.3%	1.84%		
Barrier Type (0-Wall,	•	0.0				leavy Tru			10.8%	0.74%		
Centerline Dist.	•	100.0 feet		-								
Centerline Dist. to		100.0 feet		N	oise Sc		vations (in	eet)				
Barrier Distance to		0.0 feet				Autos:						
Observer Height (Ab		5.0 feet				n Trucks:						
	Elevation:	0.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
	Elevation:	0.0 feet		Li	ane Egi	uivalent L	Distance (in	feet)				
	ad Grade:	0.0%				Autos:	96.607	,				
	Left View:	-90.0 degree	25		Mediur	n Trucks:						
	ight View:	90.0 degree				y Trucks:						
		00.0 009.00										
FHWA Noise Model (
,,	REMEL	Traffic Flow	Distanc		Finite		Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	-10.52		4.39		-1.20	-4.87		000	0.000		
Medium Trucks:	82.40	-27.76		4.39		-1.20	-4.97	_	000	0.000		
Heavy Trucks:	86.40	-31.71	-	4.39		-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise L	evels (with	out Topo and	barrier at	tenu	ation)							
VehicleType Le	eq Peak Hou	r Leq Day	Le	q Eve	ening	Leq N	ight	Ldn	CI	VEL		
Autos:	55.	7 :	53.8		52.0		45.9	54.6	3	55.2		
Medium Trucks:	49.	.1	47.5		41.2		39.6	48.	1	48.3		
Heavy Trucks:	49.	1 4	47.7		38.6		39.9	48.2	2	48.4		
Vehicle Noise:	57.	2	55.5		52.5		47.7	56.2	2	56.7		

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	12	26	56	120						
CNEL:	13	28	60	130						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Spectrum

Road Segment: w/o Fortune Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				NC	ISE MODE	L INPUT	s	
Highway Data				Si	te Con	ditions (F	<i>Hard</i> = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	2,900 vehicles	3				Autos	: 15		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Axles)	: 15		
Peak H	lour Volume:	290 vehicles	6		He	avy Truck	s (3+ Axles)	: 15		
Ve	ehicle Speed:	35 mph		Ve	ehicle l	Mix				
Near/Far La	ne Distance:	20 feet				icleType	Day	Evening	Night	Daily
Site Data							itos: 77.5%		9.6%	
Ra	rrier Height:	0.0 feet			Ме	edium Tru	cks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			F	l eavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Di		100.0 feet								
Centerline Dist.		100.0 feet		NC	oise Sc		vations (in t	reet)		
Barrier Distance		0.0 feet				Autos:				
Observer Height		5.0 feet				m Trucks:		0		
_	ad Elevation:	0.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment.	: 0.0
	ad Elevation:	0.0 feet		La	ne Eq	uivalent L	Distance (in	feet)		
	Road Grade:	0.0%				Autos:	99.544	,		
	Left View:	-90.0 degree	es		Mediui	m Trucks:	99.504			
	Right View:	90.0 degree			Heav	y Trucks:	99.544			
FHWA Noise Mod	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Distanc	e	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	64.30	-6.24	-4	4.59		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	75.75	-23.47	-4	4.59		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	81.57	-27.43	-2	4.59		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier att	tenua	ation)					
VehicleType	Leq Peak Hou	ır Leq Day	Led	g Eve	ning	Leq N	ight	Ldn	CI	NEL
Autos:	52	.3	50.4		48.6		42.6	51.2	2	51.8
Medium Trucks:	46	.5	45.0		38.6		37.1	45.	5	45.8
Heavy Trucks:	48	.3	46.9		37.9		39.1	47.	5	47.6
Vehicle Noise:	54	.5	52.8		49.3		45.0	53.	5	53.9
Contorlino Distan	co to Noiso Co	antour (in foot)	\							

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	8	17	37	79
CNEL:	8	18	39	85

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Sterling Job Number: 8141
Road Segment: b/w Rockfield Bl and Barrana Pkwy Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data				Site Con	ditions (Hard	d=10, So	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	3,800 vehicle 10% 380 vehicle			dium Trucks (avy Trucks (3	,			
	ehicle Speed: ane Distance:	35 mph 20 feet		Vehicle I	Mix icleType Autos	Day: 77.5%	Evening 12.9%	Night 9.6%	Daily 97.42%
	rrier Height: Vall, 1-Berm):	0.0 feet 0.0			edium Trucks Heavy Trucks	: 84.8%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): lad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Mediun Heav Lane Eq Mediun	Autos: m Trucks: my Trucks: uivalent Dist Autos: my Trucks:	Grade Ad	justment:	0.0	
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 64.30 75.75	Traffic Flow -5.06 -22.30 -26.26	-4.	Finite 59 59 59	Road From -1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	en Ber 000 000	<i>m Atten</i> 0.000 0.000 0.000
Unmitigated Nois VehicleType	e Levels (with Leq Peak Hou	ır Leq Day	/ Leq	enuation) Evening	Leq Night		Ldn	CI	NEL
Autos: Medium Trucks: Heavy Trucks:	47 49	.7 .5	51.6 46.2 48.1	49.8 39.8 39.1	3	3.7 8.2 0.3	52.4 46.7 48.7	7 7	53.0 46.9 48.8
Vehicle Noise:	55	.7	54.0	50.5	4	6.1	54.7	7	55.1

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	9	20	44	95						
CNEL:	10	22	47	101						

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: Technology Dr. Job Number: 8141 Road Segment: e/o Barranca Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NOISE MODEL INPUTS							
Highway Data				S	Site Con	ditions	(Hard =	= 10, So	oft = 15)			
Average Daily	Traffic (Adt): 2	20,700 vehicles	S					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tru	icks (2	Axles):	15			
Peak H	lour Volume:	2,070 vehicles	S		He	avy Truc	ks (3+	Axles):	15			
Ve	ehicle Speed:	55 mph		1	/ehicle l	Miv						
Near/Far La	ne Distance:	52 feet				icleType		Day	Evening	Night	Daily	
Site Data							lutos:	77.5%		9.6%	-	
	rrier Height:	0.0 feet			Me	edium Tr		84.8%		10.3%	1.84%	
Barrier Type (0-W	_	0.0 reet 0.0			H	leavy Tr	ucks:	86.5%		10.8%	0.74%	
Centerline Di		100.0 feet										
Centerline Dist.		100.0 feet		٨	loise So	ource El			eet)			
Barrier Distance		0.0 feet				Autos		.000				
Observer Height		5.0 feet				m Trucks		.000				
_	ad Elevation:	0.0 feet			Heav	y Trucks	s: 8	.006	Grade Adj	iustment:	0.0	
_	ad Elevation: ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distan	ice (in t	feet)			
	Road Grade:	0.0%				Autos		.607				
	Left View:	-90.0 degree	25		Mediui	m Trucks		.566				
	Right View:	90.0 degree				y Trucks		.608				
FHWA Noise Mod												
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite		Fres	nel	Barrier Att		m Atten	
Autos:		0.34		-4.39		-1.20		-4.87		000	0.000	
Medium Trucks:	82.40	-16.90		-4.39)	-1.20		-4.97		000	0.000	
Heavy Trucks:	86.40	-20.86		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	rening	Leq	Night		Ldn	CI	VEL	
Autos:	66	.5	64.6		62.9		56.	8	65.4	1	66.0	
Medium Trucks:	59	.9	58.4		52.0		50.	5	59.0)	59.2	
Heavy Trucks:	59	.9	58.5		49.5		50.	7	59.1	<u> </u>	59.2	
Vehicle Noise:	68	.1	66.3		63.4		58.	5	67.1	1	67.5	
Centerline Distan	ce to Noise Co	ontour (in feet)									
		·		70 d	<i>IBA</i>	65 (dBA	6	60 dBA	55	dBA	

64

69

Ldn:

CNEL:

137

148

296

318

637

686

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: Technology Dr. Job Number: 8141 Road Segment: w/o Barranca Pkwy. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				5	Site Con	ditions	(Hard	= 10, So	oft = 15)		
Average Daily Traffic (Adt,	: 15,8	00 vehicles	6					Autos:	15		
Peak Hour Percentage		10%			Me	dium Tı	rucks (2	Axles):	15		
Peak Hour Volume	: 1,5	80 vehicles	6		He	avy Tru	icks (3+	Axles):	15		
Vehicle Speed	:	55 mph		1	/ehicle l	Miv					
Near/Far Lane Distance	:	52 feet		_		icleType	e	Day	Evening	Night	Daily
Site Data					V 011		Autos:	77.5%	•	•	97.42%
		0.0 foot			Me	edium T		84.8%		10.3%	1.84%
Barrier Height		0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm, Centerline Dist. to Barrie		0.0 0.0 feet									011 170
Centerline Dist. to Observe		00.0 feet		^	Voise So	ource E	levatio	ns (in fe	eet)		
Barrier Distance to Observe		0.0 feet				Auto	os: 2	2.000			
Observer Height (Above Pad		5.0 feet			Mediui	m Truck	ks: 4	1.000			
Pad Elevation		0.0 feet			Heav	y Truck	ks: 8	3.006	Grade Adj	iustment:	0.0
Road Elevation		0.0 feet		,	ane Fo	uivalen	t Dista	nce (in f	feet)		
Road Grade		0.0%		_	ano Eq	Auto		6.607	001)		
Left View		0.0 % 90.0 degree									
Right View		90.0 degree 90.0 degree				ry Truck		6.608			
Night view	. 8	o.o degree	55		ricav	y ITUON	10.	3.000			
FHWA Noise Model Calculate	ons										
VehicleType REMEL	Tra	affic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 71.	78	-0.84		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.	40	-18.07		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.	40	-22.03		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout	Topo and I	barrie	er atteni	uation)						
VehicleType Leq Peak I		Leq Day		Leq Ev		Leq	Night		Ldn	CI	VEL
Autos:	65.4	(33.5	· ·	61.7		55	.6	64.3	3	64.9
Medium Trucks:	58.7	Ę	57.2		50.9		49	.3	57.8	3	58.0
Heavy Trucks:	58.8	Ę	57.4		48.3		49	.6	57.9)	58.0
Vehicle Noise:	66.9	(65.2		62.2		57	.3	65.9)	66.4
Centerline Distance to Noise	Conto	our (in feet))								
				70 d	IBA	65	dBA	6	i0 dBA	55	dBA

53

57

Ldn:

CNEL:

115

123

247

266

532

573

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Technology Dr.

Road Segment: e/o Laguna Canyon Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Conditio	ons (Hard	l = 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	17,200 vehicle	S				Autos:	15				
Peak Hour	Percentage:	10%			Medium	n Trucks (2 Axles):	15				
Peak H	lour Volume:	1,720 vehicles	S		Heavy	Trucks (3	+ Axles):	15				
Ve	hicle Speed:	50 mph		V	ehicle Mix							
Near/Far La	ne Distance:	50 feet			VehicleT	vne	Day	Evening	Night	Daily		
Site Data					VOITIOIOT	Autos:	•	J	•	97.42%		
	wwiew Heierlet.	0.0 feet			Mediur	m Trucks:			10.3%	1.84%		
ва Barrier Type (0-W	rrier Height:	0.0 reet 0.0				y Trucks:			10.8%	0.74%		
Centerline Di	•	0.0 100.0 feet										
Centerline Dist.		100.0 feet		۸	Noise Source Elevations (in feet)							
		0.0 feet			A	utos:	2.000					
Barrier Distance					Medium Tr	ucks:	4.000					
Observer Height	,	5.0 feet			Heavy Tr	ucks:	8.006	Grade Adj	ustment:	0.0		
	Pad Elevation: 0.0 feet Road Elevation: 0.0 feet				ane Equiva	lant Dist	ence (in	foot)				
								ieei)				
	Road Grade:	0.0%					06.871					
	Left View:	-90.0 degree			Medium Tr		96.830					
	Right View:	90.0 degree	es		Heavy Tr	ucks. S	6.871					
FHWA Noise Mod	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite Roa	d Fre	esnel	Barrier Atte	en Ber	m Atten		
Autos:	70.20	-0.05		-4.41	-1.	20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-17.29		-4.41	-1.	20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-21.25		-4.41	-1.	20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrie	r attenu	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening L	Leq Night		Ldn	CI	VEL		
Autos:	64	.5	62.6		60.9	5	4.8	63.4	ļ	64.0		
Medium Trucks:	58	.1	56.6		50.2	4	8.7	57.1		57.4		
Heavy Trucks:	58	.5	57.1		48.1	4	9.3	57.7	,	57.8		
Vehicle Noise:	66	.2	64.5		61.4	5	6.7	65.2	2	65.7		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	48	103	222	479
CNEL:	51	111	239	514

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Toledo Wy.

Road Segment: e/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Cor	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (A	dt): 4	,700 vehicles					Autos:	15			
Peak Hour Percenta	age:	10%		Me	dium Tr	ucks (2	Axles):	15			
Peak Hour Volu	me:	470 vehicles		He	avy Truc	cks (3+	Axles):	15			
Vehicle Spe	ed:	55 mph		Vehicle	N/iv						
Near/Far Lane Distar	nce:	52 feet			icleType	,	Day	Evening	Night	Daily	
Site Data				Ven		Autos:	77.5%		9.6%		
				Λ.4			84.8%		10.3%	1.84%	
Barrier Heig	•	0.0 feet						10.3%	0.74%		
Barrier Type (0-Wall, 1-Bei	•	0.0		,	neavy I	rucks.	00.5%	2.1%	10.6%	0.74%	
Centerline Dist. to Bar		100.0 feet		Noise Source Elevations (in feet)							
Centerline Dist. to Obser		100.0 feet			Auto	s: 2	2.000	-			
Barrier Distance to Obser		0.0 feet		Mediu	m Truck	s: 4	1.000				
Observer Height (Above Pa	ad):	5.0 feet			y Truck		3.006	Grade Ad	iustment.	0.0	
Pad Elevat	ion:	0.0 feet									
Road Elevat	ion:	0.0 feet		Lane Eq	uivalen	t Distai	nce (in i	feet)			
Road Gra	ade:	0.0%			Auto	s: 96	6.607				
Left Vi	iew:	-90.0 degree	S	Mediu	m Truck	s: 96	6.566				
Right Vi	iew:	90.0 degree	S	Heavy Trucks: 96.608							
FHWA Noise Model Calcul	ations										
VehicleType REME	EL 7	raffic Flow	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-6.10	-4.3	39	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 8	32.40	-23.34	-4.3	39	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	36.40	-27.30	-4.3	39	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels	(withou	it Topo and k	parrier atte	nuation)							
VehicleType Leq Pea	k Hour	Leq Day	Leq E	vening	Leq	Night		Ldn	CI	VEL	
Autos:	60.1	5	8.2	56.4		50	.4	59.0)	59.6	
Medium Trucks:	53.5	5	2.0	45.6		44	.1	52.5	5	52.8	
Heavy Trucks:	53.5	5	2.1	43.0		44	.3	52.7	7	52.8	
Vehicle Noise:	61.7	5	9.9	56.9		52	.1	60.6	6	61.1	
Centerline Distance to Noi	ise Con	tour (in feet)									

70 dBA

24

26

Ldn:

CNEL:

65 dBA

51

55

60 dBA

110

118

55 dBA

237

255

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Toledo Wy.

Road Segment: w/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				Site Con	ditions (Hai	rd = 10, Se	oft = 15)				
Average Daily	Traffic (Adt):	6,000 vehicles	3			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15				
Peak F	Hour Volume:	600 vehicles	3	He	avy Trucks (3+ <i>Axles):</i>	15				
Ve	ehicle Speed:	50 mph		Vehicle Mix							
Near/Far La	ane Distance:	70 feet			icleType	Day	Evening	Night	Daily		
Site Data					Auto	_		_	97.42%		
Ra	rrier Height:	0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0		F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%		
• • • •	ist. to Barrier:	100.0 feet	·				- 41				
Centerline Dist.		100.0 feet		Noise Source Elevations (in feet)							
Barrier Distance		0.0 feet			Autos:	2.000					
Observer Height		5.0 feet			n Trucks:	4.000					
•	Pad Elevation:			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
Road Elevation: 0.0 feet				Lane Eq	uivalent Dis	tance (in	feet)				
	Road Grade:	0.0%			Autos:	93.723					
	Left View:	-90.0 degree	es	Mediui	m Trucks:	93.680					
	Right View:	90.0 degree		Heav	y Trucks:	93.723					
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos:	70.20	-4.63	-4.2	20	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-21.87	-4.′	19	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-25.82	-4.2	20	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and I	barrier atte	nuation)							
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Nigh	nt	Ldn	CI	VEL		
Autos:	60	.2	58.3	56.5	56.5 50.5 59.1		1	59.7			
Medium Trucks:	53	.7	52.2	45.9 44.3			52.8	3	53.0		
Heavy Trucks:	Heavy Trucks: 54.2 52.7			43.7 45.0 53.3				53.4			

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	25	53	114	245
CNEL:	26	57	122	263

57.1

52.3

60.8

61.3

60.1

Vehicle Noise:

61.9

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Toledo Wy.

Job Number: 8141

Road Segment: w/o Ridge Route Dr.

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Ha	ard = 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	7,000 vehicle	s			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Truck	s (2 Axles):	15				
Peak F	Hour Volume:	700 vehicle	s	He	avy Trucks	(3+ Axles):	15				
Ve	ehicle Speed:	45 mph		Vehicle	Mix						
Near/Far La	ne Distance:	36 feet			icleType	Day	Evening	Night	Daily		
Site Data					Auto	os: 77.5%	12.9%	9.6%	97.42%		
Ва	rrier Height:	0.0 feet		M	edium Truck	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0		ı	Heavy Truck	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Di	st. to Barrier:	100.0 feet		Noise Se	ource Eleva	ations (in f	eet)				
Centerline Dist.	to Observer:	100.0 feet			Autos:	2.000	7				
Barrier Distance	to Observer:	0.0 feet		Mediu	m Trucks:	4.000					
Observer Height	(Above Pad):	5.0 feet			ry Trucks:	8.006	Grade Ad	iustment	0.0		
P	ad Elevation:	0.0 feet		77001	y Trucks.	0.000		, 401	0.0		
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Di	stance (in	feet)				
	Road Grade:	0.0%			Autos:	98.412					
	Left View:	-90.0 degree	es	Mediu	m Trucks:	98.372					
	Right View:	90.0 degree	es	Heavy Trucks: 98.413							
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	-resnel	Barrier Att	en Ber	m Atten		
Autos:	68.46	-3.50	-4.	51	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	79.45	-20.74	-4.	51	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	84.25	-24.69	-4.	51	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)							
VehicleType	Leq Peak Hou	ur Leq Day	/ Leq	Evening	Leq Nig	ht	Ldn	CI	VEL		
Autos:	59	0.2	57.3	55.6		49.5	58.′	1	58.8		
Medium Trucks:	53	3.0	51.5	45.1		43.6	52.0)	52.3		
Heavy Trucks:	53	3.8	52.4	43.4		44.6	53.0)	53.1		
Vehicle Noise:	61	.1	59.3	56.2		51.5	60.	1	60.5		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	22	47	101	217
CNEL:	23	50	108	233

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Toledo Wy.

Road Segment: e/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC IN		NOISE MODEL INPUTS								
Highway Data		S	Site Condition	ons (Hard :	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	8,000 vehicles	3			Autos:	15				
Peak Hour Percentage:	10%		Medium	n Trucks (2	Axles):	15				
Peak Hour Volume:	800 vehicles	6	Heavy	Trucks (3+	Axles):	15				
Vehicle Speed:	50 mph	1	/ehicle Mix							
Near/Far Lane Distance:	70 feet	_	VehicleT	vne	Day	Evening	Night	Daily		
Site Data				Autos:	77.5%		9.6%	97.42%		
Barrier Height:	0.0 feet		Mediur	m Trucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		Heav	y Trucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet	_	•							
Centerline Dist. to Observer:	100.0 feet	_^	Noise Source Elevations (in feet)							
Barrier Distance to Observer:	0.0 feet				.000					
Observer Height (Above Pad):	5.0 feet		Medium Tr		.000					
Pad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Road Elevation:	0.0 feet	1	ane Equiva	lent Distai	nce (in i	feet)				
Road Grade:	0.0%		Autos: 93.723							
Left View:	-90.0 degree	25	Medium Tr		3.680					
Right View:	90.0 degree		Heavy Tr		3.723					
	00.0 0.09.00									
FHWA Noise Model Calculation										
VehicleType REMEL	Traffic Flow	Distance	Finite Roa			Barrier Att		m Atten		
Autos: 70.20		-4.20		20	-4.87	0.0	000	0.000		
Medium Trucks: 81.00	-20.62	-4.19	-1.	20	-4.97	0.0	000	0.000		
Heavy Trucks: 85.38	-24.57	-4.20	-1.	20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	out Topo and I	barrier atteni	uation)							
VehicleType Leq Peak Ho	ur Leq Day	Leq Ev	rening L	Leq Night		Ldn	CI	VEL		
Autos: 61	.4	59.5	57.8	51	.7	60.3	3	60.9		
Medium Trucks: 55	5.0	53.5	47.1	45	45.6)	54.3		
Heavy Trucks: 55	5.4	54.0	45.0 46.2		54.6		54.7			
Vehicle Noise: 63	B.1 (61.4	58.3 53.5 62.1					62.6		

70 dBA

30

32

Ldn:

CNEL:

65 dBA

64

69

60 dBA

138

148

55 dBA 297

319

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: b/w Culver Dr. and I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INF				S	
Highway Data			Site Cond	itions (Hard	d=10, Sc	oft = 15)		
Average Daily Traffic (Adt):	38,400 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Medi	ium Trucks ((2 Axles):	15		
Peak Hour Volume:	3,840 vehicle	S	Hea	vy Trucks (3	+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle M	ix				
Near/Far Lane Distance:	52 feet		Vehic	leType	Day	Evening	Night	Daily
Site Data				Autos	77.5%	12.9%	9.6%	97.42%
Barrier Height:	0.0 feet		Med	dium Trucks	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		He	eavy Trucks	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		Noisa Sai	ırce Elevati	ons (in f	not)		
Centerline Dist. to Observer:	100.0 feet		NOISE SUL	Autos:	2.000	,c ()		
Barrier Distance to Observer:	0.0 feet		Medium					
Observer Height (Above Pad):	5.0 feet				4.000	Crada Ad	iuotmont:	
Pad Elevation:	0.0 feet		Heavy	Trucks:	8.006	Grade Adj	usimeni.	0.0
Road Elevation:	0.0 feet		Lane Equi	ivalent Dist	ance (in i	feet)		
Road Grade:	0.0%			Autos:	96.607			
Left View:	-90.0 degree	es	Medium	Trucks:	96.566			
Right View:	90.0 degree		Heavy	Trucks:	96.608			
FHWA Noise Model Calculatio	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite F	Road Fr	esnel	Barrier Atte	en Beri	m Atten
Autos: 71.7	8 3.02	-4.3	9	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -14.22	-4.3	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -18.17	-4.3	9	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atten	uation)					
VehicleType Leq Peak Ho	our Leq Day	/ Leq E	vening	Leq Night		Ldn	CI	VEL
Autos: 6	9.2	67.3	65.5	5	9.5	68.1		68.7
Medium Trucks: 6	2.6	61.1	54.7	5	3.2	61.6	6	61.9
Heavy Trucks:6	2.6	61.2	52.2	5	3.4	61.8	3	61.9
Vehicle Noise: 7	' 0.8	69.0	66.1	-	1.2	69.7	7	70.2

70 dBA

96

104

Ldn:

CNEL:

65 dBA

207

223

60 dBA

447

480

55 dBA

962

1,035

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS							
Highway Data		9	Site Conditions	(Hard :	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt):	21,400 vehicles	3			Autos:	15			
Peak Hour Percentage:	10%		Medium T	rucks (2	Axles):	15			
Peak Hour Volume:	2,140 vehicles	3	Heavy Tru	ıcks (3+	Axles):	15			
Vehicle Speed:	55 mph	,	/ehicle Mix						
Near/Far Lane Distance:	52 feet		VehicleTyp	е	Day	Evening	Night	Daily	
Site Data				Autos:	77.5%	J	9.6%	97.42%	
Barrier Height:	0.0 feet		Medium 7	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):	0.0		Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:			Noise Source Elevations (in feet)						
Centerline Dist. to Observer:	100.0 feet	<u> </u>			•	eet)			
Barrier Distance to Observer:	0.0 feet		Auto		.000				
Observer Height (Above Pad):			Medium Truci	0 1- 4-1		0.0			
Pad Elevation:			Heavy Truck	ks: 8	.006	Grade Ad	iustment:	0.0	
Road Elevation:	0.0 feet	L	ane Equivaler	nt Distar	nce (in	feet)			
Road Grade:			Auto	os: 96	5.607				
Left View:		es	Medium Truck	ks: 96	5.566				
Right View:	•		Heavy Truck	ks: 96	6.608				
FHWA Noise Model Calculation	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos: 71.7	8 0.48	-4.39	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 82.4	0 -16.76	-4.39	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 86.4	0 -20.71	-4.39	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wit	thout Topo and	barrier atten	uation)						
VehicleType Leq Peak H	our Leq Day	Leq Ev	rening Lea	Night		Ldn	CI	VEL	
Autos: 6	66.7	64.8	63.0	56.	.9	65.6	6	66.2	
Medium Trucks:	80.1	58.5	52.2	50.6		59.1	l	59.3	
Heavy Trucks:6	60.1	58.7			.9	59.2	2	59.4	
Vehicle Noise:	88.2	66.5	63.5	58.	.7	67.2	2	67.7	

70 dBA

65

70

Ldn:

CNEL:

65 dBA

140

151

60 dBA

302

325

55 dBA

652

701

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: w/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

Highway Data Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume: Vehicle Speed: Near/Far Lane Distance: Site Data Barrier Height:	10% 1,890 vehicle 55 mph			Med	ditions (Har	d = 10, Sc Autos:	oft = 15) 15			
Peak Hour Percentage: Peak Hour Volume: Vehicle Speed: Near/Far Lane Distance: Site Data	10% 1,890 vehicle 55 mph				т	Autos:	15			
Site Data	52 feet		l V	Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15 Vehicle Mix						
					cleType	Day	Evening	Night	Daily	
Rarrier Height					Autos	_	Ŭ I	9.6%	-	
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer: Barrier Distance to Observer:	0.0 100.0 feet 100.0 feet		N	H loise So	dium Trucks leavy Trucks urce Elevat Autos:	: 86.5%	2.7%	10.3%	1.84% 0.74%	
Observer Height (Above Pad): Pad Elevation: Road Elevation:	5.0 feet 0.0 feet		L	Mediun Heavy ane Eq u	iustment:	0.0				
Road Grade: Left View: Right View:	-90.0 degre			Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608						
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow		tance	Finite I			Barrier Att		m Atten	
Autos: 71.7 Medium Trucks: 82.4 Heavy Trucks: 86.4	0 -17.30)	-4.39 -4.39 -4.39		-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0 0.0 0.0	000	0.000 0.000 0.000	
Unmitigated Noise Levels (wit	thout Topo and	l barrie	er attenu	ıation)						
VehicleType Leq Peak H	our Leq Da	У	Leq Ev	ening	Leq Nigh	t	Ldn	CI	VEL	
	66.1	64.2 58.0		62.5		56.4	65.0 58.6		65.6 58.8	
	59.5 59.6	58.0 58.1		51.6 49.1		50.1 50.3	58.6 58.7		58.8	
	67.7	65.9		63.0		58.1	66.7		67.1	

70 dBA

60

65

Ldn:

CNEL:

65 dBA

129

139

60 dBA

278

299

55 dBA

600

645

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECI	IFIC INF	PUT DATA			NOISE MODEL INPUTS						
Highway Data				5	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic	(Adt): 19	9,200 vehicles	s					Autos:	15		
Peak Hour Percer	ntage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak Hour Vo.	lume: 1	,920 vehicles	s		He	avy Tru	icks (3+	Axles):	15		
Vehicle S	peed:	55 mph		,	/ehicle l	Miv					
Near/Far Lane Dist	ance:	52 feet				icleType	e	Day	Evening	Night	Daily
Site Data					V 0111		Autos:	77.5%	•	•	97.42%
	a i a da t	0.0 foot			Me	edium T		84.8%		10.3%	1.84%
Barrier Tune (0 Well 1 F	•	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-B Centerline Dist. to Ba	,	100.0 feet									011 170
Centerline Dist. to Obs		100.0 feet		1	Voise Sc	ource E	levatio	ns (in fe	eet)		
Barrier Distance to Obs		0.0 feet				Auto	os: 2	2.000			
Observer Height (Above		5.0 feet			Mediui	n Truck	rs: 4	1.000			
Pad Elev	•	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Adj	iustment:	0.0
Road Elev		0.0 feet		1	ane Eq	uivalen	t Dista	nce (in t	feet)		
Road G		Larro Eq	Auto		6.607	001)					
	View:	0.0% -90.0 degree	00		Mediu	n Truck		6.566			
Right		90.0 degree				y Truck		5.608			
Night	VIGW.	90.0 degree	55		ricav	y ITUON	.o. o	3.000			
FHWA Noise Model Calc	ulations										
VehicleType REN	MEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.01		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-17.23		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21.18		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Level	ls (witho	ut Topo and	barri	er atten	uation)						
	eak Hour			Leg Ev		Leq	Night		Ldn	CI	VEL
Autos:	66.2	2	64.3	· ·	62.5	•	56	.5	65.1		65.7
Medium Trucks:	59.6	5	58.1		51.7		50	.2	58.6	3	58.9
Heavy Trucks:	59.6	6	58.2		49.2		50	.4	58.8	3	58.9
Vehicle Noise:	67.8	3	66.0	63.1 58.2 66.7					67.2		
Centerline Distance to N	oise Cor	ntour (in feet)								
				70 a	IBA	65	dBA	6	i0 dBA	55	dBA

Ldn:

CNEL:

61

65

131

140

281

303

606

652

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o Sand Canyon

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS											
Highway Data				S	ite Cond	ditions (Hard = 1	0, S	oft = 15)				
Average Daily	Traffic (Adt):	25,700 vehicl	es				A	utos:	15				
Peak Hour	Percentage:	10%			Med	lium True	cks (2 Ax	des):	15				
Peak H	lour Volume:	2,570 vehicl	es		Heavy Trucks (3+ Axles): 15								
Ve	hicle Speed:	55 mph		V	ehicle N	/lix							
Near/Far La	ne Distance:	52 feet				cleType	E	ay	Evening	Night	Daily		
Site Data								7.5%		9.6%	-		
Ra	rrier Height:	0.0 feet			Me	dium Tru	ıcks: 8	4.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0			Н	leavy Tru	ıcks: 8	6.5%	2.7%	10.8%	0.74%		
Centerline Di		100.0 feet						<i>(</i> : c					
Centerline Dist.		100.0 feet		N	oise So		vations	-	eet)				
Barrier Distance		0.0 feet				Autos.							
Observer Height		5.0 feet				n Trucks.							
•	Pad Elevation: 0.0 feet				Heavy	/ Trucks.	8.00)6	Grade Ad	justment	: 0.0		
	Road Elevation: 0.0 feet					iivalent	Distance	e (in	feet)				
	Road Grade:	0.0%				Autos.	96.60)7					
	Left View:	-90.0 degr	ees		Mediun	n Trucks.							
	Right View:	90.0 degr			Heavy	/ Trucks.	96.60	8(
FHWA Noise Mod	el Calculation	ns											
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite I	Road	Fresne	I	Barrier Att	en Bei	m Atten		
Autos:	71.78	3 1.2	8	-4.39		-1.20	-4	4.87	0.0	000	0.000		
Medium Trucks:	82.40	-15.9	6	-4.39		-1.20	-4	4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-19.9	2	-4.39		-1.20	-{	5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo an	d barrier a	attenu	ation)								
VehicleType	Leq Peak Ho	our Leq Da	ay L	eq Eve	ening	Leq N	light		Ldn	C	NEL		
Autos:	6	7.5	65.6		63.8		57.7		66.4	4	67.0		
Medium Trucks:	6	0.9	59.3		53.0		51.4		59.9	9	60.1		
Heavy Trucks:	6	0.9	59.5		50.4 51		51.7	60.0)	60.2		
Vehicle Noise:	6	9.0	67.3		64.3		59.5		68.0	0	68.5		
Contorline Dieton	oo to Noise C	Contour (in for	-41										

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	74	159	342	736
CNEL:	79	171	368	792

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

Highway Data				NOISE MODEL INPUTS								
Ingriway Dala			S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	10%				dium Tru avy Truci	•	,	15 15 15				
Vehicle Speed: Near/Far Lane Distance:	55 mph	65	V	ehicle N		N3 (3T	Day	Evening	Night	Daily		
Site Data						utos:	77.5%		9.6%	97.42%		
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0			Medium Trucks: 84.8% 4.9% 10.3% Heavy Trucks: 86.5% 2.7% 10.8%								
Centerline Dist. to Barrier:			N	oise So	urce Ele	evatio	ns (in fe	eet)				
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad):	ier Distance to Observer: 0.0 feet			Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustme						nt: 0.0		
Road Elevation:			L	ane Equ	iivalent	Dista	nce (in i	feet)				
Road Grade: Left View: Right View:	-90.0 degr			Autos: 89.850 Medium Trucks: 89.805 Heavy Trucks: 89.850								
FHWA Noise Model Calculation	ons											
VehicleType REMEL	Traffic Flow	Distan	ice	Finite I	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 71.7	8 1.6	5	-3.92		-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -15.59	9	-3.92		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	0 -19.5	5	-3.92		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	thout Topo and	d barrier a	ttenu	ation)								
VehicleType Leq Peak H	our Leq Da	ay Le	eq Eve	ening	Leq N	Vight		Ldn	CI	VEL		
Autos:	68.3	66.4		64.6		58	.6	67.2	2	67.8		
Medium Trucks:	61.7	60.2		53.8		52	.3	60.7	7	61.0		
Heavy Trucks:	61.7	60.3		51.3 52		52.5 60.9		9	61.0			
Vehicle Noise:	69.9	68.1		65.2		60	.3	68.8	3	69.3		

Centerline Distance to Noise Contour (in feet)													
	70 dBA	65 dBA	60 dBA	55 dBA									
Ldn:	84	181	389	838									
CNEL:	90	194	418	902									

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: b/w Lake Forest Dr.and Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Cor	ditions (H	lard = 10, Sc	oft = 15)				
	Traffic (Adt): Percentage: Hour Volume:	36,000 veh 10% 3,600 veh					Autos: ks (2 Axles): s (3+ Axles):	15				
Ve	ehicle Speed: ane Distance:	55 mp	55 mph 88 feet			Mix icleType	Day	Evening	Night	Daily		
Site Data						Au	tos: 77.5%	12.9%	9.6%	97.42%		
Ba Barrier Type (0-V	vall, 1-Berm):	0.0 fe 0.0	et			edium Truc Heavy Truc			10.3% 10.8%	1.84% 0.74%		
	ist. to Barrier:	100.0 fe	et		Noise S	ource Elev	ations (in f	eet)				
Centerline Dist. to Observer: 100.0 fe Barrier Distance to Observer: 0.0 fe Observer Height (Above Pad): 5.0 fe Pad Elevation: 0.0 fe			et et et		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet)							
	Road Elevation: 0.0 feet			-	Lane E q			reet)				
	Road Grade: Left View: Right View:	0.0% -90.0 de 90.0 de	•		Autos: 89.850 Medium Trucks: 89.805 Heavy Trucks: 89.850							
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flo	ow D	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	3 2	2.74	-3.92	2	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-14	.50	-3.92	2	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40) -18	3.45	-3.92	2	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo a	and barr	ier atten	uation)							
VehicleType	Leq Peak Ho	ur Leq	Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL		
Autos:	6	9.4	67.5		65.7		59.7	68.3	3	68.9		
Medium Trucks:	62	2.8	61.3		54.9		53.4	61.8	3	62.1		
Heavy Trucks:	6	2.8	61.4		52.4		53.6	62.0)	62.1		
Vehicle Noise:	7	1.0	69.2		66.3		61.4	69.9	9	70.4		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	99	213	460	991
CNEL:	107	230	495	1,066

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: w/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				3	Site Con	ditions (Hard =	10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	40,000 vehicle	s				,	Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Trud	cks (2 A	(xles	15			
Peak H	lour Volume:	4,000 vehicle	s		He	avy Truck	ks (3+ A	(xles	15			
Ve	hicle Speed:	55 mph		_	/ehicle l	Miv						
Near/Far La	ne Distance:	88 feet		<u> </u>		icleType		Day	Evening	Night	Daily	
Site Data					• • • • • • • • • • • • • • • • • • • •			77.5%	J	9.6%	-	
	rrior Hoimbt.	0.0 feet			Ме	edium Tru		84.8%		10.3%	1.84%	
Barrier Type (0-W	rrier Height:	0.0 teet 0.0				leavy Tru		86.5%		10.8%	0.74%	
Centerline Di		0.0 100.0 feet										
Centerline Dist.		100.0 feet		1	Voise So	ource Ele		•	eet)			
Barrier Distance		0.0 feet				Autos:		000				
Observer Height (5.0 feet				n Trucks.		000				
	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Adj	iustment.	0.0	
	Road Elevation: 0.0 feet						Distand	e (in f	feet)			
			Autos:			,						
•	Road Grade: Left View:	0.0% -90.0 degree	29		Mediui	n Trucks.						
	Right View:	90.0 degree				y Trucks:						
	g	00.0 d0g.0				,						
FHWA Noise Mod												
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresn	el	Barrier Atte	en Ber	m Atten	
Autos:	71.78	3.20		-3.92	2	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-14.04		-3.92	2	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-18.00		-3.92	2	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and	barri	ier atten	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	rening	Leq N	light		Ldn	CI	VEL	
Autos:	69	.9	68.0		66.2		60.1		68.8	3	69.4	
Medium Trucks:	63	.2	61.7		55.4		53.8		62.3	3	62.5	
Heavy Trucks:	63	.3	61.9		52.8		54.1		62.4	ļ	62.6	
Vehicle Noise:	71	.4	69.7		66.7		61.8		70.4	1	70.9	
Centerline Distant	ce to Noise Co	ontour (in feet)									
				70 a	IBA	65 d	BA	6	i0 dBA	55	dBA	

Ldn:

CNEL:

106

114

229

246

493

531

1,063

1,144

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS							
Highway Data				3	Site Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	23,700 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,370 vehicle	es		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		1	/ehicle l	Mix					
Near/Far La	ne Distance:	70 feet				icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	,
	rrier Height:	0.0 feet			Me	edium T		84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0 1661				leavy T		86.5%		10.8%	0.74%
	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		^	Voise So				eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height		5.0 feet				m Truck		.000	0 - 1 - 4 - 1		0.0
_	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	0.0
Ro	Road Elevation: 0.0 feet						t Distar	ice (in i	feet)		
Road Grade: 0.0%						Auto	s: 93	.723			
	Left View:	-90.0 degre	es		Mediui	m Truck	s: 93	.680			
	Right View:	90.0 degre	es		Heavy Trucks: 93.723						
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	nel	Barrier Atte	en Ber	m Atten
Autos:	70.20	1.34		-4.20)	-1.20		-4.87	0.0		0.000
Medium Trucks:	81.00	-15.90	1	-4.19)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-19.86		-4.20)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barr	ier atteni	uation)						
VehicleType	Leq Peak Hou	ır Leq Daj	У	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	66	5.1	64.2		62.5		56.	4	65.0)	65.7
Medium Trucks:	59).7	58.2		51.8		50.	3	58.8	3	59.0
Heavy Trucks:	60	0.1	58.7		49.7		50.	9	59.3	3	59.4
Vehicle Noise:	67	7.8	66.1		63.0		58.	3	66.8	3	67.3
Centerline Distan	ce to Noise Co	ontour (in feet	t)								
				70 d	IBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

61

66

132

142

284

305

613

658

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: n/o Alicia Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE S	PECIFIC II	NPUT I	DATA				NC	ISE MOD	EL INPUT	S			
Highway Data					S	ite Con	ditions (F	Hard = 10, S	Soft = 15)				
Average Daily T	raffic (Adt):	26,500	vehicles	3				Autos	s: 15				
Peak Hour F	Percentage:	109	%			Med	dium Truc	ks (2 Axles) <i>:</i> 15				
Peak Ho	ur Volume:	2,650	vehicles	3	Heavy Trucks (3+ Axles): 15								
	icle Speed:		mph		V	ehicle N	/lix						
Near/Far Lan	e Distance:	70	feet			Vehi	cleType	Day	Evening	Night	Daily		
Site Data							AL	itos: 77.5	% 12.9%	9.6%	97.42%		
Barr	ier Height:	0.0) feet			Me	edium Tru	cks: 84.8	% 4.9%	10.3%	1.84%		
Barrier Type (0-Wa	•	0.0				H	leavy Tru	cks: 86.5	% 2.7%	10.8%	0.74%		
Centerline Dist	,	100.0) feet		M	nisa Sa	urco Elo	vations (in	foot)				
Centerline Dist. to	Observer:	100.0) feet		/4	oise so	Autos:	•	ieei)				
Barrier Distance to	Observer:	0.0) feet			Modium	n Trucks:						
Observer Height (A	bove Pad):	5.0) feet						Grade Ad	diustmont			
Pac	d Elevation:	0.0) feet			neav _.	y Trucks:	6.006	Grade At	ıjusimeni	. 0.0		
Road	d Elevation:	0.0) feet		La	ane Equ	ıivalent L	Distance (ir	r feet)				
R	oad Grade:	0.0)%				Autos:	93.723					
	Left View:	-90.0	degree	es .		Mediun	n Trucks:	93.680					
	Right View:) degree			Heav	y Trucks:	93.723					
FHWA Noise Model	l Calculation	15											
VehicleType	REMEL	Traffic	Flow	Distance	е	Finite	Road	Fresnel	Barrier At	ten Ber	m Atten		
Autos:	70.20)	1.82	-4	.20		-1.20	-4.87	7 0.	000	0.000		
Medium Trucks:	81.00)	-15.41	-4	l.19		-1.20	-4.97	7 0.	000	0.000		
Heavy Trucks:	85.38	3	-19.37	-4	1.20		-1.20	-5.16	6 0.	000	0.000		
Unmitigated Noise	Levels (with	hout To	po and l	barrier att	enu	ation)							
VehicleType L	eq Peak Ho	ur	Leq Day	Leq	Eve	ening	Leq N	ight	Ldn	C	NEL		
Autos:	60	6.6		64.7		63.0		56.9	65.	5	66.1		
Medium Trucks:	60	0.2	į	58.7		52.3		50.8	59.	2	59.5		
Heavy Trucks:	60	0.6	į	59.2		50.2		51.4	59.	8	59.9		
Vehicle Noise:	68	8.3	(66.6		63.5		58.7	67.	3	67.8		
											1		

70 dBA

66

71

Ldn:

CNEL:

65 dBA

142

153

60 dBA

306

329

55 dBA

660

709

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: s/o Alicia Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data					Site	e Cond	ditions (F	lard = 10,	Soft = 15)				
Average Daily	Traffic (Adt):	13,800 v	ehicles/					Auto	os: 15				
Peak Hour	Percentage:	10%)			Med	dium Truc	ks (2 Axle	s): 15				
Peak H	lour Volume:	1,380 \	ehicles/			Hea	avy Truck	s (3+ <i>Axle</i> .	s): 15				
Ve	hicle Speed:	50 r	mph		Veh	nicle N	Nix						
Near/Far La	ne Distance:	70 f	eet		101		cleType	Day	/ Evening	g Nigh	nt Daily		
Site Data							• • •	tos: 77.	`	,	6% 97.42%		
Ra	rrier Height:	0.0	feet			Ме	dium Truc	cks: 84.8	8% 4.9%	6 10.3	3% 1.84%		
Barrier Type (0-W	•	0.0	ieei			Н	leavy Trud						
Centerline Di		100.0	foot										
Centerline Dist.		100.0			Noi	se So	urce Elev	ations (ir	ı feet)				
Barrier Distance			feet				Autos:	2.000					
					Λ	⁄lediun	n Trucks:	4.000					
Observer Height	•		feet			Heavy	y Trucks:	8.006	Grade A	\djustm	ent: 0.0		
	ad Elevation:		feet		Lan	o Fai	iivalant F	Distance (i	in foot)				
Road Elevation: 0.0 feet					Laii	ie Equ		•	iii ieet)				
	Road Grade:	0.09					Autos:	93.723					
	Left View:		degree				n Trucks:	93.680					
	Right View:	90.0	degree	S		Heav	y Trucks:	93.723					
FHWA Noise Mod	el Calculation	s											
VehicleType	REMEL	Traffic	Flow	Distance	1	Finite i	Road	Fresnel	Barrier A	\tten	Berm Atten		
Autos:	70.20		-1.01	-4.	20		-1.20	-4.8	37 (0.000	0.000		
Medium Trucks:	81.00	•	-18.25	-4.	19		-1.20	-4.9	97 (0.000	0.000		
Heavy Trucks:	85.38		-22.20	-4.	20		-1.20	-5.1	16 (0.000	0.000		
Unmitigated Noise	e Levels (with	out Top	o and b	oarrier atte	enuat	tion)							
VehicleType	Leq Peak Hou	ur L	eq Day	Leq	Even	ing	Leq Ni	ight	Ldn		CNEL		
Autos:	63	3.8	6	61.9		60.1		54.1	62	2.7	63.3		
Medium Trucks:	57	' .4	5	55.9		49.5		47.9	56	6.4	56.6		
Heavy Trucks:	57	'.8	5	6.4				48.6			57.1		
Vehicle Noise:	65	5.5	6	3.7	60.7 55.9 64.5			1.5	64.9				
Contorlino Distan	co to Noiso C	ontour (in foot)										

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	43	92	198	427
CNEL:	46	99	213	459

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Tustin Ranch Rd. Job Number: 8141 Road Segment: w/o Jamboree Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	12,000 vehic	les					Autos:	15			
Peak Hour	Percentage:	10%			Medium Trucks (2 Axles): 15							
Peak H	lour Volume:	1,200 vehic	,200 vehicles			Heavy Trucks (3+ Axles): 15						
Ve	hicle Speed:	55 mph		V	'ehicle l	Miy						
Near/Far La	ne Distance:	88 feet		_		icleType	è	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	J	9.6%	,	
	vviav Hainbt.	0.0 foot			Me	edium T		84.8%		10.3%	1.84%	
	rrier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%	
Barrier Type (0-W Centerline Di	,	100.0 feet										
Centerline Dist.		100.0 feet		۸	loise Sc	urce E	levatio	ns (in fe	eet)			
Barrier Distance	0.0 feet				Auto		.000					
	5.0 feet		Medium Trucks: 4.000									
0 ()					Heav	y Truck	s: 8	.006	Grade Ad	justment	0.0	
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet			,	Lane Equivalent Distance (in feet)								
Road Elevation. 0.0 feet Road Grade: 0.0%			_	Autos: 89.850								
	Left View:				Medium Trucks: 89.805							
	Right View:	-90.0 deg			Heavy Trucks: 89.850							
	rigiti view.	90.0 deg	ees		Heav	y Truck	S. US	7.000				
FHWA Noise Mod	el Calculation	าร		l .								
VehicleType	REMEL	Traffic Flow	/ Di	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-2.0	3	-3.92		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-19.2	7	-3.92		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-23.2	2	-3.92		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo an	d barri	ier attenu	ıation)							
VehicleType	Leq Peak Ho			Leg Ev		Leq	Night		Ldn	C	VEL	
Autos:	64	4.6	62.7	-	61.0		54	.9	63.5	5	64.1	
Medium Trucks:	58	8.0	56.5		50.1		48	.6	57.1	1	57.3	
Heavy Trucks:	58	8.0	56.6		47.6		48	.8	57.2	2	57.3	
Vehicle Noise:	60	6.2	64.4		61.5		56	.6	65.2	2	65.6	

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	48	103	221	476						
CNEL:	51	110	238	512						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Tustin Ranch Rd.

Road Segment: s/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NOISE MODEL INPUTS									
Highway Data			Site Con	ditions (Hard	d = 10, So	oft = 15)				
Average Daily Traffic (Adt):	31,400 vehicles	S	Autos: 15							
Peak Hour Percentage:	10%		Medium Trucks (2 Axles): 15							
Peak Hour Volume:	3,140 vehicles	S	He	avy Trucks (3	3+ Axles):	15				
Vehicle Speed:	55 mph		Vehicle I	Miv						
Near/Far Lane Distance:	88 feet			icleType	Day	Evening	Daily			
Site Data			Veri	Autos	•	J	Night 9.6%	97.42%		
			1//	edium Trucks			10.3%	1.84%		
Barrier Height:	0.0 feet			Jaiam Trucks Jeavy Trucks			10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm):			,	icavy Tracks	. 00.570	2.1 /0	10.070	0.7 4 70		
Centerline Dist. to Barrier:			Noise So	ource Elevati	ions (in fe	eet)				
Centerline Dist. to Observer:			Autos: 2.000 Medium Trucks: 4.000							
Barrier Distance to Observer:	0.0 feet									
Observer Height (Above Pad):	5.0 feet 0.0 feet		Heavy Trucks: 8.006 Grade A					0.0		
Pad Elevation:		Lane Equivalent Distance (in feet)								
Road Elevation:	0.0 feet		Lane Ly		89.850	icel)				
Road Grade:			Modium		89.805					
Left View:			Heavy Trucks: 89.850							
Right View:	90.0 degree	es	пеач	y Trucks.	09.000					
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten		
Autos: 71.7	8 2.15	-3.	92	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -15.09	-3.	92	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	0 -19.05	-3.	92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)							
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Night		Ldn	CI	VEL		
Autos:	8.8	66.9	65.1	5.1 59.1		67.7		68.3		
Medium Trucks:	62.2	60.7	54.3	54.3 52.8		61.2		61.5		
Heavy Trucks:	62.2	60.8	51.8	5	3.0	61.4		61.5		
Vehicle Noise:	70.4	68.6	65.7		8.03	69.3	3	69.8		
Centerline Distance to Noise	Contour (in feet)	,							

70 dBA

90

97

Ldn:

CNEL:

65 dBA

195

210

60 dBA

420

452

55 dBA

905

973

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Tustin Ranch Rd.

Road Segment: n/o La Colina Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	31,400 vehicl	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tri	ucks (2	Axles):	15		
Peak F	lour Volume:	3,140 vehicl	3,140 vehicles			Heavy Trucks (3+ Axles): 15					
Ve	ehicle Speed:	55 mph		V	ehicle l	Vix					
Near/Far La	ne Distance:	88 feet				icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet			Me	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			F	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		N	loise Sc	ource El	evatio	ns (in fa	2et)		
Centerline Dist. to Observer: 100.0 feet				0/30 00	Auto		.000	<i></i>			
Barrier Distance	to Observer:	0.0 feet			Modium	n Truck:		.000			
Observer Height	5.0 feet						Grada Ad	e Adjustment: 0.0			
Pad Elevation: 0.0 feet					Heavy Trucks. 6.006 Grade Adjustifient. 6.0						
Road Elevation: 0.0 feet				L	ane Eq	uivalent	t Distar	nce (in i	feet)		
Road Grade: 0.0%					Auto	s: 89	.850				
	Left View:	-90.0 degr	ees		Medium Trucks: 89.805						
	Right View:	90.0 degr			Heavy Trucks: 89.850						
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	3 2.1	5	-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.09	9	-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.0	5	-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	d barrier	attenu	ation)						
VehicleType	Leq Peak Ho	our Leq Da	ny L	Leq Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	68	8.8	66.9		65.1		59.	.1	67.7	7	68.3
Medium Trucks:	62	2.2	60.7		54.3		52	.8	61.2	2	61.5
Heavy Trucks:	62	2.2	60.8		51.8		53.	.0	61.4	1	61.5
Vehicle Noise:	70	0.4	68.6		65.7		60	.8	69.3	3	69.8

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	90	195	420	905						
CNEL:	97	210	452	973						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Tustin Ranch Rd.

Road Segment: s/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)						
	Traffic (Adt): Percentage: Hour Volume:	28,200 vehic 10% 2,820 vehic				dium Tru avy Trud	•	,			
Near/Far La	ehicle Speed: ane Distance:	55 mph 88 feet	•			Mix icleType	_	Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%		9.6%	
Barrier Type (0-V	Nall , 1-Berm):	0.0 feet 0.0				edium Ti leavy Ti		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline D	100.0 feet		۸	loise So	urce El	evatio	ns (in fe	eet)			
Barrier Distance Observer Height F Ro	tenterline Dist. to Observer: arrier Distance to Observer: server Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Left View: Pad Observer: 0.0 feet			L	Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 89.850 Medium Trucks: 89.805 Heavy Trucks: 89.850						0.0
FHWA Noise Mod											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	3 1.6	8	-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40) -15.5	6	-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.5	1	-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation											
VehicleType	Leq Peak Ho	our Leq D	ay	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:		8.3	66.4		64.7		58.	6	67.2		67.8
Medium Trucks:		1.7	60.2		53.9		52.		60.8		61.0
Heavy Trucks:	6	1.8	60.3		51.3		52.	6	60.9	9	61.0
Vehicle Noise:	6	9.9	68.2		65.2		60.	3	68.9	9	69.4

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	84	181	391	842						
CNEL:	91	195	420	906						

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: University Dr.

Road Segment: b/w I-405 SB Ramps and Michelson Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT [ATAC		NOISE MODEL INPUTS						
Highway Data					S	ite Cond	ditions (F	dard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	59,700	vehicles	3				Autos:	: 15		
Peak Hour	Percentage:	10%	%			Med	lium Truc	ks (2 Axles):	: 15		
Peak H	lour Volume:	5,970	vehicles	3		Hea	vy Truck	s (3+ Axles):	: 15		
	hicle Speed:		mph		V	ehicle N	lix				
Near/Far La	ne Distance:	76	feet			Vehi	cleType	Day	Evening	Night	Daily
Site Data							Au	tos: 77.5%	6 12.9%	9.6%	97.42%
Ba	rrier Height:	0.0) feet			Me	dium Truc	cks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0				Н	leavy Trud	cks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0) feet		N	oise So	urce Fle	vations (in f	eet)		
Centerline Dist.	to Observer:	100.0) feet		-	0,00 00	Autos:	2.000			
Barrier Distance	to Observer:	0.0) feet			Modium	n Trucks:	4.000			
Observer Height (Above Pad):	5.0) feet						Grade Ad	iustmont:	
Pad Elevation: 0.0 feet						пеач	y Trucks:	8.006	Grade Adj	usimeni.	0.0
Road Elevation: 0.0 feet						ane Equ	iivalent E	Distance (in	feet)		
	Road Grade:	0.0)%				Autos:	92.547			
	Left View:	-90.0) degree	es		Mediun	n Trucks:	92.504			
	Right View:	90.0) degree	es:		Heav	/ Trucks:	92.547			
FHWA Noise Mod	el Calculatio	ns									
VehicleType	REMEL	Traffic	Flow	Distanc	е	Finite I	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	73.22	2	4.56		4.11		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	3	-12.68		4.11		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3	-16.63		4.11		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout To	po and l	barrier at	tenu	ation)					
VehicleType	Leq Peak Ho	our l	Leq Day	Lec	q Eve	ening	Leq Ni	ight	Ldn	CI	VEL
Autos:	7	2.5	7	70.6		68.8		62.7	71.4	1	72.0
Medium Trucks:	6	5.7	6	64.2		57.8		56.3	64.7	7	65.0
Heavy Trucks:	6	5.4	6	64.0		54.9		56.2	64.5	5	64.7
Vehicle Noise:	7	3.9	-	72.2		69.3		64.3	72.9)	73.4

70 dBA

156

168

Ldn:

CNEL:

65 dBA

336

362

60 dBA

725

781

55 dBA

1,562

1,682

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av. Job Number: 8141
Road Segment: w/o Jamboree Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS									
Highway Data			Site Conditions	(Hard = 10, S)	Soft = 15)							
Average Daily Traffic (Adt):	22,000 vehicle	S		Autos	: 15							
Peak Hour Percentage.			Medium Ti	rucks (2 Axles)) <i>:</i> 15							
Peak Hour Volume.	2,200 vehicle	s	Heavy Tru	icks (3+ Axles)): 15							
Vehicle Speed:	60 mph		Vehicle Mix									
Near/Far Lane Distance.	76 feet		VehicleType	e Day	Evening	Night	Daily					
Site Data				Autos: 77.59	_	9.6%	97.42%					
Barrier Height.	0.0 feet		Medium 7	rucks: 84.89	% 4.9%	10.3%	1.84%					
Barrier Type (0-Wall, 1-Berm).			Heavy 7	rucks: 86.59	% 2.7%	10.8%	0.74%					
Centerline Dist. to Barrier			Naisa Sauraa E	ilovotiono (in	foot)							
Centerline Dist. to Observer	100.0 feet		Noise Source E		ieet)							
Barrier Distance to Observer			Auto									
Observer Height (Above Pad)		Medium Truck		Crada Ad								
Pad Elevation.			Heavy Truck	(s: 8.006	Grade Ad	justment.	0.0					
Road Elevation.			Lane Equivalen	t Distance (in	feet)							
Road Grade.	0.0%		Autos: 92.547									
Left View		es	Medium Truck	s: 92.504								
Right View	_		Heavy Truck	s: 92.547								
FHWA Noise Model Calculation	ons											
VehicleType REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Att	en Ber	m Atten					
Autos: 73.2	22 0.22	-4.1	1 -1.20	-4.87	0.0	000	0.000					
Medium Trucks: 83.6	68 -17.01	-4.1	1 -1.20	-4.97	0.0	000	0.000					
Heavy Trucks: 87.3	-20.97	-4.1	1 -1.20	-5.16	0.0	000	0.000					
Unmitigated Noise Levels (wi	thout Topo and	barrier atten	uation)									
VehicleType Leq Peak H	lour Leq Day	/ Leq E	vening Leq	Night	Ldn	CI	VEL					
Autos:	68.1	66.2	64.5	58.4	67.0)	67.6					
Medium Trucks:	61.4	59.9	53.5	51.9	60.4	4	60.6					
Heavy Trucks:	61.0	59.6	50.6	51.8	60.2	2	60.3					
Vehicle Noise:	69.6	67.8	65.0	60.0	68.6	_	69.1					

70 dBA

80

86

Ldn:

CNEL:

65 dBA

173

186

60 dBA

373

401

55 dBA

803

865

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av.

Road Segment: e/o Jamboree

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Cor	nditions (H	ard = 10, So	oft = 15)				
Average Daily	Traffic (Adt):	23,400 vehicle	S			Autos:	15				
,	r Percentage:	10%		Me	edium Truck	ks (2 Axles):	15				
	Hour Volume:	2,340 vehicle	S	He	eavy Trucks	s (3+ Axles):	15				
Ve	ehicle Speed:	60 mph		Vehicle	Miss						
Near/Far La	ane Distance:	76 feet				Dov	Evenina	Niaht	Doily		
Site Data				ver	nicleType	Day tos: 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%		
					Aut						
	rrier Height:	0.0 feet			ledium Truc			10.3%	1.84%		
Barrier Type (0-V	Vall, 1-Berm):	0.0		-	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline D	ist. to Barrier:	100.0 feet		Noise S	ource Elev	ations (in f	eet)				
Centerline Dist.	to Observer:	100.0 feet			Autos:	2.000	,				
Barrier Distance	to Observer:	0.0 feet		Mediu	ım Trucks:	4.000					
Observer Height	(Above Pad):	5.0 feet			vy Trucks:	8.006	Grade Adj	iustment:	0.0		
F	Pad Elevation:	0.0 feet									
Ro	ad Elevation:	0.0 feet		Lane Eq	quivalent D	istance (in	feet)				
	Road Grade:	0.0%			Autos:	92.547					
	Left View:	-90.0 degre	es	Mediu	ım Trucks:	92.504					
	Right View:	90.0 degre	es	Hea	vy Trucks:	92.547					
FHWA Noise Mod	lel Calculatio	ns									
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:	73.22	0.49	-4	.11	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	3 -16.75	-4	.11	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-20.70	-4	.11	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	se Levels (wit	hout Topo and	barrier atte	enuation)							
VehicleType	Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq Nig	ght	Ldn	CI	VEL		
Autos:	6	8.4	66.5	64.7		58.7	67.3	3	67.9		
Medium Trucks:	6	1.6	60.1	53.8	}	52.2	60.7	7	60.9		
Heavy Trucks:	. 6	1.3	59.9	50.9		52.1	60.5	5	60.6		
Vehicle Noise:	6	9.9	68.1	65.2		60.3	68.8	3	69.3		
•	6	9.9	68.1								

70 dBA

84

90

Ldn:

CNEL:

65 dBA

180

194

60 dBA

388

418

55 dBA

836

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av. Job Number: 8141
Road Segment: w/o Culver Dr. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	25,900 vehicle	es					Autos:	15			
•	Percentage:	10%			Ме	dium Tru	ucks (2	Axles):	15			
Peak H	lour Volume:	2,590 vehicle	es		He	avy Truc	cks (3+	Axles):	15			
Ve	hicle Speed:	55 mph		V	ehicle i	Miv						
Near/Far La	ne Distance:	52 feet		•		icleType	,	Day	Evening	Night	Daily	
Site Data					VOII		Autos:	77.5%	J	9.6%	-	
		0.0 (1			M	, edium Tı		84.8%		10.3%		
	rrier Height:	0.0 feet				Heavy Ti		86.5%		10.8%		
Barrier Type (0-W	,	0.0			,	icavy 11	ucns.	00.070	2.170	10.070	0.7470	
Centerline Dis		100.0 feet		N	oise So	ource El	levatio	ns (in f	eet)			
Centerline Dist.		100.0 feet				Autos	s: 2	2.000				
Barrier Distance		0.0 feet			Mediu	m Trucks	s: 4	.000				
Observer Height (5.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	ljustmen	t: 0.0		
	ad Elevation:	0.0 feet		_		• • •			<i>c</i> 4)			
Road Elevation: 0.0 feet					ane ⊵ q	uivalent			reet)			
ı	Road Grade:	0.0%				Auto		6.607				
	Left View:	-90.0 degre	es			m Truck		6.566				
	Right View:	90.0 degre	es		Heav	y Truck	s: 96	8.608				
FHWA Noise Mode	el Calculation	15										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	snel	Barrier At	ten Be	rm Atten	
Autos:	71.78	3 1.31		-4.39		-1.20		-4.87	0.	000	0.000	
Medium Trucks:	82.40	-15.93	}	-4.39		-1.20		-4.97	0.	000	0.000	
Heavy Trucks:	86.40	-19.88	}	-4.39		-1.20		-5.16	0.	000	0.000	
Unmitigated Noise	e Levels (with	nout Topo and	l barrier	attenu	ation)							
VehicleType	Leq Peak Ho	ur Leq Da	у	Leq Eve	ening	Leq	Night		Ldn	С	NEL	
Autos:	67	7.5	65.6		63.8		57	.8	66.	4	67.0	
Medium Trucks:	60	0.9	59.4		53.0		51	.5	59.	9	60.2	
Heavy Trucks:	60	0.9	59.5		50.5		51	.7	60.	1	60.2	
Vehicle Noise:	69	9.1	67.3		64.4		59	.5	68.	0	68.5	
Centerline Distant	ce to Noise C	ontour (in fee	t)									

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	74	159	343	740
CNEL:	80	171	369	796

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av. Job Number: 8141 Road Segment: e/o Culver Dr. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	25,600 vehic	les					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15				
Peak H	lour Volume:	2,560 vehic	les		He	avy Trud	cks (3+	Axles):	15				
Ve	hicle Speed:	55 mph		V	ehicle l	Wiy							
Near/Far La	ne Distance:	52 feet		•		icleType	ė	Day	Evening	Night	Daily		
Site Data					V 0///		Autos:	77.5%		9.6%	-		
	uuiau Haiadat.	0.0 foot			Me	edium Ti		84.8%		10.3%	1.84%		
	rrier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%		
Barrier Type (0-W Centerline Di	•	100.0 feet											
Centerline Dist.		100.0 feet		N	oise Sc	ource E	levatio	ns (in fe	eet)				
Barrier Distance		0.0 feet				Auto		2.000					
					Mediur	n Truck	s: 4	.000					
Observer Height	5.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment.	0.0			
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet					ane Fai	uivalen	t Nieta	nce (in i	foot)				
	Road Grade:	0.0 feet 0.0%			anc Eq.	Auto		6.607	<i>CC1y</i>				
	Left View:				Modium	n Truck		5.566					
	Right View:	-90.0 degr				y Truck		6.608					
	Rigiti view.	90.0 degr	ees		Heav	y ITUCK	s. 30	0.000					
FHWA Noise Mod	el Calculation	ns		I									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	71.78	3 1.2	6	-4.39		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-15.9	8	-4.39		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-19.9	3	-4.39		-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo an	d barri	er attenu	ation)								
VehicleType	Leq Peak Ho	our Leq D	ay	Leg Eve	ening	Leq	Night		Ldn	CI	VEL		
Autos:	6	7.4	65.5		63.8		57	.7	66.3	3	67.0		
Medium Trucks:	6	0.8	59.3		53.0		51	.4	59.9	9	60.1		
Heavy Trucks:	6	0.9	59.4		50.4		51	.7	60.0)	60.1		
Vehicle Noise:	6	9.0	67.3		64.3		59	.4	68.0)	68.5		

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	73	158	341	734								
CNEL:	79	170	367	790								

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av.

Road Segment: e/o Yale Av.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (A	\ <i>dt):</i> 13	3,000 vehicles	3					Autos:	15			
Peak Hour Percenta	age:	10%			Me	dium Tr	ucks (2	Axles):	15			
Peak Hour Volu	me: ´	1,300 vehicles	3		He	avy Trud	cks (3+	Axles):	15			
Vehicle Spe	eed:	55 mph		,	Vehicle I	Mix						
Near/Far Lane Distar	псе:	52 feet				icleType	ڊ	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	Ŭ I	9.6%	-	
	aht.	0.0 feet			Me	edium Ti		84.8%		10.3%	1.84%	
Barrier Hei Barrier Type (0-Wall, 1-Be		0.0 reet 0.0				leavy T		86.5%		10.8%	0.74%	
Centerline Dist. to Bar	•	100.0 feet										
Centerline Dist. to Obser		100.0 feet		1	Noise So			•	eet)			
Barrier Distance to Obser		0.0 feet				Auto		.000				
Observer Height (Above P		5.0 feet				m Truck		.000				
Pad Elevai	,	0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	0.0	
Road Elevation: 0.0 feet					Lane Eq	uivalen	t Distai	nce (in i	feet)			
Road Gra		0.0%				Auto		5.607				
Left V		-90.0 degree	es		Mediu	m Truck	s: 96	5.566				
Right V	iew:	90.0 degree			Heav	y Truck	s: 96	3.608				
FHWA Noise Model Calcul					T							
VehicleType REMI		Traffic Flow	Di	istance		Road	Fres		Barrier Att		m Atten	
	71.78	-1.68		-4.39		-1.20		-4.87		000	0.000	
	82.40	-18.92		-4.39		-1.20		-4.97		000	0.000	
Heavy Trucks:	86.40	-22.88		-4.39	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels	(witho	ut Topo and	barr	ier atten	uation)							
VehicleType Leq Pea	ak Hour	Leq Day	,	Leq E	vening /	Leq	Night		Ldn	CI	VEL	
Autos:	64.5	5 (62.6		60.8		54.	.8	63.4	1	64.0	
Medium Trucks:	57.9		56.4		50.0		48		56.9	9	57.2	
Heavy Trucks:	57.9	9 ;	56.5		47.5		48		57.1	1	57.2	
Vehicle Noise:	66.1	1 (64.3		61.4		56	.5	65.0)	65.5	
Centerline Distance to No.	ise Cor	ntour (in feet))									
		·		70 c	dBA	65	dBA	6	60 dBA	55	dBA	

47

50

Ldn: CNEL: 101

108

217

233

467

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av./I-5 SB Ramps Job Number: 8141
Road Segment: w/o Jeffrey Rd. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				,	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	19,600 v	ehicles					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15			
Peak H	lour Volume:	1,960 v	ehicles		He	avy Truc	cks (3+	Axles):	15			
Ve	ehicle Speed:	55 n	nph		Vehicle I	Mix						
Near/Far La	ane Distance:	52 fe	eet			icleType		Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		9.6%	-	
	rrier Height:	0.0	foot		М	edium Ti		84.8%		10.3%	1.84%	
Barrier Type (0-W	_	0.0	ieet			Heavy Ti		86.5%		10.8%	0.74%	
	ist. to Barrier:	100.0	feet									
Centerline Dist.		100.0		_	Noise So				eet)			
Barrier Distance		0.0				Auto		.000				
Observer Height		5.0				m Trucks		.000	0 - 1 - 4 - 1		0.0	
_	ad Elevation:	0.0			Heav	y Truck	s: 8	.006	Grade Adj	iustment:	0.0	
Road Elevation: 0.0 feet					Lane Eq	uivalent	Distar	ice (in t	feet)			
	Road Grade:	0.0%	6			Autos	s: 96	.607				
	Left View:	-90.0	degrees		Mediu	m Trucks	s: 96	.566				
	Right View:	90.0	degrees		Heav	y Truck	s: 96	.608				
FHWA Noise Mod	lel Calculation	S										
VehicleType	REMEL	Traffic	Flow [Distance	Finite	Road	Fres	nel	Barrier Atte	en Ber	m Atten	
Autos:	71.78		0.10	-4.3	9	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-	17.14	-4.3	9	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-	21.09	-4.3	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Top	o and bar	rier atten	nuation)							
VehicleType	Leq Peak Ho	ur Le	eq Day	Leq E	vening	Leq	Night		Ldn	CI	VEL	
Autos:	66	5.3	64.4	4	62.6		56.	6	65.2	2	65.8	
Medium Trucks:	59).7	58.2	2	51.8		50.	3	58.7	7	59.0	
Heavy Trucks:	59).7	58.3	3	49.3		50.	5	58.9	9	59.0	
Vehicle Noise:	67	' .9	66.	1	63.1		58.	3	66.8	3	67.3	
Centerline Distan	ce to Noise C	ontour (i	in feet)									
				70 (dBA	65	dBA	ϵ	60 dBA	55	dBA	

Ldn:

CNEL:

61

66

132

142

285

307

614

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Warner Av. Job Number: 8141
Road Segment: w/o Paseo Westpark Analyst: B. Lawson

SITE	SPECIFIC II	NPUT D	ATA		NOISE MODEL INPUTS							
Highway Data				S	Site Con	ditions (H	ard = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	10,800 v	ehicles				Autos:	15				
-	Percentage:	10%			Med	dium Truck	ks (2 Axles):	15				
Peak F	lour Volume:	1,080 v	ehicles		Heavy Trucks (3+ Axles): 15							
	hicle Speed:	55 m	•	V	/ehicle l	Лix						
Near/Far La	ne Distance:	52 fe	et			cleType	Day	Evening	Night	Daily		
Site Data						Aut	tos: 77.5%	6 12.9%	9.6%	97.42%		
Ва	rrier Height:	0.0	feet		Мє	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0			F	łeavy Truc	ks: 86.5%	6 2.7%	10.8%	0.74%		
Centerline Di	•	100.0	feet		loisa So	urce Flev	ations (in f	oot)				
Centerline Dist.	to Observer:	100.0	feet		VOISE SU	Autos:	2.000	56 1)				
Barrier Distance	to Observer:	0.0	feet		Modium	n Trucks:						
Observer Height (Above Pad): 5.0 feet							4.000	Crada Ad	iuotmont:			
Pad Elevation: 0.0 feet					Heav	y Trucks:	8.006	Grade Adj	usimeni.	0.0		
Ro	Road Elevation: 0.0 feet					uivalent D	istance (in	feet)				
	Road Grade:	0.0%	, 0			Autos:	96.607					
	Left View:	-90.0	degrees		Mediur	n Trucks:	96.566					
	Right View:		degrees		Heav	y Trucks:	96.608					
FHWA Noise Mod	el Calculatior	15										
VehicleType	REMEL	Traffic I	Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:	71.78	}	-2.49	-4.39)	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40) -	19.73	-4.39)	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40) -:	23.68	-4.39)	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	nout Topo	o and ba	arrier attenu	uation)							
VehicleType	Leq Peak Ho	ur Le	eq Day	Leq Ev	rening	Leq Ni	ght	Ldn	CI	VEL		
Autos:	63	3.7	61	.8	60.0		54.0	62.6	3	63.2		
Medium Trucks:	57	7.1	55	.6	49.2		47.7	56.1	l	56.4		
Heavy Trucks:	57	7.1	55	.7	46.7		47.9		3	56.4		
Vehicle Noise:		5.3	63	_	60.6		55.7	64.2		64.7		

70 dBA

41

44

Ldn:

CNEL:

65 dBA

89

96

60 dBA

192

206

55 dBA

413

444

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Warner Av.

Road Segment: w/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS									
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	10,400 vehicles	3			Autos:	15				
	Percentage:	10%		Ме	dium Truc	ks (2 Axles).	15				
Peak H	our Volume:	1,040 vehicles	3	He	avy Truck	s (3+ Axles).	15				
Ve	hicle Speed:	55 mph		Vehicle	Miv						
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data						tos: 77.5%	•	9.6%			
	rier Height:	0.0 feet		М	edium Trud			10.3%	1.84%		
Barrier Type (0-W		0.0 leet 0.0		Heavy Trucks: 86.5% 2.7% 10.8%							
Centerline Dis		100.0 feet									
Centerline Dist.		100.0 feet		Noise S	ource Elev	ations (in f	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
Observer Height (5.0 feet		Mediu	m Trucks:	4.000					
•	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Adju	ustment.	0.0		
	ad Elevation: ad Elevation:	0.0 feet		Lane Fo	uivalent D	Distance (in	feet)				
	Road Grade:	0.0%			Autos:	96.607	,				
,	Left View:	-90.0 degree	20	Mediu	m Trucks:	96.566					
	Right View:	90.0 degree			y Trucks:	96.608					
	Night view.	90.0 degree	55	rica	y Trucks.	30.000					
FHWA Noise Mode	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:	71.78	-2.65	-4.3	9	-1.20	-4.87	0.0	00	0.000		
Medium Trucks:	82.40	-19.89	-4.3	9	-1.20	-4.97	0.0	00	0.000		
Heavy Trucks:	86.40	-23.85	-4.3	9	-1.20	-5.16	0.0	00	0.000		
Unmitigated Noise	Levels (with	out Topo and	barrier atter	nuation)							
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Ni	ight	Ldn	CI	VEL		
Autos:	63	3.5	61.6	59.9	-	53.8	62.4		63.0		
Medium Trucks:	56	5.9	55.4	49.1		47.5	56.0		56.2		
Heavy Trucks:	57	7.0	55.5	46.5 47.7 56.1			56.2				
Vehicle Noise:	65	5.1	63.4	60.4		55.5	64.1		64.6		
Centerline Distant	ce to Noise C	ontour (in feet))								

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	40	87	187	403								
CNFL:	43	93	201	433								

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Warner Av.

Job Number: 8141

Road Segment: b/w Culver Dr.and W. Yale Loop

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
Highway Data				Site Co	nditions	(Hard =	10, Sc	oft = 15)			
Peak Hou	Traffic (Adt): Percentage: Hour Volume:	11,100 vehicles 10% 1,110 vehicles			ledium Tru leavy Truc	icks (2 A	,	15			
Near/Far La	ehicle Speed: ane Distance:	55 mph 52 feet		Vehicle Ve	Mix hicleType		Day	Evening	Night	Daily	
Site Data					=		77.5%		9.6%		
Barrier Type (0-V	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0		1	Леdium Tr Heavy Tr		34.8% 36.5%		10.3% 10.8%	1.84% 0.74%	
Centerline D	ist. to Barrier:	100.0 feet		Noise Source Elevations (in feet)							
Centerline Dist. Barrier Distance Observer Height F	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet			Autos um Trucks avy Trucks	s: 4.0	00	Grade Ad	ljustment:	0.0	
Ro	ad Elevation:	0.0 feet		Lane E	quivalent	Distanc	e (in	feet)			
	Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree			Autos um Trucks avy Trucks	s: 96.5	66				
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Distance	Finit	e Road	Fresne	el	Barrier Att	en Ber	m Atten	
Autos:	71.78	-2.37	-4	.39	-1.20	-	4.87	0.0	000	0.000	
Medium Trucks:	82.40	-19.61	-4	.39	-1.20	-	4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-23.56	-4	.39	-1.20	-	5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barrier att	enuation)						
VehicleType	Leq Peak Hou	ır Leq Day	Leq	Evening	Leq	Vight		Ldn	CI	VEL	
Autos:	63	3.8	61.9	60.	2	54.1		62.7	7	63.3	
Medium Trucks:	57	7.2	55.7	49.	3	47.8		56.3	3	56.5	
Heavy Trucks:	57	7.2	55.8	46.	8	48.0		56.4	4	56.5	
Vehicle Noise:	65	5.4	63.6	60.	7	55.8		64.4	4	64.8	

70 dBA

42

45

Ldn:

CNEL:

65 dBA

91

97

60 dBA

195

210

55 dBA

421

452

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: W. Yale Loop Job Number: 8141
Road Segment: s/o Barranca Pkwy. Analyst: B. Lawson

SITE S	SPECIFIC IN		NOISE MODEL INPUTS							
Highway Data				Site Con	nditions (F	Hard = 1	10, Sc	oft = 15)		
	Traffic (Adt): Percentage: our Volume:	6,400 vehicles 10% 640 vehicles			edium Truc eavy Truck	ks (2 A	,			
	nicle Speed:	55 mph		Vehicle I	Mix					
Near/Far Lar	ne Distance:	52 feet		Veh	icleType	I	Day	Evening	Night	Daily
Site Data					Αι	itos: 7	7.5%	12.9%	9.6%	97.42%
Barrier Type (0-W	,	0.0 feet 0.0			edium Tru Heavy Tru		34.8% 36.5%		10.3% 10.8%	1.84% 0.74%
	to Observer: to Observer:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet		Mediui Heav	Autos: m Trucks: yy Trucks:	2.0 4.0 8.0	00 00 06	Grade Adj	ustment:	0.0
	Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree			Autos: m Trucks: yy Trucks:	96.5	66			
FHWA Noise Mode									1	
VehicleType Autos: Medium Trucks: Heavy Trucks:	71.78 82.40 86.40	-4.76 -22.00 -25.95	Distance -4.3 -4.3	39 39	-1.20 -1.20 -1.20	-	4.87 4.97 5.16	0.0	000	0.000 0.000 0.000
Unmitigated Noise	Levels (with	out Topo and I	parrier atte	nuation)						
	Leq Peak Hou			vening	Leq N	light		Ldn	CI	VEL
Autos:	61	.4 5	9.5	57.8	-	51.7		60.3	3	60.9
Medium Trucks:	54	.8 5	3.3	46.9		45.4		53.9)	54.1
Heavy Trucks:	54	.8 5	3.4	44.4		45.6		54.0)	54.1
Vehicle Noise:	63	.0 6	61.2	58.3		53.4		62.0)	62.4

70 dBA

29

31

Ldn: CNEL: 65 dBA

63

68

60 dBA

135

145

55 dBA

291

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: W. Yale Loop Job Number: 8141
Road Segment: s/o Alton Pkwy. Analyst: B. Lawson

SITE SPECIFIC	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
Highway Data				S	ite Con	ditions (l	Hard =	: 10, Sc	oft = 15)					
Average Daily Traffic (Ad	:): 12,	300 vehicles						Autos:	15					
Peak Hour Percentag		10%			Me	dium Truc	ks (2)	Axles):	15					
Peak Hour Volum	э <i>:</i> 1,	230 vehicles			He	avy Truck	is (3+ /	Axles):	15					
Vehicle Spee	d:	55 mph		V	ehicle l	Miv								
Near/Far Lane Distanc	ə <i>:</i>	52 feet		_		icleType		Day	Evening	Night	Daily			
Site Data					V CIT		ıtos:	77.5%	_	9.6%				
					1/1	edium Tru		84.8%		10.3%	1.84%			
Barrier Heigh		0.0 feet				dan Tru Heavy Tru		86.5%		10.8%	0.74%			
Barrier Type (0-Wall, 1-Bern		0.0			,	leavy IIu	CNS.	00.570	2.1 /0	10.070	0.7 4 70			
Centerline Dist. to Barrie		100.0 feet		Ν	oise So	ource Ele	vation	s (in fe	eet)					
Centerline Dist. to Observe		100.0 feet				Autos:	2.	000						
Barrier Distance to Observe		0.0 feet			Mediui	m Trucks:	4.	000						
Observer Height (Above Pac	•	5.0 feet				y Trucks:		006	Grade Ad	iustment:	0.0			
Pad Elevatio	n:	0.0 feet												
Road Elevatio	n:	0.0 feet		L	ane Eq	uivalent L	Distan	ce (in i	feet)					
Road Grad	e <i>:</i>	0.0%				Autos:	96.	607						
Left Vie	v: -	-90.0 degrees	S		Mediui	m Trucks:	96.	566						
Right Vie	V:	90.0 degrees	S		Heav	y Trucks:	96.	608						
FHWA Noise Model Calcula	ions													
VehicleType REMEL	T	raffic Flow	Distan	се	Finite	Road	Fresr	nel	Barrier Att	en Ber	m Atten			
Autos: 71	.78	-1.92		-4.39		-1.20		-4.87	0.0	000	0.000			
Medium Trucks: 82	.40	-19.16		-4.39		-1.20		-4.97	0.0	000	0.000			
Heavy Trucks: 86	.40	-23.12		-4.39		-1.20		-5.16	0.0	000	0.000			
Unmitigated Noise Levels (v	vithou	t Topo and b	arrier a	ttenu	ation)									
VehicleType Leq Peak	Hour	Leq Day	Le	eq Eve	ening	Leq N	light		Ldn	CI	VEL			
Autos:	64.3	6	2.4		60.6		54.5	5	63.2	2	63.8			
Medium Trucks:	57.7	5	6.1		49.8		48.2	2	56.7	7	56.9			
Heavy Trucks:	57.7	5	6.3		47.2		48.5	5	56.8	3	57.0			
Vehicle Noise:	65.8	6	4.1		61.1		56.3	3	64.8	3	65.3			

70 dBA

45

48

Ldn:

CNEL:

65 dBA

97

104

60 dBA

209

225

55 dBA

450

Sunday, May 20, 2012

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: b/w Portola and Arborwood Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			N	NOISE I	MODE	L INPUT	S	
Highway Data				Site Cor	nditions	(Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,100 vehicles	3				Autos:	15		
Peak Hour	Percentage:	10%		Me	edium Tr	ucks (2 .	Axles):	15		
Peak H	lour Volume:	610 vehicles	6	He	eavy Tru	cks (3+)	Axles):	15		
Ve	ehicle Speed:	35 mph		Vehicle	Miv					
Near/Far La	ne Distance:	20 feet			iicleType	9	Day	Evening	Night	Daily
Site Data						Autos:	77.5%		9.6%	
Ba	rrier Height:	0.0 feet		M	ledium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet		Noise S	ource F	levation	s (in fa	aat)		
Centerline Dist.	to Observer:	100.0 feet		110/30 0	Auto		000	,		
Barrier Distance	to Observer:	0.0 feet		Mediu	m Truck		000			
Observer Height	(Above Pad):	5.0 feet			vy Truck		006	Grade Ad	iustment.	: 0.0
P	ad Elevation:	0.0 feet							,400,770	
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%			Auto	s: 99.	544			
	Left View:	-90.0 degree	es	Mediu	m Truck	s: 99	504			
	Right View:	90.0 degree	es	Hea	vy Truck	s: 99	544			
FHWA Noise Mod	lel Calculations	;								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten
Autos:	64.30	-3.01	-4.	59	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	75.75	-20.24	-4.	59	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	81.57	-24.20	-4.	59	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (witho	out Topo and	barrier atte	enuation)						
VehicleType	Leq Peak Hou	r Leq Day	Leq	Evening	Leq	Night		Ldn	CI	NEL
Autos:	55.	5 ;	53.6	51.8		45.8	3	54.4	1	55.0
Madium Trucka:	40	7	40 O	11 0		40 4	2	10 0)	40.0

Unmitigated Nois	e Levels (withou	it Topo and barri	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.5	53.6	51.8	45.8	54.4	55.0
Medium Trucks:	49.7	48.2	41.8	40.3	48.8	49.0
Heavy Trucks:	51.6	50.2	41.1	42.4	50.7	50.9
Vehicle Noise:	57.7	56.0	52.6	48.2	56.7	57.1

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	13	28	60	130
CNEL:	14	30	65	139

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: b/w Park Pl. and Irvine Bl. Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data					S	ite Cond	itions (l	Hard =	10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	11,800	vehicles	;					Autos:	15				
	Percentage:	10%				Medi	ium Truc	cks (2 A	Axles):	15				
Peak H	Hour Volume:	1,180	vehicles	5		Heav	vy Truck	ks (3+ A	Axles):	15				
	ehicle Speed:		mph		V	ehicle M	ix							
Near/Far La	ne Distance:	52	feet			Vehic	leType		Day	Evening	Night	Daily		
Site Data							A	utos:	77.5%	12.9%	9.6%	97.42%		
Ba	rrier Height:	0.0	feet			Med	lium Tru	ıcks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-V	•	0.0	1001			He	eavy Tru	ıcks:	86.5%	2.7%	10.8%	0.74%		
• • •	ist. to Barrier:	100.0	feet		N	oise Sou	ırce Fle	vation	s (in fa	not)				
Centerline Dist.	to Observer:	100.0	feet		/*	0/30 000	Autos:		000	,				
Barrier Distance	to Observer:	0.0	feet			Medium								
Observer Height	(Above Pad):	5.0	feet						000	Crada Ad	livotmont			
_	ad Elevation:		feet			Heavy	Trucks:	8.	006	Grade Ad	justment	7 0.0		
	ad Elevation:		feet		Lá	ane Equi	ivalent l	Distan	ce (in t	feet)				
	Road Grade:	0.0					Autos:	96.	607					
	Left View:		degree	es.		Medium	Trucks:	96.	566					
	Right View:		degree			Heavy	Trucks:	96.	608					
FHWA Noise Mod	lel Calculation	15												
VehicleType	REMEL	Traffic	Flow	Distanc	е	Finite R	Road	Fresr	nel	Barrier Att	en Bei	rm Atten		
Autos:	71.78	3	-2.10	-4	1.39		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	82.40)	-19.34	-2	1.39		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	86.40)	-23.30	-2	4.39		-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	nout Top	o and l	barrier att	tenu	ation)								
VehicleType	Leq Peak Ho	ur L	eq Day	Leq	Eve	ening	Leq N	light		Ldn	С	NEL		
Autos:	64	4.1	6	62.2		60.4		54.4	ļ	63.0)	63.6		
Medium Trucks:	57	7.5	5	56.0		49.6		48.1		56.5	5	56.7		
Heavy Trucks:	57	7.5	5	56.1		47.0		48.3	3	56.7	7	56.8		
Vehicle Noise:	6	5.7	(63.9		60.9		56.1		64.6	6	65.1		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	44	94	203	438
CNEL:	47	102	219	471

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: n/o Bryan Av. Analyst: B. Lawson

SITE S	SPECIFIC IN	IPUT DATA			N	OISE	MODE	L INPUT	S	
Highway Data				Site Co	onditions	(Hard	= 10, Sc	oft = 15)		
Average Daily T	Traffic (Adt):	8,500 vehicle	S				Autos:			
Peak Hour I	Percentage:	10%		Λ.	1edium Tru	ıcks (2	? Axles):			
Peak Ho	our Volume:	850 vehicles	S	F	leavy Truc	ks (3+	- Axles):	15		
	nicle Speed:	55 mph		Vehicle	e Mix					
Near/Far Lar	ne Distance:	52 feet		Ve	ehicleType		Day	Evening	Night	Daily
Site Data					A	lutos:	77.5%	12.9%	9.6%	97.42%
Bar	rier Height:	0.0 feet		1	Medium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wa	_	0.0			Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		100.0 feet		Noise :	Source Ele	evatio	ns (in f	eet)		
Centerline Dist. t Barrier Distance t Observer Height (A	to Observer: Above Pad):	100.0 feet 0.0 feet 5.0 feet		Medi	Autos ium Trucks avy Trucks	s: 2 s: 4	2.000 4.000 3.006	Grade Ad	justment.	0.0
	d Elevation: d Elevation:	0.0 feet 0.0 feet		Lane E	quivalent	Dista	nce (in	feet)		
	Road Grade:	0.0%			Autos		6.607	,		
,	Left View:	-90.0 degree	20	Med	ium Trucks		6.566			
	Right View:	90.0 degree			avy Trucks	_	6.608			
FHWA Noise Mode	el Calculation	S								
VehicleType	REMEL	Traffic Flow	Distance	e Finit	te Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-3.53	-4	.39	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-20.77	-4	.39	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-24.72	-4	.39	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier att	enuation)					
VehicleType	Leq Peak Hou	ır Leq Day	Leq	Evening	Leq I	Night		Ldn	CI	VEL
Autos:	62	.7	60.8	59.	0	52	9	61.6	6	62.2
Medium Trucks:	56	.0	54.5	48.	2	46	5.6	55.	1	55.3
Heavy Trucks:	56	.1	54.7	45.	6	46	5.9	55.2	2	55.4
Vehicle Noise:	64	.2	62.5	59.	5	54	.6	63.2	2	63.7
Centerline Distanc	e to Noise Co	ontour (in feet)							

Centernine Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	35	76	163	352
CNEL:	38	82	176	379

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: n/o Trabuco Rd. Analyst: B. Lawson

SITE SPECIF	FIC INP	UT DATA		NOISE MODEL INPUTS							
Highway Data				Site Cor	ditions (H	lard = 10, S	oft = 15)				
Average Daily Traffic (/	A <i>dt</i>): 9	,900 vehicles				Autos	: 15				
Peak Hour Percent	,	10%		Ме	dium Truci	ks (2 Axles)	: 15				
Peak Hour Volu	•	990 vehicles				s (3+ Axles)					
Vehicle Sp	eed:	55 mph		Vehicle	Miv						
Near/Far Lane Dista	nce:	52 feet			icleType	Dov	Evening	Night	Doily		
Site Data				ven		Day tos: 77.5%	_	9.6%	<i>Daily</i> 97.42%		
				A 4							
Barrier Hei	·	0.0 feet			edium Trud			10.3%	1.84%		
Barrier Type (0-Wall, 1-Be	erm):	0.0		,	Heavy Truc	cks: 86.5%	6 2.7%	10.8%	0.74%		
Centerline Dist. to Ba	rrier:	100.0 feet		Noise So	ource Elev	ations (in f	eet)				
Centerline Dist. to Obse	rver:	100.0 feet			Autos:	2.000	,				
Barrier Distance to Obse	rver:	0.0 feet		Mediu	m Trucks:	4.000					
Observer Height (Above F	Pad):	5.0 feet			y Trucks:	8.006	Grade Ad	iustment:	0.0		
Pad Eleva	tion:	0.0 feet		Tical	ry Trucks.	0.000	- Crado riaj	40111101111	0.0		
Road Eleva	tion:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)				
Road Gr	ade:	0.0%			Autos:	96.607					
Left V	/iew:	-90.0 degree	S	Mediu	m Trucks:	96.566					
Right V	/iew:	90.0 degree	S	Heav	y Trucks:	96.608					
FHWA Noise Model Calcu	lations										
VehicleType REM	EL 7	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:	71.78	-2.87	-4.	39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-20.10	-4.	39	-1.20	<i>-4</i> .97	0.0	000	0.000		
Heavy Trucks:	86.40	-24.06	-4.	39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels	(withou	ıt Topo and b	oarrier atte	nuation)							
VehicleType Leq Pea	ak Hour	Leq Day	Leq I	Evening	Leq Ni	ght	Ldn	CI	VEL		
Autos:	63.3	6	51.4	59.7		53.6	62.2	2	62.8		
Medium Trucks:	56.7	5	5.2	48.8		47.3	55.8	3	56.0		
Heavy Trucks:	56.7	5	5.3	46.3		47.5	55.9)	56.0		
Vehicle Noise:	64.9		3.1	60.2		55.3	63.9)	64.3		

70 dBA

39

42

Ldn:

CNEL:

65 dBA

84

90

60 dBA

181

195

55 dBA 390

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: n/o Walnut Av. Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS					
Highway Data			Site Conditi	ons (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	13,200 vehicles	3			Autos:	15		
Peak Hour Percentage:	10%		Mediur	n Trucks (2	Axles):	15		
Peak Hour Volume:	1,320 vehicles	S	Heavy	Trucks (3+	Axles):	15		
Vehicle Speed:	50 mph		Vehicle Mix					
Near/Far Lane Distance:	50 feet		Vehicle	Type	Day	Evening	Night	Daily
Site Data				Autos:	77.5%		9.6%	97.42%
Barrier Height:	0.0 feet		Mediu	m Trucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		Hea	vy Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		M-' 0		<i>(*</i> f	4)		
Centerline Dist. to Observer:	100.0 feet		Noise Sourc			eet)		
Barrier Distance to Observer:	0.0 feet				2.000			
Observer Height (Above Pad):	5.0 feet		Medium T		1.000	Cuada Ad		0.0
Pad Elevation:	0.0 feet		Heavy T	rucks: 8	3.006	Grade Ad	iustment.	0.0
Road Elevation:	0.0 feet		Lane Equivalent Distance (in feet)					
Road Grade:	0.0%		,	Autos: 96	5.871			
Left View:	-90.0 degree	es	Medium T	rucks: 96	6.830			
Right View:	90.0 degree	es	Heavy T	rucks: 96	5.871			
FHWA Noise Model Calculatio	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite Roa	ad Fres	snel	Barrier Att	en Ber	m Atten
Autos: 70.20	0 -1.20	-4.4	1 -1	.20	-4.87	0.0	000	0.000
Medium Trucks: 81.0	0 -18.44	-4.4	1 -1	.20	-4.97	0.0	000	0.000
Heavy Trucks: 85.3	-22.40	-4.4	1 -1	.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atten	uation)					
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL
Autos: 6	3.4	61.5	59.7	53	.7	62.3	3	62.9
Medium Trucks: 5	7.0	55.4	49.1	47	.5	56.0)	56.2
Heavy Trucks: 5	7.4	55.9	46.9	48	.2	56.5	5	56.6
Vehicle Noise: 6	55.1	63.3	60.3	55	.5	64.1	1	64.5

70 dBA

40

43

Ldn:

CNEL:

65 dBA

86

93

60 dBA

186

200

55 dBA

401

431

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: s/o Walnut Av. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	11,900 vehicle	es					Autos:	15		
	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak I	Hour Volume:	1,190 vehicle	es		He	avy Truc	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		V	ehicle l	Miv					
Near/Far La	ane Distance:	52 feet		_		icleType		Day	Evening	Night	Daily
Site Data					V 0//		Autos:	77.5%		9.6%	-
		0.0 foot			Me	, edium Tr		84.8%		10.3%	1.84%
Barrier Type (0-V	rrier Height:	0.0 feet 0.0				Heavy Tr		86.5%		10.8%	0.74%
• • • •	ist. to Barrier:	0.0 100.0 feet									011 170
Centerline Dist.		100.0 feet		٨	loise So	ource El		•	eet)		
Barrier Distance		0.0 feet				Autos		.000			
Observer Height		5.0 feet			Mediu	m Trucks	s: 4	.000			
=	ad Elevation:	0.0 feet			Heav	y Trucks	s: 8	.006	Grade Ad	iustment:	0.0
	ad Elevation:	0.0 feet		L	Lane Equivalent Distance (in feet)						
710	Road Grade:	0.0%				Autos		6.607	,		
	Left View:	-90.0 degre	200		Mediu	m Trucks		5.566			
	Right View:	90.0 degre				y Trucks		6.608			
	, agair vieur	00.0 d0g.v	,,,,								
FHWA Noise Mod	lel Calculation										
VehicleType	REMEL	Traffic Flow		tance		Road	Fres		Barrier Att		m Atten
Autos:		_		-4.39		-1.20		-4.87		000	0.000
Medium Trucks:	82.40) -19.3 ²	l	-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-23.26	3	-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	d barrie	r attenu	ıation)						
VehicleType	Leq Peak Ho	our Leq Da	ıy	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	6	4.1	62.2		60.5		54.	.4	63.0)	63.6
Medium Trucks:	5	7.5	56.0		49.6		48.	.1	56.6	6	56.8
Heavy Trucks:	5	7.5	56.1		47.1		48.	.3	56.7	7	56.8
Vehicle Noise:	6	5.7	63.9		61.0		56.	.1	64.7	7	65.1
Centerline Distan	ce to Noise C	Contour (in fee	t)								
			-							_	

70 dBA

44

47

Ldn:

CNEL:

65 dBA

95

102

60 dBA

204

220

55 dBA

441

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: b/w Deerfield Dr. and ICD Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				NC	DISE M	ODE	L INPUT	S	
Highway Data				S	ite Con	ditions (l	Hard = '	10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	12,800 vehicle 10% 1,280 vehicle				dium Truc avy Truck	cks (2 A	,			
	ehicle Speed: ane Distance:	55 mph 52 feet		V	ehicle I Vehi	cleType		Day 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium Tru Jeavy Tru	icks: 8	7.5% 84.8% 86.5%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height F	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: (Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608						: 0.0	
VehicleType Autos: Medium Trucks: Heavy Trucks:	71.78 82.40	Traffic Flow -1.75 -18.99		4.39 4.39 4.39	Finite	-1.20 -1.20 -1.20	-	el 4.87 4.97 5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Nois VehicleType	Leq Peak Ho	ur Leq Da	y Led		ening	Leq N	-		Ldn		NEL
Autos: Medium Trucks: Heavy Trucks:	5	4.4 7.8 7.9	62.5 56.3 56.4		60.8 50.0 47.4		54.7 48.4 48.6		63.3 56.9 57.0	9)	63.9 57.1 57.1
Vehicle Noise:	66	6.0	64.3		61.3		56.4		65.0	J	65.5

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	46	100	215	463
CNEL:	50	107	231	498

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: b/w ICD and Yale Lp. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA	1			NO	ISE N	/IODE	L INPUT	S	
Highway Data				5	Site Con	ditions (H	lard =	10, Sc	oft = 15)		
Peak Hou	r Traffic (Adt): r Percentage: Hour Volume:	11,000 vehice 10% 1,100 vehice 10%				dium Truck avy Trucks	ks (2 A	,			
V	ehicle Speed: ane Distance:	55 mph 52 feet		1	/ehicle l			Day	Evening	Night	Daily
Site Data						Aut	tos:	77.5%	12.9%	9.6%	97.42%
Barrier Type (0-V	•	0.0 feet 0.0				edium Truc Heavy Truc	_	84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline D	ist. to Barrier:	100.0 feet		^	loise Sc	ource Elev	ation	s (in fe	eet)		
Barrier Distance Observer Height	e to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet				Autos: m Trucks: ry Trucks:	4.0	000 000 006	Grade Adj	justment.	0.0
	ad Elevation:	0.0 feet		L	Lane Equivalent Distance (in feet)						
	Road Grade: Left View: Right View:	0.0% -90.0 deg 90.0 deg				Autos: m Trucks: ry Trucks:	96. 96. 96.	566			
FHWA Noise Mod	del Calculation	าร									
VehicleType	REMEL	Traffic Flow	/ Di	stance	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos	: 71.78	3 -2.4	1	-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks	: 82.40	-19.6	55	-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks	: 86.40	-23.6	0	-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	hout Topo an	d barri	ier atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq D	ay	Leq Ev	rening	Leq Ni	ght		Ldn	CI	VEL
Autos		3.8	61.9		60.1		54.1		62.7		63.3
Medium Trucks		7.2	55.7		49.3		47.8		56.2		56.4
Heavy Trucks		7.2	55.8		46.7		48.0)	56.3		56.5
Vehicle Noise		5.4	63.6		60.6		55.8	3	64.3	3	64.8
Centerline Distar	nce to Noise C	Contour (in fe	et)								

70 dBA

42

45

Ldn:

CNEL:

65 dBA

90

97

60 dBA

194

209

55 dBA

418

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Thomas

Road Segment: n/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NO	ISE MODE	L INPUT	S	
Highway Data				Site Cond	litions (H	ard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	1,500 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Mea	lium Truck	s (2 Axles):	15		
Peak H	lour Volume:	150 vehicles	6	Hea	vy Trucks	(3+ Axles):	15		
Ve	hicle Speed:	40 mph		Vehicle M	liy				
Near/Far La	ne Distance:	12 feet			:leType	Day	Evening	Night	Daily
Site Data					Aut		_	9.6%	
Ra	rrier Height:	0.0 feet		Me	dium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0		Н	eavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet							
Centerline Dist.		100.0 feet		Noise So		ations (in f	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height (5.0 feet			Trucks:	4.000			
•	ad Elevation:	0.0 feet		Heavy	Trucks:	8.006	Grade Adj	ustment:	0.0
- 1	ad Elevation:	0.0 feet		Lane Equ	ivalent D	istance (in	feet)		
	Road Grade:	0.0%		Autos: 99.865					
•	Left View:	-90.0 degree	26	Medium	Trucks:	99.825			
	Right View:	90.0 degree			Trucks:	99.865			
FHWA Noise Mod								ı	
VehicleType	REMEL	Traffic Flow	Distance	Finite F		Fresnel	Barrier Atte		m Atten
Autos:	66.51	-9.68	-4.6		-1.20	-4.87		000	0.000
Medium Trucks:	77.72	-26.92	-4.6	51	-1.20	-4.97	0.0		0.000
Heavy Trucks:	82.99	-30.87	-4.6	51	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier atter	nuation)					
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Nig	ght	Ldn	CI	VEL
Autos:	51	.0	49.1	47.4		41.3	49.9)	50.5
Medium Trucks:	45	.0	43.5	37.1		35.6	44.0)	44.3
Heavy Trucks:	46	.3	44.9	35.9		37.1	45.5	5	45.6
Vehicle Noise:	53	0.0	51.3	48.0		43.5	52.0)	52.5

Ldn:	6	14	29	63
CNEL:	7	15	31	68

70 dBA

65 dBA

60 dBA

55 dBA

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2011 Approved Project (Baseline)

Road Name: Thomas Job Number: 8141 Road Segment: s/o Muirlands Bl. Analyst: B. Lawson

SITE S Highway Data	SPECIFIC IN	IPUT DATA		Si	te Cond				L INPUT	S	
	Troffic (Adt):	7,000 vehicle		- 0,	10 00110	10115	riara	Autos:	15		
Average Daily	• ,	10%	5		Mod	ium Tru	icks (2	Autos. : (Axles	15		
	Percentage: our Volume:		_				•	· Axles):	15		
		700 vehicle	S		пеа	vy Truc	KS (3+	- Axies).	13		
	hicle Speed:	40 mph		Ve	ehicle M	lix					
Near/Far La	ne Distance:	12 feet			Vehic	leType		Day	Evening	Night	Daily
Site Data						Α	utos:	77.5%	12.9%	9.6%	97.42%
Bai	rier Height:	0.0 feet			Med	dium Tro	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			He	eavy Tro	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	,	100.0 feet		N	oise Sou	irca Eld	ovetio	ne (in fa	not)		
Centerline Dist.	to Observer:	100.0 feet		/40	<i>3136</i> 300	Autos		2.000			
Barrier Distance	to Observer:	0.0 feet			Madium		-				
Observer Height (Above Pad):	5.0 feet		Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Pá	ad Elevation:	0.0 feet			неаvy	Trucks	i. (3.006	Grade Au	iusimeni	. 0.0
Roa	ad Elevation:	0.0 feet		La	ne Equ	ivalent	Dista	nce (in i	feet)		
ı	Road Grade:	0.0%				Autos	: 99	9.865			
	Left View:	-90.0 degree	es		Medium	Trucks	: 99	9.825			
	Right View:	90.0 degre			Heavy	Trucks	: 99	9.865			
FHWA Noise Mode	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite F	Road	Fre	snel	Barrier Att	en Bei	m Atten
Autos:	66.51	-2.99		-4.61		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	77.72	-20.23		-4.61		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	82.99	-24.18		-4.61		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier a	attenua	ation)						
VehicleType	Leq Peak Hou	ır Leq Day	/ Le	eq Eve	ening	Leq N	Vight		Ldn	C	NEL
Autos:	57	7.7	55.8		54.0		48	3.0	56.6	3	57.2
Medium Trucks:	51	.7	50.2		43.8		42	3	50.7	7	51.0

Vehicle Noise:	59.7 58	3.0	54.7	50.2	58.7 59.1
Centerline Distance to	Noise Contour (in feet)				
		70 dB	A 65 dB	4 60 dBA	55 dBA
	Lo	dn: 18	38	82	176
	CNE	EL: 19	41	88	189

42.5

43.8

52.1

52.3

51.6

Heavy Trucks:

53.0

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o "F" St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOISE	MODE	L INPUT	S		
Highway Data				Site Con	ditions (Hard	= 10, Sc	oft = 15)			
	Traffic (Adt): r Percentage: Hour Volume:	100 vehicles 10% 10 vehicles			dium Trucks (3 avy Trucks (3	,				
V	ehicle Speed: ane Distance:	60 mph 76 feet		Vehicle I		Day	Evening	Night	Daily	
Site Data					Autos:	77.5%	12.9%	9.6%	97.42%	
Barrier Type (0-V	,	0.0 feet 0.0			edium Trucks: Heavy Trucks:	84.8% 86.5%		10.3% 10.8%	1.84% 0.74%	
	ist. to Barrier:	100.0 feet		Noise So	ource Elevatio	ons (in fe	eet)			
Centerline Dist Barrier Distance Observer Height	e to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet			m Trucks:	2.000 4.000 8.006	Grade Adj	justment:	0.0	
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)						
	Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree			m Trucks: 9	2.547 2.504 2.547				
FHWA Noise Mod	del Calculation	ıs								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Att	en Ber	m Atten	
Autos	73.22	-23.20	-4.	11	-1.20	-4.87	0.0	000	0.000	
Medium Trucks	: 83.68	-40.44	-4.	11	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks	87.33	-44.39	-4.	11	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	se Levels (with	out Topo and I	barrier atte	nuation)						
VehicleType	Leq Peak Ho	ur Leq Day	Leq I	Evening	Leq Night		Ldn	CI	VEL	
Autos	: 44	1.7	12.8	41.0	3	5.0	43.6	6	44.2	
Medium Trucks	: 37	7.9	36.4	30.1	28	3.5	37.0)	37.2	
Heavy Trucks.	:37	7.6	36.2	27.2	28	3.4	36.8	3	36.9	
Vehicle Noise			14.4	41.5	30	6.6	45.′	1	45.6	
Centerline Distar	ice to Noise C	ontour (in feet)								

70 dBA

2

2

Ldn:

CNEL:

65 dBA

5

5

60 dBA

10

11

55 dBA

22

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o "F" St.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			N	OISE N	/IODE	L INPUT	S	
Highway Data			Site Co	nditions ((Hard =	10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 18,000 vehicle	es			,	Autos:	15		
Peak Hour Percentage	•		М	edium Tru	icks (2 A	Axles):	15		
Peak Hour Volume	: 1,800 vehicle	es	Н	eavy Truc	ks (3+ A	Axles):	15		
Vehicle Speed	: 60 mph		Vehicle	Mix					
Near/Far Lane Distance	76 feet					Day	Evening	Night	Doily
Site Data			Vei	hicleType ^		<i>Day</i> 77.5%	Evening 12.9%	9.6%	<i>Daily</i> 97.42%
				A 1edium Tri		84.8%		10.3%	1.84%
Barrier Height								10.8%	0.74%
Barrier Type (0-Wall, 1-Berm)				Heavy Tru	ucks.	86.5%	2.1%	10.6%	0.74%
Centerline Dist. to Barrier			Noise S	Source Ele	evation	s (in fe	eet)		
Centerline Dist. to Observer				Autos	: 2.0	000			
Barrier Distance to Observer			Mediu	ım Trucks	: 4.0	000			
Observer Height (Above Pad)			Hea	vy Trucks	e: 8.0	006	Grade Ad	iustment:	0.0
Pad Elevation						<i>(</i> : <i>(</i>			
Road Elevation			Lane Equivalent Distance (in feet)						
Road Grade				Autos					
Left View	3 -			ım Trucks	_				
Right View	: 90.0 degre	es	Hea	vy Trucks	: 92.	547			
FHWA Noise Model Calculation									
VehicleType REMEL	Traffic Flow	Distant	ce Finite	e Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos: 73.2	22 -0.65	-	4.11	-1.20		<i>-4.</i> 87	0.0	000	0.000
Medium Trucks: 83.6	68 -17.89	-	4.11	-1.20		<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks: 87.3	33 -21.84	-	4.11	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	thout Topo and	barrier at	tenuation)	1					
VehicleType Leq Peak F	lour Leq Day	y Le	q Evening	Leq N	Vight		Ldn	CI	VEL
Autos:	67.3	65.4	63.6	6	57.5	,	66.2	2	66.8
	60.5	59.0	52.6		51.1		59.5		59.8
Heavy Trucks:	60.2	58.7	49.7	7	51.0)	59.3	3	59.4
Vehicle Noise:	68.7	67.0	64.1	1	59.1		67.7	7	68.2
Centerline Distance to Noise	Contour (in feet	t)							

70 dBA

70

76

Ldn: CNEL: 65 dBA

151

163

60 dBA

326

351

55 dBA

702

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Fairbanks

Job Number: 8141

Analyst: B. Lawson

Medium Trucks: 83.68 -13.99 -4.11 -1.20 -4.97 0.000 0.000 Heavy Trucks: 87.33 -17.95 -4.11 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.2 69.3 67.5 61.4 70.1 70.7 Medium Trucks: 64.4 62.9 56.5 55.0 63.4 63.7										
Average Daily Traffic (Adt): 44,100 vehicles Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15 Heavy Trucks (3+ Axles): 15	SITE	SPECIFIC IN	IPUT DATA			r	NOISE MOD	EL INPUT	S	
Peak Hour Percentage:	Highway Data				Site Cor	ditions	s(Hard = 10, S)	oft = 15)		
Peak Hour Volume: Vehicle Speed: Kehicle Speed: For the large Processing Peak Hour Volume: Vehicle Speed: Near/Far Lane Distance: For the large Peak Hour Vehicle Mix Vehicle Mix Vehicle Type Day Evening Night Daily	Average Daily	Traffic (Adt): 4	44,100 vehicles	S			Autos	: 15		
Vehicle Speed: Near/Far Lane Distance: 76 feet Vehicle Mix Vehicle Type Day Evening Night Daily Site Data Vehicle Type Day Evening Night Daily Site Data Autos: 77.5% 12.9% 9.6% 97.42% Barrier Height: Barrier Height: Dist. to Barrier: 10.0.0 feet No feet Medium Trucks: 84.8% 4.9% 10.3% 1.84% Centerline Dist. to Observer: 100.0 feet Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 80.06 Grade Adjustment: 0.0 Barrier Distance Pad Elevation: 0.0 feet Autos: 92.547 Left View: 90.0 degrees Medium Trucks: 82.54 Medium Trucks: 92.504 Heavy Trucks: 92.504 Heavy Trucks: 92.547 FHWA Noise Model Calculations Finite Road Frestel Barrier Atten Berm Atten Autos: 73.22										

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	128	275	592	1,276
CNEL:	137	296	638	1,375

68.0

63.0

71.6

70.9

72.1

Vehicle Noise:

72.6

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks

Job Number: 8141

Road Segment: e/o Alton Pkwy.

Analyst: B. Lawson

SITE SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS									
Highway Data			Site Cond	ditions (Ha	ard = 10, Sc	oft = 15)						
Average Daily Traffic (Adt):	7,000 vehicles	3			Autos:	15						
Peak Hour Percentage:	10%		Med	dium Truck	s (2 Axles):	15						
Peak Hour Volume:	700 vehicles	6	Hea	avy Trucks	(3+ Axles):	15						
Vehicle Speed:	40 mph	,	Vehicle N	/liy								
Near/Far Lane Distance:	12 feet	_		cleType	Day	Evening	Night	Daily				
Site Data				Auto			9.6%	97.42%				
Barrier Height:	0.0 feet		Ме	dium Truci	ks: 84.8%	4.9%	10.3%	1.84%				
Barrier Type (0-Wall, 1-Berm):	0.0		Н	leavy Truci	ks: 86.5%	2.7%	10.8%	0.74%				
Centerline Dist. to Barrier:	100.0 feet	<u> </u>										
Centerline Dist. to Observer:	100.0 feet	<u> </u>	Noise So		ations (in fe	eet)						
Barrier Distance to Observer:	0.0 feet			Autos:	2.000							
Observer Height (Above Pad):	5.0 feet			n Trucks:		4.000						
Pad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0									
Road Elevation:	0.0 feet	1	Lane Equ	ıivalent Di	istance (in	feet)						
Road Grade:	0.0%			Autos:	99.865	,						
Left View:	-90.0 degree	76	Mediun	n Trucks:	99.825							
Right View:	90.0 degree			Trucks:	99.865							
rugin view.	50.0 degree	,5		,	00.000							
FHWA Noise Model Calculation	s	·										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten				
Autos: 66.51	-2.99	-4.61	1	-1.20	-4.87	0.0	000	0.000				
Medium Trucks: 77.72	-20.23	-4.61	1	-1.20	-4.97	0.0	000	0.000				
Heavy Trucks: 82.99	-24.18	-4.61	1	-1.20	-5.16	0.0	000	0.000				
Unmitigated Noise Levels (with	out Topo and	barrier atten	uation)									
VehicleType Leq Peak Hou	ur Leq Day	Leg Ev	ening	Leq Nig	ght	Ldn	CI	VEL				
Autos: 57	'.7	55.8	54.0		48.0	56.6	6	57.2				
Medium Trucks: 51	.7	50.2	43.8		42.3	50.7	7	51.0				
Heavy Trucks: 53	3.0	51.6	42.5		43.8	52.1	<u> </u>	52.3				
Vehicle Noise: 59).7	58.0	54.7		50.2	58.7	7	59.1				

70 dBA

18

19

Ldn:

CNEL:

65 dBA

38

41

60 dBA

82

88

55 dBA

176

189

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks

Job Number: 8141

Road Segment: w/o Alton Pkwy.

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (Ha	ard = 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: lour Volume:	2,400 vehicles 10% 240 vehicles			dium Trucks avy Trucks	,	15		
Near/Far La	hicle Speed: ne Distance:	45 mph 36 feet		Vehicle Veh	icleType	Day 77.5%	Evening	Night	Daily
Barrier Type (0-W	•	0.0 feet 0.0			Auto edium Truck Heavy Truck	ks: 84.8%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%
Roa	to Observer: to Observer: Above Pad): ad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 90.0 degree		Mediu. Heav	Autos: m Trucks: ny Trucks: uivalent Dia Autos: m Trucks:	2.000 4.000 8.006	Grade Ad	ijustment:	0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 68.46 79.45 84.25	Traffic Flow -8.15 -25.39 -29.34	-4	Finite .51 .51	Road F -1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Noise VehicleType Autos:	Levels (with Leq Peak Hou	ır Leq Day		enuation) Evening 50.9	Leq Nig	ht 44.9	Ldn 53.5	_	VEL 54.1
Medium Trucks: Heavy Trucks: Vehicle Noise:	48 49 56	.4	46.8 47.8 54.7	40.5 38.7 51.5		38.9 40.0 46.9	47.4 48.3 55.4	4 3	47.6 48.5 55.9

Centerline Distance to Noise Contour (in feet)		23 49 106						
	70 dBA	65 dBA	60 dBA	55 dBA				
Ldn: ¯	11	23	49	106				
CNEL:	11	25	53	114				

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks

Job Number: 8141

Road Segment: s/o Astor St.

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				ſ	NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, So	oft = 15)		
Average Daily	Traffic (Adt):	900 vehicle	S					Autos:	15		
,	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	90 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	40 mph		,	Vehicle l	Miv					
Near/Far La	ane Distance:	12 feet				icleType	ė	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	Ū	9.6%	_
	nrrier Height:	0.0 feet			Ме	edium T		84.8%		10.3%	
Barrier Type (0-V	•	0.0 1661			F	leavy T	rucks:	86.5%		10.8%	
, , ,	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		1	Noise Sc	ource E			eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				n Truck	_	.000			
_	Pad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment	: 0.0
-	ad Elevation: ad Elevation:	0.0 feet			Lane Eq	uivalen	t Distai	nce (in t	feet)		
	Road Grade:	0.0%				Auto		9.865			
	Left View:	-90.0 degree	es		Mediur	n Truck		9.825			
	Right View:	90.0 degree				y Truck		9.865			
	9	20.0 acg. c									
FHWA Noise Mod	lel Calculation										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite		Fres		Barrier Att	en Ber	m Atten
Autos:		-11.90		-4.6	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	77.72	-29.14		-4.6	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	82.99	-33.09		-4.6	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	48	.8	46.9		45.1		39	.1	47.7	7	48.3
Medium Trucks:	42	.8	41.3		34.9		33	.4	41.8	3	42.1
Heavy Trucks:	44	.1	42.7		33.6		34	.9	43.2	2	43.4
Vehicle Noise:	50	.8	49.1		45.8		41	.3	49.8	3	50.2
Centerline Distan	ce to Noise Co	ontour (in feet)								
L		-		70 c	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

4

5

21

22

10

10

45

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks

Road Segment: n/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOIS	SE MODE	L INPUT	S	
Highway Data				Site Con	ditions (Ha	rd = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	100 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Trucks	s (2 Axles):	15		
Peak H	lour Volume:	10 vehicle	s	He	avy Trucks	(3+ Axles):	15		
Ve	hicle Speed:	45 mph		Vehicle	Miy				
Near/Far La	ne Distance:	36 feet			icleType	Day	Evening	Night	Daily
Site Data				7011	Auto			9.6%	97.42%
		0.0.6==4		M	edium Truck			10.3%	1.84%
	rrier Height:	0.0 feet 0.0			Heavy Truck			10.8%	0.74%
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet							
Centerline Dist.		100.0 feet		Noise So	ource Eleva	tions (in f	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
				Mediu	m Trucks:	4.000			
Observer Height (5.0 feet		Heavy Trucks: 8.006 Grade Adjustmen					0.0
	ad Elevation: ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)					
		0.0 feet		Lanc Lq	Autos:	98.412	iccij		
	Road Grade:	0.0%		Modiu	m Trucks:	98.372			
	Left View:	-90.0 degree			ry Trucks:	98.413			
	Right View:	90.0 degree	es	пеач	y Trucks.	90.413			
FHWA Noise Mod	el Calculation	s							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	68.46	-21.95	-4.	.51	-1.20	<i>-4</i> .87	0.0	000	0.000
Medium Trucks:	79.45	-39.19	-4.	.51	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	84.25	-43.15	-4.	.51	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier atte	enuation)					
VehicleType	Leq Peak Hou	ır Leq Day	/ Leq	Evening	Leq Nigi	ht	Ldn	CI	VEL
Autos:	40	.8	38.9	37.1		31.1	39.7	7	40.3
Medium Trucks:	34	5	33.0	26.7		25.1	33.6	6	33.8
Heavy Trucks:	35	5.4	34.0	24.9		26.2	34.5	5	34.7
Vehicle Noise:	42	2.6	40.9	37.7		33.1	41.0	6	42.1

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	1	3	6	13
CNEL:	1	3	6	14

Scenario: Post 2030 - 2011 Approved Project (Baseline) Project Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks

Job Number: 8141

Road Segment: w/o Irvine Bl.

Analyst: B. Lawson

SITE SPECIF	IC INP	UT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (A	A <i>dt):</i> 8	,300 vehicles	S					Autos:	15		
Peak Hour Percenta	age:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volu	me:	830 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Vehicle Spe	eed:	40 mph		1	/ehicle l	Miv					
Near/Far Lane Distar	nce:	12 feet		-		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	_
Barrier Heig	aht:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Be	_	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Bar	,	100.0 feet			loise So	urco E	lovatio	ne (in fa	not)		
Centerline Dist. to Obser	ver:	100.0 feet			10/36 30	Auto		2.000			
Barrier Distance to Obser	ver:	0.0 feet			Madiuu	Auto n Truck					
Observer Height (Above P	ad):	5.0 feet						1.000	Crada Ad	livotmont	
Pad Eleva	,	0.0 feet			Heav	y Truck	S. E	3.006	Grade Ad	justinent	. 0.0
Road Eleva	tion:	0.0 feet		L	Lane Equivalent Distance (in feet)						
Road Gra	ade:	0.0%				Auto	s: 99	9.865			
Left V	iew:	-90.0 degree	es		Mediui	n Truck	s: 99	9.825			
Right V		90.0 degree			Heav	y Truck	s: 99	9.865			
FHWA Noise Model Calcul	lations										
VehicleType REMI	EL 7	Traffic Flow	Dist	tance	Finite	Road	Fres	snel	Barrier Att	en Bei	rm Atten
Autos:	66.51	-2.25		-4.61		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	77.72	-19.49		-4.61		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	82.99	-23.44		-4.61		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels	(withou	ıt Topo and	barrie	r attenu	uation)						
VehicleType Leq Pea	ak Hour	Leq Day	,	Leq Ev	rening	Leq	Night		Ldn	С	NEL
Autos:	58.5	;	56.6		54.8		48	.7	57.4	4	58.0
Medium Trucks:	52.4	;	50.9		44.6		43	.0	51.5	5	51.7
Heavy Trucks:	53.7	,	52.3		43.3		44	.5	52.9	9	53.0
Vehicle Noise:	60.5		58.7		55.5		50	.9	59.4	4	59.9
Centerline Distance to No.	ise Con	tour (in feet,)								

70 dBA

20

21

Ldn:

CNEL:

65 dBA

43

46

60 dBA

92

98

55 dBA

198

APPENDIX 7.2

2012 Modified Project
Off-Site Transportation Noise Model Printouts



Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Ada Job Number: 8141
Road Segment: s/o Barranca Pkwy. Analyst: B. Lawson

SITE SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS									
Highway Data		9	Site Cond	ditions (Ha	ard = 10, Sc	oft = 15)						
Average Daily Traffic (Adt):	2,800 vehicles	3			Autos:	15						
Peak Hour Percentage:	10%		Med	dium Truck	s (2 Axles):	15						
Peak Hour Volume:	280 vehicles	3	Hea	avy Trucks	(3+ Axles):	15						
Vehicle Speed:	55 mph	1	/ehicle N	Niy								
Near/Far Lane Distance:	52 feet	_		cleType	Day	Evening	Night	Daily				
Site Data				Auto			9.6%	97.42%				
Barrier Height:	0.0 feet		Me	dium Truc	ks: 84.8%	4.9%	10.3%	1.84%				
Barrier Type (0-Wall, 1-Berm):	0.0		Н	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%				
Centerline Dist. to Barrier:	100.0 feet	_										
Centerline Dist. to Observer:	100.0 feet		Noise So		ations (in f	eet)						
Barrier Distance to Observer:	0.0 feet			Autos:	2.000							
Observer Height (Above Pad):	5.0 feet			n Trucks:		4.000						
Pad Elevation:	0.0 feet		Heav	/ Trucks:	8.006	Grade Ad	justment:	0.0				
Road Elevation:	0.0 feet	L	Lane Equ	ıivalent Di	istance (in	feet)						
Road Grade:	0.0%			Autos:	96.607	,						
Left View:	-90.0 degree	25	Mediun	n Trucks:	96.566							
Right View:	90.0 degree			/ Trucks:	96.608							
	00.0 0.09.00											
FHWA Noise Model Calculation												
VehicleType REMEL	Traffic Flow	Distance	Finite			Barrier Att		m Atten				
Autos: 71.78	-8.35	-4.39	9	-1.20	-4.87	0.0	000	0.000				
Medium Trucks: 82.40	-25.59	-4.39	9	-1.20	-4.97	0.0	000	0.000				
Heavy Trucks: 86.40	-29.55	-4.39	9	-1.20	-5.16	0.0	000	0.000				
Unmitigated Noise Levels (with	out Topo and	barrier atten	uation)									
VehicleType Leq Peak Hou	ur Leq Day	Leq Ev	vening	Leq Nig	ght	Ldn	CI	VEL				
Autos: 57	'.8 <u></u>	55.9	54.2		48.1	56.7	7	57.3				
Medium Trucks: 51	.2	49.7	43.4		41.8	50.3	3	50.5				
Heavy Trucks: 51	.3	49.8	40.8		42.0	50.4	1	50.5				
Vehicle Noise: 59).4	57.7	54.7		49.8	58.4	4	58.9				

70 dBA

17

18

Ldn:

CNEL:

65 dBA

36

39

60 dBA

78

84

55 dBA

168

181

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

Highway Data Average Daily Traffic (Adt):								L INPUT	_			
Average Daily Traffic (Adt):			S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)				
Peak Hour Percentage:	10%				dium Tru	•	,					
Peak Hour Volume:	3,880 vehicle	S		He	avy Truc	cks (3+	· Axles):	15				
Vehicle Speed:	55 mph		V	ehicle l	Mix							
Near/Far Lane Distance:	88 feet			Veh	icleType	·	Day	Evening	Night	Daily		
Site Data					-	Autos:	77.5%	12.9%	9.6%	97.42%		
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0				edium Tr Heavy Tr		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%		
Centerline Dist. to Barrier:	100.0 feet		N	oise Sc	ource El	evatio	ns (in fe	eet)				
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet 0.0 feet	0.0 feet			Autos m Trucks ry Trucks	s: 2	2.000 4.000 3.006	0				
Road Elevation:	0.0 feet		Lane Equivalent Distance (in feet)									
Road Grade:	0.0%				Autos	s: 89	9.850					
Left View:	-90.0 degre	es		Mediur	m Trucks	s: 89	9.805					
Right View:	90.0 degre			Heav	y Trucks	s: 89	9.850					
FHWA Noise Model Calculatio	ns											
VehicleType REMEL	Traffic Flow	Distand	ce	Finite		Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 71.78	3.07	-	3.92		-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -14.17	-	3.92		-1.20		<i>-4</i> .97		000	0.000		
Heavy Trucks: 86.40	-18.13	-	3.92		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wit	hout Topo and	barrier at	ttenu	ation)								
VehicleType Leq Peak Ho			q Eve	ening	Leq	Night		Ldn	CI	VEL		
Autos: 6	9.7	67.8		66.1		60	.0	68.6	3	69.2		
Medium Trucks: 6	3.1	61.6		55.2		53	.7	62.2	2	62.4		
Heavy Trucks: 6	3.1	61.7		52.7		53	.9	62.3	3	62.4		
Vehicle Noise: 7	1.3	69.5		66.6		61	.7	70.3	3	70.7		

70 dBA

104

112

Ldn: CNEL: 65 dBA

224

241

60 dBA

483

520

55 dBA

1,042

1,121

Sunday,	May	20,	2012

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT D	ATA			NC	DISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions (l	Hard =	: 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	43,000 v 10% 4,300 v	•			dium Truc avy Truck	cks (2 .	,			
	ehicle Speed: nne Distance:	55 r 88 f	•		Vehicle I	Mix icleType		Day	Evening	Night	Daily
Site Data							ıtos:	77.5%			97.42%
Barrier Type (0-W Centerline Di Centerline Dist. Barrier Distance Observer Height P	ist. to Barrier: to Observer: to Observer:	0.0 100.0 100.0 0.0 5.0 0.0 0.0	feet feet feet feet feet		Medium Heav	edium Trudeavy Trudeavy Trucks: m Trucks: ny Trucks: uivalent I Autos: m Trucks:	vation 2. 4. 8. Distan	000 000 006	2.7% eet) Grade Ad	10.3% 10.8%	1.84% 0.74%
	Right View:	90.0	degrees	5	Heav	y Trucks:	89	.850			
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten
Autos: Medium Trucks: Heavy Trucks:	82.40) -	3.51 -13.73 -17.68	-3.9 -3.9 -3.9	92	-1.20 -1.20 -1.20		-4.87 -4.97 -5.16	0.0	000 000 000	0.000 0.000 0.000
Unmitigated Nois	e Levels (with	hout Top	o and b	arrier atte	nuation)						
VehicleType	Leq Peak Ho		eq Day	•	vening	Leq N	light		Ldn		VEL
Autos:		0.2		8.3	66.5		60.		69.1		69.7
Medium Trucks:		3.6		2.1						62.8	
Heavy Trucks: Vehicle Noise:	7	3.6 1.7	70	0.0	53.1 67.0		54. 62.		62.7 70.7		62.9 71.2
Centerline Distan	ce to Noise C	ontour (I	iii reet)	1				-		1	

70 dBA

112

120

Ldn:

CNEL:

65 dBA

240

259

60 dBA

518

557

55 dBA

1,115

1,200

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	10%	9,700 vehicles 10% 5,970 vehicles			dium Tru avy Truc	ucks (2	,				
Vehicle Speed: Near/Far Lane Distance:		55 mph 88 feet			/ehicle l Vehi	Mix icleType	1	Day	Evening	Night	Daily	
Site Data					-	Autos:	77.5%		9.6%			
	Barrier Height: Barrier Type (0-Wall, 1-Berm):		0.0 feet 0.0			edium Tr Ieavy Tr		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%	
Centerline Dist. to Barrier:		100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degrees 90.0 degrees			Noise Source Elevations (in feet)							
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Left View: Right View:					Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 89.850 Medium Trucks: 89.805							
					Heavy Trucks: 89.850							
FHWA Noise Mod	lel Calculation	ns		'								
VehicleType	REMEL	Traffic Flov		stance	Finite		Fres		Barrier Att		m Atten	
Autos:				-3.92		-1.20		-4.87		000	0.000	
Medium Trucks: Heavy Trucks:			-12.30 -3.9 -16.26 -3.9			-1.20 -1.20				000	0.000	
Unmitigated Nois	e Levels (with	hout Topo ai	nd barri	ier attenu	uation)							
VehicleType	Leq Peak Ho	k Hour Leq Day		Leq Ev	ening					CI	CNEL	
Autos:		1.6			67.9 61.9			70.5		71.1		
Medium Trucks:		5.0			57.1 55.6			64.0		64.3		
•	Heavy Trucks: 65				54.6 55.8			64.2		64.3		
Vehicle Noise:	7	3.2	2 71.4		68.5	5 63.6		6	72.1		72.6	

Centerline Distance to Noise Contour (in feet)								
	70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:	139	299	644	1,388				
CNEL:	149	322	693	1,493				

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: n/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data						Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	60,100	vehicles	;			Autos:	15					
= -	Percentage: 10%				Medium Trucks (2 Axles): 15								
Peak F	Peak Hour Volume: 6,010 vehicles				Heavy Trucks (3+ Axles): 15								
Vehicle Speed: 55 mph Near/Far Lane Distance: 88 feet			mph		Vehicle I	Mix							
			feet			icleType	Day	Evening	Night	Daily			
Site Data						Aut	os: 77.5%	12.9%	9.6%	97.42%			
Ba	rrier Height:	0.0	feet		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0			F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%			
Centerline Dist. to Barrier:		100.0	feet		Noise Source Elevations (in feet)								
Centerline Dist. to Observer:		100.0	feet		710/30 00	Autos:	2.000	<i></i>					
Barrier Distance	to Observer:	0.0	feet		Modiu	n Trucks:	4.000						
Observer Height (5.0	feet					Grade Adj	iustmont:					
Pad Elevation:		0.0	feet		неач	y Trucks:	8.006	Grade Auj	usimeni.	0.0			
Roa	0.0	feet		Lane Eq	uivalent D	istance (in	feet)						
Road Grade:		0.0	%			Autos:	89.850						
	-90.0	degree	s	Mediui	n Trucks:	89.805							
		90.0 degrees			Heavy Trucks: 89.850								
FHWA Noise Mod	el Calculatio	าร											
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten			
Autos:	71.78	3	4.97	-3.	92	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40)	-12.27	-3.	92	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	eavy Trucks: 86.40 -16.23		-3.	92 -1.20		-5.16	0.000		0.000				
Unmitigated Noise	e Levels (with	hout Top	oo and l	barrier atte	nuation)								
VehicleType	Leq Peak Ho	ur L	Leq Day	Leq	Evening	Leq Nig	ght	Ldn	CI	VEL			
Autos:	7	1.6	69.7		68.0		61.9	70.5	70.5				
Medium Trucks:	6	5.0	0 63.5		57.1 5		55.6	5.6 64.1		64.3			
Heavy Trucks:	Heavy Trucks: 65.		63.6		54.6 55		55.8	64.2		64.3			
Vehicle Noise: 73.2			71.4		68.5			3.6 72.2		72.6			

70 dBA

139

150

Ldn:

CNEL:

65 dBA

300

323

60 dBA

647

696

55 dBA 1,394

1,500

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: b/w I-5 NB Ramps and Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				,	Site Conditions (Hard = 10, Soft = 15)							
	Traffic (Adt): Percentage: Hour Volume:	66,000 ve 10% 6,600 ve					Autos: ks (2 Axles): s (3+ Axles):	15 15 15				
	ehicle Speed: ane Distance:	55 m 88 fe	-		Vehicle Veh	Mix icleType	Day	Evening	Night	Daily		
Site Data						Aut	tos: 77.5%	12.9%	9.6%			
B a Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 f 0.0	eet			edium Truc Heavy Truc			10.3% 10.8%	1.84% 0.74%		
Centerline D	ist. to Barrier:	100.0 f	eet		Noise So	ource Elev	ations (in fe	eet)				
-	to Observer:	100.0 f 0.0 f 5.0 f 0.0 f 0.0 f	eet eet eet		Heav	Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Adj	iustment.	0.0		
Λ0	Road Grade:	0.0 1			Luno Lq	Autos:	89.850					
	Left View: Right View:	-90.0 c	degrees degrees			m Trucks: yy Trucks:	89.805 89.850					
FHWA Noise Mod	lel Calculation	ns										
VehicleType	REMEL	Traffic F	low D	istance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:	71.78		5.37	-3.9	2	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40) -1	11.87	-3.9	2	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40) -1	15.82	-3.9	2	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo	and barı	rier atten	uation)							
VehicleType	Leq Peak Ho	our Le	q Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL		
Autos:		2.0	70.1		68.4		62.3	70.9)	71.5		
Medium Trucks:	6	5.4	63.9)	57.6		56.0	64.5	5	64.7		
Heavy Trucks:	6	5.5	64.0)	55.0		56.2	64.6	6	64.7		
Vehicle Noise:	7	3.6	71.8	3	68.9		64.0	72.6	3	73.0		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	148	320	689	1,484
CNEL:	160	344	741	1,597

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o I-5 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT I	DATA				NC	DISE	MODE	L INPUT	S	
Highway Data					S	ite Con	ditions (l	Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	53,300	vehicles	3					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Truc	cks (2 .	Axles):	15		
Peak H	lour Volume:	5,330	vehicles	3		He	avy Truck	ks (3+ .	Axles):	15		
Ve	ehicle Speed:	55	mph		V	ehicle l	Wix					
Near/Far La	ne Distance:	88	feet		-		icleType		Day	Evening	Night	Daily
Site Data								utos:	77.5%	Ū	9.6%	
Ra	rrier Height:	0.0) feet			Ме	edium Tru	ıcks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0				F	leavy Tru	ıcks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:) feet			-: O-	51-	4!	/! £	4\		
Centerline Dist.) feet		N	oise Sc	ource Ele			eet)		
Barrier Distance	to Observer:) feet				Autos:		.000			
Observer Height) feet				n Trucks:		.000			
•	ad Elevation:) feet			Heav	y Trucks:	8.	.006	Grade Ad	ljustment	: 0.0
	ad Elevation:) feet		L	ane Eq	uivalent l	Distan	ce (in	feet)		
	Road Grade:	0.0					Autos:		.850			
	Left View:) degree	es		Mediur	n Trucks:	89	.805			
	Right View:) degree			Heav	y Trucks:	89	.850			
FHWA Noise Mod	lel Calculation	18										
VehicleType	REMEL	Traffic	Flow	Dista	ance	Finite	Road	Fresi	nel	Barrier Att	ten Bei	m Atten
Autos:	71.78		4.44		-3.92		-1.20		-4.87	0.	000	0.000
Medium Trucks:	82.40		-12.79		-3.92		-1.20		-4.97	0.	000	0.000
Heavy Trucks:	86.40		-16.75		-3.92		-1.20		-5.16	0.	000	0.000
Unmitigated Nois	e Levels (with	out To	po and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur	Leq Day	,	Leq Eve	ening	Leq N	light		Ldn	С	NEL
Autos:	71	1.1	(69.2		67.4		61.	4	70.	0	70.6
Medium Trucks:	64	4.5	(63.0		56.6		55.	1	63.	5	63.8
Heavy Trucks:	64	4.5	(63.1		54.1		55.	3	63.	7	63.8
Vehicle Noise:	72	2.7	-	70.9		68.0		63.	1	71.	6	72.1
Contorlino Distan	ce to Noise C	ontour	(in feet)	1								

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	129	277	597	1,287
CNEL:	138	298	643	1,385

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o Paseo de Valencia

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS						
Highway Data					S	ite Con	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	45,900	vehicles	S					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Tru	ucks (2	Axles):	15		
Peak H	lour Volume:	4,590	vehicles	S		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	55	mph		V	ehicle l	Vix					
Near/Far La	ne Distance:	88	feet				icleType)	Day	Evening	Night	Daily
Site Data							, , ,	Autos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0	feet			Me	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0				F	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:		feet		A.	loine Ca	roo El	lovotio	no (in f	2041		
Centerline Dist.	to Observer:	100.0			/\	orse sc	ource El		•	et)		
Barrier Distance	to Observer:	0.0) feet				Auto		2.000			
Observer Height			feet				n Trucks		.000	0 , 4 ,		0.0
_	ad Elevation:		feet			Heav	y Trucks	s: 8	3.006	Grade Ad	justment	: 0.0
	ad Elevation:		feet		L	ane Eq	uivalent	t Distai	nce (in i	feet)		
	Road Grade:	0.0					Autos	s: 89	9.850			
	Left View:) degree	25		Mediur	n Trucks		9.805			
	Right View:		degree				y Trucks		9.850			
FHWA Noise Mod	1											
VehicleType	REMEL		Flow	Dista		Finite		Fres		Barrier Att		m Atten
Autos:			3.80		-3.92		-1.20		-4.87		000	0.000
Medium Trucks:			-13.44		-3.92		-1.20		-4.97		000	0.000
Heavy Trucks:	86.40)	-17.40		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout To	po and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur I	Leq Day	' L	eq Eve	ening	Leq	Night		Ldn	C	NEL
Autos:	70	0.5	(68.6		66.8		60	.7	69.4	1	70.0
Medium Trucks:	6	3.8		62.3		56.0		54	.4	62.9	Э	63.1
Heavy Trucks:	6	3.9		62.5		53.4		54	.7	63.0)	63.1
Vehicle Noise:	7:	2.0		70.3		67.3		62	.4	71.0)	71.5

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	117	251	541	1,165
CNEL:	125	270	582	1,253

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o Moulton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT I	DATA				r	NOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	44,500	vehicles	3					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Tr	ucks (2	? Axles):	15		
Peak F	lour Volume:	4,450	vehicles	S		He	avy Tru	cks (3+	- Axles):	15		
Ve	ehicle Speed:	55	mph			Vehicle l	Mix					
Near/Far La	ne Distance:	88	feet				icleType	Э	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	-
Ba	rrier Height:	0.0) feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0				ŀ	l eavy T	rucks:	86.5%	2.7%	10.8%	0.74%
•••	ist. to Barrier:) feet			Noise So	ouroo E	lovatio	ns (in f	201		
Centerline Dist.	to Observer:	100.0) feet		_	NOISE SC	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0) feet			Madiu	Auto m Truck		4.000			
Observer Height	(Above Pad):	5.0) feet					_		Grade Ad	liustmont	. 0.0
P	ad Elevation:	0.0) feet			пеач	y Truck	.S. (3.006	Grade Au	justin o nt	. 0.0
Ro	ad Elevation:	0.0) feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0)%				Auto	s: 8	9.850			
	Left View:	-90.0	degree	es		Mediu	m Truck	s: 89	9.805			
	Right View:	90.0) degree	es		Heav	y Truck	s: 89	9.850			
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic	c Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	m Atten
Autos:	71.78		3.66		-3.9	2	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40		-13.58		-3.9	2	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40		-17.53		-3.9	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and	barri	ier atten	uation)						
VehicleType	Leq Peak Ho	ur	Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	70).3		68.4		66.7		60).6	69.2	2	69.8
Medium Trucks:	63	3.7		62.2		55.8		54	.3	62.8	3	63.0
Heavy Trucks:	63	3.7	(62.3		53.3		54	.5	62.9	9	63.0
Vehicle Noise:	71	.9		70.1		67.2		62	2.3	70.9	9	71.3
Centerline Distan	ce to Noise C	ontour	(in feet)								
					70	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

114

123

246

265

530

570

1,141

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Aliso Creek Rd.

Road Segment: e/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				;	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	18,500 vehicles	3					Autos:	15			
Peak Hou	r Percentage:	10%			Me	dium Tru	ucks (2	Axles):	15			
Peak I	Hour Volume:	1,850 vehicles	3		He	avy Truc	cks (3+	Axles):	15			
Ve	ehicle Speed:	50 mph			/ehicle	Mix						
Near/Far La	ane Distance:	70 feet				icleType	,	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		9.6%	_	
	arrier Height:	0.0 feet			М	edium Ti		84.8%		10.3%		
Barrier Type (0-V	•	0.0 leet 0.0				Heavy Ti		86.5%		10.8%	0.74%	
• • •	ist. to Barrier:	100.0 feet										
Centerline Dist.		100.0 feet		1	Voise S	ource El			eet)			
Barrier Distance		0.0 feet				Autos		2.000				
Observer Height		5.0 feet				m Trucks		1.000	0 , 4 ,		0.0	
_	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0	
	oad Elevation:	0.0 feet		I	ane Eq	uivalent	t Dista	nce (in	feet)			
	Road Grade:	0.0%				Autos	s: 9:	3.723				
	Left View:	-90.0 degree	es		Mediu	m Trucks	s: 90	3.680				
	Right View:	90.0 degree	es		Heav	y Truck	s: 93	3.723				
FHWA Noise Mod	del Calculation	s										
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos.	70.20	0.26		-4.20)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks.	81.00	-16.98		-4.19)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks.	85.38	-20.93		-4.20)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barrie	r atten	uation)							
VehicleType	Leq Peak Hou			Leq E	ening/	Leq	Night		Ldn	C	NEL	
Autos.	65	5.1	63.2		61.4		55	.4	64.0)	64.6	
Medium Trucks.			57.1		50.8		49		57.7		57.9	
Heavy Trucks.	59).1	57.6		48.6		49	.8	58.2	2	58.3	
Vehicle Noise.	66	5.8	65.0		62.0		57	.2	65.7	7	66.2	
Centerline Distan	ice to Noise C	ontour (in feet)									
				70 c			dBA	6	60 dBA		dBA	
			Ldn:	52	2	1	12		241	5	19	

CNEL:

56

259

120

558

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy. Job Number: 8141 Road Segment: w/o Culver Dr. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	27,200 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,720 vehicle	es		Hea	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		V	ehicle I	Miy					
Near/Far La	ne Distance:	76 feet				icleType	e e	Day	Evening	Night	Daily
Site Data					V 0/1/		Autos:	77.5%	J	9.6%	-
	wwiew Heierlet.	0.0 foot			Ме	edium T		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet									
Centerline Dist.		100.0 feet		N	oise So	urce E	levatio	ns (in fe	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
					Mediur	n Truck	s: 4	1.000			
Observer Height	ad Elevation:	5.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment.	0.0
	ad Elevation: ad Elevation:	0.0 feet 0.0 feet		1	ane Fai	uivalen	t Dista	nce (in f	foot)		
	Road Grade:	0.0 feet 0.0%			une Eqe	Auto		2.547	1001)		
	Left View:				Modiur	Auto n Truck	_	2.504			
	Right View:	-90.0 degre				ry Truck		2.547			
	Rigiti view.	90.0 degre	es		i icav	y IIUCK	S. 32	2.547			
FHWA Noise Mod	lel Calculation	ns									
VehicleType	REMEL	Traffic Flow	Distar	се	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	2 1.15		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.09		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.05		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	our Leq Day	y Le	eq Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	6	9.1	67.2		65.4		59	.3	68.0)	68.6
Medium Trucks:	6	2.3	60.8		54.4		52	.9	61.3	3	61.6
Heavy Trucks:	6	2.0	60.5		51.5		52	.8	61.1	1	61.2
Vehicle Noise:	7	0.5	68.8		65.9		60	.9	69.5	5	70.0

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	92	199	429	925
CNEL:	100	215	462	996

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I		NOISE MODEL INPUTS								
Highway Data			Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt):	29,300 vehicles	S			Autos:	15				
Peak Hour Percentage:	10%		Me	dium Trucks (2 Axles):	15				
Peak Hour Volume:	2,930 vehicles	S	He	avy Trucks (3	+ Axles):	15				
Vehicle Speed:	55 mph		Vehicle	Miv						
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data				Autos:	•	J	9.6%	97.42%		
Barrier Height:	0.0 feet		M	edium Trucks:			10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0 1661			leavy Trucks:			10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet									
Centerline Dist. to Observer:	100.0 feet		Noise So	ource Elevation		eet)				
Barrier Distance to Observer:	0.0 feet			Autos:	2.000					
Observer Height (Above Pad):	5.0 feet			m Trucks:	4.000					
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0		
Road Elevation:	0.0 feet		Lane Eq	uivalent Dista	ance (in	feet)				
Road Grade:	0.0%			Autos: 9	 96.607					
Left View:	-90.0 degree	es	Mediu		96.566					
Right View:	90.0 degree		Heav		96.608					
FHWA Noise Model Calculation						5		•		
VehicleType REMEL	Traffic Flow	Distance				Barrier Att		m Atten		
Autos: 71.78			.39	-1.20	-4.87		000	0.000		
Medium Trucks: 82.40			.39	-1.20	-4.97		000	0.000		
Heavy Trucks: 86.40	-19.35	-4.	.39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)							
VehicleType Leq Peak Ho	our Leq Day	Leq	Evening	Leq Night		Ldn	CI	VEL		
Autos: 6	8.0	66.1	64.4	5	8.3	66.9	9	67.5		
Medium Trucks: 6	1.4	59.9	53.6	5	2.0	60.5	5	60.7		
Heavy Trucks: 6	1.5	60.0	51.0	5	2.2	60.6	3	60.7		
Vehicle Noise: 6	9.6	67.8	64.9	6	0.0	68.6	6	69.0		
Centerline Distance to Noise C	Contour (in feet)								

70 dBA

80

86

Ldn: CNEL: 65 dBA

173

186

60 dBA

373

401

55 dBA

803

864

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o W. Yale Loop

Job Number: 8141

Analyst: B. Lawson

Highway Data Average Daily Traffic (Adt): 2 Peak Hour Percentage: Peak Hour Volume: Vehicle Speed: Near/Far Lane Distance: Site Data	28,200 vehicles 10% 2,820 vehicles 55 mph 52 feet		Med	ditions (Hard	Autos:	15		
Peak Hour Percentage: Peak Hour Volume: Vehicle Speed: Near/Far Lane Distance:	10% 2,820 vehicles 55 mph							
Peak Hour Volume: Vehicle Speed: Near/Far Lane Distance:	2,820 vehicles 55 mph	6			(2 Axles):			
Vehicle Speed: Near/Far Lane Distance:	55 mph	5	Hea		2 / 1000).	15		
Near/Far Lane Distance:	•			avy Trucks (3	3+ Axles):	15		
	52 feet		Vehicle N	/lix				
Site Data				cleType	Day	Evening	Night	Daily
One Data				Autos			9.6%	97.42%
Barrier Height:	0.0 feet		Ме	dium Trucks	: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		H	leavy Trucks	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		Noise Co	uras Eleveti	ana (in f	204)		
Centerline Dist. to Observer:	100.0 feet		Noise 30	urce Elevati	•	et)		
Barrier Distance to Observer:	0.0 feet		N 4 a alia wa	Autos:	2.000			
Observer Height (Above Pad):	5.0 feet			n Trucks:	4.000	Crada Ad	iuotmant	0.0
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	usimeni.	0.0
Road Elevation:	0.0 feet		Lane Equ	ıivalent Dist	ance (in	feet)		
Road Grade:	0.0%			Autos:	96.607			
Left View:	-90.0 degree	es	Mediun	n Trucks:	96.566			
Right View:	90.0 degree		Heav	y Trucks:	96.608			
FHWA Noise Model Calculations	s							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos: 71.78	1.68	-4.3	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.40	-15.56	-4.3	39	-1.20	<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks: 86.40	-19.51	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	out Topo and	barrier atte	nuation)					
VehicleType Leq Peak Hou	ır Leq Day	Leq E	Evening	Leq Night		Ldn	CI	VEL
Autos: 67	.9	66.0	64.2	5	8.1	66.8	3	67.4
Medium Trucks: 61.	.3	59.7	53.4	5	1.8	60.3	3	60.5
Heavy Trucks: 61	.3	59.9	50.8	5	2.1	60.4	1	60.6
Vehicle Noise: 69	.4	67.7	64.7	5	9.9	68.4	1	68.9

70 dBA

78

84

Ldn:

CNEL:

65 dBA

169

182

60 dBA

363

391

55 dBA

783

842

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Lake Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE MODI	EL INPUTS	S	
Highway Data			Site Condition:	s (Hard = 10, S	oft = 15)		
Average Daily Traffic (Adt):	26,400 vehicle	S		Autos	: 15		
Peak Hour Percentage:	10%		Medium T	rucks (2 Axles)	: 15		
Peak Hour Volume:	2,640 vehicles	s	Heavy Tru	ucks (3+ Axles)	: 15		
Vehicle Speed:	55 mph		Vehicle Mix				
Near/Far Lane Distance:	52 feet		VehicleTyp	e Day	Evening	Night	Daily
Site Data			vomotoryp	Autos: 77.5%	J	9.6%	
Barrier Height:	0.0 feet		Medium			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			Heavy	Trucks: 86.5%		10.8%	0.74%
Centerline Dist. to Barrier:							
Centerline Dist. to Observer.			Noise Source E	Elevations (in	feet)		
Barrier Distance to Observer:			Auto	os: 2.000			
			Medium Truc	ks: 4.000			
Observer Height (Above Pad):			Heavy Truc	ks: 8.006	Grade Adj	ustment:	0.0
Pad Elevation:	0.0		Lane Equivalent Distance (in feet)				
Road Elevation:			Auto	•	icel)		
Road Grade:							
Left View:			Medium Truc				
Right View:	90.0 degree	es	Heavy Truc	ks: 96.608			
FHWA Noise Model Calculation	ons						
VehicleType REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos: 71.7	78 1.39	-4.3	9 -1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	-15.84	-4.3	9 -1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	-19.80	-4.3	9 -1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atter	nuation)				
VehicleType Leq Peak H	lour Leq Day	/ Leq E	vening Led	n Night	Ldn	CI	VEL
	67.6	65.7	63.9	57.9	66.5		67.1
Autos:	07.0	03.7	05.5	37.3	00.0	,	07.1

Vehicle Noise:	69.2	67.4	64.4	59.6	68.1	68.6
Centerline Distance to	Noise Contour (in f	feet)				
			70 dBA	65 dBA	60 dBA	55 dBA
		Ldn:	75	161	348	749
		CNEL:	81	174	374	806

50.5

51.8

60.1

60.3

59.6

Heavy Trucks:

61.0

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Creek Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA	4			N	IOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	25,400 vehic	cles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,540 vehic	cles		He	avy Trud	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		1	Vehicle I	Mix					
Near/Far La	ne Distance:	52 feet				icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
Ra	rrier Height:	0.0 fee			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	•		F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet		_	Voise So	ourco E	lovatio	nc (in f	201		
Centerline Dist.	to Observer:	100.0 feet		<u>'</u>	VOISE SC	Auto		2.000	(C I)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auto n Truck		1.000			
Observer Height ((Above Pad):	5.0 feet					_		Grade Ad	iustmont	. 0 0
Pa	ad Elevation:	0.0 feet			пеач	y Truck	S. C	3.006	Grade Auj	justinent	. 0.0
Ros	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 deg	rees		Mediui	n Truck	s: 96	6.566			
	Right View:	90.0 deg	rees		Heav	y Truck	s: 96	6.608			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flov	v D	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.2	23	-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.0)1	-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.9	97	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo ai	nd barr	ier atten	uation)						
VehicleType	Leq Peak Hou	ur Leq E	ay	Leq Ev	ening/	Leq	Night		Ldn	C	NEL
Autos:	67	' .4	65.5		63.7		57	.7	66.3	3	66.9
Medium Trucks:	60).8	59.3		52.9		51	.4	59.8	3	60.1
Heavy Trucks:	60).8	59.4	·	50.4		51	.6	60.0)	60.1
Vehicle Noise:	69	0.0	67.2		64.3		59	.4	68.0)	68.4
Centerline Distant	ce to Noise Co	ontour (in fe	et)	1	,						
				70 a	<i>IBA</i>	65	dBA	ϵ	60 dBA	55	dBA

73

79

Ldn: CNEL: 157

169

339

365

730

786

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: w/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISI	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	d = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	30,300 vehicle	S			Autos:	15		
Peak Hour Percentage:			Me	dium Trucks (2 Axles):	15		
Peak Hour Volume:	3,030 vehicle	S	He	avy Trucks (3	+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle	N <i>i</i> lisz				
Near/Far Lane Distance:	•				Dov	Funning	Niaht	Doily
Site Date			veri	icleType	Day	Evening	Night	Daily
Site Data				Autos:			9.6%	97.42%
Barrier Height:				edium Trucks.			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			<i>'</i>	Heavy Trucks.	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier.			Noise So	ource Elevati	ons (in f	eet)		
Centerline Dist. to Observer.				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet			y Trucks:	8.006	Grade Ad	iustment:	0.0
Pad Elevation:	0.0 feet							
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist	•	feet)		
Road Grade:	0.0%				96.607			
Left View:	-90.0 degre	es	Mediu	m Trucks:	96.566			
Right View.	90.0 degre	es	Heav	y Trucks:	96.608			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	'8 1.99	-4	.39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -15.25	-4	.39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	-19.20	-4	.39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	68.2	66.3	64.5	5	8.5	67.1	1	67.7
Medium Trucks:	61.6	60.1	53.7	5	2.2	60.6	6	60.8
Heavy Trucks:	61.6	60.2	51.1	5	2.4	60.7	7	60.9
Vehicle Noise:	69.8	68.0	65.0	6	0.2	68.7	7	69.2
Centerline Distance to Noise	Contour (in feet)						

CNEL:	88	190	410	884

Ldn:

70 dBA

82

65 dBA

177

60 dBA

381

55 dBA

822

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Jeffrey Rd. and Royal Oak

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOI	SE MODE	L INPUT	S	
Highway Data				Site Cond	ditions (Ha	rd = 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	23,700 vehicles	;			Autos:	15		
Peak Hour	Percentage:	10%		Med	dium Trucks	s (2 Axles):	15		
Peak H	Hour Volume:	2,370 vehicles	;	Hea	avy Trucks	(3+ Axles):	15		
Ve	ehicle Speed:	55 mph		Vehicle N	Niv				
Near/Far La	ane Distance:	52 feet			cleType	Day	Evening	Night	Daily
Site Data					Auto			9.6%	•
Ra	rrier Height:	0.0 feet		Me	dium Truck	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0		Н	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%
, ,	ist. to Barrier:	100.0 feet							
Centerline Dist.		100.0 feet		Noise So	urce Eleva		eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height		5.0 feet			n Trucks:	4.000			
	Pad Elevation:	0.0 feet		Heav	/ Trucks:	8.006	Grade Ad	justment.	0.0
	ad Elevation: ad Elevation:	0.0 feet		Lane Equ	ivalent Dis	stance (in	feet)		
710	Road Grade:	0.0%		<u> </u>	Autos:	96.607	,		
	Left View:	-90.0 degree	ie.	Mediun	n Trucks:	96.566			
	Right View:	90.0 degree			/ Trucks:	96.608			
	rugin viow.	oo.o degree	.5		,	00.000			
FHWA Noise Mod	lel Calculation	s							
VehicleType	REMEL	Traffic Flow	Distance	Finite I	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.92	-4.3	9	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.31	-4.3	9	-1.20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks:	86.40	-20.27	-4.3	9	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and I	barrier atten	nuation)					
VehicleType	Leq Peak Hou			vening	Leq Nigi	ht	Ldn	CI	VEL
A (_ O	00.4		F7 A	00.0	`	00.0

Unmitigated Nois	e Levels (withou	it Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	67.1	65.2	63.4	57.4	66.0	66.6
Medium Trucks:	60.5	59.0	52.6	51.1	59.5	59.8
Heavy Trucks:	60.5	59.1	50.1	51.3	59.7	59.8
Vehicle Noise:	68.7	66.9	64.0	59.1	67.7	68.1

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	70	150	324	697							
CNEL:	75	162	348	750							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Royal Oak and Valley Oak

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOISI	E MODE	L INPUT	S	
Highway Data				Site Condi	tions (Hard	d = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	21,200 vehicles	S			Autos:	15		
Peak Hou	r Percentage:	10%		Mediu	ım Trucks (2 Axles):	15		
Peak I	Hour Volume:	2,120 vehicles	S	Heav	y Trucks (3	+ Axles):	15		
Ve	ehicle Speed:	55 mph		Vehicle Mix	,				
Near/Far La	ane Distance:	52 feet		Vehicle		Day	Evening	Night	Daily
Site Data				70711010	Autos:			9.6%	
Re	arrier Height:	0.0 feet		Medi	um Trucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0		Hea	avy Trucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet							
Centerline Dist.		100.0 feet		Noise Soul		•	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
		5.0 feet		Medium	Trucks:	4.000			
Observer Height	(Above Pau). Pad Elevation:			Heavy	Trucks:	8.006	Grade Ad	justment.	. 0.0
	ad Elevation:	0.0 feet 0.0 feet		Lane Equiv	alent Dist	ance (in	feet)		
AC.				Lanc Lyan		96.607	1001)		
	Road Grade:	0.0%		A.4 - 11					
	Left View:	-90.0 degree		Medium 1		96.566			
	Right View:	90.0 degree	es	Heavy	Trucks: 9	96.608			
FHWA Noise Mod	del Calculation	าร							
VehicleType	REMEL	Traffic Flow	Distance	Finite Ro	oad Fre	esnel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.44	-4.3	39 -	1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.80	-4.3	39 -	1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.75	-4.3	39 -	1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	NEL
Autos:	6		64.7	63.0	5	6.9	65.5	5	66.1
Medium Trucks	. 6	0.0	58 5	52.1	5	0.6	50 1	1	50.3

Unmitigated Nois	e Levels (withou	t Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	66.6	64.7	63.0	56.9	65.5	66.1
Medium Trucks:	60.0	58.5	52.1	50.6	59.1	59.3
Heavy Trucks:	60.0	58.6	49.6	50.8	59.2	59.3
Vehicle Noise:	68.2	66.4	63.5	58.6	67.2	67.6

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	65	139	301	647						
CNEL:	70	150	323	697						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: w/o Sand Canyon Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Co.	nditions (H	ard = 10, So	oft = 15)		
Average Daily	Traffic (Adt):	21,100 vehicle	es			Autos:	15		
Peak Hour	r Percentage:	10%		M	edium Truck	s (2 Axles):	15		
Peak I	Hour Volume:	2,110 vehicle	es	H	eavy Trucks	(3+ Axles):	15		
Ve	ehicle Speed:	60 mph		Vehicle	Mix				
Near/Far La	ane Distance:	76 feet			hicleType	Day	Evening	Night	Daily
Site Data					Aut		J	9.6%	-
Ba	nrrier Height:	0.0 feet		N	ledium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0			Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		Noise S	ource Elev	otions (in f	204)		
Centerline Dist.	to Observer:	100.0 feet		Noise 3		•	eet)		
Barrier Distance	to Observer:	0.0 feet		A 4 = =!:	Autos:	2.000			
Observer Height		5.0 feet			ım Trucks:	4.000	0 - 4 - 4 - 4		0.0
_	Pad Elevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adj	ustment:	0.0
Ro	ad Elevation:	0.0 feet		Lane Ed	quivalent D	istance (in	feet)		
	Road Grade:	0.0%			Autos:	92.547			
	Left View:	-90.0 degre	es	Mediu	ım Trucks:	92.504			
	Right View:	90.0 degre		Hea	vy Trucks:	92.547			
FHWA Noise Mod			5		5 .		5		
VehicleType	REMEL	Traffic Flow	Distance			Fresnel	Barrier Att		m Atten
Autos:	_			.11	-1.20	-4.87		000	0.000
Medium Trucks:				.11	-1.20	-4.97	0.0		0.000
Heavy Trucks:	87.33	3 -21.15	-4	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier att	enuation)					
VehicleType	Leq Peak Ho	our Leq Day	y Leq	Evening	Leq Nig	ght	Ldn	CI	VEL
Autos:	6	7.9	66.1	64.3	3	58.2	66.9)	67.5
Medium Trucks:	6	1.2	59.7	53.3	3	51.8	60.2	2	60.5
Heavy Trucks:	6	0.9	59.4	50.4	1	51.7	60.0)	60.1
Vehicle Noise:	6	9.4	67.7	64.8	3	59.8	68.4	1	68.9

Centerline Distance to Noise Contour (in feet)	70 dBA 65 dBA 60 dBA 55 dBA Ldn: 78 168 362 781								
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	78	168	362	781					
CNEL:	84	181	390	841					

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Sand Canyon. Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA			N	OISE MODE	L INPUT	S	
Highway Data				Site Cor	nditions (Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	32,000 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Me	edium True	cks (2 Axles):	15		
Peak H	lour Volume:	3,200 vehicles	S	He	eavy Truck	ks (3+ Axles):	15		
Ve	hicle Speed:	60 mph		Vehicle	Mix				
Near/Far La	ne Distance:	76 feet			nicleType	Day	Evening	Night	Daily
Site Data						utos: 77.5%	_	9.6%	-
	rrier Height:	0.0 feet		М	ledium Tru			10.3%	1.84%
Barrier Type (0-W	•	0.0			Heavy Tru	ucks: 86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet					- 41		
Centerline Dist.		100.0 feet		Noise S		evations (in f	eet)		
Barrier Distance		0.0 feet			Autos.				
Observer Height (5.0 feet			m Trucks.				
•	ad Elevation:	0.0 feet		Hea	vy Trucks.	8.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 feet		Lane Eq	uivalent	Distance (in	feet)		
	Road Grade:	0.0%			Autos.	: 92.547	-		
	Left View:	-90.0 degree	es	Mediu	m Trucks.	: 92.504			
	Right View:	90.0 degree		Hea	vy Trucks.	92.547			
FHWA Noise Mod	el Calculation	ıs							
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	73.22	1.85	-4	.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-15.39	-4	.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-19.34	-4	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier att	enuation)					
VehicleType	Leq Peak Ho	ur Leq Day	Leq	Evening	Leq N	light	Ldn	CI	VEL
Autos:	69	9.8	67.9	66.1		60.0	68.7	7	69.3
Medium Trucks:	63	3.0	61.5	55.1		53.6	62.0)	62.3
Heavy Trucks:	62	2.7	61.2	52.2	·	53.5	61.8	3	61.9

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	103	222	478	1,031
CNFI ·	111	239	515	1 110

66.6

61.6

70.2

70.7

69.5

Vehicle Noise:

71.2

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: e/o Laguna Canyon Rd.

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				Si	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Peak Hou	Traffic (Adt): Percentage: Hour Volume:	19,300 vehicl 10% 1,930 vehicl					•	Autos: Axles): Axles):			
Near/Far La	ehicle Speed: ane Distance:	55 mph 52 feet		Ve	ehicle I Vehi	Mix cleType)	Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%		9.6%	
Barrier Type (0-V	Nall , 1-Berm):	0.0 feet 0.0				edium Ti leavy Ti		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline D	ist. to Barrier:	100.0 feet		N	oise So	urce El	levatio	ns (in fe	eet)		
Ro	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustme Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608					justment	0.0	
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.00	3	-4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40) -17.2°	1	-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21.10	6	-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	d barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	our Leq Da	ny Le	eq Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	_	6.2	64.3		62.6		56	_	65.1		65.7
Medium Trucks:		9.6	58.1		51.7		50.		58.7		58.9
Heavy Trucks:	59	9.6	58.2		49.2		50.	.4	58.8	3	58.9
Vehicle Noise:	6	7.8	66.0		63.1		58	.2	66.8	3	67.2

Centerline Distance to Noise Contour (in feet)	70 dBA 65 dBA 60 dBA 55 dBA Ldn: 61 131 282 608								
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	61	131	282	608					
CNEL:	65	141	304	654					

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Pacifica and Banting

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DAT	Γ Α			NO	ISE MODE	L INPUT	s	
Highway Data				S	ite Con	ditions (H	lard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	20,400 veh	icles				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truci	ks (2 Axles):	15		
Peak H	lour Volume:	2,040 veh	icles		He	avy Trucks	s (3+ Axles):	15		
Ve	hicle Speed:	55 mp	h	V	ehicle l	Mix				
Near/Far La	ne Distance:	52 fee	t			icleType	Day	Evening	Night	Daily
Site Data						Au	tos: 77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 fe	ot .		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	GL		ŀ	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 fe	et	A.	oioo C	ower Flor	rationa (in f	41		
Centerline Dist.	to Observer:	100.0 fee	et	//	oise so		rations (in f	eet)		
Barrier Distance	to Observer:	0.0 fe				Autos:	2.000			
Observer Height		5.0 fe				m Trucks:	4.000			
	ad Elevation:	0.0 fe			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
	ad Elevation: ad Elevation:	0.0 fe		L	Lane Equivalent Distance (in fee					
	Road Grade:	0.0%				Autos:	96.607			
	Left View:	-90.0 de	arees		Mediu	m Trucks:	96.566			
	Right View:	90.0 de	•		Heav	y Trucks:	96.608			
FHWA Noise Mod	el Calculation	ıs								
VehicleType	REMEL	Traffic Flo	ow D	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	0	.27	-4.39		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16	5.96	-4.39		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20	.92	-4.39		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo a	and barr	ier attenu	ation)					
VehicleType	Leq Peak Ho	ur Leq	Day	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	66	6.5	64.6		62.8		56.7	65.4	4	66.0
Medium Trucks:	59	8.0	58.3		52.0		50.4	58.9	9	59.1
Heavy Trucks:	59	0.9	58.5		49.4		50.7	59.0)	59.2
Vehicle Noise:	68	3.0	66.3		63.3		58.4	67.0)	67.5
Contorlino Distan	co to Noiso C	ontour (in	foot)							

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	63	136	293	631
CNEL:	68	146	315	679

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: w/o Meridian

Job Number: 8141

Analyst: B. Lawson

SITE SPECIF	IC INF	PUT DATA				1	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily Traffic (A	Adt): 17	7,800 vehicles	S					Autos:	15		
Peak Hour Percenta	age:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak Hour Volu	ıme: 1	1,780 vehicles	S		He	avy Tru	icks (3+	Axles):	15		
Vehicle Spe	eed:	55 mph		1	/ehicle l	Miy					
Near/Far Lane Distar	nce:	52 feet				icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Barrier Hei	aht:	0.0 feet			Ме	edium 7	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Be	_	0.0 leet 0.0			F	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Bar	,	100.0 feet									
Centerline Dist. to Obser		100.0 feet		^	Voise So			ns (in fe	et)		
Barrier Distance to Obser		0.0 feet				Auto		2.000			
Observer Height (Above P		5.0 feet				n Truck	_	1.000			
Pad Elevai	,	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment:	0.0
Road Elevai		0.0 feet		L	ane Eg	uivalen	t Dista	nce (in f	eet)		
Road Gra		0.0%				Auto		5.607			
Left V		-90.0 degree	25		Mediui	n Truck		3.566			
Right V		90.0 degree				y Truck		6.608			
3											
FHWA Noise Model Calcul											
VehicleType REMI		Traffic Flow	Di	stance	Finite		Fres	snel	Barrier Att	en Ber	m Atten
	71.78	-0.32		-4.39		-1.20		-4.87		000	0.000
	82.40	-17.56		-4.39		-1.20		-4.97		000	0.000
Heavy Trucks:	86.40	-21.51		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels	(witho	ut Topo and	barri	er atteni	uation)						
VehicleType Leq Pea	ak Hour	Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	65.9)	64.0		62.2		56	.1	64.8	3	65.4
Medium Trucks:	59.3	3	57.7		51.4		49	.8	58.3	3	58.5
Heavy Trucks:	59.3	3	57.9		48.8		50	.1	58.4	1	58.6
Vehicle Noise:	67.4	1	65.7		62.7		57	.9	66.4	4	66.9
Centerline Distance to No.	ise Cor	ntour (in feet)								
		<u> </u>		70 d	IBA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

58

62

124

134

267

288

576

620

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: b/w Meridian and ICD

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				NOI	SE MODE	L INPUT	S	
Highway Data				S	ite Cond	itions (Ha	ard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	17,900 vehicle	S				Autos:	15		
Peak Hour	Percentage:	10%			Medi	um Truck	s (2 Axles):	15		
Peak H	lour Volume:	1,790 vehicle	S		Heav	y Trucks	(3+ Axles):	15		
Ve	hicle Speed:	60 mph		ν	ehicle Mi	i x				
Near/Far La	ne Distance:	76 feet				leType	Day	Evening	Night	Daily
Site Data						Auto			9.6%	•
Ra	rrier Height:	0.0 feet			Med	lium Truci	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			He	avy Truci	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Di	,	100.0 feet		N	oise Sou	rce Eleva	ations (in f	eet)		
Centerline Dist.	to Observer:	100.0 feet				Autos:	2.000			
Barrier Distance	to Observer:	0.0 feet			Medium		4.000			
Observer Height ((Above Pad):	5.0 feet				Trucks:	8.006	Grade Ad	iustment	. 0 0
Pa	ad Elevation:	0.0 feet			Heavy	TTUCKS.	0.000	Orado riaj	, a o ti i i o i i t	0.0
Roa	ad Elevation:	0.0 feet		L	ane Equi	valent Di	stance (in	feet)		
	Road Grade:	0.0%				Autos:	92.547			
	Left View:	-90.0 degre	es		Medium	Trucks:	92.504			
	Right View:	90.0 degre	es		Heavy	Trucks:	92.547			
FHWA Noise Mod	el Calculatior	18								
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite R	oad	Fresnel	Barrier Att	en Ber	m Atten
Autos:	73.22	-0.67		-4.11		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-17.91		-4.11		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-21.87		-4.11		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	nout Topo and	barrie	r attenu	ation)					
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Eve	ening	Leq Nig	ıht	Ldn	CI	VEL
Autos:	67	7.2	65.3		63.6		57.5	66.1	1	66.7
Medium Trucks:	60	0.5	59.0		52.6		51.0	59.5	5	59.7
Heavy Trucks:	60	0.1	58.7		49.7		50.9	59.3	3	59.4

Centerline Distance to Noise Contour (in feet)	tance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 70 151 325 700										
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	70	151	325	700							
CNEL:	75	162	350	754							

64.1

66.9

67.7

59.1

68.2

Vehicle Noise:

68.7

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Alton Pkwy. Job Number: 8141 Road Segment: b/w Enterprise and Gateway Bl. Analyst: B. Lawson

SITE SPE	CIFIC INF	PUT DATA				NC	DISE N	10DE	L INPUT	S	
Highway Data					Site Con	ditions (l	Hard =	10, So	ft = 15)		
Average Daily Traff	fic (Adt): 37	7,500 vehicles	3				,	Autos:	15		
Peak Hour Perd	centage:	10%			Me	dium Truc	cks (2 A	xles):	15		
Peak Hour	Volume: 3	3,750 vehicles	3		He	avy Truck	rs (3+ A	xles):	15		
Vehicle	Speed:	60 mph		,	Vehicle l	Miv					
Near/Far Lane D	istance:	76 feet				icleType		Day	Evening	Night	Daily
Site Data								77.5%		9.6%	-
	Height:	0.0 feet			Ме	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1	_	0.0 reet 0.0				leavy Tru		86.5%		10.8%	0.74%
Centerline Dist. to	,	100.0 feet									
Centerline Dist. to O		100.0 feet		1	Noise So	ource Ele		•	et)		
Barrier Distance to O		0.0 feet				Autos:		000			
Observer Height (Abo		5.0 feet				n Trucks:		000			
• ,	levation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Adj	iustment:	0.0
	levation: levation:	0.0 feet			Lane Eq	uivalent l	Distand	e (in f	eet)		
	d Grade:	0.0%			-	Autos:		•			
	eft View:	-90.0 degree	es		Mediui	n Trucks:					
Rig	ıht View:	90.0 degree			Heav	y Trucks:	92.5	547			
FHWA Noise Model Ca											
		Traffic Flow	Dis	stance	Finite		Fresn		Barrier Atte		m Atten
Autos:	73.22	2.54		-4.1		-1.20		-4.87		000	0.000
Medium Trucks:	83.68	-14.70		-4.1	-	-1.20		-4.97	0.0		0.000
Heavy Trucks:	87.33	-18.65		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Le	vels (withou	ut Topo and I	barri	er atten	uation)						
VehicleType Leq	Peak Hour	Leq Day		Leq E	vening	Leq N	light		Ldn	CI	VEL
Autos:	70.4	. 6	8.5		66.8		60.7		69.3	3	70.0
Medium Trucks:	63.7	'	52.2		55.8		54.3		62.7	7	63.0
Heavy Trucks:	63.4		31.9		52.9		54.1		62.5	5	62.6
Vehicle Noise:	71.9)	70.2		67.3		62.3		70.9)	71.4
Centerline Distance to	Noise Con	ntour (in feet))								
L		· · · · · ·		70 c	dBA	65 di	BA	6	0 dBA	55	dBA

115

123

Ldn: CNEL: 247

266

532

573

1,145

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Enterprise and I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DAT	ΓA			NO	ISE MODE	L INPUT	S	
Highway Data				S	Site Con	ditions (H	ard = 10, So	oft = 15)		
Average Daily	Traffic (Adt):	52,000 veh	nicles				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truck	ks (2 Axles):	15		
Peak I	lour Volume:	5,200 veh	nicles		He	avy Trucks	s (3+ Axles):	15		
	ehicle Speed:	60 mp		ν	/ehicle l	Mix				
Near/Far La	ane Distance:	76 fee	t		Vehi	icleType	Day	Evening	Night	Daily
Site Data						Aut	tos: 77.5%	12.9%	9.6%	97.42%
Ва	rrier Height:	0.0 fe	et		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline D	ist. to Barrier:	100.0 fe	et	^	loise Sc	ource Elev	ations (in f	eet)		
Centerline Dist.	to Observer:	100.0 fe	et		-0.00	Autos:	2.000			
Barrier Distance	to Observer:	0.0 fe	et		Mediur	n Trucks:	4.000			
Observer Height	(Above Pad):	5.0 fe	et			y Trucks:	8.006	Grade Ad	iustment:	0.0
F	ad Elevation:	0.0 fe	et		Heav	y Trucks.	0.000	Orado riaj	dourion.	0.0
Ro	ad Elevation:	0.0 fe	et	L	ane Eq	uivalent D	istance (in	feet)		
	Road Grade:	0.0%				Autos:	92.547			
	Left View:	-90.0 de	grees		Mediur	n Trucks:	92.504			
	Right View:	90.0 de	egrees		Heav	y Trucks:	92.547			
FHWA Noise Mod	lel Calculation	18								
VehicleType	REMEL	Traffic Flo	ow Dis	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	73.22	2 3	3.96	-4.11	•	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-13	3.28	-4.11		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-17	7.23	-4.11		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout Topo a	and barri	er attenu	uation)					
VehicleType	Leq Peak Ho	ur Leq	Day	Leq Ev	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	7	1.9	70.0		68.2		62.1	70.8	3	71.4
Medium Trucks:	6	5.1	63.6		57.2		55.7	64.1	l	64.4
Heavy Trucks:	64	4.8	63.4		54.3		55.6	63.9	9	64.1
Vehicle Noise:	7:	3.3	71.6		68.7		63.7	72.3	3	72.8

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	142	307	661	1,424								
CNEL:	153	331	712	1,534								

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Alton Pkwy. Job Number: 8141 Road Segment: b/w I-5 NB Ramps and Technology Dr. W Analyst: B. Lawson

SITE		NOISE MODEL INPUTS									
Highway Data				;	Site Con	ditions (Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	53,900 vehicle	s				,	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	(xles	15		
Peak H	lour Volume:	5,390 vehicle	s		He	avy Truck	ks (3+ A	(xles	15		
Ve	hicle Speed:	60 mph		,	Vehicle l	Miv					
Near/Far La	ne Distance:	76 feet				icleType		Day	Evening	Night	Daily
Site Data					7011			77.5%	J	9.6%	-
	rrior Hoimbt.	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 feet 0.0				Heavy Tru		86.5%		10.8%	0.74%
Centerline Dis		0.0 100.0 feet									
Centerline Dist.		100.0 feet		1	Noise So	ource Ele	evation	s (in fe	eet)		
Barrier Distance		0.0 feet				Autos.		000			
Observer Height (5.0 feet				m Trucks.		000			
• ,	ad Elevation:	0.0 feet			Heav	y Trucks.	: 8.0	006	Grade Adj	iustment:	0.0
	ad Elevation: ad Elevation:	0.0 feet		1	Lane Eg	uivalent	Distan	ce (in t	eet)		
	Road Grade:	0.0%			<u> </u>	Autos.		•			
•	Left View:	-90.0 degree	es		Mediui	m Trucks.					
	Right View:	90.0 degree			Heav	y Trucks.	92.	547			
FHWA Noise Mod		_									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite		Fresn		Barrier Atte		m Atten
Autos:	73.22	4.12		-4.1		-1.20		-4.87		000	0.000
Medium Trucks:	83.68	-13.12		-4.1°	-	-1.20		-4.97	0.0		0.000
Heavy Trucks:	87.33	-17.08		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	ier atten	uation)						
VehicleType	Leq Peak Hou			Leq E	vening	Leq ∧	light		Ldn	CI	VEL
Autos:	72	2.0	70.1		68.4		62.3	}	70.9	9	71.5
Medium Trucks:	65	5.3	63.7		57.4		55.8	}	64.3	3	64.5
Heavy Trucks:	64	.9	63.5		54.5		55.7		64.1	<u> </u>	64.2
Vehicle Noise:	73	3.5	71.7		68.9		63.9)	72.5	5	72.9
Centerline Distant	ce to Noise Co	ontour (in feet)								
<u> </u>		· · · · · ·		70 d	dBA	65 d	BA .	6	0 dBA	55	dBA

146

157

Ldn:

CNEL:

314

339

677

729

1,459

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Techonology Dr. W and Ada

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS								
Highway Data				Site C	Conditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	40,700 vehicle	S				Autos:	15		
Peak Hour	Percentage:	10%			Medium Tr	rucks (2	Axles):	15		
Peak H	lour Volume:	4,070 vehicle	s		Heavy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	60 mph		Vehic	le Mix					
Near/Far La	ne Distance:	76 feet			/ehicleType	9	Day	Evening	Night	Daily
Site Data						Autos:	77.5%	_	9.6%	_
Ra	rrier Height:	0.0 feet			Medium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet		A/	0	·	(* f	4)		
Centerline Dist.		100.0 feet		NOISE	Source E			eet)		
Barrier Distance	to Observer:	0.0 feet			Auto		2.000			
Observer Height		5.0 feet			dium Truck		.000	0		. 0.0
Pad Elevation: 0.0 feet			Heavy Trucks: 8.006 Grade Adjus						: 0.0	
	ad Elevation:	0.0 feet		Lane	Equivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%			Auto	s: 92	2.547			
	Left View:	-90.0 degre	es	Med	dium Truck	rs: 92	2.504			
	Right View:	90.0 degre		Н	eavy Truck	rs: 92	2.547			
FHWA Noise Mod	el Calculation	18								
VehicleType	REMEL	Traffic Flow	Distanc	e Fir	nite Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.90	-4	4.11	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.34	-4	4.11	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.30	-4	4.11	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo and	barrier at	tenuatio	n)					
VehicleType	Leq Peak Ho	ur Leq Day	/ Led	g Evening	g Leq	Night		Ldn	C	NEL
Autos:	70	0.8	68.9	6	7.1	61	.1	69.7	7	70.3
Medium Trucks:	64	4.0	62.5	56	6.2	54	.6	63.1	1	63.3
Heavy Trucks:	6:	3.7	62.3	5	3.3	54	.5	62.9	9	63.0

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	121	261	561	1,210								
CNEL:	130	281	605	1,303								

67.6

62.7

71.2

71.7

70.5

Vehicle Noise:

72.3

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Ada

Job Number: 8141

Analyst: B. Lawson

SITE SI		NOISE MODEL INPUTS									
Highway Data				3	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Tr	raffic (Adt):	35,500 vehicle	s					Autos:	15		
Peak Hour P	. ,	10%			Me	dium Tru	ucks (2	Axles):	15		
Peak Hot	ur Volume:	3,550 vehicle	s		He	avy Truc	cks (3+	Axles):	15		
Vehi	cle Speed:	60 mph		,	/ehicle l	Miv					
Near/Far Lane	e Distance:	76 feet		,		icleType		Day	Evening	Night	Daily
Site Data					VEII		Autos:	77.5%		9.6%	-
					1/4	ر edium Tı		84.8%		10.3%	1.84%
	ier Height:	0.0 feet				Heavy Tr		86.5%		10.8%	0.74%
Barrier Type (0-Wal		0.0			,	icavy 11	ucno.	00.070	2.1 /0	10.070	0.7 4 70
Centerline Dist.		100.0 feet		^	Voise So	ource El	evatio	ns (in fe	eet)		
Centerline Dist. to		100.0 feet				Autos	s: 2	.000			
Barrier Distance to		0.0 feet			Mediui	n Trucks	s: 4	.000			
Observer Height (A		5.0 feet			Heav	y Trucks	s: 8	.006	Grade Adj	iustment:	0.0
	Elevation:	0.0 feet		,	ono Fa	uivalant	· Dioto	ago (in	faat)		
	Elevation:	0.0 feet		L	.ane Eq				reet)		
Ro	oad Grade:	0.0%				Autos		2.547			
_	Left View:	-90.0 degre				n Trucks		2.504			
F	Right View:	90.0 degre	es		Heav	y Trucks	s: 92	2.547			
FHWA Noise Model	Calculation	ıs		-							
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.30		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.94		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.89		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrio	er atteni	uation)						
VehicleType L	eq Peak Ho	ur Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	70).2	68.3				60	.5	69.1		69.7
Medium Trucks:		3.4	61.9				54.			62.5	
Heavy Trucks:	63	3.1	61.7		52.7 53.9 62.3					62.4	
Vehicle Noise:	71	1.7	69.9		67.0		62	.1	70.6	3	71.1
Centerline Distance	to Noise C	ontour (in feet)								

70 dBA

110

119

Ldn:

CNEL:

65 dBA

238

256

60 dBA

513

552

55 dBA

1,104

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: w/o Marine Wy.

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS											
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	37,300 vehicle	S					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15				
Peak H	lour Volume:	3,730 vehicle	s		He	avy Tru	cks (3+	Axles):	15				
Ve	ehicle Speed:	60 mph		V	/ehicle l	Miy							
Near/Far La	ane Distance:	76 feet				icleType	9	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%	J	9.6%	•		
	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%		10.3%	1.84%		
Barrier Type (0-W	•	0.0 1661			ŀ	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
• • • • • • • • • • • • • • • • • • • •	ist. to Barrier:	100.0 feet											
Centerline Dist.		100.0 feet		٨	loise So			•	eet)				
Barrier Distance		0.0 feet				Auto		.000					
Observer Height		5.0 feet				m Truck	_	.000	0 - 4 - 4 - 4		0.0		
_	ad Elevation:	0.0 feet			Heav	y Truck	(s: 8	.006	Grade Ad	justment	. 0.0		
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distar	nce (in t	eet)				
	Road Grade:	0.0%				Auto	s: 92	2.547					
	Left View:	-90.0 degre	es		Mediui	m Truck	rs: 92	2.504					
	Right View:	90.0 degre	es		Heavy Trucks: 92.547								
FHWA Noise Mod	lel Calculation	s											
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	73.22	2.52		-4.11	1	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-14.72		-4.11		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-18.68		-4.11		-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barri	ier attenu	uation)								
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	C	NEL		
Autos:).4	68.5		66.8		60.	.7	69.3	3	69.9		
Medium Trucks:	63	3.7	62.1		55.8		54.	.2	62.7	7	62.9		
Heavy Trucks:	63	3.3	61.9		52.9		54.	.1	62.5	5	62.6		
Vehicle Noise:	71	.9	70.1		67.3		62.	.3	70.9	9	71.3		
Centerline Distan	ce to Noise C	ontour (in feet)		,								
				70 d	<i>BA</i>	65	dBA	6	0 dBA	55	dBA		

Ldn:

CNEL:

114

123

246

265

530

571

1,141

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Alton Pkwy. Job Number: 8141 Road Segment: e/o Technology Analyst: B. Lawson

SITE		NOISE MODEL INPUTS										
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	37,300 vehicles	S				,	Autos:	15			
Peak Hour	Percentage:	10%			Ме	dium Truc	cks (2 A	(xles	15			
Peak H	Hour Volume:	3,730 vehicles	3		He	avy Truck	ks (3+ A	(xles	15			
Ve	ehicle Speed:	60 mph		,	Vehicle i	Miv						
Near/Far La	ne Distance:	76 feet				icleType		Day	Evening	Night	Daily	
Site Data								77.5%	Ŭ,	9.6%	-	
	rrier Height:	0.0 feet			М	edium Tru		84.8%		10.3%	1.84%	
Barrier Type (0-W	•	0.0 reet 0.0				Heavy Tru		86.5%		10.8%	0.74%	
, ,	ist. to Barrier:	100.0 feet										
Centerline Dist.		100.0 feet		1	Noise So	ource Ele		•	eet)			
Barrier Distance		0.0 feet				Autos:		000				
Observer Height		5.0 feet				m Trucks:		000				
_	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Adj	iustment.	0.0	
	ad Elevation:	0.0 feet		1	Lane Eq	uivalent l	Distand	ce (in f	feet)			
	Road Grade:	0.0%				Autos:	92.	547	-			
	Left View:	-90.0 degree	es		Mediu	m Trucks:	92.	504				
	Right View:	90.0 degree			Heav	y Trucks:	92.	547				
FHWA Noise Mod				· · · · · · · · ·		D /		- 1	D		A ((
VehicleType	<i>REMEL</i> 73.22	Traffic Flow	DI	stance -4.1	Finite		Fresn		Barrier Att		m Atten	
Autos: Medium Trucks:	_	2.52 -14.72		-4.1 -4.1		-1.20 -1.20		-4.87 -4.97		000	0.000	
Heavy Trucks:		-14.72		-4.1 -4.1	-	-1.20 -1.20		-4.97 -5.16		000	0.000	
						-1.20		-3.10	0.0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.000	
Unmitigated Nois	•				,					_		
VehicleType	Leq Peak Hou			Leq E		Leq N			Ldn		VEL	
Autos:	_		68.5		66.8		60.7		69.3		69.9	
Medium Trucks:			62.1		55.8		54.2		62.7		62.9	
Heavy Trucks:			61.9		52.9		54.1		62.5		62.6	
Vehicle Noise:	71	.9	70.1		67.3		62.3	.	70.9		71.3	
Centerline Distan	ce to Noise Co	ontour (in feet)									
				70 c	dBA	65 d	BA	6	60 dBA	55	dBA	

114

123

Ldn:

CNEL:

246

265

530

571

1,141

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Alton Pkwy. Job Number: 8141 Road Segment: s/o Barranca Pkwy./Muirlands Bl. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				7	NOISE	MODE	L INPUT	S	
Highway Data					Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	37,300 vehicle	S					Autos:	15		
•	Percentage:	10%			Ме	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	3,730 vehicles	S		He	avy Tru	cks (3+	- Axles).	15		
Ve	hicle Speed:	60 mph			Vehicle I	Miv.					
Near/Far La	ne Distance:	76 feet				icleType	2	Day	Evening	Night	Daily
Site Data					VEII		Autos:	77.5%		9.6%	
		0.0 (==1			M	edium T		84.8%		10.3%	
	rrier Height:	0.0 feet				leavy T		86.5%		10.8%	
Barrier Type (0-W Centerline Di		0.0				roavy r	raono.		2.170	10.070	0.7 170
Centerline Dist.		100.0 feet		1	Noise So	ource E	levatio	ns (in f	eet)		
Barrier Distance		100.0 feet 0.0 feet				Auto		2.000			
Observer Height (5.0 feet			Mediu	n Truck	(S: 4	4.000			
•	ad Elevation:				Heav	y Truck	rs: 8	3.006	Grade Adj	iustment	: 0.0
	ad Elevation:	0.0 feet 0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)		
	F	<u> </u>	Auto		2.547	1001)					
	Road Grade: Left View:	0.0% -90.0 degree	20		Mediu	n Truck		2.504			
	Right View:	90.0 degree				ry Truck	-	2.547			
	ragin view.	30.0 degree			7.047	<i>y</i> 17401					
FHWA Noise Mod	el Calculation	าร		,							
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	rm Atten
Autos:	73.22	2.52		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.72		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.68		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	,	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	70	0.4	68.5		66.8		60).7	69.3	3	69.9
Medium Trucks:	63	3.7	62.1		55.8		54	.2	62.7	7	62.9
Heavy Trucks:	60	3.3	61.9		52.9		54	.1	62.5	5	62.6
Vehicle Noise:	7	1.9	70.1		67.3		62	2.3	70.9)	71.3
Centerline Distan	ce to Noise C	ontour (in feet)								
				70 d			dBA	(60 dBA		dBA
			Ldn:	11	4	2	246		530	1,	141

CNEL:

123

265

571

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o Barranca Pkwy./Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS									
Highway Data				9	Site Con	ditions	(Hard	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	41,900 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	4,190 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		1	/ehicle l	Wix					
Near/Far La	ne Distance:	76 feet				icleType	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet							- 41		
Centerline Dist.		100.0 feet			Voise So			•	et)		
Barrier Distance	to Observer:	0.0 feet			N / = = 15 · · ·	Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				n Truck	_	1.000	Grade Ad	iuotmont	0.0
P	ad Elevation:	0.0 feet			пеач	y Truck	(S. C	3.006	Grade Auj	usimeni.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediui	n Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	rs: 92	2.547			
FHWA Noise Mod	lel Calculation	18									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	3.02		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.22		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.17		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	y	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	70	0.9	69.0		67.3		61	.2	69.8	3	70.4
Medium Trucks:	64	4.2	62.6		56.3		54	.7	63.2	2	63.4
Heavy Trucks:	63	3.8	62.4		53.4		54	.6	63.0)	63.1
Vehicle Noise:	72	2.4	70.6		67.8		62	.8	71.4	1	71.8
Centerline Distan	ce to Noise C	ontour (in feet	t)		-1			1		1	
				70 a	IBA -	65	dBA	6	0 dBA	55	dBA

123

133

266

286

Ldn:

CNEL:

1,233

1,328

572

617

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: s/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS									
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	41,900 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak F	lour Volume:	4,190 vehicle	es		He	avy Truc	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		V	ehicle l	Mix					
Near/Far La	ne Distance:	76 feet	feet			icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
Ba	rrier Height:	0.0 feet			Me	edium Tr	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0			F	leavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		N	nisa Sr	ource El	evatio	ns (in fa	20 <i>t</i>)		
Centerline Dist.	to Observer:	100.0 feet		-	0/30 00	Autos		.000	<i></i>		
Barrier Distance	to Observer:	0.0 feet			Modium	n Trucks		.000			
Observer Height	(Above Pad):	5.0 feet							Grade Ad	liustmant	. 0.0
P	ad Elevation:	0.0 feet			пеач	y Trucks	s. o	.006	Grade Ad	justin o nt	. 0.0
Ro	ad Elevation:	0.0 feet		La	ane Eq	uivalent	Distar	nce (in	feet)		
	Road Grade:	0.0%		Autos: 92.547							
	Left View:	-90.0 degre	es		Mediur	n Trucks	s: 92	2.504			
	Right View:	90.0 degre			Heav	y Trucks	s: 92	2.547			
FHWA Noise Mod	lel Calculation	18									
VehicleType	REMEL	Traffic Flow	Distanc	e	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	3.02	-4	1.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.22	-4	1.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.17	-4	1.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier att	tenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	y Leq	Eve	ening	Leq	Night		Ldn	C	NEL
Autos:	70	0.9	69.0		67.3		61.	.2	69.8	3	70.4
Medium Trucks:	64	4.2	62.6	56.3 54.7			.7	63.2		63.4	
Heavy Trucks:	63	3.8	62.4	53.4 54.6 63.0)	63.1			
Vehicle Noise:	72	2.4	70.6		67.8	7.8 62.8 71.4				71.8	

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	123	266	572	1,233								
CNEL:	133	286	617	1,328								

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	38,200	0 vehicles	3					Autos:	15			
Peak Hour	Percentage:	10	0%			Me	dium Tr	ucks (2	Axles):	15			
Peak H	our Volume:	3,820	0 vehicles	3		He	avy Tru	cks (3+	Axles):	15			
Ve	ehicle Speed:	60	0 mph		,	Vehicle l	Miv						
Near/Far La	ne Distance:	76	6 feet				icleType	Ş	Day	Evening	Night	Daily	
Site Data						V 011		Autos:	77.5%		9.6%	-	
	uviav Uaiabt.		0 foot			Ме	edium T		84.8%		10.3%		
Barrier Type (0-V	rrier Height:	-	.0 feet .0				leavy T		86.5%		10.8%		
	ist. to Barrier:		.0 .0 feet										
Centerline Dist.			.0 feet		1	Noise So			•	eet)			
Barrier Distance			.0 feet				Auto		2.000				
Observer Height			.0 feet				n Truck		1.000				
ŭ	ad Elevation:	_	.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0	
-	ad Elevation:		.0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)			
	Road Grade:		.0%			-	Auto		2.547				
	Left View:		.0 degree	25		Mediui	n Truck	s: 92	2.504				
	Right View:		.0 degree			Heav	y Truck	s: 92	2.547				
FHWA Noise Mod													
VehicleType	REMEL		fic Flow	Dis	stance	Finite		Fres		Barrier Att		m Atten	
Autos:			2.62		-4.11		-1.20		-4.87		000	0.000	
Medium Trucks:			-14.62		-4.11		-1.20		-4.97		000	0.000	
Heavy Trucks:	87.33	3	-18.57		-4.1	1	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (wit	hout T	opo and	barri	er atten	uation)							
VehicleType	Leq Peak Ho	our	Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL	
Autos:	7	0.5		68.6		66.9		60	.8	69.4	4	70.0	
Medium Trucks:	6	3.8	(62.2		55.9		54	.3	62.8	3	63.0	
Heavy Trucks:	6	3.4		62.0		53.0		54	.2	62.6	<u> </u>	62.7	
Vehicle Noise:	7	2.0		70.2		67.4		62	.4	71.0)	71.4	
Centerline Distan	ce to Noise C	ontou	r (in feet)									
			. ,		70 c	dBA	65	dBA	6	60 dBA	55	dBA	

Ldn:

CNEL:

116

125

250

269

538

580

1,160

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: s/o Toledo Wy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC II	NPUT DATA					L INPUT	S			
Highway Data			Site Condition	ns (Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	30,700 vehicles	3			Autos:	15				
Peak Hour Percentage:	10%		Medium	Trucks (2	2 Axles):	15				
Peak Hour Volume:	3,070 vehicles	5	Heavy T	rucks (3-	+ Axles):	15				
Vehicle Speed:	60 mph	<u>, </u>	/ehicle Mix							
Near/Far Lane Distance:	76 feet	<u> </u>	VehicleTy	<i>ре</i>	Day	Evening	Night	Daily		
Site Data				Autos:	77.5%	12.9%	9.6%	97.42%		
Barrier Height:	0.0 feet		Medium	Trucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		Heavy	Trucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet	,	Voise Source	Flevation	nns (in fø	20t)				
Centerline Dist. to Observer:	100.0 feet	•			2.000					
Barrier Distance to Observer:	0.0 feet		Medium Tru		4.000					
Observer Height (Above Pad):	5.0 feet		Heavy Tru		8.006	Grade Ad	liustment	. 0 0		
Pad Elevation:	0.0 feet		Tieavy Tru	UNO.	0.000	Orado riaj	jaourrorit.	0.0		
Road Elevation:	0.0 feet	L	Lane Equivalent Distance (in feet)							
Road Grade:	0.0%		Autos: 92.547							
Left View:	-90.0 degree	es	Medium Tru	cks: 9	2.504					
Right View:	90.0 degree	es	Heavy Tru	cks: 9	2.547					
FHWA Noise Model Calculation	18									
VehicleType REMEL	Traffic Flow	Distance	Finite Road	l Fre	snel	Barrier Att	en Ber	m Atten		
Autos: 73.22	1.67	-4.11	-1.2	:0	-4.87	0.0	000	0.000		
Medium Trucks: 83.68	-15.57	-4.11	-1.2	.0	<i>-4.</i> 97	0.0	000	0.000		
Heavy Trucks: 87.33	-19.52	-4.11	-1.2	.0	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	nout Topo and	barrier atten	uation)							
VehicleType Leq Peak Ho				eq Night		Ldn	CI	VEL		

Unmitigated Nois	e Levels (withou	it Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	69.6	67.7	65.9	59.9	68.5	69.1
Medium Trucks:	62.8	61.3	54.9	53.4	61.9	62.1
Heavy Trucks:	62.5	61.1	52.0	53.3	61.6	61.8
Vehicle Noise:	71.1	69.3	66.4	61.5	70.0	70.5

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	100	216	465	1,002						
CNEL:	108	233	501	1.080						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Job Number: 8141

Road Segment: n/o Toledo Wy.

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				NO	ISE MODE	L INPUT	s			
Highway Data				S	ite Con	ditions (H	lard = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	30,100 vehic	es				Autos:	15				
= -	Percentage:	10%			Ме	dium Truc	ks (2 Axles):	15				
Peak H	lour Volume:	3,010 vehic	es		Heavy Trucks (3+ Axles): 15							
Ve	hicle Speed:	60 mph		V	ehicle l	Mix						
Near/Far La	ne Distance:	76 feet				icleType	Day	Evening	Night	Daily		
Site Data						• • •	tos: 77.5%	J	9.6%			
Ra	rrier Height:	0.0 feet			М	edium Trud	cks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0			ŀ	Heavy Truc			10.8%	0.74%		
Centerline Di		100.0 feet										
Centerline Dist.		100.0 feet		N	Noise Source Elevations (in feet)							
Barrier Distance		0.0 feet				Autos:	2.000					
					Mediu	m Trucks:	4.000					
Observer Height	,	5.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0		
	Pad Elevation: 0.0 feet				ono Fa	uivalant F	Distance (in	footl				
Road Elevation: 0.0 feet				L	ane Eq			reet)				
	Road Grade:	0.0%				Autos:	92.547					
	Left View:	-90.0 degr				m Trucks:	92.504					
	Right View:	90.0 degr	ees		Heav	y Trucks:	92.547					
FHWA Noise Mod	el Calculation	S										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	73.22	1.5	9	-4.11		-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-15.6	5	-4.11		-1.20	<i>-4</i> .97	0.0	000	0.000		
Heavy Trucks:	87.33	-19.6	1	-4.11		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo an	d barri	ier attenu	ation)							
VehicleType	Leq Peak Hou	ır Leq Da	ay	Leq Eve	ening	Leq Ni	ight	Ldn	CI	VEL		
Autos:	69	.5	67.6		65.8		59.8	68.4	4	69.0		
Medium Trucks:	62	2.7	61.2		54.9		53.3	61.8	3	62.0		
Heavy Trucks:	62	4	61.0		51.9		53.2	61.5	5	61.7		
Vehicle Noise:	71	.0	69.2		66.3		61.4	69.9	9	70.4		
Contarlina Distan	co to Noiso C	ontour (in fo	n#1									

Centerline Distance to Noise Contour (in feet)	Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	99	213	459	989							
CNEL:	107	230	495	1,066							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: s/o Irvine Bl. / Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				Site Con	ditions (H	lard = 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	33,400 vehicle	S			Autos:	15				
Peak Hour	Percentage:	10%		Ме	dium Truck	ks (2 Axles):	15				
Peak H	lour Volume:	3,340 vehicle	S	Heavy Trucks (3+ Axles): 15							
Ve	hicle Speed:	60 mph		Vehicle I	Miv						
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily		
Site Data						tos: 77.5%	-	9.6%	97.42%		
	rrier Height:	0.0 feet		Me	edium Truc			10.3%	1.84%		
Barrier Type (0-W	•	0.0 reet 0.0			leavy Truc			10.8%	0.74%		
Centerline Di		100.0 feet									
Centerline Dist.		100.0 feet		Noise So	ource Elev	ations (in f	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
				Mediui	n Trucks:	4.000					
Observer Height (,	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment.	0.0		
	ad Elevation:	0.0 feet		Lana Ea	uivalant D	istance (in	foot)				
	ad Elevation:	0.0 feet		Lane Eq			ieet)				
ı	Road Grade:	0.0%		Autos: 92.547							
	Left View:	-90.0 degre		Medium Trucks: 92.504							
	Right View:	90.0 degre	es	Heav	y Trucks:	92.547					
FHWA Noise Mod	el Calculatior	15									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	73.22	2.04	-4.	11	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-15.20	-4.	11	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-19.16	-4.	11	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	nout Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq E	vening	Leq Ni	ght	Ldn	CI	VEL		
Autos:	69	9.9	68.0	66.3		60.2	68.8	3	69.5		
Medium Trucks:	63	3.2	61.7	55.3		53.8	62.2	2	62.5		
Heavy Trucks:	62	2.9	61.4	52.4		53.6	62.0)	62.1		
Vehicle Noise:	7	1.4	69.7	66.8		61.8	70.4	1	70.9		
Cantarlina Diaton	N-' O	\									

Centerline Distance to Noise Contour (in feet)	70 dBA 65 dBA 60 dBA 55 dBA									
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	106	228	492	1,060						
CNEL:	114	246	530	1,142						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DA	TA		NOISE MODEL INPUTS							
Highway Data					Site Con	ditions	(Hard:	= 10, So	ft = 15)			
Average Daily	Traffic (Adt):	40,900 vel	nicles					Autos:	15			
	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15			
Peak H	lour Volume:	4,090 vel	nicles		Hea	avy Tru	cks (3+	Axles):	15			
Ve	ehicle Speed:	60 mp	h		Vehicle I	Miv						
Near/Far La	ne Distance:	76 fee	et			icleType	è	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	J	9.6%	,	
	rrier Height:	0.0 fe			Ме	edium T		84.8%		10.3%	1.84%	
Barrier Type (0-W	•	0.0 16	ecı		F	leavy T	rucks:	86.5%		10.8%	0.74%	
• • •	ist. to Barrier:	100.0 fe	ot.									
Centerline Dist.		100.0 fe		_	Noise Sc	ource E			eet)			
Barrier Distance		0.0 fe				Auto		.000				
Observer Height		5.0 fe				n Truck	_	.000				
_	ad Elevation:	0.0 fe			Heav	y Truck	s: 8	.006	Grade Ad	justment.	0.0	
-	ad Elevation:	0.0 fe			Lane Equ	uivalen	t Distai	nce (in f	eet)			
	Road Grade:	0.0%				Auto	s: 92	2.547				
	Left View:	-90.0 de	earees		Medium Trucks: 92.504							
	Right View:	90.0 de	•		Heavy Trucks: 92.547							
FHWA Noise Mod												
VehicleType	REMEL	Traffic Fl		istance	Finite		Fres		Barrier Att		m Atten	
Autos:	_		2.92	-4.1		-1.20		-4.87		000	0.000	
Medium Trucks:			4.32	-4.1		-1.20		-4.97		000	0.000	
Heavy Trucks:	87.33	-18	3.28	-4.1	1	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo	and barr	ier atten	uation)							
VehicleType	Leq Peak Ho	ur Leq	Day	Leq E	vening	Leq	Night		Ldn	CI	VEL	
Autos:	70	0.8	68.9		67.2		61	.1	69.7	7	70.3	
Medium Trucks:	64	l.1	62.5		56.2		54	.6	63.1	1	63.3	
Heavy Trucks:	63	3.7	62.3		53.3		54	.5	62.9	9	63.0	
Vehicle Noise:	72	2.3	70.5		67.7		62	.7	71.3	3	71.7	
Centerline Distan	ce to Noise C	ontour (in	feet)									
		•		70 (dBA	65	dBA	6	0 dBA	55	dBA	

Ldn:

CNEL:

121

131

261

282

563

607

1,214

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o Commercentre

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data					Site Con	ditions (H	lard = 10, Sc	oft = 15)				
	Traffic (Adt): Percentage: Hour Volume:	53,200 veh 10% 5,320 veh					Autos: ks (2 Axles): s (3+ Axles):					
Near/Far La	ehicle Speed: ane Distance:	55 mpl 88 feet	55 mph 88 feet		Vehicle Veh	icleType	Day	Evening	Night	Daily		
Site Data							tos: 77.5%		9.6%			
Ba Barrier Type (0-W	rrier Height: Vall, 1-Berm):	0.0 fee 0.0	et			edium Trud Heavy Trud			10.3% 10.8%	1.84% 0.74%		
Centerline Di	ist. to Barrier:	100.0 fee	et	1	Noise So	ource Elev	ations (in f	eet)				
Barrier Distance Observer Height P Ro	Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0%		1	Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 89.850								
	Left View: Right View:	-90.0 de 90.0 de	•			m Trucks: yy Trucks:	89.805 89.850					
FHWA Noise Mod	lel Calculation	ns		,								
VehicleType	REMEL	Traffic Flo		istance		Road	Fresnel	Barrier Att		m Atten		
Autos: Medium Trucks: Heavy Trucks:	82.40	-12		-3.92 -3.92 -3.92	2	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0)00)00)00	0.000 0.000 0.000		
Unmitigated Nois						1.20	0.70	0.0		0.000		
VehicleType	Leq Peak Ho	our Leq	•	Leq Ev	/ening	Leq Ni	ght	Ldn	CI	VEL		
Autos:		1.1	69.2		67.4		61.4	70.0		70.6		
Medium Trucks:		4.5	63.0		56.6		55.1	63.5		63.8		
Heavy Trucks:		4.5	63.1		54.1		55.3	63.7		63.8		
Vehicle Noise:	7	2.7	70.9		68.0		63.1	71.6	6	72.1		

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	129	277	597	1,286							
CNEL:	138	298	642	1,383							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: s/o SR-241 Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S			
Highway Data			Site Con	ditions (Hard	d=10, So	oft = 15)				
Average Daily Traffic (Adt):	30,900 vehicles	S			Autos:	15				
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15				
Peak Hour Volume:	3,090 vehicles	S	He	avy Trucks (3	3+ Axles):	15				
Vehicle Speed:	50 mph		Vehicle I	Miv						
Near/Far Lane Distance:	70 feet			icleType	Day	Evening	Night	Daily		
Site Data			VEII	Autos	•	J	9.6%	-		
			1/4	Autos edium Trucks			10.3%	1.84%		
Barrier Height:				-dium Trucks Heavy Trucks		86.5% 2.7%		0.74%		
Barrier Type (0-Wall, 1-Berm):			,	leavy Trucks	. 00.576	2.1 /0	10.8%	0.7470		
Centerline Dist. to Barrier:			Noise So	ource Elevati	ons (in fe	eet)				
Centerline Dist. to Observer:			Autos: 2.000							
Barrier Distance to Observer:			Medium Trucks: 4.000							
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
Pad Elevation:			Lane Equivalent Distance (in feet)							
Road Elevation:			Lane Eq		•	ieet)				
Road Grade:			A.4 1'		93.723					
Left View:	3		Medium Trucks: 93.680 Heavy Trucks: 93.723							
Right View:	90.0 degree	es	Heav	y Trucks:	93.723					
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten		
Autos: 70.2	0 2.49	-4	.20	-1.20	<i>-4.</i> 87	0.0	000	0.000		
Medium Trucks: 81.0	0 -14.75	-4	.19	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 85.3	8 -18.70	-4	.20	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	thout Topo and	barrier att	enuation)							
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL		
Autos:	67.3	65.4	63.6	5	7.6	66.2	2	66.8		
Medium Trucks:	60.9	59.4	53.0	5	51.4	59.9	9	60.1		
Heavy Trucks:	31.3	59.9	50.8	5	52.1	60.4	4	60.6		
Vehicle Noise:	69.0	67.2	64.2		9.4	68.0)	68.4		
Centerline Distance to Noise	Contour (in feet,)								

70 dBA

73

79

Ldn:

CNEL:

65 dBA

158

169

60 dBA

339

365

55 dBA

731

785

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o SR-241 Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	C INPU	T DATA			N	OISE	MODE	L INPUT	S	
Highway Data				Site Con	ditions (Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic (Ac Peak Hour Percentag Peak Hour Volum	ge:	00 vehicles 10% 10 vehicles			dium Tru avy Truci	•	,			
Vehicle Spee Near/Far Lane Distand	ed:	55 mph 88 feet	-	Vehicle l	-		Day	Evening	Night	Daily
Site Data						utos:	77.5%	_	9.6%	
Barrier Height Barrier Type (0-Wall, 1-Berrier Centerline Dist. to Barrier Centerline Dist. to Observent Barrier Distance to Observent (Above Para Pad Elevation Road Grade Left View Right View Para Page 1-2 (1997)	m): er: 10 er: 10 er: d): on: de: ew: -9	0.0 feet 0.0 0.0 feet 0.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 degrees 0.0 degrees		Medium Trucks: 84.8% 4.9% 10.3% Heavy Trucks: 86.5% 2.7% 10.8% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment Lane Equivalent Distance (in feet) Autos: 89.850 Medium Trucks: 89.805 Heavy Trucks: 89.850				1.84% 0.74%		
FHWA Noise Model Calcula	tions									
VehicleType REME	L Tra	affic Flow	Distance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
	1.78 2.40	1.66 -15.57	-3.9 -3.9		-1.20 -1.20		-4.87 -4.97		000	0.000
	6.40	-19.53	-3.9		-1.20		-5.16		000	0.000
Unmitigated Noise Levels (without	Topo and b	arrier attei	nuation)						
VehicleType Leq Peak	Hour	Leq Day	Leq E	vening	Leq N	light		Ldn	CI	VEL
Autos:	68.3	6	6.4	64.7		58.	6	67.2	2	67.8
Medium Trucks:	61.7	6	60.2		53.8 52.3 60.8		3	61.0		
Heavy Trucks:	61.7	6	0.3	51.3 52.5 60.9			61.0			
Vehicle Noise:	69.9	6	8.1	65.2 60.3 68.9					69.3	

70 dBA

84

90

Ldn:

CNEL:

65 dBA

181

195

60 dBA

390

419

55 dBA

840

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Avenida Carlota

Road Segment: w/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

	INPUT DATA	1	NOISE MODEL INPUTS					
Highway Data			Site Cor	ditions (Ha	rd = 10, S	oft = 15)		
Average Daily Traffic (Adt):	10,100 vehic	les			Autos:	15		
Peak Hour Percentage:			Me	dium Truck	s (2 Axles).	15		
Peak Hour Volume:	1,010 vehic	les	He	avy Trucks	(3+ Axles).	15		
Vehicle Speed:	50 mph		Vehicle	Miv				
Near/Far Lane Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data			7011	Auto		-	9.6%	97.42%
	0.0 feet		М	edium Truck			10.3%	1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm):				Heavy Truck			10.8%	0.74%
Centerline Dist. to Barrier:								
Centerline Dist. to Observer:			Noise S	ource Eleva	•	eet)		
Barrier Distance to Observer:				Autos:	2.000			
Observer Height (Above Pad):			Mediu	Medium Trucks: 4.000				
Pad Elevation:			Heavy Trucks: 8.006 Grade Adjustment: (0.0
Road Elevation:			Lane Eq	uivalent Di	stance (in	feet)		
Road Grade:			Autos: 93.723					
Left View:		200	Medium Trucks: 93.680					
Right View:	3			y Trucks:	93.723			
rugin view.	50.0 degi	000		<i>y</i>	0020			
FHWA Noise Model Calculation								
VehicleType REMEL	Traffic Flow				resnel	Barrier Att	en Ber	m Atten
Autos: 70.2	20 -2.3	7 -	4.20	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 81.0	00 -19.6	0	4.19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 85.3	-23.5	6	4.20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo an	d barrier at	tenuation)					
VehicleType Leq Peak H	our Leq D	ay Led	q Evening	Leq Nig	ht	Ldn	CI	VEL
Autos:	62.4	60.5	58.8		52.7	61.3	3	62.0
Medium Trucks:	56.0	54.5	48.1 46.6 55.0)	55.3		
Heavy Trucks:	56.4	55.0	46.0 47.2 55.6			55.7		
Vehicle Noise:	64.1	62.4	59.3 54.6 63.1 63.				63.6	

70 dBA

35

37

Ldn:

CNEL:

65 dBA

75

80

60 dBA

161

173

55 dBA

347

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Avenida Carlota

Job Number: 8141

Road Segment: w/o Paseo de Valencia

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA				1	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	17,300 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	rucks (2	Axles):	15		
Peak H	lour Volume:	1,730 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		V	/ehicle l	Viy					
Near/Far La	ne Distance:	70 feet		-		icleType	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet			<i>1-1</i> 0	· · · · · · ·			- 41		
Centerline Dist.		100.0 feet		^	loise So			•	et)		
Barrier Distance	to Observer:	0.0 feet			NA malia	Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				n Truck	_	1.000	Grade Ad	iustmont	0.0
P	ad Elevation:	0.0 feet			неач	y Truck	(S. C	3.006	Grade Auj	justinent.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	os: 93	3.723			
	Left View:	-90.0 degre	es		Medium Trucks: 93.680						
	Right View:	90.0 degre	es		Heav	y Truck	rs: 93	3.723			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	70.20	-0.03		-4.20)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-17.27		-4.19)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-21.22		-4.20)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	64	1.8	62.9		61.1		55	.1	63.7	7	64.3
Medium Trucks:	58	3.3	56.8		50.5 48.9 57.4			57.6			
Heavy Trucks:	58	3.8	57.3		48.3 49.6 57.9				58.0		
Vehicle Noise:	66	6.5	64.7		61.7 56.9 65.4 65					65.9	
Centerline Distan	ce to Noise C	ontour (in feet)		ı						
				70 d	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

50

53

107

115

231

248

497

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Avenida Carlota

Job Number: 8141

Road Segment: b/w Paseo de Valencia and El Toro Rd.

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS					
Highway Data			Site Cond	liti <mark>ons (Ha</mark>	ord = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	36,400 vehicles	3			Autos:	15		
Peak Hour Percentage:	10%		Med	lium Trucks	s (2 Axles):	15		
Peak Hour Volume:	3,640 vehicles	3	Hea	vy Trucks	(3+ Axles):	15		
Vehicle Speed:	50 mph	,	Vehicle M	lix				
Near/Far Lane Distance:	70 feet			eleType	Day	Evening	Night	Daily
Site Data				Auto	os: 77.5%		9.6%	97.42%
Barrier Height:	0.0 feet		Me	dium Truck	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		H	eavy Truck	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		Noise Co	uraa Elava	tions (in f	204)		
Centerline Dist. to Observer:	100.0 feet	<u> </u>	Noise Soi		tions (in fe	eet)		
Barrier Distance to Observer:	0.0 feet		A 4 - 1'	Autos:	2.000			
Observer Height (Above Pad):	5.0 feet			Trucks:	4.000	Orodo Ad		0.0
Pad Elevation:	0.0 feet		Heavy	Trucks:	8.006	Grade Ad	ustment.	0.0
Road Elevation:	0.0 feet		Lane Equ	ivalent Di	stance (in	feet)		
Road Grade:	0.0%			Autos:	93.723			
Left View:	-90.0 degree	es	Medium	Trucks:	93.680			
Right View:	90.0 degree		Heavy	Trucks:	93.723			
FHWA Noise Model Calculation	ne							
VehicleType REMEL	Traffic Flow	Distance	Finite F	Road F	resnel	Barrier Att	en Ber	m Atten
Autos: 70.20		-4.20		-1.20	-4.87		000	0.000
Medium Trucks: 81.00	-14.04	-4.19	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 85.38	-17.99	-4.20	0	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and l	barrier atten	uation)					
VehicleType Leq Peak Ho				Leq Nig	ht	Ldn	CI	VEL
Autos: 6	8.0	66.1	64.3	, ,	58.3	66.9)	67.5
Medium Trucks: 6	1.6	60.1	53.7 52.2 60.6		6	60.9		
Heavy Trucks: 6	2.0	60.6	51.5 52.8 61.1			61.3		
Vehicle Noise: 6	9.7	68.0	64.9		60.1	68.7	7	69.1

70 dBA

82

88

Ldn:

CNEL:

65 dBA

176

189

60 dBA

379

407

55 dBA

815

876

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Avenida Carlota

Road Segment: e/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT	DATA			NOISE MODEL INPUTS						
Highway Data					•	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	23,500	vehicles	3					Autos:	15		
Peak Hour	Percentage:	10	%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	2,350	vehicles	S		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	50	mph		,	Vehicle i	Mix					
Near/Far La	ane Distance:	70	feet				icleType	9	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	,
Ra	rrier Height:	0.0) feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0				ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:) feet			Noise C	roo F	lovotio	no (in f	2041		
Centerline Dist.	to Observer:	100.0) feet		_	Noise So			2.000	et)		
Barrier Distance	to Observer:	0.0) feet			Madiu	Auto m Truck		.000			
Observer Height	(Above Pad):	5.0) feet						3.006	Grade Ad	iustmant	. 0 0
P	Pad Elevation:	0.0) feet			пеач	y Truck	S. C	.006	Orace Au	usimeni	0.0
Ro	ad Elevation:	0.0) feet		1	Lane Eq	uivalen	t Distai	nce (in i	feet)		
	Road Grade:	0.0	0%				Auto	s: 93	3.723			
	Left View:	-90.0) degree	es		Mediu	m Truck	s: 93	3.680			
	Right View:	90.0) degree	es		Heav	y Truck	s: 93	3.723			
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traffi	c Flow	Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	70.20		1.30		-4.20	0	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00		-15.94		-4.19	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38		-19.89		-4.20	0	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and	barr	ier atten	uation)						
VehicleType	Leq Peak Ho	ur	Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	VEL
Autos:	66	3.1	(64.2		62.4		56	.4	65.0)	65.6
Medium Trucks:	59	9.7	;	58.2		51.8		50	.3	58.7	7	58.9
Heavy Trucks:	60).1	<u> </u>	58.7		49.6 50.9 59.2 5				59.4		
Vehicle Noise:	67	7.8		66.1		63.0		58	.2	66.8	3	67.2
Centerline Distan	ce to Noise C	ontour	(in feet)								
					70 d	dBA	65	dBA	ϵ	60 dBA	55	dBA

Ldn:

CNEL:

61

65

131

141

283

304

609

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Co.	nditions (Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	20,000 vehicle	S			Autos	: 15		
Peak Hour	Percentage:	10%		Me	edium Tru	cks (2 Axles)	: 15		
Peak H	lour Volume:	2,000 vehicle	s	He	eavy Truc	ks (3+ Axles)	: 15		
Ve	hicle Speed:	50 mph		Vehicle	Mix				
Near/Far La	ne Distance:	70 feet	feet		VehicleType Day			Night	Daily
Site Data						utos: 77.5%	Evening 12.9%	9.6%	•
Ra	rrier Height:	0.0 feet		N	ledium Tri	ucks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			Heavy Tro	ucks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Dis	,	100.0 feet							
Centerline Dist.		100.0 feet		Noise S		evations (in f	eet)		
Barrier Distance		0.0 feet			Autos				
Observer Height (5.0 feet			ım Trucks			_	
• ,	ad Elevation:	0.0 feet		Hea	vy Trucks	2 8.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)					
	Road Grade:	0.0%			Autos	: 93.723			
-	Left View:	-90.0 degre	es	Mediu	ım Trucks	: 93.680			
	Right View:	90.0 degre			vy Trucks				
FHWA Noise Mod									
VehicleType	REMEL	Traffic Flow	Distance		Road	Fresnel	Barrier Att		m Atten
Autos:	70.20			.20	-1.20	-4.87		000	0.000
Medium Trucks:	81.00	-16.64	-4	.19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-20.59	-4	.20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	nout Topo and	barrier att	enuation)					
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq	Evening	Leq N	Vight	Ldn	CI	VEL
Autos:	65	5.4	63.5	61.7	,	55.7	64.3	3	64.9
Medium Trucks:	59	9.0	57.5	51.1		49.6	58.0)	58.2
Heavy Trucks:	59	9.4	58.0	48.9)	50.2	58.5	5	58.7

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	55	118	254	547							
CNEL:	59	127	273	588							

62.3

57.5

66.1

66.5

65.4

67.1

Vehicle Noise:

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: n/o Commercentre Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NO	ISE N	/IODE	L INPUT	S		
Highway Data				Site Con	ditions (F	lard =	10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	33,100 vehicles	S			,	Autos:	15			
Peak Hour	Percentage:	10%		Medium Trucks (2 Axles): 15							
Peak H	lour Volume:	3,310 vehicles	S	He	avy Truck	s (3+ A	(xles	15			
Ve	hicle Speed:	50 mph		Vehicle	Miv						
Near/Far La	ne Distance:	70 feet			icleType		Day	Evening	Night	Daily	
Site Data							77.5%		9.6%	97.42%	
	rrier Height:	0.0 feet		М	edium Tru		84.8%		10.3%	1.84%	
Barrier Type (0-W	•	0.0		1	Heavy True	cks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dis	,	100.0 feet									
Centerline Dist.		100.0 feet		Noise So	ource Elev		•	et)			
Barrier Distance		0.0 feet			Autos:	2.0	000				
		5.0 feet		Mediu	m Trucks:	4.0	000				
Observer Height (ad Elevation:			Heav	y Trucks:	8.0	006	Grade Adj	iustment:	0.0	
	ad Elevation:	0.0 feet		I ano Fo	uivalent E)ietan	in t) مح	Got)			
		0.0 feet		Lanc Lq		93.		ccij			
•	Road Grade:	0.0%		A 4 1'	Autos:						
	Left View:	-90.0 degree			m Trucks:	93.0					
	Right View:	90.0 degree	es	Heav	y Trucks:	93.	723				
FHWA Noise Mode	el Calculation	18									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten	
Autos:	70.20	2.79	-4.:	20	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	81.00	-14.45	-4.	19	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	85.38	-18.40	-4.:	20	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	nout Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq I	Evening	Leq Ni	ight		Ldn	CI	VEL	
Autos:	67	7.6	65.7	63.9		57.9		66.5	5	67.1	

Unmitigated Nois	se Levels (without	t Topo and barri	er attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos	67.6	65.7	63.9	57.9	66.5	67.1
Medium Trucks:	61.2	59.7	53.3	51.7	60.2	60.4
Heavy Trucks:	61.6	60.2	51.1	52.4	60.7	60.9
Vehicle Noise:	69.3	67.5	64.5	59.7	68.3	68.7

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	77	165	355	765
CNEL:	82	177	382	822

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: n/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA				DISE MODE		S	
Highway Data				Site Co	nditions (I	Hard = 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	37,900 vehicle	es			Autos:	15		
Peak Hour	Percentage:	10%		М	edium Truc	cks (2 Axles):	15		
Peak F	lour Volume:	3,790 vehicle	es	Н	eavy Truck	(3+ <i>Axles</i>):	15		
Ve	ehicle Speed:	50 mph		Vehicle	Mix				
Near/Far La	ane Distance:	70 feet			hicleType	Day	Evening	Night	Daily
Site Data						utos: 77.5%		9.6%	-
Ba	rrier Height:	0.0 feet		Λ	1edium Tru	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			Heavy Tru	cks: 86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		Noise S	Source Fle	vations (in f	eet)		
Centerline Dist.	to Observer:	100.0 feet			Autos:	•			
Barrier Distance	to Observer:	0.0 feet		Madii	ım Trucks:				
Observer Height	(Above Pad):	5.0 feet			vy Trucks:		Grade Adj	iustment:	0.0
P	ad Elevation:	0.0 feet		1166	ivy Trucks.	8.000	Orauc Auj	astriciit.	0.0
Ro	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)					
	Road Grade:	0.0%			Autos:	93.723			
	Left View:	-90.0 degre	es	Media	ım Trucks:	93.680			
	Right View:	90.0 degre	es	Hea	vy Trucks:	93.723			
FHWA Noise Mod	lel Calculation	ns							
VehicleType	REMEL	Traffic Flow	Distanc	e Finite	e Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	70.20	3.38	-4	4.20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-13.86	-4	4.19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-17.82	-4	4.20	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier att	tenuation)	1				
VehicleType	Leq Peak Ho	our Leq Day	y Leq	Evening	Leq N	light	Ldn	CI	VEL
Autos:	6	8.2	66.3	64.5	5	58.5	67.1		67.7
Medium Trucks:	6	1.7	60.2	53.9	9	52.3	60.8	3	61.0
Heavy Trucks:	6	2.2	60.7	51.7	7	53.0	61.3	3	61.4
Vehicle Noise:	6	9.9	68.1	65.	1	60.3	68.8	3	69.3

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	84	180	389	838
CNEL:	90	194	418	900

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE S	PECIFIC I	NPUT DATA			NOISE MODEL INPUTS								
Highway Data				5	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)				
Average Daily 7	raffic (Adt):	48,400 vehicle	s					Autos:	15				
Peak Hour F	. ,	10%			Me	dium Tru	ucks (2	Axles):	15				
	our Volume:	4,840 vehicle	S		He	avy Truc	cks (3+	Axles):	15				
Veh	icle Speed:	60 mph			/ehicle l	14:52							
Near/Far Lan	e Distance:	76 feet		<u>'</u>				Day	Funning	Niaht	Doilu		
Cita Data					ven	icleType		Day 50/	Evening	Night	Daily		
Site Data					1.4		Autos:	77.5%		9.6%			
	rier Height:	0.0 feet				edium Tr		84.8%		10.3%	1.84%		
Barrier Type (0-Wa		0.0			,	leavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dis		100.0 feet		^	Voise So	ource El	evatio	ns (in f	eet)				
Centerline Dist. to		100.0 feet				Autos	s: 2	.000					
Barrier Distance to	o Observer:	0.0 feet			Mediui	n Trucks	s: 4	.000					
Observer Height (A	Above Pad):	5.0 feet				y Trucks		.006	Grade Ad	iustment.	0.0		
Pa	d Elevation:	0.0 feet				-							
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalent	t Distar	nce (in	feet)				
R	Road Grade:	0.0%				Autos		2.547					
	Left View:	-90.0 degre	es		Mediui	n Trucks	s: 92	2.504					
	Right View:	90.0 degre	es		Heav	y Trucks	s: 92	2.547					
FHWA Noise Mode	l Calculation	ıs											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	73.22	3.65		-4.11		-1.20		<i>-4.</i> 87	0.0	000	0.000		
Medium Trucks:	83.68	-13.59		-4.11		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-17.55		-4.11		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	out Topo and	barrie	er atteni	uation)								
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL		
Autos:	71	1.6	69.7		67.9		61.	.8	70.5	5	71.1		
Medium Trucks:	64	4.8	63.3		56.9		55	.4	63.8	3	64.1		
Heavy Trucks:	64	4.5	63.0		54.0		55.	.3	63.6	3	63.7		
Vehicle Noise:	73	3.0	71.3		68.4		63	.4	72.0)	72.5		
Centerline Distance	e to Noise C	ontour (in feet)										

70 dBA

136

146

Ldn:

CNEL:

65 dBA

293

315

60 dBA

630

679

55 dBA

1,358

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Job Number: 8141

Road Segment: b/w Toledo Wy. and Jeronimo Rd.

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt): 56,40	00 vehicles					Autos:	15			
Peak Hour Percentage		10%		Me	dium Tru	ucks (2	Axles):	15			
Peak Hour Volume	e: 5,64	40 vehicles		He	avy Truc	cks (3+	Axles):	15			
Vehicle Speed	d: 6	60 mph		Vehicle	N/iv						
Near/Far Lane Distance	e: 7	76 feet			icleType		Day	Evening	Night	Daily	
Site Data				VEII		Autos:	77.5%		9.6%		
				Λ.4.	r edium Tı		84.8%		10.3%	1.84%	
Barrier Heigh		0.0 feet			Heavy Ti		86.5%		10.3%	0.74%	
Barrier Type (0-Wall, 1-Berm	'	0.0		,	leavy II	ucks.	00.576	2.1 /0	10.0 /6	0.7470	
Centerline Dist. to Barrie		0.0 feet		Noise So	ource El	levatio	ns (in fe	eet)			
Centerline Dist. to Observe	_	0.0 feet			Autos	s: 2	2.000				
Barrier Distance to Observe		0.0 feet		Mediu	m Trucks	s: 4	1.000				
Observer Height (Above Pad		5.0 feet		Heav	y Trucks	s: 8	3.006	Grade Ad	justment.	0.0	
Pad Elevation		0.0 feet	-		-				•		
Road Elevation	n: (0.0 feet	-	Lane Eq	uivalent			feet)			
Road Grade	e: (0.0%			Auto		2.547				
Left View	v: -90	0.0 degree	S	Mediu	m Trucks	s: 92	2.504				
Right View	v: 90	0.0 degree	s	Heav	y Truck	s: 92	2.547				
FHWA Noise Model Calculat	ions										
VehicleType REMEL	Tra	ffic Flow	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos: 73	22	4.31	-4.1	11	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 83	68	-12.93	-4.1	11	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 87	33	-16.88	-4.1	11	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (v	rithout T	Topo and b	parrier atte	nuation)							
VehicleType Leq Peak	Hour	Leq Day	Leq E	vening	Leq	Night		Ldn	CI	VEL	
Autos:	72.2	7	0.3	68.6		62	.5	71.	1	71.7	
Medium Trucks:	65.4	6	3.9	57.6		56	.0	64.5	5	64.7	
Heavy Trucks:	65.1	6	3.7	54.7		55	.9	64.3	3	64.4	
Vehicle Noise:	73.7	7	'1.9	69.0		64	.1	72.7	7	73.1	
Centerline Distance to Noise	Conto	ur (in feet)									

70 dBA

150

162

Ldn:

CNEL:

65 dBA

324

349

60 dBA

698

752

55 dBA

1,504

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: n/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				5	Site Con	ditions (Ha	rd = 10, Se	oft = 15)				
Peak Hou	Traffic (Adt): r Percentage: Hour Volume:	62,500 vel 10% 6,250 vel				dium Trucks avy Trucks	,	15				
	ehicle Speed: ane Distance:		60 mph 76 feet			Mix icleType	Day	Evening	Night	Daily		
Site Data						Auto	s: 77.5%	12.9%	9.6%	97.42%		
Barrier Type (0-V	•	0.0 fe				edium Truck Heavy Truck			10.3% 10.8%	1.84% 0.74%		
	ist. to Barrier:	100.0 fe		^	Voise So	ource Eleva	tions (in f	eet)				
Centerline Dist Barrier Distance Observer Height	e to Observer:	100.0 fe 0.0 fe 5.0 fe 0.0 fe	et et			Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0		
	oad Elevation:	0.0 fe		L	ane Eq	uivalent Di	stance (in	feet)				
	Road Grade: Left View: Right View:	0.0% -90.0 de 90.0 de	•			Autos: m Trucks: ry Trucks:	92.547 92.504 92.547					
FHWA Noise Mod	del Calculatio	ns										
VehicleType	REMEL	Traffic FI	ow D	istance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos	73.22	2 4	4.76	-4.11		-1.20	-4.87	0.0	000	0.000		
Medium Trucks	: 83.68	3 -12	2.48	-4.11		-1.20	-4.97	0.0	000	0.000		
Heavy Trucks	: 87.33	3 -10	6.44	-4.11		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	se Levels (wit	hout Topo	and barr	ier atteni	uation)							
VehicleType	Leq Peak Ho	our Leq	Day	Leq Ev	rening	Leq Nig	ht	Ldn	CI	VEL		
Autos	. 7	2.7	70.8		69.0		62.9	71.6	3	72.2		
Medium Trucks		5.9	64.4		58.0		56.5	64.9		65.2		
Heavy Trucks	:6	5.6	64.2		55.1		56.4	64.7	7	64.8		
Vehicle Noise		4.1	72.4		69.5		64.5	73.′	1	73.6		
Centerline Distar	nce to Noise C	Contour (in	feet)									

70 dBA

161

173

Ldn:

CNEL:

65 dBA

347

374

60 dBA

747

805

55 dBA

1,610

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPU ⁻	T DATA	NOISE MODEL INPUTS								
Highway Data					,	Site Con	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	62,00	00 vehicles	5					Autos:	15		
Peak Hour	Percentage:	1	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	6,20	00 vehicles	;		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	6	65 mph			Vehicle I	Wiy					
Near/Far La	ane Distance:	17	75 feet				icleType	,	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	-
	rrier Height:		0.0 feet			М	edium T		84.8%		10.3%	1.84%
Barrier Type (0-V			0.0 leet 0.0				leavy T		86.5%		10.8%	0.74%
•••	ist. to Barrier:		0.0 feet									
Centerline Dist.			0.0 feet		_	Noise So			•	eet)		
Barrier Distance			0.0 feet				Auto		.000			
Observer Height			5.0 feet				m Truck		.000	0 - 1 - 4 - 1		0.0
-	ad Elevation:		0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment	: 0.0
Ro	ad Elevation:		0.0 feet			Lane Eq	uivalen	t Distai	nce (in i	feet)		
	Road Grade:	(0.0%				Auto	s: 48	3.505			
	Left View:	-90	0.0 degree	s		Mediu	n Truck	s: 48	3.423			
	Right View:	90	0.0 degree	s		Heav	y Truck	s: 48	3.506			
FHWA Noise Mod	lel Calculation	18										
VehicleType	REMEL		ffic Flow	Di	istance	Finite	Road	Fres	nel	Barrier Atte	en Bei	m Atten
Autos:	74.55		4.38		0.0	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	84.86		-12.86		0.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	88.18		-16.82		0.0	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out	Topo and I	barri	ier atten	uation)						
VehicleType	Leq Peak Ho	ur	Leq Day		Leq E	vening	Leq	Night		Ldn	C	VEL
Autos:	7	7.8	7	75.9		74.2		68	.1	76.7	7	77.3
Medium Trucks:	70	0.9	6	9.4		63.0		61	.5	70.0)	70.2
Heavy Trucks:	70	0.3	(8.8		59.8		61	.0	69.4	1	69.5
Vehicle Noise:	79	9.2	-	77.4		74.6		69	.6	78.2	2	78.7
Centerline Distan	ce to Noise C	onto	ur (in feet)									
					70 (dBA	65	dBA	6	60 dBA	55	dBA

350

378

Ldn: CNEL: 755

814

1,626

1,753

3,503

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Job Number: 8141

Road Segment: s/o Rockfield Bl.

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Co	nditions (F	Hard =	= 10, Sc	oft = 15)			
	Traffic (Adt): r Percentage: Hour Volume:	10%				edium Truc eavy Truck	ks (2	,				
Ve	ehicle Speed: ane Distance:	60	mph feet		Vehicle Mix VehicleType Day Evening Night							
Site Data						AL	ıtos:	77.5%	12.9%	9.6%	97.42%	
Barrier Type (0-V	•	0.0				ledium Tru Heavy Tru		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%	
	ist. to Barrier:	100.0			Noise S	ource Ele	vatior	ıs (in fe	eet)			
Centerline Dist. Barrier Distance Observer Height	to Observer:	5.0	feet feet feet feet			Autos: um Trucks: vy Trucks:	4	.000 .000 .006	Grade Ad	justment	: 0.0	
	ad Elevation:		feet		Lane Ed	quivalent L	Distan	ce (in i	feet)			
	Road Grade: Left View: Right View:		% degrees degrees			Autos: um Trucks: vy Trucks:	92	.547 .504 .547				
FHWA Noise Mod	del Calculatio	ns										
VehicleType	REMEL	Traffic	Flow	Distance	Finite	e Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos.	73.22	2	5.79	-4.	11	-1.20		-4.87	0.0	000	0.000	
Medium Trucks.	83.68	3	-11.45	-4.	11	-1.20		<i>-4</i> .97	0.0	000	0.000	
Heavy Trucks.	87.33	3	-15.40	-4.	11	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	se Levels (with	hout Top	oo and b	arrier atte	nuation)							
VehicleType	Leq Peak Ho	our L	.eq Day	Leq	Evening	Leq N	ight		Ldn	C	NEL	
Autos.	7	3.7	7′	1.8	70.0)	64.	0	72.6	3	73.2	
Medium Trucks.	: 6	6.9	65	5.4	59.1	I	57.	5	66.0)	66.2	
Heavy Trucks.	6	6.6	65	5.2	56.2	2	57.	4	65.8	3	65.9	
Vehicle Noise.	7	5.2	73	3.4	70.5	5	65.	6	74.′	1	74.6	
Centerline Distant	ice to Noise C	ontour	(in feet)									

70 dBA

189

203

Ldn: CNEL: 65 dBA

407

438

60 dBA

876

943

55 dBA

1,887

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: n/o I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Con	ditions (F	Hard =	10, Sc	ft = 15)			
Average Daily	Traffic (Adt): 8	33,200 vehicles	S				A	Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Truc	cks (2 A	xles):	15			
Peak H	lour Volume:	8,320 vehicles	S		He	avy Truck	rs (3+ A	xles):	15			
Ve	hicle Speed:	60 mph		,	Vehicle l	Miv						
Near/Far La	ne Distance:	76 feet				icleType		Day	Evening	Night	Daily	
Site Data					V 011			77.5%		9.6%	-	
	rrior Usiabti	0.0 feet			Ме	edium Tru		84.8%		10.3%	1.84%	
Barrier Type (0-W	rrier Height:	0.0 reet 0.0				Heavy Tru		36.5%		10.8%	0.74%	
Centerline Dis		0.0 100.0 feet										
Centerline Dist.		100.0 feet		1	Noise So	ource Ele	vations	in fe	eet)			
Barrier Distance		0.0 feet				Autos:						
Observer Height (5.0 feet				m Trucks:						
	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	06	Grade Adj	iustment:	0.0	
	ad Elevation: ad Elevation:	0.0 feet			Lane Eg	uivalent L	Distand	e (in t	eet)			
	Road Grade:	0.0%			<u> </u>	Autos:		•				
•	Left View:	-90.0 degree	25		Mediui	m Trucks:						
	Right View:	90.0 degree			Heav	y Trucks:	92.5	547				
FHWA Noise Mode												
VehicleType	REMEL	Traffic Flow	Di	stance	Finite		Fresn		Barrier Atte		m Atten	
Autos:	73.22	6.00		-4.11		-1.20		-4.87	0.0		0.000	
Medium Trucks:	83.68	-11.24		-4.1	-	-1.20		-4.97	0.0		0.000	
Heavy Trucks:	87.33	-15.19		-4.1	1	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and	barri	er atten	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq E	/ening	Leq N	light		Ldn	CI	VEL	
Autos:	73	.9	72.0		70.2		64.2		72.8	3	73.4	
Medium Trucks:	67	.1	65.6		59.3		57.7		66.2	2	66.4	
Heavy Trucks:	66	.8	65.4		56.4		57.6		66.0)	66.1	
Vehicle Noise:	75	.4	73.6		70.7		65.8		74.3	3	74.8	
Centerline Distant	ce to Noise Co	ontour (in feet)									
				70 c	dBA	65 dl	ВА	6	0 dBA	55	dBA	

195

210

Ldn:

CNEL:

420

452

904

974

1,949

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: b/w I-5 SB Ramps and Research Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS							
Highway Data			Site Cond	itions (Ha	rd = 10, So	oft = 15)			
Average Daily Traffic (Adt).	36,000 vehicle	S			Autos:	15			
Peak Hour Percentage.	10%		Medi	ium Trucks	(2 Axles):	15			
Peak Hour Volume.	3,600 vehicle	s	Hea	vy Trucks (3+ <i>Axles):</i>	15			
Vehicle Speed.	60 mph		Vehicle M	ix					
Near/Far Lane Distance.	76 feet			leType	Day	Evening	Night	Daily	
Site Data				Auto		_	9.6%	97.42%	
Barrier Height	0.0 feet		Med	lium Truck	s: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm)			He	eavy Truck	s: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier			M-1 0	51	· · · · · · · · · · · · · · · · · · ·	41			
Centerline Dist. to Observer			Noise Sou		•	eet)			
Barrier Distance to Observer				Autos:	2.000				
Observer Height (Above Pad)			Medium		4.000	Crada Adi		0.0	
Pad Elevation			Heavy	Trucks:	8.006	Grade Adj	ustment.	0.0	
Road Elevation	0.0 feet		Lane Equi	ivalent Dis	tance (in	feet)			
Road Grade	0.0%			Autos:	92.547				
Left View	-90.0 degre	es	Medium	Trucks:	92.504				
Right View	90.0 degre	es	Heavy	Trucks:	92.547				
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance	Finite F	Road F	resnel	Barrier Atte	en Ber	m Atten	
Autos: 73.2	22 2.36	-4.1	1	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 83.6	68 -14.88	-4.1	1	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 87.3	-18.83	-4.1	1	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier atter	nuation)						
VehicleType Leq Peak F	lour Leq Day	/ Leq E	vening	Leq Nigh	nt	Ldn	CI	VEL	
Autos:	70.3	68.4	66.6		60.5	69.2	2	69.8	
Medium Trucks:	63.5	62.0	55.6		54.1	62.5	5	62.8	
Heavy Trucks:	63.2	61.8	52.7		54.0	62.3	3	62.5	
Vehicle Noise:	71.7	70.0	67.1		62.1	70.7	,	71.2	

70 dBA

111

120

Ldn:

CNEL:

65 dBA

240

259

60 dBA

517

557

55 dBA

1,115

1,201

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: b/w Research Dr. and ICD

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (F	dard = 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	17,600 vehicles	i			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Truc	ks (2 Axles):	15		
Peak H	lour Volume:	1,760 vehicles	ı	He	avy Truck	s (3+ Axles):	15		
Ve	hicle Speed:	60 mph		Vehicle I	Mix				
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data						tos: 77.5%	•	9.6%	-
Ra	rrier Height:	0.0 feet		Ме	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0		F	leavy Trud	cks: 86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet		Noise So	ource Elev	vations (in f	eet)		
Centerline Dist.	to Observer:	100.0 feet			Autos:	2.000	/		
Barrier Distance	to Observer:	0.0 feet		Mediui	n Trucks:	4.000			
Observer Height ((Above Pad):	5.0 feet			y Trucks:	8.006	Grade Adj	iustment.	: 0.0
Pa	ad Elevation:	0.0 feet							
Ros	ad Elevation:	0.0 feet		Lane Eq	uivalent D	Distance (in	feet)		
	Road Grade:	0.0%			Autos:	92.547			
	Left View:	-90.0 degree	S	Mediui	n Trucks:	92.504			
	Right View:	90.0 degree	S	Heav	y Trucks:	92.547			
FHWA Noise Mod	el Calculation	s							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	73.22	-0.75	-4.1	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-17.98	-4.1	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-21.94	-4.1	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and I	parrier atter	nuation)					
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Ni	ight	Ldn	CI	NEL
Autos:	67	7.2	5.3	63.5		57.4	66.1	I	66.7
Medium Trucks:	60).4 5	8.9	52.5		51.0	59.4	1	59.7
Heavy Trucks:	60).1 5	8.7	49.6		50.9	59.2	2	59.3

Vehicle Noise:	68.6 66	6.9	.0 59	9.0 67.	6 68.1
Centerline Distance to	Noise Contour (in feet)				
		70 dBA	65 dBA	60 dBA	55 dBA
	La	In: 69	149	321	692
	CNE	EL: 75	161	346	745

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/ICD

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS						
Highway Data				Site	Condition	s (Hard :	= 10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	16,300 vehicle 10% 1,630 vehicle				Trucks (2 rucks (3+	,			
	ehicle Speed: ane Distance:	60 mph 76 feet		Veh	nicle Mix VehicleTy	pe Autos:	<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0			Medium Heavy		84.8% 86.5%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre 90.0 degre		Lan	Medium Trud Heavy Trud ne Equivale	tos: 2 cks: 4 cks: 8 ent Distar tos: 92 cks: 92	.000	Grade Ad	iustment:	0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	73.22 83.68	-1.08 -18.32	-4	9 // 11 11	Finite Road -1.2 -1.2	0	-4.87 -4.97 -5.16	0.0	en Ber 000 000	0.000 0.000 0.000
Unmitigated Nois VehicleType	Leq Peak Ho	ur Leq Day	/ Leq	enuat Even	ing Le	eq Night		Ldn		VEL
Autos: Medium Trucks: Heavy Trucks:	60 59).1 9.7	64.9 58.5 58.3		63.2 52.2 49.3	57. 50. 50.	.6 .5	65.7 59.1 58.9	l 9	66.3 59.3 59.0
Vehicle Noise:	68	3.3	66.5	5 63.7 58.7 67.3						67.7

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	66	142	305	657
CNEL:	71	153	329	708

Scenario: Post 2030 - 2012 Modified Project (Option 1) Proj

Project Name: 2012 Great Park GPA/ZC

249

116

Road Name: Bake Pkwy.

Job Number: 8141

Road Segment: b/w Lake Forest Dr. and Ridge Route Dr.

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS							
Highway Data				3	Site Cor	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	3,400 vehicles	3					Autos:	15			
•	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15			
Peak H	our Volume:	340 vehicles	3		He	avy Tru	cks (3+	Axles):	15			
Ve	hicle Speed:	60 mph		-	/-l-:-l-							
Near/Far Lai	•	76 feet			/ehicle			Davi	[[]	Nicolat	Doile	
0'4- 0-4-					ven	icleType		Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		9.6%		
	rier Height:	0.0 feet				edium T		84.8%		10.3%		
Barrier Type (0-W		0.0			,	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dis	st. to Barrier:	100.0 feet		1	Voise S	ource E	levatio	ns (in fe	eet)			
Centerline Dist.	to Observer:	100.0 feet				Auto		2.000	,			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck		1.000				
Observer Height (Above Pad):	5.0 feet				y Truck		3.006	Grade Ad	iustment	: 0.0	
Pa	ad Elevation:	0.0 feet										
Roa	ad Elevation:	0.0 feet		L	.ane Eq	uivalen			feet)			
I	Road Grade:	0.0%				Auto	-	2.547				
	Left View:	-90.0 degree	es			m Truck		2.504				
	Right View:	90.0 degree	es		Heav	y Truck	s: 92	2.547				
FHWA Noise Mode	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	73.22	-7.89		-4.11		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-25.12		-4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-29.08		-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (with	out Topo and	barrier	atten	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev		Leq	Night		Ldn		NEL	
Autos:	60	.0	58.1		56.4		50	.3	58.9	9	59.5	
Medium Trucks:	53	.2	51.7		45.4		43	.8	52.3	3	52.5	
Heavy Trucks:	52	.9	51.5		42.5		43	.7	52.1	1	52.2	
Vehicle Noise:	61	.5	59.7		56.9		51	.9	60.5	5	60.9	
Centerline Distance	ce to Noise Co	ontour (in feet)		15.4		15.4				15.4	
			L	70 c			dBA	6	60 dBA		dBA	
			Ldn:	23	3	,	50		107	2	231	

CNEL:

25

Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Bake Pkwy.

Road Segment: b/w Ridge Route Dr. and Laguna Canyon

Project Name: 2012 Great Park GPA/ZC

Job Number: 8141 Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Cor	nditions (H	ard = 10, So	of $t = 15$)				
Average Daily	Traffic (Adt):	10,800 vehicles	S			Autos:	15				
Peak Hour	Percentage:	10%		Me	edium Truck	ks (2 Axles):	15				
Peak F	lour Volume:	1,080 vehicles	S	He	avy Trucks	(3+ Axles):	15				
Ve	ehicle Speed:	60 mph		Vehicle	Mix						
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily		
Site Data					Aut	tos: 77.5%	-	-	97.42%		
Ba	rrier Height:	0.0 feet		М	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0			Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Di	st. to Barrier:	100.0 feet		Noise S	ource Elev	ations (in f	eet)				
Barrier Distance to Observer: 0.0 Observer Height (Above Pad): 5.0		100.0 feet 0.0 feet 5.0 feet 0.0 feet	0.0 feet 5.0 feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.						
Ro	Road Elevation: 0.0 feet				uivalent D	istance (in	feet)				
	Road Grade:	0.0%			Autos:	92.547					
	Left View:	-90.0 degree	es	Mediu	m Trucks:	92.504					
	Right View:	90.0 degree	es	Hear	vy Trucks:	92.547					
FHWA Noise Mod	lel Calculation	18									
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	73.22	2 -2.87	-4	.11	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-20.10	-4	.11	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-24.06	-4	.11	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	nout Topo and	barrier atte	enuation)							
VehicleType	Leq Peak Ho	ur Leq Day	Leq	Evening	Leq Ni	ght	Ldn	CI	VEL		
Autos:	65	5.0	63.1	61.4		55.3	63.9	9	64.5		
Medium Trucks:	58	8.3	56.8	50.4		48.9	57.3	3	57.5		
Heavy Trucks:	58	3.0	56.5	47.5		48.7	57.1	1	57.2		
Vehicle Noise:	66	6.5	64.8	61.9		56.9	65.5	5	66.0		

70 dBA

50

54

Ldn:

CNEL:

65 dBA

108

116

60 dBA

232

250

55 dBA

500

538

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S		
Highway Data			Site Con	ditions (Hare	d=10, So	oft = 15)			
Average Daily Traffic (Adt):	27,200 vehicles	S			Autos:	15			
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15			
Peak Hour Volume:	2,720 vehicles	S	He	avy Trucks (3	3+ Axles):	15			
Vehicle Speed:	60 mph		Vehicle	Miss					
Near/Far Lane Distance:	76 feet				Dou		Niosht	Doily	
Cita Data			ven	icleType	Day : 77.5%	Evening	Night	Daily	
Site Data				Autos Autos Trusta			9.6%		
Barrier Height:				edium Trucks			10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):			<i>'</i>	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:			Noise So	ource Elevati	ons (in fe	eet)			
Centerline Dist. to Observer:				Autos:	2.000				
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks:	4.000				
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0	
Pad Elevation:									
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist	•	feet)			
Road Grade:	0.0%				92.547				
Left View:	-90.0 degree	es	Mediui	n Trucks:	92.504	504			
Right View:	90.0 degree	es	Heav	ry Trucks:	92.547				
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance	Finite		esnel	Barrier Att	en Ber	m Atten	
Autos: 73.2	2 1.15	-4	.11	-1.20	<i>-4.87</i>	0.0	000	0.000	
Medium Trucks: 83.6	8 -16.09	-4	.11	-1.20	<i>-4.97</i>	0.0	000	0.000	
Heavy Trucks: 87.3	3 -20.05	-4	.11	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)						
VehicleType Leq Peak H			Evening	Leq Night		Ldn	CI	VEL	
Autos:	69.1	67.2	65.4	5	9.3	68.0)	68.6	
Medium Trucks:	52.3	60.8	54.4	5	52.9	61.3	3	61.6	
Heavy Trucks:	62.0	60.5	51.5 52.8 61.1					61.2	
Vehicle Noise:	70.5	68.8	65.9		0.9	69.5	5	70.0	
Centerline Distance to Noise	Contour (in feet)							

70 dBA

92

100

Ldn: CNEL: 65 dBA

199

215

60 dBA

429

462

55 dBA

925

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS									
Highway Data				S	ite Con	ditions (H	ard = 10, S	oft = 15)					
		32,000 vehicle	s			,, T	Autos:						
	Percentage:	10%					ks (2 Axles):						
	lour Volume:	3,200 vehicle	:S		He	avy Trucks	s (3+ Axles):	15					
	ehicle Speed:	55 mph		V	ehicle l	Vix							
Near/Far La	ne Distance:	52 feet			Veh	icleType	Day	Evening	Night	Daily			
Site Data						Aut	tos: 77.5%	5 12.9%	9.6%	97.42%			
Ва	rrier Height:	0.0 feet			Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0			F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%			
Centerline Di	st. to Barrier:	100.0 feet		N	Noise Source Elevations (in feet)								
Centerline Dist.	to Observer:	100.0 feet				Autos:	2.000	,					
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks:	4.000						
Observer Height	(Above Pad):	5.0 feet				y Trucks:	8.006	Grade Ad	iustment:	0.0			
Pad Elevation: 0.0 feet										0.0			
Ro	Road Elevation: 0.0 feet				ane Eq	uivalent D	istance (in	feet)					
	Road Grade:	0.0%				Autos:	96.607						
	Left View:	-90.0 degre	es		Mediur	n Trucks:	96.566						
	Right View:	90.0 degre	es		Heav	y Trucks:	96.608						
FHWA Noise Mod	lel Calculation	1S											
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	71.78	3 2.23		-4.39		-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-15.01		-4.39		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-18.97		-4.39		-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	hout Topo and	barrie	er attenu	ation)								
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL			
Autos:	68	8.4	66.5		64.8		58.7	67.3	3	67.9			
Medium Trucks:	6	1.8	60.3		53.9		52.4	60.8	3	61.1			
Heavy Trucks:	6	1.8	60.4		51.4		52.6	61.0)	61.1			
Vehicle Noise:	70	0.0	68.2		65.3		60.4	69.0)	69.4			

70 dBA

85

92

Ldn:

CNEL:

65 dBA

184

197

60 dBA

395

425

55 dBA

852

917

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o W. Yale Lp.

Job Number: 8141

Analyst: B. Lawson

	SPECIFIC II	NPUT DATA			NOISE MODEL INPUTS						
Highway Data				S	Site Con	ditions (H	ard = 10,	Soft = 15)			
Average Daily	Traffic (Adt):	29,200 vehicle	s				Auto	s: 15			
Peak Hour	Percentage:	10%			Me	dium Truck	ks (2 Axles	s): 15			
Peak H	lour Volume:	2,920 vehicle	s		He	avy Trucks	(3+ <i>Axles</i>	s): 15			
Ve	ehicle Speed:	55 mph		V	/ehicle l	Mix					
Near/Far La	ne Distance:	52 feet				icleType	Day	Evening	Night	Daily	
Site Data						Aut	•	•	9.6%	-	
Ra	rrier Height:	0.0 feet			Me	edium Truc	ks: 84.8	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			F	Heavy Truc	ks: 86.5	5% 2.7%	10.8%	0.74%	
, ,	ist. to Barrier:	100.0 feet			laina Ca	ource Elev	otiono (in	foot)			
Centerline Dist.	to Observer:	100.0 feet			voise sc	Autos:	2.000	reet)			
Barrier Distance	to Observer:	0.0 feet			Modiuu	n Trucks:	4.000				
Observer Height	(Above Pad):	5.0 feet				ry Trucks:	8.006	Grade Ad	liustment	. 0.0	
P	ad Elevation:	0.0 feet							ijadimom.	0.0	
Ro	Road Elevation: 0.0 feet						istance (i	n feet)			
	Road Grade: 0.0%					Autos:	96.607				
	Left View:	-90.0 degre	es			m Trucks:	96.566				
	Right View:	90.0 degre	es		Heav	y Trucks:	96.608				
FHWA Noise Mod	lel Calculatior	าร									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresnel	Barrier Att	ten Ber	m Atten	
Autos:	71.78	1.83		-4.39)	-1.20	-4.8	7 0.	000	0.000	
Medium Trucks:	82.40	-15.41		-4.39)	-1.20	-4.9	7 0.	000	0.000	
Heavy Trucks:	86.40	-19.36		-4.39)	-1.20	-5.1	6 0.	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	ier attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Ev	rening	Leq Nig	ght	Ldn	CI	VEL	
Autos:			66.1		64.4		58.3	66.		67.5	
Medium Trucks:			59.9		53.5		52.0	60.		60.7	
Heavy Trucks:		1.4	60.0		51.0		52.2	60.	6	60.7	
Vehicle Noise:	69	9.6	67.8		64.9		60.0	68.	6	69.0	
Centerline Distan	ce to Noise C	ontour (in feet)								
				70 d	<i>BA</i>	65 dB	Α	60 dBA	55	dBA	

Ldn:

CNEL:

80

86

173

186

372

400

802

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Lake Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC INF	PUT DATA			NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions (Ha	rd = 10, S	oft = 15)					
• •	Traffic (Adt): 26 Percentage:	6,000 vehicles 10%	3		Me	dium Trucks	Autos (2 Axles)						
Peak F	Hour Volume: 2	2,600 vehicles	6		He	avy Trucks	(3+ Axles	: 15					
Ve	hicle Speed:	55 mph		ν	ehicle	Mix							
Near/Far La	ne Distance:	52 feet			VehicleType Day Evening Night								
Site Data						Auto	s: 77.5°	% 12.9%	9.6%	97.42%			
Ba Barrier Type (0-W	rrier Height: /all, 1-Berm):	0.0 feet 0.0			Medium Trucks: 84.8% 4.9% 10.3 Heavy Trucks: 86.5% 2.7% 10.3								
Centerline Di	st. to Barrier:	100.0 feet		N	Noise Source Elevations (in feet)								
Centerline Dist. Barrier Distance Observer Height	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet			Mediu	Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	ljustment:	0.0			
	ad Elevation:	0.0 feet	L	ane Eq	uivalent Dis	stance (in	feet)						
	Road Grade:	0.0%				Autos:	96.607						
	Left View: Right View:	-90.0 degree				m Trucks: ry Trucks:	96.566 96.608						
FHWA Noise Mod	el Calculations												
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road F	resnel	Barrier Att	ten Ber	m Atten			
Autos:	71.78	1.33		-4.39		-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-15.91		-4.39		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-19.87		-4.39		-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (withou	ut Topo and	barrie	er attenu	ation)								
VehicleType	Leq Peak Hour	Leq Day	,	Leq Ev	ening	Leq Nigi	ht	Ldn	CI	VEL			
Autos:	67.5	5	65.6		63.8		57.8	66.4	4	67.0			
Medium Trucks:	60.9		59.4		53.0		51.5	59.9		60.2			
Heavy Trucks:	60.9		59.5	50.5 51.7 6					1	60.2			
Vehicle Noise:	69.1		67.3		64.4		59.5	68.	1	68.			
Centerline Distan	ce to Noise Cor	ntour (in feet))										
				70 d	DΛ	65 dD /		60 4D1	EE	AD A			

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	74	160	344	742
CNEL:	80	172	370	798

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: b/w Creek Rd. and Lyon

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPU	T DATA				N	OISE	MODE	L INPUT	S		
Highway Data				3	Site Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt): 24,9	00 vehicles						Autos:	15			
Peak Hour Percentage		10%			Me	dium Tru	ıcks (2	Axles):	15			
Peak Hour Volume		90 vehicles			Heavy Trucks (3+ Axles): 15							
Vehicle Speed	l: :	55 mph		,	/ehicle l	Miy						
Near/Far Lane Distance):	52 feet		-		icleType		Day	Evening	Night	Daily	
Site Data					V 011		lutos:	77.5%	J	9.6%	_	
	4-	0.0 foot			M	, edium Tr		84.8%		10.3%	1.84%	
Barrier Heigh		0.0 feet 0.0				Heavy Tr		86.5%		10.8%	0.74%	
Barrier Type (0-Wall, 1-Berm Centerline Dist. to Barrie		0.0 0.0 feet								. 0.070	011 170	
Centerline Dist. to Observe				^	loise So	ource El	evatio	ns (in fe	eet)			
		0.0 feet				Autos	s: 2	2.000				
Barrier Distance to Observe		0.0 feet			Mediu	m Trucks	s: 4	1.000				
Observer Height (Above Pad		5.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	justment.	0.0	
Pad Elevation Road Elevation		0.0 feet		,	ano Fa	uivalent	Dieta	nce (in	foot)			
		0.0 feet			anc Lq	Autos		6.607	iccij			
Road Grade		0.0%	_		Modiu	Autos m Trucks		5.566				
Left Viev	_	00.0 degree						5.608				
Right Viev	<i>):</i> 9	0.0 degree	S		пеач	y Trucks	s. 90	0.000				
FHWA Noise Model Calculat	ions			<u> </u>								
VehicleType REMEL	Tra	affic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos: 71	78	1.14		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 82	40	-16.10		-4.39)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 86	40	-20.05		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (w	ithout	Topo and k	oarrie	er atteni	uation)							
VehicleType Leq Peak	Hour	Leq Day		Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	67.3	6	5.4		63.7		57	.6	66.2	2	66.8	
Medium Trucks:	60.7	5	9.2		52.8		51	.3	59.8	3	60.0	
Heavy Trucks:	60.7	5	9.3		50.3 51.5		51.5 59.9		9	60.0		
Vehicle Noise:	68.9	6	7.1		64.2		59	.3	67.9	9	68.3	
Centerline Distance to Noise	Conto	our (in feet)										

70 dBA

72

78

Ldn: CNEL: 65 dBA

155

167

60 dBA

335

360

55 dBA

721

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o E. Yale Lp.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT D	ATA			N	OISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions (Hard:	= 10, Sc	oft = 15)		
Average Daily Peak Hour	Traffic (Adt): Percentage:	24,900 v 10%			Me	dium Tru	cks (2	Autos: Axles):	15 15		
Peak H	lour Volume:	2,490 v	ehicles		He	avy Truci	ks (3+	Axles):	15		
	hicle Speed: ne Distance:	55 r 52 f	•	_	Vehicle	Mix icleType		Day	Evening	Night	Daily
Site Data					ven		utos:	77.5%		9.6%	-
Ba Barrier Type (0-W	•	0.0	feet			edium Tru Heavy Tru	ıcks:	84.8% 86.5%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist.		100.0			Noise So	ource Ele	vatio	ns (in fe	eet)		
Barrier Distance Observer Height (to Observer:	100.0 0.0 5.0 0.0	feet feet			Autos. m Trucks. ry Trucks.	: 4	2.000 3.000 3.006	Grade Ad	justment.	0.0
Road Elevation: 0.0 feet					Lane Eq	uivalent	Dista	nce (in	feet)		
	Road Grade: Left View: Right View:		% degrees degrees			Autos. m Trucks. ry Trucks.	: 96	6.607 6.566 6.608			
FHWA Noise Mod	el Calculatio	ns									
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3	1.14	-4.3	39	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40) -	16.10	-4.3	39	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40) -	20.05	-4.3	39	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Top	o and ba	arrier atter	nuation)						
VehicleType	Leq Peak Ho	our Le	eq Day	Leq E	vening	Leq N	light		Ldn	CI	VEL
Autos:	6	7.3	65	5.4	63.7		57	.6	66.2	2	66.8
Medium Trucks:	6	0.7	59	.2	52.8		51	.3	59.8	3	60.0
Heavy Trucks:	6	0.7	59	.3	50.3		51	.5	59.9		60.0
Vehicle Noise:	6	8.9	67	'.1	64.2		59	.3	67.9	9	68.3
Centerline Distant	ce to Noise C	Contour (in feet)								

Ldn:	72	155	335	721
CNEL:	78	167	360	775

70 dBA

65 dBA

60 dBA

55 dBA

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions (H	ard = 10, So	oft = 15)				
Peak Hour	Percentage:	27,700 vehicle 10%					Autos: ks (2 Axles):					
	lour Volume:	2,770 vehicle	es		He	avy Trucks	s (3+ Axles):	15				
	ehicle Speed:	55 mph		V	ehicle i	Mix						
Near/Far La	ne Distance:	52 feet			Veh	icleType	Day	Evening	Night	Daily		
Site Data						Aut	tos: 77.5%	12.9%	9.6%	97.42%		
Ba	rrier Height:	0.0 feet			Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0			ŀ	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%		
	st. to Barrier:	100.0 feet		N	loise So	ource Elev	ations (in f	eet)				
Ro	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre			Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608							
FHWA Noise Mod	lel Calculation	ns										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:	71.78	3 1.60)	-4.39		-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-15.64		-4.39		-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-19.59)	-4.39		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	l barrier	r attenu	ation)							
VehicleType	Leq Peak Ho	our Leq Da	у	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL		
Autos:	_	7.8	65.9		64.1		58.1	66.7	7	67.3		
Medium Trucks:	6	1.2	59.7		53.3		51.8	60.2	2	60.5		
Heavy Trucks:	6	1.2	59.8		50.8		52.0	60.4	1	60.5		
Vehicle Noise:	69	9.4	67.6		64.7		59.8	68.3	3	68.8		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	77	167	359	774
CNEL:	83	179	386	832

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Barranca Pkwy. Job Number: 8141 Road Segment: e/o Jeffrey Rd. Analyst: B. Lawson

SITE SPECIFIC	INP	PUT DATA					NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily Traffic (Ad): 17	,900 vehicles	3					Autos:	15		
Peak Hour Percentag	e:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak Hour Volum	e: 1	,790 vehicles	S		He	avy Tru	icks (3+	Axles):	15		
Vehicle Spee	d:	55 mph		,	Vehicle I	Miy					
Near/Far Lane Distanc	ə <i>:</i>	52 feet				icleTyp	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Barrier Heigh	4-	0.0 feet			Me	edium 7	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Bern		0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrie	,	100.0 feet									
Centerline Dist. to Observe		100.0 feet		1	Noise So			•	et)		
Barrier Distance to Observe		0.0 feet				Auto		2.000			
Observer Height (Above Page		5.0 feet				n Truck	_	1.000			
Pad Elevatio	•	0.0 feet			Heav	y Truck	ks: 8	3.006	Grade Ad	justment:	0.0
Road Elevatio		0.0 feet			Lane Eq	uivalen	t Dista	nce (in t	eet)		
Road Grad		0.0%			-	Auto		 6.607			
Left Vie		-90.0 degree	25		Mediui	n Truck		6.566			
Right Vie		90.0 degree				y Truck		6.608			
3											
FHWA Noise Model Calcula											
VehicleType REMEL		Traffic Flow	Di	stance	Finite		Fres	snel	Barrier Att	en Ber	m Atten
	.78	-0.29		-4.39		-1.20		-4.87		000	0.000
	.40	-17.53		-4.39		-1.20		-4.97		000	0.000
Heavy Trucks: 86	.40	-21.49		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (v	/itho	ut Topo and	barri	ier atten	uation)						
VehicleType Leq Peak	Hour	Leq Day	,	Leq E	/ening	Leq	Night		Ldn	CI	VEL
Autos:	65.9)	64.0		62.2		56	.2	64.8	3	65.4
Medium Trucks:	59.3	3	57.8		51.4		49	.9	58.3	3	58.6
Heavy Trucks:	59.3	3	57.9		48.9		50	.1	58.5	5	58.6
Vehicle Noise:	67.5	5	65.7		62.8		57	.9	66.4	4	66.9
Centerline Distance to Nois	e Con	ntour (in feet)								
		· · · · · · · · · · · · · · · · · · ·		70 c	dBA	65	dBA	6	0 dBA	55	dBA

58

62

Ldn:

CNEL:

125

134

268

289

578

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o Sand Canyon. Av.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt). Peak Hour Percentage. Peak Hour Volume.	10% 1,810 vehicles			dium Trucks (2 avy Trucks (3-	,	15 15 15			
Vehicle Speed:	•		Vehicle	Mix					
Near/Far Lane Distance.	52 feet		Veh	icleType	Day	Evening	Night	Daily	
Site Data				Autos:	77.5%	12.9%	9.6%	97.42%	
Barrier Height . Barrier Type (0-Wall, 1-Berm).	0.0			edium Trucks: Heavy Trucks:	84.8% 86.5%		10.3% 10.8%	1.84% 0.74%	
Centerline Dist. to Barrier			Noise So	ource Elevatio	ons (in fe	eet)			
Centerline Dist. to Observer. Barrier Distance to Observer. Observer Height (Above Pad). Pad Elevation.	0.0 feet 5.0 feet			m Trucks:	2.000 4.000 8.006	Grade Adj	iustment:	0.0	
Road Elevation			Lane Eq	uivalent Dista	nce (in f	feet)			
Road Grade. Left View.		es	Mediu		6.607 6.566				
Right View	90.0 degree	es	Heav	y Trucks: 9	6.608				
FHWA Noise Model Calculation	ons		-						
VehicleType REMEL	Traffic Flow	Distance			snel	Barrier Att	en Ber	m Atten	
Autos: 71.7			.39	-1.20	-4.87		000	0.000	
Medium Trucks: 82.4			.39	-1.20	-4.97		000	0.000	
Heavy Trucks: 86.4	-21.44	-4	.39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)						
VehicleType Leq Peak H	lour Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL	
Autos:	65.9	64.0		56	6.2	64.8	3	65.4	
		57.8			9.9	58.4		58.6	
Heavy Trucks:	59.4	57.9	48.9 50.2			58.5		58.6	
Vehicle Noise:	67.5	65.8	62.8	57	7.9	66.5	5	67.0	
Centerline Distance to Noise	Contour (in feet)							

70 dBA

58

63

Ldn: CNEL: 65 dBA

126

135

60 dBA

270

291

55 dBA

583

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Barranca Pkwy. Job Number: 8141 Road Segment: e/o Sand Canyon. Av. Analyst: B. Lawson

SITE SPEC	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				5	Site Con	ditions	(Hard	= 10, So	oft = 15)			
Average Daily Traffi	c (Adt): 15	5,600 vehicles	3					Autos:	15			
Peak Hour Perce	entage:	10%			Me	dium Tı	rucks (2	Axles):	15			
Peak Hour V	olume:	1,560 vehicles	3		He	avy Tru	icks (3+	Axles):	15			
Vehicle	Speed:	55 mph		,	/ehicle l	Miv						
Near/Far Lane Di	stance:	52 feet		<u> </u>		icleType	e	Day	Evening	Night	Daily	
Site Data					V 0111		Autos:	77.5%	-	•	97.42%	
	Haiada.	0.0 foot			Me	edium T		84.8%		10.3%	1.84%	
Barrier Type (0 Well 1	_	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%	
Barrier Type (0-Wall, 1- Centerline Dist. to	,	100.0 feet									011 170	
Centerline Dist. to Ob		100.0 feet		^	Voise Sc	ource E	levatio	ns (in fe	eet)			
Barrier Distance to Ob		0.0 feet				Auto	os: 2	2.000				
Observer Height (Abov		5.0 feet			Mediui	n Truck	rs: 4	1.000				
Pad Ele	•	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Adj	iustment:	0.0	
Road Ele		0.0 feet		1	Lane Eq	uivalen	t Dista	nce (in t	feet)			
	Grade:	0.0 feet 0.0%		-	zano zy	Auto		6.607	001)			
	ft View:	-90.0 degree	20		Mediu	n Truck		6.566				
	nt View. nt View:	90.0 degree				y Truck		6.608				
Nigi	it view.	90.0 degree	55		ricav	y ITUON	.o. o	3.000				
FHWA Noise Model Ca	lculations											
VehicleType RI	EMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-0.89		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-18.13		-4.39	9	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-22.09		-4.39	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Lev	els (witho	ut Topo and	barri	er atteni	uation)							
	Peak Hour			Leq Ev		Leq	Night		Ldn	CI	VEL	
Autos:	65.3	3	63.4	· ·	61.6	•	55	.6	64.2	2	64.8	
Medium Trucks:	58.7	7	57.2		50.8		49	.3	57.7	7	58.0	
Heavy Trucks:	58.7	7	57.3		48.3		49	.5	57.9)	58.0	
Vehicle Noise:	66.9)	65.1		62.2		57	.3	65.8	3	66.3	
Centerline Distance to	Noise Cor	ntour (in feet)									
		-		70 a	IBA	65	dBA	6	i0 dBA	55	dBA	

53

57

Ldn:

CNEL:

114

122

528

568

245

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Laguna Canyon Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Hard	l = 10, Sc	oft = 15)			
Average Daily Traffic (Adt).	14,900 vehicle	S			Autos:	15			
Peak Hour Percentage.			Me	dium Trucks (2 Axles):	15			
Peak Hour Volume:	1,490 vehicle	s	He	avy Trucks (3	+ Axles):	15			
Vehicle Speed:	55 mph		Vehicle i	Miss					
Near/Far Lane Distance.	•				Dov		Niaht	Doily	
Site Date			veri	icleType	Day	Evening	Night	Daily	
Site Data			A 4	Autos:			9.6%	97.42%	
Barrier Height				edium Trucks:			10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm).			,	leavy Trucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier			Noise So	ource Elevation	ons (in f	eet)			
Centerline Dist. to Observer				Autos:	2.000				
Barrier Distance to Observer	0.0 feet		Mediu		4.000				
Observer Height (Above Pad)	5.0 feet				8.006	Grade Ad	iustment:	0.0	
Pad Elevation									
Road Elevation	0.0 feet		Lane Eq	uivalent Dista		feet)			
Road Grade.	0.0%				6.607				
Left View	-90.0 degre	es	Mediui		6.566				
Right View	90.0 degre	es	Heav	y Trucks: 9	6.608				
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten	
Autos: 71.7	78 -1.09	-4.	39	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 82.4	10 -18.33	-4.	39	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 86.4	10 -22.28	-4.	39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)						
VehicleType Leq Peak H	lour Leq Day	y Leq	Evening	Leq Night		Ldn	CI	VEL	
Autos:	65.1	63.2	61.4	5	5.4	64.0)	64.6	
Medium Trucks:	58.5	57.0		4	9.1	57.5	5	57.8	
Heavy Trucks:	58.5	57.1	48.1 49.3		9.3	57.7		57.8	
Vehicle Noise:	66.7	64.9	62.0	5	7.1	65.6	<u></u>	66.1	
Centerline Distance to Noise	Contour (in feet	t)							

70 dBA

51

55

Ldn:

CNEL:

65 dBA

110

119

60 dBA

238

256

55 dBA

512

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: b/w Discovery and Banting

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				3	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt): 1	3,300 vehicles	3					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	? Axles):	15			
Peak H	lour Volume:	1,330 vehicles	3		He	avy Tru	cks (3+	- Axles):	15			
Ve	hicle Speed:	55 mph		-	/ehicle	Miv						
Near/Far La	ne Distance:	52 feet				icleType	è	Day	Evening	Night	Daily	
Site Data					*011		Autos:	77.5%		9.6%		
	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%		10.3%	1.84%	
Barrier Type (0-W		0.0			I	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dis	•	100.0 feet										
Centerline Dist.		100.0 feet		1	Voise So			•	eet)			
Barrier Distance		0.0 feet				Auto		2.000				
					Mediu	m Truck	s:	4.000				
Observer Height (Above Pad): 5.0 feet					Heav	y Truck	s:	3.006	Grade Ad	iustment.	0.0	
	ad Elevation:	0.0 feet		-	Lane Eq	uivalan	t Diete	noo (in	foot)			
	ad Elevation:	0.0 feet			_arie Eq			•	ieei)			
ı	Road Grade:	0.0%				Auto		6.607				
	Left View:	-90.0 degree				m Truck		6.566				
	Right View:	90.0 degree	es		Heav	y Truck	s: 9	6.608				
FHWA Noise Mode	el Calculations	······································										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-1.58		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-18.82		-4.39)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-22.78		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (witho	out Topo and	barrie	er atten	uation)							
VehicleType	Leq Peak Hou	r Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	64.	6	62.7		60.9		54	1.9	63.5	5	64.1	
Medium Trucks:	58.	0	56.5		50.1		48	3.6	57.0)	57.3	
Heavy Trucks:	58.	0	56.6		47.6		48	3.8	57.2	2	57.3	
Vehicle Noise:	66.	2	64.4		61.5		56	6.6	65.1		65.6	

70 dBA

47

51

Ldn: CNEL: 65 dBA

102

110

60 dBA

220

237

55 dBA

474

510

Sunday.	May 20	2012
Sulluav.	IVIAV ZU.	2012

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: s/o ICD

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)							
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	18,400 vehicle 10% 1,840 vehicle				dium Tru avy Truc	•	,	15 15 15			
	ehicle Speed: ane Distance:	55 mph 52 feet		V	ehicle I Vehi	/lix cleType	,	Day	Evening	Night	Daily	
Site Data						-	Autos:	77.5%		9.6%		
Ba Barrier Type (0-V	vall, 1-Berm):	0.0 feet 0.0				edium Ti łeavy Ti		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%	
Centerline D	ist. to Barrier:	100.0 feet		N	oise So	urce El	evatio	ns (in fe	eet)			
Barrier Distance Observer Height P Ro	Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet bserver Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608							
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-0.17		-4.39		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:				-4.39		-1.20		-4.97		000	0.000	
Heavy Trucks:	86.40	-21.37	-	-4.39		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	l barrier a	ttenu	ation)							
VehicleType	Leq Peak Ho	ur Leq Da	y Le	q Eve	ening	Leq	Night		Ldn	CI	VEL	
Autos:	_	6.0	64.1		62.3		56	_	64.9		65.5	
Medium Trucks:		9.4	57.9		51.5		50		58.4		58.7	
Heavy Trucks:		9.4	58.0		49.0		50.	2	58.6		58.7	
Vehicle Noise:	6	7.6	65.8		62.9		58	0	66.6	6	67.0	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	59	127	273	589
CNEL:	63	137	294	634

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: b/w I-5 HOV Ramp and ICD

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Ha	ord = 10, Sc	oft = 15)			
Average Daily Traffic (Adt):	21,000 vehicles	S			Autos:	15			
Peak Hour Percentage:	10%		Me	dium Truck	s (2 Axles):	15			
Peak Hour Volume:	2,100 vehicles	S	Hea	avy Trucks	(3+ Axles):	15			
Vehicle Speed:	55 mph		Vehicle I	Лix					
Near/Far Lane Distance:	52 feet			cleType	Day	Evening	Night	Daily	
Site Data				Auto			9.6%		
Barrier Height:	0.0 feet		Me	edium Truck	ks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Truck	ks: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:	100.0 feet			51		4)			
Centerline Dist. to Observer:	100.0 feet		Noise Sc	urce Eleva	•	eet)			
Barrier Distance to Observer:	0.0 feet			Autos:	2.000				
Observer Height (Above Pad):	5.0 feet			n Trucks:	4.000	Orodo Ad			
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0	
Road Elevation:	0.0 feet		Lane Equ	uivalent Di	stance (in	feet)			
Road Grade:	0.0%			Autos:	96.607				
Left View:	-90.0 degree	es	Mediur	n Trucks:	96.566				
Right View:	90.0 degree	es	Heav	y Trucks:	96.608				
FHWA Noise Model Calculatio	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road I	-resnel	Barrier Att	en Ber	m Atten	
Autos: 71.78	8 0.40	-4.3	89	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 82.4	0 -16.84	-4.3	89	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 86.4	0 -20.79	-4.3	89	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)						
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nig	ht	Ldn	CI	VEL	
Autos: 6	6.6	64.7	62.9		56.9	65.5	5	66.1	
Medium Trucks: 6	0.0	58.5	52.1		50.6	59.0)	59.3	
Heavy Trucks: 6	0.0	58.6	49.6		50.8	59.2	2	59.3	
Vehicle Noise: 6	88.2	66.4	63.4		58.6	67.	1	67.6	

70 dBA

64

69

Ldn:

CNEL:

65 dBA

139

149

60 dBA

299

321

55 dBA

643

692

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: s/o Technology

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INP	UT DATA			NOISE MODEL INPUTS							
Highway Data				3	Site Con	ditions ((Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Ad	t): 22,	400 vehicles	3					Autos:	15			
Peak Hour Percentag		10%			Me	dium Tru	ıcks (2	Axles):	15			
Peak Hour Volum		240 vehicles	6		He	avy Truc	ks (3+	Axles):	15			
Vehicle Spee	d:	55 mph		,	/ehicle	Miv						
Near/Far Lane Distanc	e:	52 feet		-		icleType		Day	Evening	Night	Daily	
Site Data					VEII		lutos:	77.5%		9.6%	-	
					1/1	ے edium Tr		84.8%		10.3%	1.84%	
Barrier Heigi		0.0 feet				Heavy Tr		86.5%		10.8%	0.74%	
Barrier Type (0-Wall, 1-Berr	,	0.0			,	icavy III	ucns.	00.570	2.1 /0	10.070	0.7470	
Centerline Dist. to Barri		100.0 feet		1	Voise S	ource Ele	evatio	ns (in fe	eet)			
Centerline Dist. to Observ		100.0 feet				Autos	s: 2	2.000				
Barrier Distance to Observe		0.0 feet			Mediu	m Trucks	s: 4	1.000				
Observer Height (Above Pa	•	5.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	iustment:	0.0	
Pad Elevation		0.0 feet		,	one Fe	ivolont	Dioto	noo (in i	foot)			
Road Elevation		0.0 feet			.ane ⊏q	uivalent		•	eet)			
Road Grad		0.0%				Autos		5.607				
Left Vie		-90.0 degree				m Trucks		5.566				
Right Vie	W:	90.0 degree	es		Heav	y Trucks	s: 96	6.608				
FHWA Noise Model Calcula	tions											
VehicleType REMEL	. 7	raffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos: 7	.78	0.68		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 82	2.40	-16.56		-4.39)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 86	5.40	-20.51		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (vithou	t Topo and	barri	er atten	uation)							
VehicleType Leq Peak	Hour	Leq Day	,	Leq Ev	rening	Leq I	Night		Ldn	CI	VEL	
Autos:	66.9	(65.0		63.2		57	.1	65.8	3	66.4	
Medium Trucks:	60.3		58.7		52.4		50	.8	59.3	3	59.5	
Heavy Trucks:	60.3		58.9		49.8 5		51.1		59.4		59.6	
Vehicle Noise:	68.4	(66.7		63.7		58	.9	67.4	1	67.9	
Centerline Distance to Nois	e Con	tour (in feet))									

70 dBA

67

72

Ldn: CNEL: 65 dBA

145

156

60 dBA

312

335

55 dBA

672

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: n/o Technology

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	24,100	vehicles					Autos.	15			
Peak Hour	Percentage:	10%	ó			Me	dium Truc	ks (2 Axles).	15			
Peak H	lour Volume:	2,410	vehicles			He	avy Truck	s (3+ <i>Axles</i>).	15			
Ve	hicle Speed:	55	mph		V	ehicle l	Mix					
Near/Far La	ne Distance:	52	feet				icleType	Day	Evening	Night	Daily	
Site Data							Au	tos: 77.5%	6 12.9%	9.6%	97.42%	
Ra	rrier Height:	0.0	feet			Me	edium Trud	cks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0	icci			ŀ	Heavy True	cks: 86.5%	2.7%	10.8%	0.74%	
Centerline Di		100.0	feet						' 4\			
Centerline Dist.		100.0			N	oise So		ations (in f	eet)			
Barrier Distance			feet				Autos:	2.000				
Observer Height			feet				m Trucks:	4.000				
Pad Elevation.			feet			Heav	y Trucks:	8.006	Grade Ad	justment.	: 0.0	
			feet		Lá	ane Ea	uivalent D	Distance (in	feet)			
	Road Grade:	0.0					Autos:	96.607	,			
	Left View:		degree	e		Mediu	m Trucks:	96.566				
	Right View:		degree				y Trucks:	96.608				
	3											
FHWA Noise Mod	el Calculation											
VehicleType	REMEL	Traffic	Flow	Distanc	e	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos:	71.78		1.00		4.39		-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	82.40		-16.24		4.39		-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40		-20.20	-	4.39		-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Top	o and b	parrier at	tenu	ation)						
VehicleType	Leq Peak Ho	ur L	eq Day	Lec	q Eve	ening	Leq Ni	ight	Ldn	CI	NEL	
Autos:	67	7.2	6	65.3		63.5		57.5	66.	1	66.7	
Medium Trucks:	60	0.6	5	59.1		52.7		51.2 59.6		6	59.9	
Heavy Trucks:	60	0.6	5	9.2		50.1		51.4	59.8	8	59.9	
Vehicle Noise:	68	3.8	6	67.0				59.2	67.	7	68.2	
Contorlino Distan	co to Noiso C	ontour /	(in foot)									

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	71	152	327	705							
CNEL:	76	163	352	759							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Ada

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Si	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	21,800 vehicle	s				Autos	: 15				
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Axles).	: 15				
Peak F	lour Volume:	2,180 vehicle	es		He	avy Truck	s (3+ Axles)	: 15				
Ve	ehicle Speed:	55 mph		V	ehicle i	Mix						
Near/Far La	ne Distance:	52 feet		-		icleType	Day	Evening	Night	Daily		
Site Data							tos: 77.5%	J	9.6%	-		
Ba	rrier Height:	0.0 feet			Me	edium Tru	cks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-V	•	0.0			ŀ	Heavy True	cks: 86.5%	6 2.7%	10.8%	0.74%		
	st. to Barrier:	100.0 feet		N	oise So	ource Flev	/ations (in f	eet)				
Centerline Dist.	to Observer:	100.0 feet		7.	0,50 00	Autos:	2.000	ccij				
Barrier Distance	to Observer:	0.0 feet			Modiuu	m Trucks:	4.000					
Observer Height (Above Pad): 5.0 feet						8.006	Grada Ad	iustmont				
_	Pad Elevation: 0.0 feet									0.0		
Ro	ad Elevation:	0.0 feet		La	ane Eq	uivalent E	Distance (in	feet)				
	Road Grade:	0.0%				Autos:	96.607					
	Left View:	-90.0 degre	es		Mediu	m Trucks:	96.566					
	Right View:	90.0 degre			Heav	y Trucks:	96.608					
FHWA Noise Mod	lal Calculation	ne										
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:				-4.39		-1.20	-4.87		000	0.000		
Medium Trucks:				-4.39		-1.20	-4.97		000	0.000		
Heavy Trucks:	86.40	-20.63		-4.39		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	barrier a	attenu	ation)							
VehicleType	Leg Peak Ho			eq Eve		Leq Ni	iaht	Ldn	CI	VEL		
Autos:	•	6.7	64.9	- 1	63.1	4	57.0	65.7		66.3		
Medium Trucks:	6	0.1	58.6		52.3		50.7	59.2	2	59.4		
Heavy Trucks:	6	0.2	58.7		49.7		51.0	59.3	3	59.4		
Vehicle Noise:	6	8.3	66.6		63.6		58.7	67.3	3	67.8		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	66	142	306	660
CNEL:	71	153	329	710

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Job Number: 8141

Road Segment: w/o Marine Wy.

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	ATA		NOISE MODEL INPUTS						
Highway Data					S	ite Con	ditions (F	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	25,700 v	vehicles					Autos	15		
Peak Hour	Percentage:	10%				Me	dium Truc	ks (2 Axles).	15		
Peak H	lour Volume:	2,570 \) vehicles 5 mph 2 feet			He	avy Truck	s (3+ Axles)	15		
Ve	hicle Speed:	55 ı				ehicle l	Mix				
Near/Far La	ne Distance:	52 f					icleType	Day	Evening	Night	Daily
Site Data							Au	tos: 77.5%	6 12.9%	9.6%	97.42%
Ra	rrier Height:	0.0	feet			Me	edium Tru	cks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	reet			ŀ	Heavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Di	,	100.0	feet						· - 4		
Centerline Dist.		100.0			N	oise So		vations (in f	eet)		
Barrier Distance			feet				Autos:	2.000			
	ver Height (Above Pad): 5.0 feet						m Trucks:	4.000			
	ad Elevation:		feet			Heav	y Trucks:	8.006	Grade Ad	ljustment	: 0.0
	ad Elevation: ad Elevation:				Lá	ane Ea	uivalent [Distance (in	feet)		
	Road Grade:					Autos: 96.607					
	Left View:		degree	e		Mediu	m Trucks:	96.566			
	Right View:		degree				y Trucks:	96.608			
	g	00.0	acg.cc	J			,				
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic	Flow	Distan	ce	Finite	Road	Fresnel	Barrier Att	ten Ber	m Atten
Autos:	71.78		1.28	-	4.39		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40		-15.96	-	4.39		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	•	-19.92	-	4.39		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	o and b	parrier a	ttenu	ation)					
VehicleType	Leq Peak Ho	ur L	eq Day	Le	q Eve	ening	Leq N	ight	Ldn	C	NEL
Autos:	67	'.5	6	5.6		63.8		57.7	66.4	4	67.0
Medium Trucks:	60).9	5	9.3		53.0		51.4	59.9	9	60.1
Heavy Trucks:	60).9	5	9.5		50.4 51.7			60.0	0	60.2
Vehicle Noise:	69	0.0	6	67.3		64.3		59.5	68.0	0	68.5
Contorlino Distan	co to Noiso C	ontour (in foot)								

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	74	159	342	736							
CNEL:	79	171	368	792							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy./Muirlands Bl.

Road Segment: w/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (Ha	rd = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	20,700 vehicles	3			Autos.	15		
Peak Hour	Percentage:	10%		Me	dium Trucks	s (2 Axles).	15		
Peak H	lour Volume:	2,070 vehicles	6	He	avy Trucks	(3+ Axles).	15		
Ve	hicle Speed:	55 mph	-	Vehicle I	Mix				
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data					Auto		-	9.6%	_
Ra	rrier Height:	0.0 feet		Me	edium Truck	(s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0 leet 0.0		ŀ	Heavy Truck	s: 86.5%		10.8%	0.74%
Centerline Di	•	100.0 feet							
Centerline Dist.		100.0 feet	-	Noise So	ource Eleva	•	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height (5.0 feet			m Trucks:	4.000			
,	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustmen				justment.	: 0.0
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)					
	Road Grade:	0.0%			Autos:	96.607	<u> </u>		
	Left View:	-90.0 degree	es	Mediui	m Trucks:	96.566			
	Right View:	90.0 degree		Heav	y Trucks:	96.608			
FHWA Noise Mod									
VehicleType	REMEL	Traffic Flow	Distance			-resnel	Barrier Att		m Atten
Autos:			-4.3		-1.20	-4.87		000	0.000
Medium Trucks:			-4.3		-1.20	-4.97		000	0.000
Heavy Trucks:	86.40	-20.86	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nig	ht	Ldn	CI	NEL
Autos:	6	6.5	64.6	62.9		56.8	65.4	4	66.0
Medium Trucks:	5	9.9	58.4	52.0		50.5	59.0)	59.2
Heavy Trucks:	5	9.9	58.5	49.5		50.7	59.1	1	59.2

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	64	137	296	637
CNEL:	69	148	318	686

63.4

66.3

67.1

58.5

67.5

Vehicle Noise:

68.1

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy
Road Segment: e/o Alton Pkwy.

Job Number: 8141
Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DA	ATA		NOISE MODEL INPUTS						
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	20,400 v	ehicles					Autos:	15		
	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	2,040 v	ehicles		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 m	nph		Vehicle I	Miv					
Near/Far La	ane Distance:	52 fe	eet			icleType	2	Day	Evening	Night	Daily
Site Data					VOII		Autos:	77.5%	Ū	9.6%	-
		0.0	e 1		lΛ	edium T		84.8%		10.3%	
	rrier Height:	0.0	reet			leavy T		86.5%		10.8%	0.74%
Barrier Type (0-V		0.0	.		,	louvy i	raono.	00.070	2.1 70	10.070	0.7 170
Centerline Dist.	ist. to Barrier:	100.0 1			Noise So	ource E	levatio	ns (in fe	eet)		
		0.0 1				Auto		2.000			
Barrier Distance					Mediui	n Truck	rs: 4	.000			
Observer Height	(Above Pau). Pad Elevation:	5.0 1			Heav	y Truck	(s: 8	3.006	Grade Ad	justment	: 0.0
-	ad Elevation: ad Elevation:	0.0 1			Lane Equivalent Distance (in feet)						
	Road Grade:		0.0 feet Lane Equivalent Distance (in feet) 0.0% Autos: 96.607								
	Left View:				Modiu	n Truck		6.566			
	Right View:		degrees degrees			ry Truck		6.608			
	Right view.	90.0	uegrees		ricav	y ITUCK	.s. 30	.000			
FHWA Noise Mod	lel Calculation	ıs			I						
VehicleType	REMEL	Traffic I	Flow	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78		0.27	-4.	39	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40		16.96	-4.	39	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-2	20.92	-4.	39	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo	and ba	rrier atte	nuation)						
VehicleType	Leq Peak Ho		eq Day		Evening	Leq	Night		Ldn	C	NEL
Autos:	66	6.5	64.	6	62.8		56	.7	65.4	4	66.0
Medium Trucks:	59	9.8	58.	.3 52.0 50.4 58.9				9	59.1		
Heavy Trucks:	59	9.9	58.	5	5 49.4 50.7 59.0				59.2		
Vehicle Noise:	68	3.0	66.	.3	63.3 58.4 67.0 67				67.5		
Centerline Distan	ce to Noise C	ontour (ii	n feet)								
		<u> </u>	<u> </u>	70) dBA	65	dBA	6	60 dBA	55	dBA

63

68

136

146

293

315

631

679

Ldn:

CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy
Road Segment: e/o Sterling
Job Number: 8141
Analyst: B. Lawson

SITE SPECIFIC	INPUT	T DATA		NOISE MODEL INPUTS						
Highway Data				Site Con	ditions (H	lard = 10, S	oft = 15)			
Average Daily Traffic (Adt	: 16,10	0 vehicles				Autos.	15			
Peak Hour Percentage		0%		Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15						
Peak Hour Volume		0 vehicles								
Vehicle Speed	<i>l:</i> 5	55 mph		Vehicle i	N/iv					
Near/Far Lane Distance	o: 5	52 feet				Dov	Evening	Niaht	Doily	
Site Data				ven	icleType	Day tos: 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%	
Barrier Heigh		0.0 feet			edium Trud			10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm) <i>:</i> (0.0		1	Heavy Truc	cks: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrie	r: 100	0.0 feet		Noise So	ource Elev	ations (in f	eet)			
Centerline Dist. to Observe		0.0 feet			Autos:	2.000	,			
Barrier Distance to Observe	r: (0.0 feet		Mediu	m Trucks:	4.000				
Observer Height (Above Pad): 5	5.0 feet			y Trucks:	8.006	Grade Adj	ustment:	0.0	
Pad Elevation	n: (0.0 feet								
Road Elevation	n: (0.0 feet		Lane Equivalent Distance (in feet)						
Road Grade	e: (0.0%		Autos: 96.607						
Left Viev	<i>:</i> -90	0.0 degree	S	Mediu	m Trucks:	96.566				
Right Viev	<i>y:</i> 90	0.0 degree	S	Heav	y Trucks:	96.608				
FHWA Noise Model Calculate	ons									
VehicleType REMEL	Tra	ffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten	
Autos: 71.	78	-0.75	-4.3	9	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 82.	40	-17.99	-4.3	9	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 86	40	-21.95	-4.3	9	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (w	ithout 7	Topo and b	arrier atten	uation)						
VehicleType Leq Peak	lour	Leq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL	
Autos:	65.4	6	3.5	61.8		55.7	64.3	3	64.9	
Medium Trucks:	58.8	5	7.3	51.0		49.4	57.9)	58.1	
Heavy Trucks:	58.9	5	7.4	48.4 49.6 58.0)	58.1		
Vehicle Noise:	67.0	6	5.2	62.3 57.4 66.0				66.4		

70 dBA

54

58

Ldn:

CNEL:

65 dBA

116

125

60 dBA

250

269

55 dBA

539

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Job Number: 8141
Road Segment: w/o Jamboree Rd. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	TA		NOISE MODEL INPUTS							
Highway Data				S	ite Cond	ditions (F	Hard = 10, S	Soft = 15)				
Average Daily	Traffic (Adt):	25,300 vel	hicles				Autos	: 15				
Peak Hour	Percentage:	10%			Med	lium Truc	ks (2 Axles)): 15				
Peak H	lour Volume:	2,530 vel	hicles		Hea	vy Truck	s (3+ Axles)): 15				
Ve	hicle Speed:	50 mp	h	V	ehicle N	lix						
Near/Far La	ne Distance:	70 fee	et			cleType	Day	Evening	Night	Daily		
Site Data						Αι	itos: 77.5°	% 12.9%	9.6%	97.42%		
Bai	rrier Height:	0.0 fe	et		Me	dium Tru	cks: 84.8°	% 4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0			Н	eavy Tru	cks: 86.5°	% 2.7%	10.8%	0.74%		
Centerline Dis	st. to Barrier:	100.0 fe	et	N	oise So	urce Ele	vations (in	feet)				
Centerline Dist.	to Observer:	100.0 fe	et			Autos:	•	,				
Barrier Distance	to Observer:	0.0 fe	et		Mediun	Trucks:						
Observer Height (Above Pad):	5.0 fe	et		Heavy Trucks: 8.006 Grade Adjustment: 0							
Pa	ad Elevation:	0.0 fe	et		,							
Roa	ad Elevation:	0.0 fe	et	L	ane Equ	iivalent L	ent Distance (in feet)					
	Road Grade:	0.0%				Autos:	93.723					
	Left View:	-90.0 de	egrees		Mediun	n Trucks:	93.680					
	Right View:	90.0 de	egrees		Heavy	/ Trucks:	93.723					
FHWA Noise Mode	el Calculatio	าร										
VehicleType	REMEL	Traffic Fl	ow Di	istance	Finite I	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	70.20	,	1.62	-4.20		-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00) -15	5.62	-4.19		-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	3 -19	9.57	-4.20		-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	hout Topo	and barr	ier attenu	ation)							
VehicleType	Leq Peak Ho	our Leq	Day	Leq Eve	ening	Leq N	ight	Ldn	CI	VEL		
Autos:	6	6.4	64.5	•	62.8		56.7	65.3	3	65.9		
Medium Trucks:	6	0.0	58.5		52.1		50.6	59.0)	59.3		
Heavy Trucks:	6	0.4	59.0		50.0		51.2	59.6	6	59.7		
Vehicle Noise:	6	8.1	66.4		63.3		58.5	67.	1	67.6		

70 dBA

64

69

Ldn:

CNEL:

65 dBA

138

148

60 dBA

297

319

55 dBA

640

687

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Job Number: 8141
Road Segment: e/o Jamboree Rd. Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA			NOISE MODEL INPUTS						
Highway Data				S	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	20,000 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	2,000 vehicle	es		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	55 mph			/ehicle l	Miy					
Near/Far La	ne Distance:	52 feet				icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		^	loise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				n Truck	_	.000	Crada Ad	iuotmont	
_	ad Elevation:	0.0 feet			Heav	y Truck	(S: E	3.006	Grade Adj	justinent.	0.0
Ro	ad Elevation:	0.0 feet		L	Lane Equivalent Distance (in feet)						
	Road Grade:	0.0%			Autos: 96.607						
	Left View:	-90.0 degre	es		Mediui	n Truck	rs: 96	6.566			
	Right View:	90.0 degre	es		Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	lel Calculation	18									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.19	1	-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-17.05	,	-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21.01		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	66	6.4	64.5		62.7		56	.7	65.3	3	65.9
Medium Trucks:	59	9.8	58.3		51.9		50	.3	58.8	3	59.0
Heavy Trucks:	59	9.8	58.4		49.3 50.6 58.9				59.1		
Vehicle Noise:	68	3.0	66.2		63.2 58.4 66.9 6					67.4	
Centerline Distan	ce to Noise C	ontour (in fee	t)		-1						
				70 d	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

62

67

134

144

623

670

289

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Job Number: 8141
Road Segment: w/o Culver Dr. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS						
Highway Data				Site	Conditions	(Hard =	10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	26,700 vehicle 10% 2,670 vehicle			Medium Tr Heavy Tru	rucks (2 A	,			
	ehicle Speed: ane Distance:	55 mph 52 feet		Veh	nicle Mix VehicleType		<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0			Medium T Heavy T	rucks:	84.8% 86.5%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 90.0 degre		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608					iustment:	0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	71.78 82.40	Traffic Flow 1.44 1.45	-2	e F 1.39 1.39 1.39	-1.20 -1.20 -1.20		-4.87 -4.97 -5.16	0.0	en Ber 000 000	<i>m Atten</i> 0.000 0.000 0.000
Unmitigated Nois VehicleType	Leq Peak Ho	our Leq Da	y Leq	Even	ing Leq	Night		Ldn		VEL
Autos: Medium Trucks: Heavy Trucks:	6	7.6 1.0 1.1	65.7 59.5 59.6		64.0 53.1 50.6	57.9 51.6 51.8	5 3	66.5 60.1 60.2	l 2	67.1 60.3 60.3
Vehicle Noise:	69	9.2	67.4		64.5	59.6)	68.2	<u> </u>	68.6

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn: ¯	76	163	350	755							
CNEL:	81	175	377	812							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Job Number: 8141
Road Segment: e/o Culver Dr. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS					
Highway Data				S	ite Con	ditions (H	lard = 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	19,700 vehicl	es				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truci	ks (2 Axles):	15		
Peak H	lour Volume:	1,970 vehicl	es		Heavy Trucks (3+ Axles): 15					
Ve	ehicle Speed:	55 mph	mph			Mix				
Near/Far La	ne Distance:	52 feet				icleType	Day	Evening	Night	Daily
Site Data							tos: 77.5%		9.6%	
Ra	rrier Height:	0.0 feet			Me	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			H	Heavy Truc	cks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet								
Centerline Dist.		100.0 feet		N	oise So		ations (in f	eet)		
Barrier Distance		0.0 feet				Autos:	2.000			
	bserver Height (Above Pad): 5.0 fe				Mediui	m Trucks:	4.000			
_	•	•				y Trucks:	8.006	Grade Ad	justment:	0.0
	ad Elevation: ad Elevation:			1 :	ano Fa	uivalent F	istanco (in	foot)		
		0.0 feet			Lane Equivalent Distance (in feet) Autos: 96.607					
	Road Grade:	0.0%			N 4 = -1:					
	Left View:	-90.0 degr				m Trucks:	96.566			
	Right View:	90.0 degr	ees		Heav	y Trucks:	96.608			
FHWA Noise Mod	lel Calculation	S								
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.1	2	-4.39		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-17.1	2	-4.39		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21.0	7	-4.39		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo an	d barri	ier attenu	ation)					
VehicleType	Leq Peak Hou	ır Leq Da	ay	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	66	5.3	64.4		62.6		56.6	65.2	2	65.8
Medium Trucks:	59).7	58.2		51.8		50.3	58.7	7	59.0
Heavy Trucks:	59).7	58.3		49.3		50.5	58.9	9	59.0
Vehicle Noise:		' .9	66.1		63.2		58.3	66.8	3	67.3
Contorlino Distan	co to Noise C	ontour (in for	٠ + ١							

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	62	133	286	617							
CNEL:	66	143	308	663							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Job Number: 8141
Road Segment: e/o Eastwood Analyst: B. Lawson

SITE SPECIFIC	INPL	JT DATA				ı	NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, Sc	ft = 15)		
Average Daily Traffic (Adt)	: 14,2	200 vehicles	3					Autos:	15		
Peak Hour Percentage	:	10%			Me	dium Ti	rucks (2	Axles):	15		
Peak Hour Volume	: 1,4	420 vehicles	3		He	avy Tru	icks (3+	- Axles):	15		
Vehicle Speed	:	55 mph		-	Vehicle I	Miv					
Near/Far Lane Distance	:	52 feet				icleTyp	e	Day	Evening	Night	Daily
Site Data					V 011		Autos:	77.5%		•	97.42%
		0.0 foot			Me	edium 7		84.8%		10.3%	1.84%
Barrier Height		0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm, Centerline Dist. to Barrie		0.0 00.0 feet									011 170
Centerline Dist. to Observe		00.0 feet		1	Voise So	ource E	levatio	ns (in fe	eet)		
Barrier Distance to Observe		0.0 feet				Auto	os: 2	2.000			
Observer Height (Above Pad	-	5.0 feet			Mediui	m Truck	ks: 4	4.000			
Pad Elevation		0.0 feet			Heav	y Truck	ks: 8	3.006	Grade Adj	justment:	0.0
Road Elevation		0.0 feet		,	Lane Eq	uivalen	t Dista	nce (in t	eet)		
Road Grade	-	0.0 feet 0.0%		-	zano zq	Auto		6.607	000		
Left View		90.0 degree			Mediu	n Truck		6.566			
Right View		90.0 degree				ry Truck		6.608			
Night view	. ,	90.0 degree	;5		ricav	y Truck	10.	3.000			
FHWA Noise Model Calculati	ons										
VehicleType REMEL	Tr	raffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos: 71.	78	-1.30		-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.	40	-18.54		-4.39	9	-1.20		<i>-4</i> .97	0.0	000	0.000
Heavy Trucks: 86.	40	-22.49		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout	t Topo and i	barri	er atten	uation)						
VehicleType Leq Peak I		Leq Day		Leg Ev		Leg	Night		Ldn	CI	VEL
Autos:	64.9		3.0		61.2	<u> </u>	55	5.2	63.8	3	64.4
Medium Trucks:	58.3	į	56.8		50.4		48	3.9	57.3	3	57.6
Heavy Trucks:	58.3	į	56.9		47.9		49	.1	57.5	5	57.6
Vehicle Noise:	66.5	(64.7		61.7		56	5.9	65.4	4	65.9
Centerline Distance to Noise	Conto	our (in feet))								
		-		70 c	IBA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

50

53

107

115

230

248

496

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Canyon View Av.

Road Segment: w/o Jamboree Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			1	NOISE MODEL INPUTS					
Highway Data				Site Co	onditions	(Hard =	= 10, Sc	oft = 15)			
	Traffic (Adt): Percentage: Hour Volume:	7,200 vehicle: 10% 720 vehicle:			ledium Tr leavy Tru	,	,				
Near/Far La	ehicle Speed: ane Distance:	50 mph 70 feet		Vehicle Ve	ehicleType	_	Day	Evening	Night	Daily	
Site Data Barrier Type (0-W	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0			Medium T Heavy T		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%	
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): lad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustmen Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723						0.0	
VehicleType Autos: Medium Trucks: Heavy Trucks:	70.20 81.00	7raffic Flow -3.84 -21.07	-2	e Finia 4.20 4.19 4.20	te Road -1.20 -1.20 -1.20	Fres	nel -4.87 -4.97 -5.16	0.0	en Ber 000 000 000	<i>m Atten</i> 0.000 0.000 0.000	
Unmitigated Nois VehicleType Autos:	Leq Peak Hou	ur Leq Day	1	tenuation Evening 57.	Leq	Night 51.	3	<i>Ldn</i> 59.9		VEL 60.5	
Medium Trucks: Heavy Trucks: Vehicle Noise:	55	5.0	53.0 53.5 60.9	46. 44. 57.	5	45. 45. 53.	7	53.6 54.7 61.6	1	53.8 54.2 62.1	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	28	60	128	277
CNEL:	30	64	138	297

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Chapman Ave./Santiago Cyn.

Job Number: 8141

Road Segment: w/o Jamboree Rd.

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS						
Highway Data				Site Cond	litions (Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	28,300 vehicles	S			Autos:	15			
Peak Hour	Percentage:	10%		Med	ium Trucks (2	? Axles):	15			
Peak H	lour Volume:	2,830 vehicles	S	Hea	vy Trucks (3-	- Axles):	15			
Ve	hicle Speed:	55 mph		Vehicle M	iy .					
Near/Far La	ne Distance:	88 feet			leType	Day	Evening	Night	Daily	
Site Data				707710	Autos:	77.5%		9.6%	-	
	rrier Height:	0.0 feet		Med	dium Trucks:	84.8%		10.3%	1.84%	
Barrier Type (0-W	•	0.0 1661			eavy Trucks:	86.5%		10.8%	0.74%	
Centerline Dis		100.0 feet								
Centerline Dist.		100.0 feet		Noise Sou	ırce Elevatio	•	eet)			
Barrier Distance		0.0 feet				2.000				
Observer Height (5.0 feet				4.000				
,	ad Elevation:	0.0 feet		Heavy	Trucks:	3.006	Grade Adj	ustment:	0.0	
	ad Elevation:	0.0 feet		Lane Equ	ivalent Dista	nce (in	feet)			
	Road Grade:	0.0%				9.850				
	Left View:	-90.0 degree	25	Medium		9.805				
	Right View:	90.0 degree				9.850				
FHWA Noise Mode	el Calculatio	าร								
VehicleType	REMEL	Traffic Flow	Distance	Finite F		snel	Barrier Atte	en Ber	m Atten	
Autos:	71.78	1.70	-3.9	92	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-15.54	-3.9	92	-1.20	<i>-4.</i> 97	0.0	000	0.000	
Heavy Trucks:	86.40	-19.50	-3.9	92	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	hout Topo and	barrier attei	nuation)						
VehicleType	Leq Peak Ho			vening	Leq Night		Ldn	CI	VEL	
Autos:	6	8.4	66.5	64.7	58	3.6	67.3	3	67.9	
Medium Trucks:	6	1.7	60.2	53.9	52	2.3	60.8	3	61.0	
Heavy Trucks:	6	1.8	60.4	51.3	52	2.6	60.9)	61.0	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	84	182	392	844
CNEL:	91	196	421	908

65.2

60.3

68.9

68.2

69.4

Vehicle Noise:

69.9

Job Number: 8141

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Chapman Ave./Santiago Cyn.

Road Segment: e/o Jamboree Rd. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS							
Highway Data			-		Site Con	ditions (Hard =	: 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	41,200 vehicles	S					Autos:	15			
Peak Hour	r Percentage:	10%			Me	dium Tru	cks (2	Axles):	15			
Peak F	Hour Volume:	4,120 vehicles	S		He	avy Truc	ks (3+	Axles):	15			
Ve	ehicle Speed:	55 mph		-	Vehicle l	Vix						
Near/Far La	ane Distance:	88 feet				icleType		Day	Evening	Night	Daily	
Site Data							utos:	77.5%		9.6%		
Ra	arrier Height:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V	•	0.0			ŀ	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%	
• • •	ist. to Barrier:	100.0 feet		,	Noise Sc	ource Ele	evation	s (in fe	eet)			
Centerline Dist.	to Observer:	100.0 feet		-	10,00 00	Autos		000	,,,,			
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks		.000				
Observer Height	(Above Pad):	5.0 feet				ry Trucks		.006	Grade Ad	iustment.	0.0	
P	Pad Elevation:	0.0 feet										
Ro	ad Elevation:	0.0 feet		1	Lane Eq	uivalent	Distan	ce (in i	feet)			
	Road Grade:	0.0%				Autos		.850				
	Left View:	-90.0 degree	es			n Trucks		.805				
	Right View:	90.0 degree	es		Heav	y Trucks	: 89	.850				
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	3.33		-3.92	2	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-13.91		-3.92	2	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-17.87		-3.92	2	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq E	vening	Leq l	Vight		Ldn	CI	VEL	
Autos:	70	0.0	68.1		66.3		60.	3	68.9	9	69.5	
Medium Trucks:	63	3.4	61.9		55.5		54.	0	62.4	1	62.7	
Heavy Trucks:	63	3.4	62.0		52.9		54.	2	62.6	6	62.7	
Vehicle Noise:	71	.6	69.8		66.8		62.	0	70.5	5	71.0	
Centerline Distan	ce to Noise Co	ontour (in feet)		Ti di							
				70 c	dBA	65 c	<i>IBA</i>	ϵ	60 dBA	55	dBA	

108

117

Ldn:

CNEL:

234

251

503

541

1,084

1,166

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Creek Rd.

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOIS	SE MODE	L INPUT	S		
Highway Data				Site Con	ditions (Ha	rd = 10, So	oft = 15)			
Average Daily	Traffic (Adt):	4,300 vehicles	S			Autos:	15			
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15			
Peak H	lour Volume:	430 vehicles	S	Heavy Trucks (3+ Axles): 15						
Ve	hicle Speed:	35 mph		Vehicle Mix						
Near/Far La	ne Distance:	20 feet			icleType	Day	Evening	Night	Daily	
Site Data					Auto	-		9.6%		
Ra	rrier Height:	0.0 feet		Ме	edium Truck	s: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0		F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%	
Centerline Di		100.0 feet					4)			
Centerline Dist.		100.0 feet		Noise Sc	ource Eleva	-	eet)			
Barrier Distance		0.0 feet			Autos:	2.000 4.000				
Observer Height		5.0 feet		Mediui						
	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0						
	Road Elevation: 0.0 feet				uivalent Dis	stance (in	feet)			
	Road Grade:	0.0%		•	Autos:	99.544				
	Left View:	-90.0 degree	25	Mediui	n Trucks:	99.504				
	Right View:	90.0 degree			y Trucks:	99.544				
FHWA Noise Mod		· ·							_	
VehicleType	REMEL	Traffic Flow	Distance	Finite		resnel	Barrier Atte		m Atten	
Autos:	64.30	-4.52	-4.		-1.20	-4.87	0.0		0.000	
Medium Trucks:		-21.76	-4.		-1.20	-4.97	0.0		0.000	
Heavy Trucks:	81.57	-25.72	-4.	59	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and	barrier atte	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Nigl	ht	Ldn	CI	VEL	
Autos:	54	.0	52.1	50.3		44.3	52.9	9	53.5	
Medium Trucks:	48	3.2	46.7	40.3		38.8	47.2	2	47.5	
Heavy Trucks:	50	.1	48.6	39.6		40.9	49.2	2	49.3	
Vehicle Noise:	56	5.2	54.5	51.1		46.7	55.2	2	55.6	

70 dBA

10

11

Ldn:

CNEL:

65 dBA

22

24

60 dBA

48

51

55 dBA

103

110

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: s/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INP	UT DATA				N	NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Ad): 25,	,500 vehicles	3					Autos:	15		
Peak Hour Percentag		10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volum	ə <i>:</i> 2,	,550 vehicles	S		Heavy Trucks (3+ Axles): 15						
Vehicle Spee	d:	60 mph			Vehicle i	Miv					
Near/Far Lane Distanc	э:	76 feet				icleType	2	Day	Evening	Night	Daily
Site Data					VEII		Autos:	77.5%	J	9.6%	_
					Λ.4.	, edium T		84.8%		10.3%	
Barrier Heigh		0.0 feet				Heavy T		86.5%		10.3%	
Barrier Type (0-Wall, 1-Berm	,	0.0			,	leavy i	rucks.	00.576	2.1 /0	10.676	0.7470
Centerline Dist. to Barrie		100.0 feet			Noise So	ource E	levatio	ns (in f	eet)		
Centerline Dist. to Observe		100.0 feet				Auto	s: 2	2.000			
Barrier Distance to Observe		0.0 feet			Mediu	m Truck	rs: 4	1.000			
Observer Height (Above Pac	•	5.0 feet			Heav	y Truck	:s: 8	3.006	Grade Ad	justment	± 0.0
Pad Elevatio		0.0 feet									
Road Elevatio		0.0 feet			Lane Eq			•	feet)		
Road Grad		0.0%				Auto		2.547			
Left Vie	v: ·	-90.0 degree	es			m Truck	-	2.504			
Right Vie	v:	90.0 degree	es		Heav	y Truck	rs: 92	2.547			
FHWA Noise Model Calculate	ions										
VehicleType REMEL	7	raffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Bei	rm Atten
Autos: 73	.22	0.86		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 83	.68	-16.37		-4.1	1	-1.20		<i>-4</i> .97	0.0	000	0.000
Heavy Trucks: 87	.33	-20.33		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (v	vithou	t Topo and	barri	ier atten	uation)						
VehicleType Leq Peak	Hour	Leq Day	,	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	68.8	(66.9		65.1		59	.1	67.7	7	68.3
Medium Trucks:	62.0	(60.5		54.1 52.6 61.0						61.3
Heavy Trucks:	61.7		60.3		51.2		52	.5	60.8	3	61.0
Vehicle Noise:	70.3		68.5		65.6		60	.7	69.2	2	69.7
Centerline Distance to Noise	Con	tour (in feet))								

70 dBA

89

95

Ldn:

CNEL:

65 dBA

191

206

60 dBA

411

443

55 dBA

886

Sunday,	May	20,	2012

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: n/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

	SPECIFIC II	NPUT DA	TA				ISE MODE		s			
Highway Data				S	ite Con	ditions (H	ard = 10, So	oft = 15)				
Average Daily	Traffic (Adt):	28,400 ve	hicles				Autos:	15				
Peak Hour	Percentage:	10%			Med	dium Truck	s (2 Axles):	15				
Peak F	lour Volume:	2,840 ve	hicles		Hea	avy Trucks	(3+ Axles):	15				
Ve	hicle Speed:	60 m	oh	V	ehicle I	Vix						
Near/Far La	ne Distance:	76 fee	et			cleType	Day	Evening	Night	Daily		
Site Data						Aut			9.6%	-		
Ra	rrier Height:	0.0 fe	et :		Ме	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0			H	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Di		100.0 fe	eet		C-		-4: (: f	4)				
Centerline Dist.		100.0 fe		N	oise so		ations (in f	eet)				
Barrier Distance	to Observer:	0.0 fe			1.4 a ali	Autos:	2.000					
Observer Height	(Above Pad):	5.0 fe	eet			n Trucks:	4.000	Crada Ad	iuotmont			
P	ad Elevation:	0.0 fe	eet		Heav	y Trucks:	8.006	Grade Adj	usimeni.	0.0		
Ro	ad Elevation:	0.0 fe	eet	L	ane Equ	uivalent D	istance (in	feet)				
	Road Grade:	0.0%			Autos: 92.547							
	Left View:	-90.0 d	egrees		Mediun	n Trucks:	92.504					
	Right View:	90.0 d	egrees		Heav	y Trucks:	92.547					
FHWA Noise Mod	el Calculation	าร										
VehicleType	REMEL	Traffic F	low D	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	73.22	<u> </u>	1.33	-4.11		-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	3 -1	5.91	-4.11		-1.20	<i>-4</i> .97	0.0	000	0.000		
Heavy Trucks:	87.33	3 -1	9.86	-4.11		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (witl	hout Topo	and barı	rier attenu	ation)							
VehicleType	Leq Peak Ho	our Lea	g Day	Leq Eve	ening	Leq Nig	ght	Ldn	CI	VEL		
Autos:	6	9.2	67.3		65.6		59.5	68.1	l	68.7		
Medium Trucks:		2.5	61.0		54.6		53.1	61.5	5	61.7		
Heavy Trucks:	6	2.2	60.7		51.7		52.9	61.3	3	61.4		
Vehicle Noise:	7	0.7	68.9		66.1		61.1	69.7	7	70.2		
Contouling Dieton	1- N-i C	\	faatl									

Centerline Distance to Noise Contour (in feet) 70 dBA 65 dBA 60 dBA 55 dBA Ldn: 95 205 442 952										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	95	205	442	952						
CNEL:	103	221	476	1,025						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: s/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	TA			N	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	36,700 vel	hicles					Autos:	15		
Peak Hou	r Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	3,670 vel	hicles		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 mp	oh		Vehicle I	Miv					
Near/Far La	ane Distance:	76 fee	et			icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	Ū	9.6%	_
	nrrier Height:	0.0 fe	ot		Ме	edium T		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0	EC		F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 fe	et								
Centerline Dist.		100.0 fe		_	Noise Sc				eet)		
Barrier Distance	to Observer:	0.0 fe				Auto		.000			
Observer Height	(Above Pad):	5.0 fe				n Truck	-	.000	Cuada Ad	li a 4 ma a . a 4	
J	Pad Elevation:	0.0 fe	et		Heav	y Truck	s: 8	.006	Grade Ad	jusimeni	. 0.0
Ro	ad Elevation:	0.0 fe	et		Lane Eq	uivalen	t Distaı	nce (in f	feet)		
	Road Grade:	0.0%				Auto	s: 92	2.547			
	Left View:	-90.0 de	egrees		Mediur	n Truck	s: 92	2.504			
	Right View:	90.0 de	egrees		Heav	y Truck	s: 92	2.547			
FHWA Noise Mod	lel Calculation	15									
VehicleType	REMEL	Traffic Fl	ow D	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos.	73.22		2.45	-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks.	83.68	-14	4.79	-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks.	87.33	-18	8.75	-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo	and barr	ier atter	nuation)						
VehicleType	Leq Peak Ho	ur Leq	Day	Leq E	vening	Leq	Night		Ldn	Ci	NEL
Autos.	70	0.4	68.5		66.7		60	.6	69.3	3	69.9
Medium Trucks.		3.6	62.1		55.7		54.	.2	62.6		62.9
Heavy Trucks.		3.3	61.8		52.8		54.	.1	62.4		62.5
Vehicle Noise.	7	1.8	70.1		67.2		62	.2	70.8	3	71.3
Centerline Distan	ce to Noise C	ontour (in	feet)	ı	1						
				70	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

113

122

243

262

524

564

1,129

1,216

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Culver Dr. Job Number: 8141 Road Segment: n/o Bryan Av. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				NO	DISE N	10DE	L INPUT	S	
Highway Data					Site Con	ditions (Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	32,200 vehicle	s				,	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Trud	cks (2 A	xles):	15		
Peak H	lour Volume:	3,220 vehicles	s		He	avy Truck	ks (3+ A	xles):	15		
Ve	hicle Speed:	60 mph		-	Vehicle l	Miv					
Near/Far La	ne Distance:	76 feet				icleType		Day	Evening	Night	Daily
Site Data					V 011			77.5%	J	9.6%	-
	rrior Usiabti	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 teet 0.0				Heavy Tru		86.5%		10.8%	0.74%
Centerline Dis		0.0 100.0 feet									
Centerline Dist.		100.0 feet		1	Noise So	ource Ele	vations	s (in fe	eet)		
Barrier Distance		0.0 feet				Autos.		000			
Observer Height (5.0 feet				m Trucks.		000			
• ,	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Adj	iustment.	0.0
	ad Elevation:	0.0 feet		1	Lane Eg	uivalent i	Distand	e (in t	feet)		
	Road Grade:	0.0%			<u> </u>	Autos		•			
•	Left View:	-90.0 degree	25		Mediui	m Trucks.					
	Right View:	90.0 degree			Heav	y Trucks:	92.5	547			
FHWA Noise Mod											
VehicleType	REMEL	Traffic Flow	Di	stance	Finite		Fresn		Barrier Atte		m Atten
Autos:	73.22	1.88		-4.11		-1.20		-4.87	0.0		0.000
Medium Trucks:	83.68	-15.36		-4.11	-	-1.20		-4.97	0.0		0.000
Heavy Trucks:	87.33	-19.32		-4.11	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hou			Leq E	vening /	Leq N	light		Ldn	CI	VEL
Autos:	69	.8	67.9		66.1		60.1		68.7	7	69.3
Medium Trucks:	63	.0	61.5		55.1		53.6		62.1		62.3
Heavy Trucks:	62	.7	61.3		52.2		53.5		61.8	3	62.0
Vehicle Noise:	71	.3	69.5		66.6		61.7		70.2	2	70.7
Centerline Distant	ce to Noise Co	ontour (in feet)								
<u> </u>				70 c	dBA	65 d	'BA	6	i0 dBA	55	dBA

103

111

Ldn:

CNEL:

223

240

1,035

1,115

480

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: s/o Bryan Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT	DATA				N	IOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	51,300	vehicles	3					Autos:	15		
Peak Hour	Percentage:	10	%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	5,130	vehicles	3		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	60	mph			Vehicle I	Mix					
Near/Far La	ane Distance:	76	feet		F		icleType	è	Day	Evening	Night	Daily
Site Data								Autos:	77.5%	Ŭ I	9.6%	-
	rrier Height:	0.4) feet			М	edium T		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0					leavy T		86.5%		10.8%	0.74%
•••	ist. to Barrier:) feet									
Centerline Dist.) feet			Noise So				eet)		
Barrier Distance) feet				Auto		2.000			
Observer Height) feet				m Truck		.000	0 - 4 - 4 - 4		0.0
	Pad Elevation:	_) feet			Heav	y Truck	s: E	3.006	Grade Adj	iustment.	. 0.0
Ro	ad Elevation:) feet			Lane Eq	uivalen	t Distai	nce (in i	feet)		
	Road Grade:	0.0	0%				Auto	s: 92	2.547			
	Left View:	-90.0) degree	es		Mediu	m Truck	s: 92	2.504			
	Right View:	90.0) degree	es		Heav	y Truck	s: 92	2.547			
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traffi	c Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22		3.90		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		-13.34		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33		-17.29		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and	barri	ier atter	nuation)						
VehicleType	Leq Peak Ho	ur	Leq Day	,	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	71	.8	(69.9		68.1		62	.1	70.7	7	71.3
Medium Trucks:	65	5.0	(63.5		57.2		55	.6	64.1	l	64.3
Heavy Trucks:	64	1.7	(63.3		54.3		55	.5	63.9)	64.0
Vehicle Noise:	73	3.3		71.5		68.6		63	.7	72.2	2	72.7
Centerline Distan	ce to Noise C	ontour	(in feet))								
					70	dBA	65	dBA	ϵ	60 dBA	55	dBA

141

152

Ldn:

CNEL:

304

328

655

706

1,412

1,520

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	ATA			NC	ISE MODE	L INPUT	S	
Highway Data					Site Con	ditions (F	Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	52,000 ve	ehicles				Autos	15		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Axles).	15		
Peak H	lour Volume:	5,200 ve	ehicles		He	avy Truck	s (3+ Axles).	15		
Ve	hicle Speed:	60 m	nph		Vehicle I	Mix				
Near/Far La	ne Distance:	76 fe	eet			icleType	Day	Evening	Night	Daily
Site Data							itos: 77.5%		9.6%	-
	rrier Height:	0.0 1	foot		Ме	edium Tru	cks: 84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0	ICCL		F	leavy Tru	cks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 f	feet							
Centerline Dist.		100.0 f			Noise Sc		vations (in f	eet)		
Barrier Distance		0.0 f				Autos:	2.000			
Observer Height		5.0 f				n Trucks:	4.000			
•	ad Elevation:	0.0 f			Heav	y Trucks:	8.006	Grade Ad	justment.	: 0.0
	ad Elevation:	0.0 f			Lane Eq	uivalent E	Distance (in	feet)		
	Road Grade:	0.0 1				Autos:	92.547	1001,		
	Left View:		degrees		Mediur	n Trucks:	92.504			
	Right View:		degree: degree:			y Trucks:	92.547			
	rigiti view.	90.0	uegree	5	Heav	y Trucks.	32.541			
FHWA Noise Mod	el Calculation	าร								
VehicleType	REMEL	Traffic F	Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	73.22	2	3.96	-4.1	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	} -	13.28	-4.1	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3 -	17.23	-4.1	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo	and b	arrier atter	nuation)					
VehicleType	Leq Peak Ho	our Le	q Day	Leq E	vening	Leq N	ight	Ldn	CI	NEL
Autos:	7	1.9	7	0.0	68.2		62.1	70.8	3	71.4
Medium Trucks:	6	5.1	6	3.6	57.2		55.7	64.1	1	64.4
Heavy Trucks:	6	4.8	6	3.4	54.3		55.6	63.9	9	64.1
Vehicle Noise:	7	3.3	7	1.6	68.7		63.7	72.3	3	72.8
Contouling Distan	aa ta Naisa C	````` <i>\</i>	f4\							

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	142	307	661	1,424
CNEL:	153	331	712	1,534

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: s/o I-5 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Har	d = 10, S	oft = 15)						
Average Daily	Traffic (Adt):	57,000 vehicles	3			Autos:	15						
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles).	15						
Peak H	lour Volume:	5,700 vehicles	6	He	avy Trucks (3+ Axles).	15						
Ve	hicle Speed:	60 mph		Vehicle I	Mix								
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily				
Site Data					Autos			9.6%	_				
Ra	rrier Height:	0.0 feet		Me	edium Trucks	s: 84.8%	4.9%	10.3%	1.84%				
Barrier Type (0-W	•	0.0 Teet		F	leavy Trucks	s: 86.5%		10.8%	0.74%				
Centerline Dis	•	100.0 feet		M-' 0-		· // /	' 4\						
Centerline Dist.		100.0 feet		Noise Sc	ource Elevat	•	eet)						
Barrier Distance		0.0 feet			Autos:	2.000							
Observer Height (5.0 feet			m Trucks:	4.000	0 , 4 ,		0.0				
,	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0									
	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)						
	Road Grade:	0.0%			Autos:	92.547	<u> </u>						
	Left View:	-90.0 degree	es	Mediur	m Trucks:	92.504							
	Right View:	90.0 degree		Heav	y Trucks:	92.547							
FHWA Noise Mod						_			_				
VehicleType	REMEL	Traffic Flow	Distance	Finite		resnel	Barrier Att		m Atten				
Autos:	73.22		-4.1		-1.20	-4.87		000	0.000				
Medium Trucks:	83.68		-4.1		-1.20	-4.97		000	0.000				
Heavy Trucks:	87.33	-16.84	-4.1	1	-1.20	-5.16	0.0	000	0.000				
Unmitigated Noise	e Levels (with	hout Topo and	barrier attei	nuation)									
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	NEL				
Autos:	72	2.3	70.4	68.6	(62.5	71.2	2	71.8				
Medium Trucks:	6	5.5	64.0	57.6	:	56.1	64.5	5	64.8				
Heavy Trucks:	6	5.2	63.8	54.7	;	56.0	64.3	3	64.4				

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	151	326	703	1,514
CNEL:	163	351	757	1,631

69.1

64.1

72.7

73.2

72.0

Vehicle Noise:

73.7

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: n/o Walnut Av.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S		
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)			
Average Daily Traffic (Adt):	51,800 vehicles	S			Autos:	15			
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15			
Peak Hour Volume:	5,180 vehicles	S	He	avy Trucks (3	3+ Axles):	15			
Vehicle Speed:	60 mph		Vehicle I	Miss					
Near/Far Lane Distance:	76 feet				Dov	- Cuonina	Niaht	Doily	
Cita Data			veni	icleType	Day	Evening	Night	Daily	
Site Data			.,	Autos			9.6%	97.42%	
Barrier Height:	0.0 feet			edium Trucks			10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):	0.0		<i>-</i>	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)			
Centerline Dist. to Observer:				Autos:	2.000				
Barrier Distance to Observer:	0.0 feet		Mediur	m Trucks:	4.000				
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0	
Pad Elevation:	0.0 feet		·						
Road Elevation:	0.0 feet		Lane Equivalent Distance (in feet)						
Road Grade:	0.0%				92.547				
Left View:	-90.0 degree	es	Mediur	m Trucks:	92.504				
Right View:	90.0 degree	es	Heav	ry Trucks:	92.547				
FHWA Noise Model Calculation	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten	
Autos: 73.2	2 3.94	-4	.11	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 83.6	8 -13.30	-4	.11	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 87.3	3 -17.25	-4	.11	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)						
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Nigh	t	Ldn	CI	VEL	
Autos:	71.8	70.0	68.2	(32.1	70.8	3	71.4	
Medium Trucks:	35.1	63.6	57.2	į	55.7	64.1	1	64.4	
Heavy Trucks:6	64.8	63.3	54.3		55.6	63.9	9	64.0	
Vehicle Noise:	73.3	71.6	68.7	-	63.7	72.3	3	72.8	
Centerline Distance to Noise	Contour (in feet)	,						

70 dBA

142

153

Ldn:

CNEL:

65 dBA

306

330

60 dBA

659

710

55 dBA

1,421

1,530

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Walnut Av. and Deerfiled Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT D	ATA			NO	ISE MODE	L INPUT	s	
Highway Data					Site Cor	ditions (H	ard = 10, Se	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	47,800 v 10% 4,780 v					Autos: ks (2 Axles): s (3+ Axles):	15		
	ehicle Speed: ane Distance:	60 n 76 fe	•	-	Vehicle Veh	Mix icleType Aut	Day	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
Barrier Type (0-V Centerline D Centerline Dist. Barrier Distance Observer Height	ist. to Barrier: to Observer: to Observer:		feet feet feet feet feet feet		Medium Trucks: 84.8% 4.9% 10.3% Heavy Trucks: 86.5% 2.7% 10.8% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547					
FHWA Noise Mod										
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos: Medium Trucks: Heavy Trucks:	83.68	3 -	3.59 13.64 17.60	-4.1 -4.1 -4.1	1	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	000 000	0.000 0.000 0.000
Unmitigated Nois	e Levels (with	hout Top	o and ba	arrier attei	nuation)					
VehicleType	Leq Peak Ho	our Le	eq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL
Autos: Medium Trucks:	6	1.5 4.7	69 63	3.2	67.8 56.9		61.8 55.3	70. ² 63.8	3	71.0 64.0
Heavy Trucks:		4.4	63		54.0		55.2	63.6		63.7
Vehicle Noise:	7	3.0	71	.2	68.3		63.4	71.9	9	72.4

70 dBA

135

145

Ldn: CNEL: 65 dBA

290

312

60 dBA

625

673

55 dBA 1,347

1,450

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Deerfield Dr. and ICD

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT D	DATA			NOIS	E MODE	L INPUT	S		
Highway Data					Site Con	ditions (Hard	d = 10, So	oft = 15)			
Peak Hou	Traffic (Adt): r Percentage: Hour Volume:	10%				dium Trucks (avy Trucks (3	,	15			
V	ehicle Speed: ane Distance:	60	mph feet		Vehicle l		Day	Evening	Night	Daily	
Site Data						Autos	77.5%	12.9%	9.6%	97.42%	
Barrier Type (0-V	,	0.0				edium Trucks Heavy Trucks			10.3% 10.8%	1.84% 0.74%	
Centerline Dist	ist. to Barrier:	100.0 100.0			Noise So	ource Elevati	ons (in f	eet)			
Barrier Distance Observer Height	to Observer:	0.0 5.0	feet feet feet			Autos: m Trucks: ry Trucks:	2.0004.0008.006	Grade Adj	justment:	0.0	
	ad Elevation:		feet		Lane Equivalent Distance (in feet)						
	Road Grade: Left View: Right View:		% degrees degrees			m Trucks:	92.547 92.504 92.547				
FHWA Noise Mod	del Calculatio	ns									
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten	
Autos	73.22	2	3.12	-4.	11	-1.20	-4.87	0.0	000	0.000	
Medium Trucks	83.68	3	-14.11	-4.	11	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks	87.33	3	-18.07	-4.	11	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	se Levels (wit	hout Top	oo and b	arrier atte	nuation)						
VehicleType	Leq Peak Ho	our L	eq Day	Leq I	vening	Leq Night		Ldn	CI	VEL	
Autos	7	1.0	69	9.1	67.4	6	1.3	69.9	9	70.5	
Medium Trucks		4.3		2.8	56.4		4.8	63.3		63.5	
Heavy Trucks	:6	3.9	62	2.5	53.5	5	4.7	63.1	1	63.2	
Vehicle Noise		2.5		0.7	67.9	6	2.9	71.5	5	72.0	
Centerline Distar	ice to Noise C	Contour	(in feet)								

70 dBA

125

135

Ldn: CNEL: 65 dBA

270

291

60 dBA

582

626

55 dBA

1,253

1,349

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w ICD and Warner Av.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			N	OISE N	IODE	L INPUT	S	
Highway Data			Site Co	nditions ((Hard =	10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 46,500 vehicle	es				Autos:	15		
Peak Hour Percentage	•		Me	edium Tru	icks (2 A	Axles):	15		
Peak Hour Volume	: 4,650 vehicle	es	He	eavy Truc	ks (3+ A	Axles):	15		
Vehicle Speed	: 60 mph		Vehicle	Mix					
Near/Far Lane Distance	: 76 feet					Day	Evening	Night	Doily
Site Data			ver	nicleType		<i>Day</i> 77.5%	Evening 12.9%	9.6%	<i>Daily</i> 97.42%
				A ledium Tri					
Barrier Height						84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)				Heavy Tru	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier			Noise S	ource Ele	evation	s (in fe	eet)		
Centerline Dist. to Observer				Autos	: 2.0	000			
Barrier Distance to Observer			Mediu	ım Trucks	: 4.0	000			
Observer Height (Above Pad)				vy Trucks		006	Grade Ad	justment:	0.0
Pad Elevation									
Road Elevation			Lane Equivalent Distance (in feet)						
Road Grade	2: 0.0%			Autos					
Left View	: -90.0 degre	ees	Mediu	ım Trucks	: 92.	504			
Right View	: 90.0 degre	ees	Hea	vy Trucks	: 92.	547			
FHWA Noise Model Calculati	ons								
VehicleType REMEL	Traffic Flow	Distant	ce Finite	e Road	Fresr	nel	Barrier Att	en Ber	m Atten
Autos: 73.	22 3.47	7 -	4.11	-1.20		<i>-4.87</i>	0.0	000	0.000
Medium Trucks: 83.	68 -13.76	} -	4.11	-1.20		<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks: 87.	33 -17.72	2 -	4.11	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout Topo and	l barrier at	tenuation)						
VehicleType Leq Peak F	Hour Leq Da	y Le	q Evening	Leq N	Vight		Ldn	CI	VEL
Autos:	71.4	69.5	67.7	7	61.7	,	70.3	3	70.9
Medium Trucks:	64.6	63.1	56.7	7	55.2	2	63.7	7	63.9
Heavy Trucks:	64.3	62.9	53.8	3	55.1		63.4	4	63.6
Vehicle Noise:	72.9	71.1	68.2	2	63.3	3	71.8	3	72.3
Centerline Distance to Noise	Contour (in fee	et)							

70 dBA

132

142

Ldn: CNEL: 65 dBA

285

307

60 dBA

614

661

55 dBA

1,322

1,424

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Warner Av. and Barranca Pkwy.

Job Number: 8141

Analyst: B. Lawson

	SPECIFIC IN	IPUT DATA						L INPUT	s	
Highway Data				5	Site Con	ditions (Ha	rd = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	47,200 vehicle	s				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Trucks	(2 Axles):	15		
Peak H	lour Volume:	4,720 vehicle	s		He	avy Trucks	(3+ <i>Axles</i>):	15		
Ve	hicle Speed:	60 mph		1	Vehicle I	Vix				
Near/Far La	ne Distance:	76 feet				icleType	Day	Evening	Night	Daily
Site Data						Auto	s: 77.5%	12.9%	9.6%	97.42%
Bai	rrier Height:	0.0 feet			Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%
Centerline Di	,	100.0 feet		,	Noisa Sa	ource Eleva	tions (in f	not)		
Centerline Dist.	to Observer:	100.0 feet		,	10/36 30	Autos:	2.000			
Barrier Distance	to Observer:	0.0 feet			Mediuu	n Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet				ry Trucks:	8.006	Grade Ad	iustment:	0.0
Pa	ad Elevation:	0.0 feet								0.0
7 1000 21010111						uivalent Dis	stance (in	feet)		
1	Road Grade: 0.0%					Autos:	92.547			
	Left View:	-90.0 degre	es		Mediui	m Trucks:	92.504			
	Right View:	90.0 degre	es		Heav	ry Trucks:	92.547			
FHWA Noise Mode	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road F	resnel	Barrier Atte	en Ber	m Atten
Autos:	73.22	3.54		-4.11	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-13.70		-4.11	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-17.66		-4.11	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	ier atten	uation)					
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	/ening	Leq Nigl	ht	Ldn	CI	VEL
Autos:	71	.4	69.5		67.8		61.7	70.3	3	71.0
Medium Trucks:	64	.7	63.2		56.8		55.3	63.7	7	64.0
Heavy Trucks:	64	.4	62.9		53.9		55.1	63.5	5	63.6
Vehicle Noise:	72	2.9	71.2		68.3		63.3	71.9	9	72.4
Centerline Distant	ce to Noise Co	ontour (in feet)							
				70 a	<i>IBA</i>	65 dBA	. 6	60 dBA	55	dBA

Ldn:

CNEL:

134

144

288

310

1,335

1,438

620

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS						
Highway Data		,	Site Conditions	Hard = 10, Se	oft = 15)				
Average Daily Traffic (Adt)	51,500 vehicle	S		Autos:	15				
Peak Hour Percentage	10%		Medium Tru	icks (2 Axles):	15				
Peak Hour Volume	5,150 vehicle	S	Heavy Truc	ks (3+ Axles):	15				
Vehicle Speed	60 mph		Vehicle Mix						
Near/Far Lane Distance	76 feet		VehicleType	Day	Evening	Night	Daily		
Site Data				utos: 77.5%	_	9.6%	97.42%		
Barrier Height	0.0 feet		Medium Tr	ucks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm)			Heavy Tr	ucks: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier			N-' 0 FI		' 4\				
Centerline Dist. to Observer		-	Noise Source Ele	•	eet)				
Barrier Distance to Observer			Autos						
Observer Height (Above Pad)			Medium Trucks		Cuada Adi		0.0		
Pad Elevation			Heavy Trucks	8.006	Grade Adji	ustment.	0.0		
Road Elevation	. 0.0 feet		Lane Equivalent	Distance (in	feet)				
Road Grade	0.0%		Autos	: 92.547					
Left View	: -90.0 degre	es	Medium Trucks	: 92.504					
Right View	90.0 degre	es	Heavy Trucks	2: 92.547					
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos: 73.2	22 3.92	-4.1	1 -1.20	<i>-4.</i> 87	0.0	00	0.000		
Medium Trucks: 83.6	68 -13.32	-4.1	1 -1.20	-4.97	0.0	00	0.000		
Heavy Trucks: 87.5	-17.28	-4.1	1 -1.20	-5.16	0.0	00	0.000		
Unmitigated Noise Levels (w	thout Topo and	barrier atten	uation)						
VehicleType Leq Peak F	lour Leq Day	/ Leq E	vening Leq I	Vight	Ldn	CI	VEL		
Autos:	71.8	69.9	68.2	62.1	70.7		71.3		
Medium Trucks:	65.1	63.5	57.2	55.6	64.1		64.3		
Heavy Trucks:	64.7	63.3	54.3	55.5	63.9		64.0		
Vehicle Noise:	73.3	71.5	68.7	63.7	72.3		72.7		

70 dBA

142

152

Ldn:

CNEL:

65 dBA

305

328

60 dBA

657

707

55 dBA

1,415

1,524

Centerline Distance to Noise Contour (in feet)

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Culver Dr. Job Number: 8141 Road Segment: b/w Alton Pkwy. and Main St. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						1	VOISE	MODE	L INPUT	S				
Highway Data				9	Site Con	ditions	(Hard	= 10, So	ft = 15)					
Average Daily	Traffic (Adt):	52,100 vehicle	s					Autos:	15					
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	Axles): 15					
Peak H	lour Volume:	5,210 vehicle	S		He	avy Tru	icks (3+	Axles):	15					
Ve	hicle Speed:	60 mph		_	Vehicle Mix									
Near/Far La	ne Distance:	76 feet		-	VehicleType Day Evening Night					Daily				
Site Data					• • • • • • • • • • • • • • • • • • • •		Autos:	77.5%		•	97.42%			
	uuiau Haiadat.	0.0 foot			Me	edium T		84.8%		10.3%	1.84%			
	rrier Height:	0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%			
Barrier Type (0-W Centerline Dis		0.0 100.0 feet									011 170			
Centerline Dist.	^	Voise Sc	ource E	levatio	ns (in fe	eet)								
Barrier Distance		100.0 feet 0.0 feet				Auto		2.000						
Observer Height (5.0 feet			Medium Trucks: 4.000									
• ,	ad Elevation:	0.0 feet			Heav	y Truck	rs: E	3.006	Grade Ad	iustment:	0.0			
Roa	ı	ane Eq	uivalen	t Dista	nce (in t	eet)								
			Auto		2.547	,								
,	Road Grade: Left View:	0.0% -90.0 degre	2 9		Mediui	n Truck		2.504						
	Right View:	90.0 degre				y Truck		2.547						
	g	00.0 d0g.0	00			,								
FHWA Noise Mode	el Calculation	s												
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten			
Autos:	73.22	3.97		-4.11		-1.20		-4.87	0.0	000	0.000			
Medium Trucks:	83.68	-13.27		-4.11		-1.20		-4.97		000	0.000			
Heavy Trucks:	87.33	-17.23		-4.11		-1.20		-5.16	0.0	000	0.000			
Unmitigated Noise	e Levels (with	out Topo and	barri	er atten	uation)									
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL			
Autos:	71	.9	70.0		68.2	<u>-</u>	62	.2	70.8	3	71.4			
Medium Trucks:	65	5.1	63.6		57.2 55.7 64.1				1	64.4				
Heavy Trucks:	64	.8	63.4	54.3 55.6 63.9					64.1					
Vehicle Noise:	73	3.4	71.6		68.7		63	.8	72.3	3	72.8			
Centerline Distant	ce to Noise Co	ontour (in feet)											
				70 a	IBA	65	dBA	6	0 dBA	55	dBA			

143

154

Ldn:

CNEL:

307

331

1,426

1,536

662

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Main St. and San Leandro

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						N	OISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Peak Hour	Average Daily Traffic (Adt): 52,600 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 5,260 vehicles Vehicle Speed: 60 mph Near/Far Lane Distance: 76 feet					dium Tru avy Truc	,	,			
Near/Far La						Mix icleType		Day	Evening	Night	Daily
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0						edium Tr Jeavy Tr		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height Po Ro	Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos Autos Trucks y Trucks uivalent Autos m Trucks y Trucks	s: 2 s: 4 s: 8 Distar s: 92	.000 .000 .006	Grade Ad	justment	0.0
FHWA Noise Mod VehicleType Autos: Medium Trucks: Heavy Trucks:	73.22 83.68	Traffic Flow 4.0 4.0 -13.2	1	-4.11 -4.11 -4.11	Finite	Road -1.20 -1.20 -1.20	Fres	nel -4.87 -4.97 -5.16	0.0	en Ber 000 000	<i>m Atten</i> 0.000 0.000 0.000
Unmitigated Noise VehicleType Autos:	Leq Peak Ho			e r attenu Leq Eve		Leq	Night 62.	2	<i>Ldn</i> 70.8		VEL 71.4
Medium Trucks: Heavy Trucks: Vehicle Noise:	69 64	65.1 63.6 57 64.8 63.4 54 73.4 71.6 68					55. 55. 63.	7 6	64.2 64.0 72.4	2	64.4 64.1 72.8

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	144	309	666	1,435							
CNEL:	155	333	718	1,546							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w San Leandro and I-405 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NC	DISE N	IODE	L INPUT	S	
Highway Data				;	Site Con	ditions (l	Hard =	10, So	ft = 15)		
Average Daily	Traffic (Adt):	58,700 vehicle:	S				,	Autos:	15		
Peak Hour	Percentage:	10%			Medium Trucks (2 Axles): 15						
Peak H	lour Volume:	5,870 vehicles	S		He	avy Truck	rs (3+ A	xles):	15		
Ve	ehicle Speed:	60 mph		,	Vehicle i	Miv					
Near/Far La	ne Distance:	76 feet				icleType		Day	Evening	Night	Daily
Site Data								77.5%		9.6%	-
	rrier Height:	0.0 feet			М	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0 leet 0.0				leavy Tru		86.5%		10.8%	0.74%
Centerline Di		100.0 feet									
Centerline Dist.	1	Noise So	ource Ele		•	et)					
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet						Autos:		000			
Observer Height		5.0 feet				m Trucks:		000			
_	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Adj	iustment:	0.0
Ro	1	Lane Eq	uivalent l	Distand	e (in f	eet)					
			Autos:	92.5	547						
	Left View:	-90.0 degree	es		Mediu	m Trucks:	92.5	504			
	Right View:	90.0 degree			Heav	y Trucks:	92.5	547			
FHWA Noise Mod		_	<u> </u>	- 4	- :.:	D/		- 1	D ' A		A ((
VehicleType	<i>REMEL</i> 73.22	Traffic Flow	Di	stance -4.1	Finite		Fresn		Barrier Atte		m Atten
Autos: Medium Trucks:	_	4.49 -12.75		-4.1°		-1.20 -1.20		-4.87 -4.97	0.0	000	0.000
Heavy Trucks:				-4.1	-	-1.20 -1.20		-4.97 -5.16	0.0		0.000
						-1.20		-5.10	0.0	,00	0.000
Unmitigated Nois	•				,					1	
VehicleType	Leq Peak Hot			Leq E		Leq N	_		Ldn		VEL
Autos:			70.5		68.7		62.7		71.3		71.9
Medium Trucks:		_	64.1		57.8 56.2 64.7				64.9		
Heavy Trucks:			63.9						64.6		
Vehicle Noise:		3.9	72.1		69.2		64.3		72.8	3	73.3
Centerline Distan	ce to Noise C	ontour (in feet)								
				70 c	dBA	65 di	BA	6	0 dBA	55	dBA

Ldn:

CNEL:

154

166

333

358

717

772

1,544

1,663

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: E. Yale Lp.

Road Segment: s/o Barranca Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE			NO	ISE MODE	L INPUT	S					
Highway Data				Site Cor	nditions (H	lard = 10, Se	oft = 15)				
	Traffic (Adt): Percentage:	12,200 vehicles	S	ΛΛο	odium Trucl	Autos: ks (2 Axles):	15 15				
	Hour Volume:	1,220 vehicles	e			s (3+ Axles):					
Ve	ehicle Speed: ane Distance:	50 mph 50 feet	3	Vehicle	Mix	<u> </u>					
	ine Distance.	30 1661		Veh	icleType	Day	Evening	Night	Daily		
Site Data				_		tos: 77.5%		9.6%	97.42%		
Ва	rrier Height:	0.0 feet			edium Truc			10.3%	1.84%		
Barrier Type (0-V	Vall, 1-Berm):	0.0		1	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%		
	ist. to Barrier:	100.0 feet		Noise S	ource Elev	ations (in f	eet)				
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Heat	Autos: 2.000 Im Trucks: 4.000 Im Trucks: 8.006 Grade Adjustment: 0.0 Im Trucks: 8.006 Grade Adjustment: 0.0 Im Trucks: 96.871 Im Trucks: 96.830 Im Trucks: 96.871						
FHWA Noise Mod	I		Distance	Finito	Dood	Franci	Dorrior A#	on Bon	m 140n		
VehicleType Autos:	70.20	Traffic Flow -1.54	Distance -4.		-1.20	Fresnel -4.87	Barrier Atte	000 ber	<i>m Atten</i> 0.000		
Medium Trucks:			-4. -4.		-1.20 -1.20	-4.07 -4.97		000	0.000		
Heavy Trucks:			-4.		-1.20	-5.16		000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Ho	ur Leq Day	Leq	Evening	Leq Ni	ght	Ldn	CI	VEL		
Autos:	63	3.0	61.1	59.4		53.3	61.9	9	62.6		
Medium Trucks:	56	6.6	55.1	48.7		47.2	55.7	7	55.9		
Heavy Trucks:	57	7.0	55.6	46.6		47.8	56.2	2	56.3		
Vehicle Noise:	64	4.7	63.0	59.9		55.2	63.7	7	64.2		

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	38	82	177	381								
CNEL:	41	88	190	409								

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: E. Yale Lp.

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				9	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	11,600 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	1,160 vehicle	es		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		1	/ehicle l	Mix					
Near/Far La	ne Distance:	52 feet				icleType	Э	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		_	C.			<i>(: £</i> -	41		
Centerline Dist.	<u> </u>	Voise So				eet)					
Barrier Distance	to Observer:	0.0 feet			N / = = 15 · · ·	Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	_	1.000	Crada Ad	iuotmont	
_	ad Elevation:	0.0 feet			Heavy Trucks: 8.006 Grade Adjustment: 0.0						
Ro	L	ane Eq	uivalen	t Dista	nce (in i	feet)					
Road Grade: 0.0%						Auto	s: 96	6.607			
	Left View:	-90.0 degre	es		Mediui	m Truck	rs: 96	6.566			
	Right View:	90.0 degre	es		Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-2.18		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-19.42		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-23.37		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barr	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	rening	Leq	Night		Ldn	CI	NEL
Autos:	64	1.0	62.1		60.3		54	.3	62.9)	63.5
Medium Trucks:	57	7.4	55.9	49.5 48.0 56.4				56.7			
Heavy Trucks:	57	7.4	56.0	0 47.0 48.2 56.6 56					56.7		
Vehicle Noise:	65	5.6	63.8		60.9		56	.0	64.5	5	65.0
Centerline Distan	ce to Noise C	ontour (in fee	t)								
				70 a	IBA .	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

43

47

93

100

201

216

433

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: E. Yale Lp.

Road Segment: s/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE			NO	ISE MODE	L INPUTS	;								
Highway Data				Site Cor	nditions (H	lard = 10, S	oft = 15)							
Average Daily	Traffic (Adt):	11,500 vehicles	S			Autos:	15							
	Percentage:	10%		Мє	edium Truci	ks (2 Axles):	15	I						
Peak H	our Volume:	1,150 vehicles	3	He	eavy Trucks	s (3+ Axles):	15							
Ve	hicle Speed:	55 mph		Vehicle	Miv									
Near/Far La	ne Distance:	52 feet			nicleType	Day	Evening	Night	Daily					
Site Data						tos: 77.5%	J	9.6%						
	rier Height:	0.0 feet		М	ledium Trud			10.3%	1.84%					
Barrier Type (0-W	•	0.0 leet 0.0			Heavy Truc									
Centerline Dis	•	100.0 feet												
Centerline Dist.		100.0 feet		Noise S		ations (in f	eet)							
Barrier Distance		0.0 feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.										
Observer Height (5.0 feet												
•	ad Elevation:	0.0 feet		Hear	vy Trucks:	8.006	Grade Adju	ıstment.	0.0					
	ad Elevation:	0.0 feet		Lane Eq	uivalent D	Distance (in	feet)							
	Road Grade:	0.0%		<u> </u>	Autos:	96.607								
	Left View:	-90.0 degree	es	Mediu	m Trucks:	96.566								
	Right View:	90.0 degree		Hea	vy Trucks:	96.608								
FHWA Noise Mode	el Calculation	ıs												
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	n Ber	m Atten					
Autos:	71.78	-2.22	-4.3	9	-1.20	-4.87	0.00	00	0.000					
Medium Trucks:	82.40	-19.45	-4.3	9	-1.20	-4.97	0.0	00	0.000					
Heavy Trucks:	86.40	-23.41	-4.3	9	-1.20	-5.16	0.00	00	0.000					
Unmitigated Noise	Levels (with	out Topo and	barrier atten	uation)										
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Ni	ight	Ldn	CI	VEL					
Autos:	64	1.0	62.1	60.3		54.3	62.9		63.5					
Medium Trucks:	ucks: 57.4 55.9			49.5	;	47.9	56.4		56.6					
Heavy Trucks: 57.4 56.0				46.9)	48.2	56.5		56.7					
Vehicle Noise:	65	5.5	63.8	60.8		56.0	64.5		65.0					
Centerline Distance	ce to Noise C	ontour (in feet))											

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	43	93	200	431							
CNFI ·	46	100	215	463							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Camino Real Job Number: 8141
Road Segment: e/o Tustin Ranch Rd. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NC	DISE I	MODE	L INPUT	S					
Highway Data				S	ite Con	ditions (l	Hard =	: 10, Sc	oft = 15)						
Average Daily Traffic (Adt): 16,6	600 vehicles						Autos:	15						
Peak Hour Percentage	-	10%			Ме	dium Truc	ks (2 .	Axles):	15						
Peak Hour Volume		660 vehicles			He	avy Truck	s (3+ .	Axles):	15						
Vehicle Speed	d:	50 mph		1/	ehicle l	Miv									
Near/Far Lane Distance) <i>:</i>	70 feet		V				Day	Evening	Niaht	Doily				
Site Data					ven	icleType	ıtooı	<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%				
							itos:								
Barrier Heigh		0.0 feet				edium Tru		84.8%		10.3%	1.84%				
Barrier Type (0-Wall, 1-Berm	pe (0-Wall, 1-Berm): 0.0					leavy Tru	cks:	86.5%	2.7%	10.8%	0.74%				
Centerline Dist. to Barrie	r: 10	00.0 feet		N	oise So	ource Ele	vation	s (in fe	eet)						
Centerline Dist. to Observe			Autos:		000	,									
Barrier Distance to Observe			Mediu	m Trucks:		000									
Observer Height (Above Pad) <i>:</i>	5.0 feet				ry Trucks:		006	Grade Ad	rade Adjustment: 0.0					
Pad Elevation	0.0 feet			ricav	y Trucks.	0.	000	Orado riaj	dournorn.	0.0					
Road Elevation		Lá	ane Eq	uivalent L	Distan	ce (in i	feet)								
Road Grade	e <i>:</i>	0.0%				Autos:	93	.723							
Left Viev	v: -9	90.0 degree	S		Mediu	m Trucks:	93	.680							
Right View	v: 9	90.0 degree	S		Heav	y Trucks:	93	.723							
FHWA Noise Model Calculat	ions														
VehicleType REMEL	Tr	affic Flow	Distanc	е	Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten				
Autos: 70	20	-0.21	-4	1.20		-1.20		-4.87	0.0	000	0.000				
Medium Trucks: 81	00	-17.45	-4	4.19		-1.20		-4.97	0.0	000	0.000				
Heavy Trucks: 85	38	-21.40	-4	4.20		-1.20		-5.16	0.0	000	0.000				
Unmitigated Noise Levels (w	ithout	Topo and b	parrier at	tenu	ation)										
VehicleType Leq Peak	Hour	Leq Day	Led	Eve	ening	Leq N	light		Ldn	CI	VEL				
Autos:	64.6	6	2.7		60.9		54.	9	63.5	5	64.1				
Medium Trucks:	58.2	5	6.7	7 50.3 48.7 57.2			2	57.4							
Heavy Trucks:	58.6	5	57.2 48.1 49.4 57.7				7	57.9							
Vehicle Noise:	66.3	6	64.5		61.5		56.	7	65.3	3	65.7				

70 dBA

48

52

Ldn:

CNEL:

65 dBA

104

112

60 dBA

224

241

55 dBA

483

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Camino Real Job Number: 8141
Road Segment: e/o Jamboree Rd. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NO	ISE MODE	L INPUT	s					
Highway Data				Si	ite Con	ditions (H	lard = 10, Se	oft = 15)						
Average Daily	Traffic (Adt):	24,400 ve	hicles				Autos:	15						
Peak Hour	Percentage:	10%			Me	dium Truci	ks (2 Axles):	15						
Peak H	lour Volume:	2,440 ve	hicles		He	avy Trucks	s (3+ Axles):	15						
Ve	hicle Speed:	55 mp	oh	V	ehicle l	Mix								
Near/Far La	ne Distance:	52 fee	et			icleType	Day	Evening	Night	Daily				
Site Data						Aut	tos: 77.5%	12.9%	9.6%	97.42%				
Ra	rrier Height:	0.0 fe	et .		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%				
	Barrier Type (0-Wall, 1-Berm): 0.0				ŀ	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%				
Centerline Di	,	100.0 fe	et	A/	oico Sa	ource Elev	ations (in f	not)						
Centerline Dist.	14	UISE SC		2.000	eei)									
Barrier Distance	to Observer:	0.0 fe	et		N 4 = =15	Autos: m Trucks:								
Observer Height	(Above Pad):	5.0 fe	et				4.000	Cuada Ad						
	ad Elevation:	0.0 fe			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0				
	ad Elevation:	0.0 fe		Lá	ane Eq	uivalent D	istance (in	feet)						
	Road Grade:	0.0%				Autos:	96.607							
	Left View:	-90.0 d	egrees		Mediu	m Trucks:	96.566							
	Right View:	90.0 d	•		Heav	y Trucks:	96.608							
FHWA Noise Mod	el Calculation	s												
VehicleType	REMEL	Traffic Fi	ow L	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten				
Autos:	71.78	,	1.05	-4.39		-1.20	-4.87	0.0	000	0.000				
Medium Trucks:	82.40	-1	6.19	-4.39		-1.20	-4.97	0.0	000	0.000				
Heavy Trucks:	86.40	-2	0.14	-4.39		-1.20	-5.16	0.0	000	0.000				
Unmitigated Nois	e Levels (with	out Topo	and bar	rier attenu	ation)									
VehicleType	Leq Peak Ho	ur Leq	Day	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL				
Autos:	67	7.2	65.3	3	63.6		57.5	66.	1	66.7				
Medium Trucks:	60).6	59.1	1	52.8		51.2	59.7	7	59.9				
Heavy Trucks:	60).7	59.2	2	50.2		51.5	59.8	3	59.9				
Vehicle Noise:	68	3.8	67.′	1	64.1		59.2	67.8	3	68.3				
Contorlino Distan	ce to Noise C	ontour (in	foot)											

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	71	153	330	711							
CNEL:	76	165	355	765							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Camino Real N.

Road Segment: s/o Bryan Ave.

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS											
Highway Data	S	Site Conditions (Hard = 10, Soft = 15)											
Average Daily	Traffic (Adt):	7,800 vehicles	S					Autos:	15				
Peak Hou	10%			Medium Trucks (2 Axles): 15									
Peak I	780 vehicles			Heavy Trucks (3+ Axles): 15									
V	55 mph		/ehicle l	Miy									
Near/Far La	ane Distance:	52 feet				icleType		Day	Evening	Night	Daily		
Site Data							utos:	77.5%		9.6%			
R	arrier Height:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):		0.0 leet 0.0			ŀ	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:		100.0 feet						<i>(</i> ' •					
Centerline Dist. to Observer:		100.0 feet		^	Noise Source Elevations (in feet)								
Barrier Distance to Observer:		0.0 feet		Autos: 2.000 Medium Trucks: 4.000									
Observer Height	5.0 feet					.000 .006 <i>Grade Adjustment:</i> 0.0							
Pad Elevation:		0.0 feet		Heav	s: 8	.006	Graue Auj	justinent.	0.0				
Road Elevation:		0.0 feet			Lane Equivalent Distance (in feet)								
	0.0%			Autos: 96.607									
	-90.0 degrees			Medium Trucks: 96.566									
Right View:		90.0 degrees			Heavy Trucks: 96.608								
FHWA Noise Mod	del Calculation	S											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos	: 71.78	-3.90	-3.90		.39 -			-4.87	0.0	000	0.000		
Medium Trucks	: 82.40	-21.14		-4.39)	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks	: 86.40	-25.10	-25.10 -4			-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	se Levels (with	out Topo and	barrie	er attenu	uation)								
VehicleType	Leq Peak Ho	ır Leq Day	,	Leq Ev	ening	Leq I	Vight		Ldn	CI	VEL		
Autos	: 62	2.3 60			58.6			6	61.2		61.8		
Medium Trucks: 55		.7 54.2			47.8	46.3		3	54.7	7	55.0		
Heavy Trucks: 55		5.7 54.3					46.			9	55.0		
Vehicle Noise: 63		.9 62.1			59.1		54.	54.3 6		.8 63.3			
Centerline Distar	nce to Noise C	ontour (in feet)										
				70 d	'BA	65 d	dBA	6	60 dBA	55	dBA		

33

36

Ldn:

CNEL:

72

77

154

166

332

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Portola Pkwy./S. Margarita Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data						Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	20,000 \	ehicles/						Autos:	15			
Peak Hour	Percentage:	10%)			Me	dium Tru	cks (2	Axles):	15			
Peak H	lour Volume:	· ·			cles Heavy Trucks (3+ A								
Vehicle Speed:		55 mph			Ve	ehicle l	Vix						
Near/Far La	ne Distance:	88 feet					icleType		Day	Evening	Night	Daily	
Site Data								utos:	77.5%		9.6%		
Ra	rrier Height:	0.0			Ме	edium Tru	ıcks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-V		0.0	icci			F	leavy Tru	ıcks:	86.5%	2.7%	10.8%	0.74%	
• • •	ist. to Barrier:	100.0	feet										
Centerline Dist.	100.0 feet				Noise Source Elevations (in feet)								
Barrier Distance			feet				Autos.		2.000				
Observer Height			feet				n Trucks.		.000				
•	ad Elevation:		feet			Heav	y Trucks.	: 8	3.006	Grade Ad	ljustment	: 0.0	
, Ro		0.0 feet			Lane Equivalent Distance (in feet)								
710	0.09				1	Autos.		9.850					
		-90.0 degrees			Medium Trucks: 89.805								
	90.0 degrees			Heavy Trucks: 89.850									
FHWA Noise Mod													
VehicleType	REMEL	Traffic		Distance		Finite		Fres		Barrier Att		m Atten	
Autos:			0.19		.92	-1.20			<i>-4.</i> 87			0.000	
Medium Trucks:			-17.05		.92		-1.20		-4.97		000	0.000	
Heavy Trucks:	86.40	•	-21.01	1 -3.9			-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Top	o and k	parrier atte	enu	ation)							
VehicleType	Leq Peak Ho	ur L	eq Day	Leq	Eve	ening	Leq N	light		Ldn	C	NEL	
Autos:	66	66.8		64.9		63.2 57		57	.1	65.	7	66.4	
Medium Trucks: 6).2	2 58.7			52.4 50		.8 59.3		3	59.5		
Heavy Trucks: 6		0.3	58.8			49.8 51		.1 59.4		4	59.5		
Vehicle Noise: 6		3.4	66.7			63.7 58		58	3.8 67.4		4	67.9	
Contorlino Distan	ce to Noise C	ontour (in foot)										

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	67	144	311	670						
CNEL:	72	155	334	720						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o Portola Pkwy./S. Margarita Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA				N	IOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	42,900	vehicle	S					Autos:	15		
Peak Hour	Percentage:	10	%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	4,290	vehicle	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55	mph			Vehicle l	Miy					
Near/Far La	ne Distance:	88	feet				icleType	9	Day	Evening	Night	Daily
Site Data								Autos:	77.5%	_	9.6%	-
	rrier Height:	0.0	0 feet			Me	edium T	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0				ŀ	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:		o O feet									
Centerline Dist.) feet			Noise So			•	eet)		
Barrier Distance) feet				Auto		2.000			
Observer Height) feet				m Truck		1.000			
ŭ	ad Elevation:	_) feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment.	: 0.0
-	ad Elevation:) feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:		0%			-	Auto		9.850			
	Left View:		o degree	es		Mediui	m Truck		9.805			
	Right View:		o degree			Heav	y Truck	s: 89	9.850			
FHWA Noise Mod						1						
VehicleType	REMEL		c Flow	Dis	stance	Finite		Fres		Barrier Att		m Atten
Autos:			3.50		-3.9		-1.20		-4.87		000	0.000
Medium Trucks:			-13.74		-3.9		-1.20		-4.97		000	0.000
Heavy Trucks:	86.40)	-17.69		-3.9	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout To	po and	barri	er atten	nuation)						
VehicleType	Leq Peak Ho	our	Leq Day	′	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	7	0.2		68.3		66.5		60	.4	69.1	1	69.7
Medium Trucks:	6	3.5		62.0		55.7		54	.1	62.6	3	62.8
Heavy Trucks:	6	3.6		62.2		53.1		54	.4	62.7	7	62.9
Vehicle Noise:	7	1.7		70.0		67.0		62	.1	70.7	7	71.2
Centerline Distan	ce to Noise C	ontour	(in feet)								
			• /		70 (dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

111

120

240

258

517

556

1,114

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	DATA				NO	ISE MODE	L INPUT	S	
Highway Data					S	ite Con	ditions (F	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	22,000	vehicles	1				Autos.	15		
Peak Hour	Percentage:	10%	6			Me	dium Truc	ks (2 Axles).	15		
Peak H	lour Volume:	2,200	vehicles	;		He	avy Truck	s (3+ Axles).	15		
Ve	hicle Speed:	55	mph		V	ehicle l	Mix				
Near/Far La	ne Distance:	88	feet				icleType	Day	Evening	Night	Daily
Site Data								tos: 77.5%		9.6%	
Ra	rrier Height:	0.0	feet			Me	edium Trud	cks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0				ŀ	Heavy True	cks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Di	,	100.0							· - 4		
Centerline Dist.		100.0			N	oise Sc		ations (in f	eet)		
Barrier Distance			feet				Autos:	2.000			
Observer Height			feet				m Trucks:	4.000			
	ad Elevation:		feet			Heav	y Trucks:	8.006	Grade Ad	ljustment	: 0.0
	ad Elevation:		feet		La	ane Eq	uivalent E	Distance (in	feet)		
	Road Grade:	0.0					Autos:	89.850	,		
	Left View:		degree	s		Mediui	m Trucks:	89.805			
	Right View:		degree				y Trucks:	89.850			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic	Flow	Distanc	е	Finite	Road	Fresnel	Barrier Att	ten Bei	m Atten
Autos:	71.78		0.60	-3	3.92		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40		-16.64	-3	3.92		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40		-20.59	-3	3.92		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	oo and k	barrier att	enu	ation)					
VehicleType	Leq Peak Ho	ur L	.eq Day	Leg	Eve	ening	Leq Ni	ight	Ldn	C	NEL
Autos:	67	'.3	6	55.4		63.6		57.5	66.2	2	66.8
Medium Trucks:	60	0.6	5	59.1		52.8		51.2	59.	7	59.9
Heavy Trucks:	60).7	5	59.3		50.2		51.5	59.8	8	60.0
Vehicle Noise:	68	3.8	6	67.1		64.1		59.2	67.8	8	68.3
Contorlino Distan	co to Noiso C	ontour	(in foot)								

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	71	154	331	714
CNEL:	77	165	356	768

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Toledo Wy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOIS	E MODE	L INPUT	S				
Highway Data			Site Cond	litions (Har	d = 10, So	oft = 15)					
Average Daily Traffic (Adt):	43,700 vehicles	3	Autos: 15								
Peak Hour Percentage:	10%		Med	ium Trucks	(2 Axles):	15					
Peak Hour Volume:	4,370 vehicles	S	Hea	vy Trucks (3+ Axles):	15					
Vehicle Speed:	60 mph		Vehicle M	liy							
Near/Far Lane Distance:	106 feet			eleType	Day	Evening	Night	Daily			
Site Data				Autos			9.6%	97.42%			
Barrier Height:	0.0 feet		Med	dium Trucks	s: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-Wall, 1-Berm):	0.0		Н	eavy Trucks	s: 86.5%	2.7%	10.8%	0.74%			
Centerline Dist. to Barrier:	100.0 feet										
Centerline Dist. to Observer:	100.0 feet		Noise Sol	urce Elevat	•	eet)					
Barrier Distance to Observer:	0.0 feet			Autos:	2.000						
Observer Height (Above Pad):	5.0 feet			Trucks:	4.000						
Pad Elevation:	0.0 feet		Heavy	Trucks:	8.006	Grade Ad	iustment:	0.0			
Road Elevation:	0.0 feet		Lane Equ	ivalent Dis	tance (in	feet)					
Road Grade:	0.0%				84.853	,					
Left View:	-90.0 degree	25	Medium		84.806						
Right View:	90.0 degree				84.853						
	00.0 a.og. 00										
FHWA Noise Model Calculation	ns										
VehicleType REMEL	Traffic Flow	Distance	Finite F			Barrier Att		m Atten			
Autos: 73.22	2 3.20	-3.5	5	-1.20	<i>-4.</i> 87	0.0	000	0.000			
Medium Trucks: 83.68	-14.03	-3.5	5	-1.20	<i>-4</i> .97	0.0	000	0.000			
Heavy Trucks: 87.33	3 -17.99	-3.5	5	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (with	hout Topo and I	barrier atten	uation)								
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL			
Autos: 7	1.7	69.8	68.0	(62.0	70.6	6	71.2			
Medium Trucks: 6	4.9	63.4	57.0	:	55.5	64.0)	64.2			
Heavy Trucks:6	4.6	63.2	54.1		55.4	63.7	7	63.9			
Vehicle Noise: 7	3.2	71.4	68.5		63.6	72.1		72.6			

70 dBA

138

149

Ldn:

CNEL:

65 dBA

298

321

60 dBA

642

692

55 dBA

1,383

1,490

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	TA			N	OISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions ((Hard =	= 10, Sc	oft = 15)		
	Percentage:	10%				dium Tru avy Truc	•	,			
Ve	lour Volume: hicle Speed: ne Distance:	4,400 ve 60 m 106 fe	ph	ν	'ehicle l	-	KS (3+	Day	Evening	Night	Daily
Site Data							utos:	77.5%		9.6%	
Barrier Type (0-W Centerline Dist. Centerline Dist. Barrier Distance Observer Height (Pa	st. to Barrier: to Observer: to Observer:	0.0 fe 0.0 100.0 fe 100.0 fe 0.0 fe 0.0 fe 0.0 fe 0.0% -90.0 d	eet eet eet eet eet		Mediui Heav ane Eq	edium Tra Heavy Tra Autos In Trucks In Trucks In Trucks In Trucks In Trucks	evation 2 2 2 4 3: 4 5: 8 Distar 3: 84	.000 .000 .006	2.7% eet) Grade Adj	10.3% 10.8% iustment:	1.84% 0.74%
FHWA Noise Mode	el Calculation	าร									
VehicleType	REMEL	Traffic F	low	Distance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	2	3.23	-3.55		-1.20		-4.87	0.0	000	0.000
Medium Trucks: Heavy Trucks:	83.68 87.33		4.00 7.96	-3.55 -3.55		-1.20 -1.20		-4.97 -5.16		000	0.000
Unmitigated Noise	e Levels (with	hout Topo	and ba	rrier attenu	ation)						
VehicleType	Leq Peak Ho	ur Led	Day Day	Leq Ev	ening	Leq I	Vight		Ldn	CI	VEL
Autos:	7	1.7	69	.8	68.0		62.	0	70.6	6	71.2
Medium Trucks:	6	4.9	63		57.1		55.	5	64.0)	64.2
Heavy Trucks:	6-	4.6	63	.2	54.2		55.	4	63.8	3	63.9
Vehicle Noise:	7	3.2	71	.4	68.5		63.	6	72.1	1	72.6

70 dBA

139

150

Ldn:

CNEL:

65 dBA

299

322

60 dBA

645

695

55 dBA

1,390

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

Barrier Height: Barrier Type (0-Wall, 1-Berm): 0.0	SITE	SPECIFIC I	NPUT I	DATA				N	OISE	MODE	L INPUT	S	
Peak Hour Percentage:	Highway Data			-		S	ite Con	ditions ((Hard	= 10, S	oft = 15)	-	
Peak Hour Volume: Vehicle Speed: 60 mph 106 feet Peak France Distance: 106 feet Peak France Distance Dist. 106 feet Peak France Dist. 106 feet Peak France Dist. 106 feet Peak France Dist. 106 feet 100.0 feet Peak France Distance Dist. 106 feet 100.0 feet 100	Average Daily	Traffic (Adt):	46,000	vehicles	3					Autos:	15		
Vehicle Speed: Near/Far Lane Distance: 60 mph 106 feet Vehicle Mix Vericle Lange User In the Image of State Plane In the Image	Peak Hour	Percentage:	109	%			Med	dium Tru	icks (2	Axles):	15		
Near/Far Lane Distance: 106 feet Vehicle Type Day Evening Night Daily	Peak H	lour Volume:	4,600	vehicles	5		Hea	avy Truc	ks (3+	Axles):	15		
Near/Far Lane Distance: 106 feet VehicleType Day Evening Night Daily	Ve	hicle Speed:	60	mph		V	ehicle II	/lix					
Site Data	Near/Far La	ne Distance:	106	feet						Dav	Evenina	Niaht	Dailv
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet	Site Data								utos:		_		_
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Centerline Dist. to Observer: 0.0 feet Centerline Distance (In feet) Centerline Distan	Ra	rrior Hoiaht:	0.0	foot			Me	dium Tr	ucks:	84.8%	4.9%	10.3%	6 1.84%
Noise Source Elevations (in feet)		_					Н	leavy Tr	ucks:	86.5%	2.7%	10.8%	6 0.74%
Centerline Dist. to Observer: 100.0 feet Autos: 2.000	• • • • • • • • • • • • • • • • • • • •					<u></u>							
Barrier Distance to Observer: 0.0 feet						N	oise So				eet)		
Observer Height (Above Pad): 5.0 feet Medium Trucks: 4.000 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 84.853 Left View: -90.0 degrees Medium Trucks: 84.806 Right View: 90.0 degrees Medium Trucks: 84.853 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.43 -3.55 -1.20 -4.87 0.000 0.00 Medium Trucks: 83.68 -13.81 -3.55 -1.20 -4.97 0.000 0.00 Heavy Trucks: 87.33 -17.77 -3.55 -1.20 -5.16 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL													
Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 84.853 Left View: -90.0 degrees Medium Trucks: 84.866 Right View: 90.0 degrees Medium Trucks: 84.853 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.43 -3.55 -1.20 -4.87 0.000 0.00 Medium Trucks: 83.68 -13.81 -3.55 -1.20 -4.97 0.000 0.00 Heavy Trucks: 87.33 -17.77 -3.55 -1.20 -5.16 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.9 70.0 68.2 62.2 70.8 71 Medium Trucks: 65.1 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>.000</td><td></td><td></td><td></td></td<>										.000			
Road Grade: 0.0 feet Lane Equivalent Distance (in feet)	•	,					Heav	y Trucks	:: 8	3.006	Grade Ad	ljustmen	t: 0.0
Road Grade:	- '					Lane Equivalent Distance (in feet)							
Left View: Right View: 90.0 degrees Medium Trucks: 84.806 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.43 -3.55 -1.20 -4.87 0.000 0.00 Medium Trucks: 83.68 -13.81 -3.55 -1.20 -4.97 0.000 0.00 Heavy Trucks: 87.33 -17.77 -3.55 -1.20 -5.16 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.9 70.0 68.2 62.2 70.8 71 Medium Trucks: 65.1 63.6 57.3 55.7 64.2 64 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64											,		
Right View: 90.0 degrees Heavy Trucks: 84.853 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.43 -3.55 -1.20 -4.87 0.000 0.00 Medium Trucks: 83.68 -13.81 -3.55 -1.20 -4.97 0.000 0.00 Heavy Trucks: 87.33 -17.77 -3.55 -1.20 -5.16 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.9 70.0 68.2 62.2 70.8 71 Medium Trucks: 65.1 63.6 57.3 55.7 64.2 64 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64	į				26		Mediun						
FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atter Autos: 73.22 3.43 -3.55 -1.20 -4.87 0.000 0.00 Medium Trucks: 83.68 -13.81 -3.55 -1.20 -4.97 0.000 0.00 Heavy Trucks: 87.33 -17.77 -3.55 -1.20 -5.16 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.9 70.0 68.2 62.2 70.8 71 Medium Trucks: 65.1 63.6 57.3 55.7 64.2 64 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64				-									
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.43 -3.55 -1.20 -4.87 0.000 0.00 Medium Trucks: 83.68 -13.81 -3.55 -1.20 -4.97 0.000 0.00 Heavy Trucks: 87.33 -17.77 -3.55 -1.20 -5.16 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.9 70.0 68.2 62.2 70.8 71 Medium Trucks: 65.1 63.6 57.3 55.7 64.2 64 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64		rugine vioiri	00.0	dogioc	50			,					
Autos: 73.22 3.43 -3.55 -1.20 -4.87 0.000 0.00 Medium Trucks: 83.68 -13.81 -3.55 -1.20 -4.97 0.000 0.00 Heavy Trucks: 87.33 -17.77 -3.55 -1.20 -5.16 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.9 70.0 68.2 62.2 70.8 71 Medium Trucks: 65.1 63.6 57.3 55.7 64.2 64 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64	FHWA Noise Mod												
Medium Trucks: 83.68 -13.81 -3.55 -1.20 -4.97 0.000 0.00 Heavy Trucks: 87.33 -17.77 -3.55 -1.20 -5.16 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.9 70.0 68.2 62.2 70.8 71 Medium Trucks: 65.1 63.6 57.3 55.7 64.2 64 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64	VehicleType	REMEL	Traffic	Flow	Distance	Э	Finite	Road	Fres	snel	Barrier At	ten Be	rm Atten
Heavy Trucks: 87.33 -17.77 -3.55 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.9 70.0 68.2 62.2 70.8 71 Medium Trucks: 65.1 63.6 57.3 55.7 64.2 64 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64	Autos:	73.22	2	3.43	-3	.55		-1.20		-4.87	0.	000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.9 70.0 68.2 62.2 70.8 71 Medium Trucks: 65.1 63.6 57.3 55.7 64.2 64 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64	Medium Trucks:	83.68	3	-13.81	-3	.55		-1.20		-4.97	0.	000	0.000
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.9 70.0 68.2 62.2 70.8 71 Medium Trucks: 65.1 63.6 57.3 55.7 64.2 64 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64	Heavy Trucks:	87.33	3	-17.77	-3	.55		-1.20		-5.16	0.	000	0.000
Autos: 71.9 70.0 68.2 62.2 70.8 71 Medium Trucks: 65.1 63.6 57.3 55.7 64.2 64 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64	Unmitigated Noise	e Levels (with	hout To	po and	barrier att	enu	ation)						
Medium Trucks: 65.1 63.6 57.3 55.7 64.2 64 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64	VehicleType	Leq Peak Ho	our I	Leq Day	Leq	Eve	ening	Leq I	Vight		Ldn	C	CNEL
Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64	Autos:	7	1.9	-	70.0		68.2		62	.2	70.	8	71.4
·	Medium Trucks:	6	5.1	(63.6		57.3		55	.7	64	2	64.4
Vehicle Noise: 73.4 71.6 68.7 63.8 72.3 72	Heavy Trucks:	6	4.8	(63.4		54.4		55	.6	64.	0	64.1
	Vehicle Noise:	7	3.4	•	71.6		68.7		63	.8	72.	3	72.8

70 dBA

143

154

Ldn:

CNEL:

65 dBA

308

332

60 dBA

664

716

55 dBA

1,432

1,542

Centerline Distance to Noise Contour (in feet)

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: El Toro Rd. Job Number: 8141 Road Segment: n/o Rockfield Bl. Analyst: B. Lawson

SITE SPEC	IFIC INF	PUT DATA				1	VOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard	= 10, So	oft = 15)		
Average Daily Traffic	(Adt): 50	0,000 vehicles	3					Autos:	15		
Peak Hour Perce	entage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak Hour Vo	olume: 5	5,000 vehicles	3		He	avy Tru	icks (3+	Axles):	15		
Vehicle S	Speed:	60 mph		1	/ehicle l	Miv					
Near/Far Lane Dis	stance:	106 feet				icleType	e	Day	Evening	Night	Daily
Site Data					7011		Autos:	77.5%	-	9.6%	-
	loiabt.	0.0 feet			Ме	edium T		84.8%		10.3%	1.84%
Barrier H Barrier Type (0-Wall, 1-I	•	0.0 reet 0.0				leavy T		86.5%		10.8%	0.74%
Centerline Dist. to E	,	100.0 feet									
Centerline Dist. to Obs		100.0 feet		٨	loise Sc			ns (in fe	eet)		
Barrier Distance to Obs		0.0 feet				Auto		2.000			
Observer Height (Above		5.0 feet				n Truck	_	1.000			
Pad Ele	•	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	iustment:	0.0
Road Ele		0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	feet)		
	Grade:	0.0%				Auto		1.853			
	t View:	-90.0 degree	es		Mediur	n Truck		1.806			
Right	t View:	90.0 degree			Heav	y Truck	ks: 84	4.853			
FHWA Noise Model Cale					T			_			
,,		Traffic Flow	Dis	stance	Finite		Fres		Barrier Att		m Atten
Autos:	73.22	3.79		-3.55		-1.20		-4.87		000	0.000
Medium Trucks:	83.68	-13.45		-3.55		-1.20		-4.97		000	0.000
Heavy Trucks:	87.33	-17.40		-3.55)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Leve	els (witho	ut Topo and	barri	er atteni	uation)						
VehicleType Leq F	Peak Hour			Leq Ev	rening	Leq	Night		Ldn		VEL
Autos:	72.3	3	70.4		68.6		62	.5	71.2	2	71.8
Medium Trucks:	65.5		64.0		57.6		56		64.5		64.8
Heavy Trucks:	65.2		63.8		54.7		56		64.3		64.4
Vehicle Noise:	73.7	7	72.0		69.1		64	.1	72.7	7	73.2
Centerline Distance to I	Noise Cor	ntour (in feet)								
				70 d	<i>IBA</i>	65	dBA	6	60 dBA	55	dBA

151

163

Ldn:

CNEL:

326

351

702

757

1,513

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: b/w Rockfield Bl.and I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT	DATA				N	IOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	65,000	vehicles	3					Autos:	15		
Peak Hour	Percentage:	10	%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	our Volume:	6,500	vehicle	S		He	avy Trud	cks (3+	Axles):	15		
Ve	hicle Speed:	60	mph			Vehicle	Mix					
Near/Far Lai	ne Distance:	106	feet				icleType	9	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	,
	rier Height:	0.0) feet			M	edium T	rucks:	84.8%	4.9%	10.3%	
Barrier Type (0-W	•	0.0				I	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	,) feet						/: 6			
Centerline Dist.) feet		_	Noise So			•	eet)		
Barrier Distance	to Observer:) feet				Auto		2.000			
Observer Height () feet				m Truck		1.000	0		. 0.0
• ,	ad Elevation:) feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0
Roa	ad Elevation:) feet			Lane Eq	uivalen	t Dista	nce (in f	feet)		
I	Road Grade:	0.0	0%				Auto	s: 84	4.853			
	Left View:	-90.0) degree	es		Mediu	m Truck	s: 84	4.806			
	Right View:	90.0) degree	es		Heav	y Truck	s: 84	4.853			
FHWA Noise Mode	el Calculation	าร										
VehicleType	REMEL	Traffi	c Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Bei	m Atten
Autos:	73.22	2	4.93		-3.5	5	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	3	-12.31		-3.5	5	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3	-16.27		-3.5	5	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	hout To	po and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	ur	Leq Day	,	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	7:	3.4		71.5		69.7		63	.7	72.3	3	72.9
Medium Trucks:	60	6.6		65.1		58.8		57	.2	65.7	7	65.9
Heavy Trucks:	60	6.3		64.9		55.9		57	.1	65.5	5	65.6
Vehicle Noise:	7	4.9		73.1		70.2		65	.3	73.8	3	74.3
Centerline Distance	e to Noise C	ontour	(in feet)								
					70 (dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

180

194

388

418

837

901

1,803

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: b/w I-5 SB Ramps and Avenida Carlota

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA	\			NC	DISE N	/ODE	L INPUT	s	
Highway Data					Site Con	ditions (F	Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	44,700 vehic	les				,	Autos:	15		
	Percentage:	10%			Me	dium Truc	ks (2 A	Axles):	15		
Peak H	lour Volume:	4,470 vehic	les		He	avy Truck	s (3+ A	Axles):	15		
Ve	hicle Speed:	55 mph		-	Vehicle i	Miv					
Near/Far La	ne Distance:	88 feet				icleType		Day	Evening	Night	Daily
Site Data					V 0//		ıtos:	77.5%		9.6%	
	unio u II o i o lo t	0.0 foot			M	edium Tru		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet 0.0				Heavy Tru		86.5%		10.8%	0.74%
Barrier Type (0-W Centerline Dis	,	100.0 feet									011 170
Centerline Dist.		100.0 feet			Noise So	ource Ele	vation	s (in fe	eet)		
Barrier Distance		0.0 feet				Autos:		000			
Observer Height (5.0 feet				m Trucks:		000			
,	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Ad	iustment:	0.0
	ad Elevation:	0.0 feet		-	Lane Eq	uivalent L	Distan	ce (in t	feet)		
	Road Grade:	0.0%				Autos:		•			
•	Left View:	-90.0 degi	ees		Mediu	m Trucks:					
	Right View:	90.0 degi			Heav	y Trucks:	89.	850			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow		istance		Road	Fresn		Barrier Att		m Atten
Autos:	71.78	3.6		-3.9		-1.20		-4.87		000	0.000
Medium Trucks:	82.40	-13.5		-3.9		-1.20		-4.97		000	0.000
Heavy Trucks:	86.40	-17.5	51	-3.9	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo an	d barr	ier atter	nuation)						
VehicleType	Leq Peak Hou	ır Leq D	ay	Leq E	vening	Leq N	ight		Ldn	CI	VEL
Autos:	70	0.3	68.4		66.7		60.6	5	69.2	2	69.8
Medium Trucks:	63	3.7	62.2		55.9		54.3	3	62.8	3	63.0
Heavy Trucks:	63	3.8	62.3		53.3		54.6	6	62.9	9	63.0
Vehicle Noise:	71	.9	70.2		67.2		62.3	3	70.9	9	71.4
Centerline Distant	ce to Noise Co	ontour (in fe	et)								
		, , , ,	,	70	dBA	65 dl	ВА	6	0 dBA	55	dBA

Ldn:

CNEL:

114

123

247

265

531

572

1,145

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Paseo de Valencia

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS						
Highway Data				Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	29,600 vehicles	S			Autos:	15			
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15			
Peak F	lour Volume:	2,960 vehicles	S	He	avy Trucks (3+ <i>Axles):</i>	15			
Ve	ehicle Speed:	55 mph		Vehicle I	Vix					
Near/Far La	ane Distance:	88 feet			icleType	Day	Evening	Night	Daily	
Site Data					Autos	_		-	97.42%	
Ra	rrier Height:	0.0 feet		Me	edium Trucks	s: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V	•	0.0		F	leavy Trucks	s: 86.5%	2.7%	10.8%	0.74%	
• • • •	ist. to Barrier:	100.0 feet		Naina Ca	51	: /:- f	41			
Centerline Dist.		100.0 feet		Noise So	ource Elevat	•	eet)			
Barrier Distance	to Observer:	0.0 feet			Autos:	2.000				
Observer Height		5.0 feet			n Trucks:	4.000	0 1- 4 -1	P 4 4	0.0	
•	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0	
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)			
	Road Grade:	0.0%			Autos:	89.850				
	Left View:	-90.0 degree	es	Mediui	n Trucks:	89.805				
	Right View:	90.0 degree	es	Heav	y Trucks:	89.850				
FHWA Noise Mod	lel Calculation	าร								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road Fi	resnel	Barrier Att	ten Ber	m Atten	
Autos:		1.89	-3.	92	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-15.35	-3.	92	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-19.30	-3.	92	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)						
VehicleType	Leq Peak Ho	our Leq Day	Leq I	Evening	Leq Nigh	t	Ldn	CI	VEL	
Autos:	6	8.5	66.7	64.9	;	58.8	67.	5	68.1	
Medium Trucks:	6	1.9	60.4	54.1	;	52.5	61.0	0	61.2	
Heavy Trucks:	62	2.0	60.5	51.5	,	52.8	61.	1	61.2	

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn: ¯	87	187	404	870								
CNEL:	94	202	434	936								

65.4

60.5

69.1

69.6

68.4

Vehicle Noise:

70.1

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o Paseo de Valencia

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOIS	E MODE	L INPUT	S			
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	33,000 vehicles	S			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles).	15				
Peak F	lour Volume:	3,300 vehicles	S	He	avy Trucks (3+ Axles).	15				
Ve	ehicle Speed:	55 mph		Vehicle i	Mix						
Near/Far La	ane Distance:	88 feet			icleType	Day	Evening	Night	Daily		
Site Data					Autos			9.6%	-		
Ra	rrier Height:	0.0 feet		Me	edium Trucks	s: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0		ŀ	Heavy Trucks	s: 86.5%	2.7%	10.8%	0.74%		
, ,	ist. to Barrier:	100.0 feet		Noise Co	viras Elevet	iono (in f	0041				
Centerline Dist.	to Observer:	100.0 feet		Noise St	ource Elevat	•	eet)				
Barrier Distance	to Observer:	0.0 feet		N 4 - 1'	Autos:	2.000					
Observer Height	(Above Pad):	5.0 feet			m Trucks:	4.000	Crada Ad	lia.tma a m.t			
	ad Elevation:	0.0 feet		Heav	ry Trucks:	8.006	Grade Ad	justment.	0.0		
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)				
	Road Grade:	0.0%			Autos:	89.850					
	Left View:	-90.0 degree	es	Mediu	m Trucks:	89.805					
	Right View:	90.0 degree	es	Heav	y Trucks:	89.850					
FHWA Noise Mod	lel Calculation	15									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road Fi	resnel	Barrier Att	ten Ber	m Atten		
Autos:	71.78	2.36	-3.	92	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-14.88	-3.	92	-1.20	<i>-4</i> .97	0.0	000	0.000		
Heavy Trucks:	86.40	-18.83	-3.	92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	nout Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Ho	ur Leq Day	Leq I	Evening	Leq Nigh	t	Ldn	CI	VEL		
Autos:	69	9.0	67.1	65.4		59.3	67.9	9	68.5		
Medium Trucks:	62	2.4	60.9	54.5	;	53.0	61.5	5	61.7		
Heavy Trucks:	62	2.4	61.0	52.0		53.2	61.6	6	61.7		

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	94	201	434	935							
CNEL:	101	217	467	1,006							

65.9

61.0

69.6

68.8

70.0

Vehicle Noise:

70.6

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o Moulton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOISE MODEL INPUTS						
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	32,200 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak F	lour Volume:	3,220 vehicle	es		He	avy Truc	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		V	ehicle l	Mix					
Near/Far La	ane Distance:	88 feet				icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet			Me	edium Tr	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			F	leavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		N	loise Sc	ource El	evation	ns (in fa	not)		
Centerline Dist.	to Observer:	100.0 feet		-	0/30 00	Autos		.000	<i></i>		
Barrier Distance	to Observer:	0.0 feet			Modium	n Trucks		.000			
Observer Height	(Above Pad):	5.0 feet							Grade Ad	liustmant	
P	ad Elevation:	0.0 feet			пеач	y Trucks	s. o	.006	Grade Au	justin o nt	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	ice (in i	feet)		
	Road Grade:	0.0%				Autos	s: 89	.850			
	Left View:	-90.0 degre	ees		Mediur	n Trucks	s: 89	.805			
	Right View:	90.0 degre			Heav	y Trucks	s: 89	.850			
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	3 2.26	5	-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-14.98	3	-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-18.94	1	-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	l barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	our Leq Da	y L	eq Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	6	8.9	67.0		65.3		59.	2	67.8	3	68.4
Medium Trucks:	6	2.3	8.00		54.4		52.	9	61.3	3	61.6
Heavy Trucks:	6	2.3	60.9		51.9		53.	1	61.5	5	61.6
Vehicle Noise:	7	0.5	68.7		65.8		60.	9	69.5	5	69.9

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	92	198	427	920
CNEL:	99	213	459	990

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Aliso Creek Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT I	DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt	: 26,500	vehicles	6					Autos:	15		
Peak Hour Percentage	e: 10 ⁹	%			Med	dium Tri	ucks (2	Axles):	15		
Peak Hour Volume	2,650	vehicles	6		Hea	avy Trud	cks (3+	Axles):	15		
Vehicle Speed	<i>l</i> : 55	mph		V	ehicle N	/liy					
Near/Far Lane Distance	e: 88	feet				cleType	,	Day	Evening	Night	Daily
Site Data					70777		Autos:	77.5%	Ū	9.69	
	. 0.0) feet			Ме	dium Ti		84.8%		10.39	
Barrier Heigh Barrier Type (0-Wall, 1-Berm					_	leavy T		86.5%		10.89	
Centerline Dist. to Barrie)) feet									
				No	oise So	urce El	levatio	ns (in fe	eet)		
Centerline Dist. to Observe) feet				Auto	s: 2	2.000			
Barrier Distance to Observe) feet			Mediun	n Truck	s: 4	.000			
Observer Height (Above Pag) feet			Heav	y Truck	s: 8	3.006	Grade Ad	iustmei	nt: 0.0
Pad Elevation) feet							• 4		
Road Elevation) feet		Lá	ane ⊑qu			nce (in	reet)		
Road Grade	e: 0.0)%				Auto		9.850			
Left View	<i>:</i> -90.0) degree	es		Mediun	n Truck	s: 89	9.805			
Right View	<i>y:</i> 90.0) degree	es		Heav	y Truck	s: 89	9.850			
FHWA Noise Model Calculat	ons										
VehicleType REMEL	Traffic	c Flow	Distar	nce	Finite	Road	Fres	snel	Barrier Att	en B	erm Atten
Autos: 71	78	1.41		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82	40	-15.83		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86	40	-19.78		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (v	ithout To	po and l	barrier a	attenua	ation)						
VehicleType Leq Peak	Hour I	Leq Day	Le	eq Eve	ening	Leq	Night		Ldn	(CNEL
Autos:	68.1	-	66.2		64.4		58	.3	67.0)	67.6
Medium Trucks:	61.5	5	59.9		53.6		52	.0	60.5	5	60.7

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	81	174	375	808							
CNEL:	87	187	403	869							

51.0

64.9

52.3

60.1

60.6

68.6

60.8

69.1

60.1

67.9

Heavy Trucks:

Vehicle Noise:

61.5

69.6

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o SR-73

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA	1			NC	DISE MODE	L INPUT	S	
Highway Data				S	ite Con	ditions (l	Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	30,100 vehic	les				Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Truc	cks (2 Axles):	15		
Peak H	lour Volume:	3,010 vehic	les		Hea	avy Truck	(s (3+ Axles):	15		
Ve	hicle Speed:	55 mph		V	ehicle I	/lix				
Near/Far La	ne Distance:	88 feet		-		cleType	Day	Evening	Night	Daily
Site Data							utos: 77.5%		9.6%	
Ra	rrier Height:	0.0 feet			Ме	edium Tru	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			F	leavy Tru	cks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet				51-		4		
Centerline Dist.		100.0 feet		^	ioise So		vations (in f	eet)		
Barrier Distance	to Observer:	0.0 feet				Autos:				
Observer Height ((Above Pad):	5.0 feet				n Trucks:		0 - 4 - 4 - 4		0.0
	ad Elevation:	0.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 feet		L	ane Equ	uivalent l	Distance (in	feet)		
	Road Grade:	0.0%				Autos:	89.850			
	Left View:	-90.0 degi	ees		Mediur	n Trucks:	89.805			
	Right View:	90.0 degi			Heav	y Trucks:	89.850			
FHWA Noise Mod	el Calculatio	าร								
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.9	6	-3.92		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.2	8	-3.92		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.2	3	-3.92		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo an	d barri	er attenu	ation)					
VehicleType	Leq Peak Ho	our Leq D	ay	Leq Ev	ening	Leq N	light	Ldn	CI	VEL
Autos:	6	8.6	66.7		65.0		58.9	67.5	5	68.1
Medium Trucks:	6	2.0	60.5		54.1		52.6	61.1	1	61.3
Heavy Trucks:	6	2.0	60.6		51.6		52.8	61.2	2	61.3

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	88	189	408	879							
CNEL:	95	204	439	946							

65.5

68.4

69.2

60.6

69.6

Vehicle Noise:

70.2

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o SR-73

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS							
Highway Data			;	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt): 1	7,800 vehicles	3			Autos:	15				
Peak Hour	Percentage:	10%		Med	ium Trucks	(2 Axles):	15				
Peak H	lour Volume:	1,780 vehicles	3	Hea	vy Trucks (3+ <i>Axles):</i>	15				
	hicle Speed:	50 mph	1	Vehicle M	lix						
Near/Far La	ne Distance:	70 feet		Vehic	leType	Day	Evening	Night	Daily		
Site Data					Autos	s: 77.5%	12.9%	9.6%	97.42%		
Ва	rrier Height:	0.0 feet		Med	dium Trucks	s: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0		He	eavy Truck	s: 86.5%	2.7%	10.8%	0.74%		
Centerline Di	st. to Barrier:	100.0 feet		Noise Soi	urce Elevat	ions (in f	eet)				
Centerline Dist.	to Observer:	100.0 feet	_	10,00 00.	Autos:	2.000					
Barrier Distance	to Observer:	0.0 feet		Medium	Trucks:	4.000					
Observer Height	(Above Pad):	5.0 feet			Trucks:	8.006	Grade Ad	iustment:			
P	ad Elevation:	0.0 feet		Heavy	TTUCKS.	8.000	Orade Adj	ustinont.	0.0		
Ro	ad Elevation:	0.0 feet	1	Lane Equ	ivalent Dis	tance (in	feet)				
	Road Grade:	0.0%			Autos:	93.723					
	Left View:	-90.0 degree	es	Medium	Trucks:	93.680					
	Right View:	90.0 degree	es	Heavy	Trucks:	93.723					
FHWA Noise Mod	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Distance	Finite F	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos:	70.20	0.10	-4.20)	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-17.14	-4.19	9	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-21.10	-4.20)	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (witho	out Topo and	barrier atten	uation)							
VehicleType	Leq Peak Hou	r Leq Day	Leq E	/ening	Leq Nigh	t	Ldn	CI	VEL		
Autos:	64.	9 (63.0	61.2		55.2	63.8	3	64.4		
Medium Trucks:	58.	5 5	57.0	50.6		49.1	57.5	5	57.7		
Heavy Trucks:	58.	9 .	57.5	48.4		49.7	58.0)	58.2		
Vehicle Noise:	66.	6	64.8	61.8		57.0	65.6	3	66.0		

70 dBA

51

54

Ldn:

CNEL:

65 dBA

109

117

60 dBA

235

252

55 dBA

506

544

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Fortune Dr.

Road Segment: b/w Gateway Bl. and Spectrum

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA		NOISE MODEL INPUTS								
Highway Data				Site Cor	ditions (Hard	d=10, So	oft = 15)					
Average Daily	Traffic (Adt):	8,700 vehicle	es			Autos:	15					
Peak Hour	Percentage:	10%		Me	dium Trucks ((2 Axles):	15					
Peak H	lour Volume:	870 vehicle	es	He	avy Trucks (3	3+ Axles):	15					
Ve	ehicle Speed:	55 mph		Vehicle	Mix							
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily			
Site Data					Autos		J	9.6%	97.42%			
Ra	rrier Height:	0.0 feet		M	edium Trucks.	: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0			Heavy Trucks	: 86.5%	2.7%	10.8%	0.74%			
Centerline Di	,	100.0 feet					4)					
Centerline Dist.		100.0 feet		Noise S	ource Elevati	•	eet)					
Barrier Distance		0.0 feet			Autos:	2.000						
Observer Height (5.0 feet			m Trucks:	4.000						
	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0			
	ad Elevation: ad Elevation:	0.0 feet		Lane Eq	uivalent Dist	ance (in	feet)					
	Road Grade:	0.0%		•		96.607						
,	Left View:	-90.0 degre	20	Mediu		96.566						
	Right View:	90.0 degre				96.608						
	g	00.0 d0g.0			,							
FHWA Noise Mod	el Calculation	ıs										
VehicleType	REMEL	Traffic Flow	Distance	e Finite		esnel	Barrier Att	en Ber	m Atten			
Autos:	71.78	-3.43	-4	.39	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-20.67	-4	.39	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-24.62	-4	.39	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise	e Levels (with	out Topo and	barrier att	enuation)								
VehicleType	Leq Peak Hou	ur Leq Daj	y Leq	Evening	Leq Night		Ldn	CI	VEL			
Autos:	62	2.8	60.9	59.1		3.0	61.7	7	62.3			
Medium Trucks:	56	5.1	54.6	48.3	4	6.7	55.2	2	55.4			
Heavy Trucks:	56	5.2	54.8	45.7	4	7.0	55.3	3	55.5			
Vehicle Noise:	64	1.3	62.6	59.6	5	4.7	63.3	3	63.8			

70 dBA

36

38

Ldn: CNEL: 65 dBA

77

83

60 dBA

166

179

55 dBA

358

385

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Fortune Dr.

Road Segment: b/w Pacifica and Spectrum

Job Number: 8141

Analyst: B. Lawson

SITE SPE		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (F	lard = 10, S	oft = 15)		
Average Daily Traff	ic (Adt): 8	3,900 vehicles				Autos	: 15		
Peak Hour Perc	,	10%		Me	dium Truc	ks (2 Axles)	: 15		
Peak Hour \	/olume:	890 vehicles		He	avy Truck	s (3+ Axles)	: 15		
Vehicle	Speed:	55 mph		Vehicle i	Miv				
Near/Far Lane D	istance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data				Veri		tos: 77.5°	_	9.6%	
				Λ 1.	Au edium Truc			10.3%	1.84%
Barrier	•	0.0 feet							
Barrier Type (0-Wall, 1	-Berm):	0.0		,	Heavy True	cks: 86.5°	% 2.7%	10.8%	0.74%
Centerline Dist. to	Barrier:	100.0 feet		Noise So	ource Elev	ations (in	feet)		
Centerline Dist. to O		100.0 feet			Autos:	2.000			
Barrier Distance to O	bserver:	0.0 feet		Mediu	m Trucks:	4.000			
Observer Height (Abov	∕e Pad):	5.0 feet			y Trucks:	8.006	Grade Ad	iustment:	0.0
Pad El	evation:	0.0 feet							
Road El	evation:	0.0 feet		Lane Eq	uivalent D	Distance (in	feet)		
Road	Grade:	0.0%			Autos:	96.607			
Le	eft View:	-90.0 degree	S	Mediu	m Trucks:	96.566			
Rig	ht View:	90.0 degree	S	Heav	y Trucks:	96.608			
FHWA Noise Model Ca	lculations								
VehicleType R	EMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	-3.33	-4.3	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-20.57	-4.3	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-24.52	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Lev	els (witho	ut Topo and b	parrier atte	nuation)					
VehicleType Leq	Peak Hour	Leq Day	Leq E	vening	Leq Ni	ight	Ldn	CI	VEL
Autos:	62.9	9 6	61.0	59.2		53.1	61.8	3	62.4
Medium Trucks:	56.2	2 5	54.7	48.4		46.8	55.3	3	55.5
Heavy Trucks:	56.3	3 5	54.9	45.8		47.1	55.4	1	55.6
Vehicle Noise:	64.4	1 6	62.7	59.7		54.8	63.4	1	63.9

70 dBA

36

39

Ldn:

CNEL:

65 dBA

78

84

60 dBA

168

181

55 dBA

363

391

Sunday,	May	20,	2012

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Gateway Bl.

Road Segment: w/o Fortune Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS						
Highway Data				Site Cor	nditions (H	ard = 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	7,200 vehicles	s			Autos:	15			
Peak Hou	r Percentage:	10%		Me	edium Truck	s (2 Axles):	15			
Peak I	Hour Volume:	720 vehicles	s	He	avy Trucks	(3+ <i>Axles</i>):	15			
Ve	ehicle Speed:	55 mph		Vehicle	Mix					
Near/Far La	ane Distance:	52 feet			icleType	Day	Evening	Night	Daily	
Site Data					Aut	os: 77.5%	12.9%	9.6%	97.42%	
Ba	arrier Height:	0.0 feet		М	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V		0.0		1	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%	
• • •	ist. to Barrier:	100.0 feet		Noise S	ource Flev	ations (in fe	2 <i>et</i>)			
Centerline Dist.	to Observer:	100.0 feet		710/30 0	Autos:	2.000	,,,			
Barrier Distance	to Observer:	0.0 feet		Modiu	m Trucks:	4.000				
Observer Height	(Above Pad):	5.0 feet					Grade Adj	iustmont:	0.0	
_	Pad Elevation:	0.0 feet		неа	vy Trucks:	8.006	Grade Auj	usimeni.	0.0	
Ro	oad Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)			
	Road Grade:	0.0%			Autos:	96.607				
	Left View:	-90.0 degree	es	Mediu	m Trucks:	96.566				
	Right View:	90.0 degree	es	Hear	vy Trucks:	96.608				
FHWA Noise Mod	del Calculation	ıs								
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten	
Autos.	71.78	-4.25	-4	.39	-1.20	-4.87	0.0	000	0.000	
Medium Trucks.	82.40	-21.49	-4	.39	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks.	86.40	-25.44	-4	.39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	se Levels (with	out Topo and	barrier atte	enuation)						
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq	Evening	Leq Nig	ght	Ldn	CI	VEL	
Autos.	6	1.9	60.0	58.3		52.2	60.8	3	61.4	
Medium Trucks.	: 55	5.3	53.8	47.5		45.9	54.4	1	54.6	
Heavy Trucks.	55	5.4	53.9	44.9		46.2	54.5	5	54.6	
Vehicle Noise.	63	3.5	61.8	58.8		53.9	62.5	5	63.0	

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	32	68	146	315						
CNEL:	34	73	157	339						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Gateway Bl.

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Cor	nditions (Hard =	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt):	1,700 vehicles	S				Autos:	15			
Peak Hour Percentage:	10%		Me	edium Tru	cks (2	Axles):	15			
Peak Hour Volume:	170 vehicles	S	He	avy Truci	ks (3+	Axles):	15			
Vehicle Speed:	55 mph		Vehicle	Miv						
Near/Far Lane Distance:	52 feet			icleType		Day	Evening	Night	Daily	
Site Data			7011		utos:	77.5%			97.42%	
	0.0 feet		М	edium Tru		84.8%		10.3%	1.84%	
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 reet 0.0			Heavy Tru		86.5%		10.8%	0.74%	
Centerline Dist. to Barrier:	100.0 feet									
Centerline Dist. to Observer:	100.0 feet		Noise S	ource Ele			eet)			
Barrier Distance to Observer:	0.0 feet			Autos		.000				
Observer Height (Above Pad):	5.0 feet		Mediu	m Trucks	: 4	.000				
Pad Elevation:	0.0 feet		Heav	vy Trucks	: 8	.006	Grade Ad	justment:	0.0	
Road Elevation:	0.0 feet		Lane Fo	uivalent	Distan	ice (in i	feet)			
Road Grade:	0.0%		24.70 29	Autos		.607				
Left View:	-90.0 degree	00	Mediu	m Trucks		.566				
Right View:	90.0 degree			vy Trucks		.608				
Ngn view.	90.0 degree	55	77001	y madno	. 50	.000				
FHWA Noise Model Calculation	ıs		-							
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos: 71.78	-10.52	-4	.39	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 82.40	-27.76	-4	.39	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 86.40	-31.71	-4	.39	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (with	out Topo and	barrier atte	enuation)							
VehicleType Leq Peak Ho	ur Leq Day	Leq	Evening	Leq N	Vight		Ldn	CI	VEL	
Autos: 55	5.7	53.8	52.0		45.	9	54.6	6	55.2	
Medium Trucks: 49	9.1	47.5	41.2		39.	6	48.1	1	48.3	
Heavy Trucks: 49	9.1	47.7	38.6 39.9 48.2			2 48.4				
Vehicle Noise: 57	7.2	55.5	52.5		47.	7	56.2	2	56.7	
Centerline Distance to Noise C	ontour (in feet)								

70 dBA

12

13

Ldn:

CNEL:

65 dBA

26

28

60 dBA

56

60

55 dBA 120

130

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Gateway Bl.

Road Segment: w/o ICD

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOIS	E MODE	L INPUT	<u> </u>			
Highway Data				Site Con	ditions (Har	d = 10, So	oft = 15)				
Average Daily	Traffic (Adt):	2,800 vehicle	S			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15				
Peak H	lour Volume:	280 vehicle	S	Heavy Trucks (3+ Axles): 15							
Ve	hicle Speed:	55 mph		Vehicle I	Miv						
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data				VCII	Autos		J	9.6%	97.42%		
		0.0.51		M	edium Trucks			10.3%	1.84%		
	rrier Height:	0.0 feet			leavy Trucks			10.8%	0.74%		
Barrier Type (0-W	,	0.0						10.070	011 170		
Centerline Di		100.0 feet		Noise So	ource Elevat	ions (in fe	eet)				
Centerline Dist.		100.0 feet			Autos:	2.000					
Barrier Distance		0.0 feet		Mediui	n Trucks:	4.000					
Observer Height (•	5.0 feet		Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0		
Pa	ad Elevation:	0.0 feet									
Roa	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis		feet)				
1	Road Grade:	0.0%			Autos:	96.607					
	Left View:	-90.0 degree	es	Mediui	n Trucks:	96.566					
	Right View:	90.0 degree	es	Heav	y Trucks:	96.608					
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road Fi	resnel	Barrier Atte	en Ber	m Atten		
Autos:	71.78	-8.35	-4.3	39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-25.59	-4.3	39	-1.20	<i>-4.97</i> 0.0		000	0.000		
Heavy Trucks:	86.40	-29.55	-4.3	39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Hou	ır Leq Day	/ Leq E	vening	Leq Nigh	t	Ldn	CI	VEL		
Autos:	57	.8	55.9	54.2		48.1	56.7	7	57.3		

Unmitigated Nois	e Levels (withou	it Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	57.8	55.9	54.2	48.1	56.7	57.3
Medium Trucks:	51.2	49.7	43.4	41.8	50.3	50.5
Heavy Trucks:	51.3	49.8	40.8	42.0	50.4	50.5
Vehicle Noise:	59.4	57.7	54.7	49.8	58.4	58.9

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	17	36	78	168						
CNEL:	18	39	84	181						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Glenn Ranch Rd.

Road Segment: n/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA	1			NOISE	MODE	L INPUT	S	
Highway Data				S	ite Conditions	s (Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	28,900 vehic	les				Autos:	15		
Peak Hour	Percentage:	10%			Medium T	rucks (2	? Axles):	15		
Peak H	lour Volume:	2,890 vehic	les		Heavy Tru	ıcks (3+	- Axles):	15		
Ve	hicle Speed:	50 mph		V	ehicle Mix					
Near/Far La	ne Distance:	70 feet			VehicleTyp	е	Day	Evening	Night	Daily
Site Data						Autos:	77.5%		9.6%	
Ra	rrier Height:	0.0 feet			Medium 1	Trucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			Heavy 7	Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet					<i>(</i> ; <i>c</i>	4)		
Centerline Dist.		100.0 feet		N	oise Source E			eet)		
Barrier Distance		0.0 feet			Auto		2.000			
Observer Height		5.0 feet			Medium Truci		4.000			
•	ad Elevation:	0.0 feet			Heavy Truc	ks: 8	3.006	Grade Ad	justment.	0.0
	ad Elevation:	0.0 feet		L	ane Equivaler	nt Dista	nce (in	feet)		
	Road Grade:	0.0%			Auto	os: 93	3.723			
	Left View:	-90.0 deg	rees		Medium Truci		3.680			
	Right View:	90.0 deg			Heavy Trucks: 93.723					
FHWA Noise Mod	el Calculation	าร								
VehicleType	REMEL	Traffic Flow	/ Di	stance	Finite Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	70.20) 2.2	20	-4.20	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-15.0)4	-4.19	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-18.9	9	-4.20	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (witl	hout Topo an	d barri	er attenu	ation)					
VehicleType	Leq Peak Ho	our Leq D	•	Leq Eve	•	Night		Ldn	CI	VEL
Autos:	6	7.0	65.1		63.3	57	'.3	65.9	9	66.5
Medium Trucks:	6	0.6	59.1		52.7	51	.2	59.6	6	59.8
Heavy Trucks:	6	1.0	59.6	50.5 51.8 60.1			1	60.3		
Vehicle Noise:	6	8.7	66.9		63.9	59).1	67.7	7	68.1
Contouling Distan	aa ta Naisa C	antary (in fa	-4\							

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	70	151	325	699						
CNEL:	75	162	349	751						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Glenwood Dr./Indian Creek Road Segment: w/o Moulton Pkwy.

Job Number: 8141 Analyst: B. Lawson

SITE SPECIFIC	CINI	PUT DATA			I	NOISI	E MODE	L INPUT	S		
Highway Data				S	ite Conditions	(Harc	l = 10, Sc	oft = 15)			
Average Daily Traffic (Ad	<i>lt):</i> 1	1,700 vehicles	5				Autos:	15			
Peak Hour Percentag	je:	10%			Medium Ti	rucks (2 Axles):	15			
Peak Hour Volum	ie:	1,170 vehicles	3	Heavy Trucks (3+ Axles): 15							
Vehicle Spee	ed:	50 mph		V	ehicle Mix						
Near/Far Lane Distand	e:	70 feet			VehicleTyp	e	Day	Evening	Night	Daily	
Site Data						Autos:	-			97.42%	
Barrier Heig	ht:	0.0 feet			Medium 7	Trucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berr		0.0			Heavy T	Trucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barri	,	100.0 feet		N	oise Source E	lovati	ons (in fa	not)			
Centerline Dist. to Observer: 100.0 feet				′•	Auto		2.000	,			
Barrier Distance to Observ	0.0 feet			Medium Truck		4.000					
Observer Height (Above Pa	d):	5.0 feet			Heavy Truck	_	8.006	Grade Ad	iustment		
Pad Elevation	n:	0.0 feet		,					. 0.0		
Road Elevation	on:	0.0 feet		Lane Equivalent Distance (in feet)							
Road Grad	le:	0.0%			Auto	os: 9	3.723				
Left Vie	W:	-90.0 degree	es		Medium Truck	ks: 9	93.680				
Right Vie	W.	90.0 degree	es		Heavy Truck	ks: 9	93.723				
FHWA Noise Model Calcula	tions	<u> </u>									
VehicleType REME	_	Traffic Flow	Distance		Finite Road	Fre	esnel	Barrier Atte	en Ber	m Atten	
Autos: 70	0.20	-1.73	-4.2	20	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 8°	1.00	-18.97	-4.1	19	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 85.38 -22.92 -4					-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (witho	out Topo and	barrier atte	nu	ation)						

Unmitigated Nois	e Levels (withou	t Topo and barri	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	63.1	61.2	59.4	53.4	62.0	62.6
Medium Trucks:	56.6	55.1	48.8	47.2	55.7	55.9
Heavy Trucks:	57.1	55.6	46.6	47.9	56.2	56.3
Vehicle Noise:	64.8	63.0	60.0	55.2	63.7	64.2

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	38	82	178	383						
CNEL:	41	89	191	411						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Handy Creek Rd.

Road Segment: e/o Jamboree Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SP	ECIFIC INP	UT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Tra	ffic (Adt): 2	,100 vehicles	3					Autos:	15		
Peak Hour Pei	• /	10%			Me	dium Tru	ucks (2	Axles):	15		
Peak Hour	· Volume:	210 vehicles	3		He	avy Truc	cks (3+	Axles):	15		
Vehicl	le Speed:	40 mph		1/	'ehicle l	Miv					
Near/Far Lane I	Distance:	12 feet		V		viix icleType		Day	Evening	Night	Daily
Site Data					ven		Autos:	77.5%	_	9.6%	-
					Λ./.	r edium Tı		84.8%		10.3%	1.84%
	r Height:	0.0 feet						86.5%		10.3%	0.74%
Barrier Type (0-Wall,	,	0.0			,	leavy Ti	ucks.	00.3%	2.170	10.0%	0.7476
Centerline Dist. t		100.0 feet		٨	loise Sc	ource El	evatio	ns (in f	eet)		
Centerline Dist. to (100.0 feet				Autos	s: 2	.000			
Barrier Distance to (Observer:	0.0 feet			Mediui	n Trucks	s: 4	.000			
Observer Height (Abo	ove Pad):	5.0 feet				y Trucks		.006	Grade Ad	iustment.	0.0
Pad E	Elevation:	0.0 feet				-					
Road E	Elevation:	0.0 feet		L	ane Eq	uivalent	t Distar	nce (in	feet)		
Roa	nd Grade:	0.0%				Auto	s: 99	.865			
L	_eft View:	-90.0 degree	es		Mediui	n Trucks	s: 99	.825			
Ri	ght View:	90.0 degree	es		Heav	y Truck	s: 99	0.865			
FHWA Noise Model C	Calculations										
VehicleType	REMEL	Traffic Flow	Distar	ice	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	66.51	-8.22		-4.61		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	77.72	-25.46		-4.61		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	82.99	-29.41		-4.61		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Le	evels (withou	ıt Topo and	barrier a	ittenu	ation)						
VehicleType Le	q Peak Hour	Leq Day	Le	eq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	52.5	!	50.6		48.8		42	.8	51.4	1	52.0
Medium Trucks:	46.5	4	44.9		38.6		37	.0	45.5	5	45.7
Heavy Trucks:	47.8	4	37.3 38.6 46.9			9	47.0				
Vehicle Noise:	54.5		52.8		49.5		44.	.9	53.5	5	53.9
Centerline Distance t	o Noise Con	tour (in feet))								

70 dBA

8

8

Ldn:

CNEL:

65 dBA

17

18

60 dBA

37

39

55 dBA

79

85

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Harvard Av.

Job Number: 8141

Road Segment: s/o Walnut Av.

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				NOISE	MODE	L INPUT	S	
Highway Data				Si	te Condition:	s (Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	11,500 vehicle	es				Autos:	15		
	Percentage:	10%			Medium T	rucks (2	Axles):	15		
Peak H	lour Volume:	1,150 vehicle	es		Heavy Tru	ıcks (3+	Axles):	15		
Ve	ehicle Speed:	35 mph		Ve	ehicle Mix					
Near/Far La	ne Distance:	20 feet			VehicleTyp	е	Day	Evening	Night	Daily
Site Data						Autos:	77.5%		9.6%	,
Ra	rrier Height:	0.0 feet			Medium	Trucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			Heavy	Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet								
Centerline Dist.		100.0 feet		No	oise Source E			eet)		
Barrier Distance		0.0 feet			Auto		2.000			
Observer Height		5.0 feet			Medium Truc		1.000			
•	ad Elevation:	0.0 feet			Heavy Truc	ks: 8	3.006	Grade Ad	justment.	: 0.0
-	ad Elevation:	0.0 feet		La	ane Equivaler	nt Dista	nce (in	feet)		
	Road Grade:	0.0%			Auto	os: 99	9.544			
	Left View:	-90.0 degre	es		Medium Truc		9.504			
	Right View:	90.0 degre			Heavy Truc	ks: 99	9.544			
FHWA Noise Mod	lel Calculation	าร								
VehicleType	REMEL	Traffic Flow	Distanc	е	Finite Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	64.30	-0.25	-4	4.59	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	75.75	-17.49		4.59	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	81.57	-21.45	; - <i>-</i>	4.59	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (witl	hout Topo and	l barrier at	tenua	ation)					
VehicleType	Leq Peak Ho	ur Leq Da	y Led	q Eve	ening Led	Night		Ldn	CI	NEL
Autos:	5	8.3	56.4		54.6	48	.5	57.2	2	57.8
Medium Trucks:	52	2.5	51.0		44.6	43	.1	51.5	5	51.8
Heavy Trucks:	5-	4.3	52.9	43.9	45	.1	53.5	5	53.6	
Vehicle Noise:	6	0.5	58.8		55.3	50	.9	59.5	5	59.9

70 dBA

20

21

Ldn:

CNEL:

65 dBA

43

46

60 dBA

92

98

55 dBA

199

212

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Harvard Av.

Road Segment: n/o Edinger Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				NO	ISE MODE	L INPUT	s		
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	13,100 vehicl	es				Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Truci	ks (2 Axles):	15			
Peak H	lour Volume:	1,310 vehicl	es		Heavy Trucks (3+ Axles): 15						
Ve	hicle Speed:	55 mph		V	ehicle l	Mix					
Near/Far La	ne Distance:	52 feet		-		icleType	Day	Evening	Night	Daily	
Site Data							tos: 77.5%		9.6%		
Ra	rrier Height:	0.0 feet			Ме	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			F	Heavy Truc			10.8%	0.74%	
Centerline Di		100.0 feet									
Centerline Dist.		100.0 feet		N	oise Sc	ource Elev	ations (in f	eet)			
Barrier Distance		0.0 feet				Autos:	2.000				
					Mediur	m Trucks:	4.000				
Observer Height	,	5.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0	
	ad Elevation:	0.0 feet					N:-4 /!	£4\			
Road Elevation: 0.0 feet					ane Eq		istance (in	reet)			
	Road Grade:	0.0%				Autos:	96.607				
	Left View:	-90.0 degr	ees		Mediur	m Trucks:	96.566				
	Right View:	90.0 degr	ees		Heav	y Trucks:	96.608				
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-1.6	5	-4.39		-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-18.8	9	-4.39		-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-22.8	4	-4.39		-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	d barr	ier attenu	ation)						
VehicleType	Leq Peak Hou	ır Leq Da	ay	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL	
Autos:	64	5	62.6		60.9		54.8	63.4	4	64.0	
Medium Trucks:	57	.9	56.4		50.1		48.5	57.0)	57.2	
Heavy Trucks:	58	3.0	56.5		47.5		48.8	57.	1	57.2	
Vehicle Noise:	66	5.1	64.4		61.4		56.5	65.	1	65.6	
Centerline Distan	ce to Noise C	ontour (in fo	a#)								

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	47	101	218	470
CNEL:	51	109	235	505

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Harvard Av. Job Number: 8141
Road Segment: b/w Edinger Av. And Paseo Westpark Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA	4			NO	ISE MODE	L INPUT	s	
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)					
Average Daily	Traffic (Adt):	15,300 vehic	cles				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truci	ks (2 Axles):	15		
Peak H	lour Volume:	1,530 vehic	cles		He	avy Trucks	s (3+ Axles):	15		
Ve	hicle Speed:	55 mph		V	ehicle l	Mix				
Near/Far La	ne Distance:	52 feet				icleType	Day	Evening	Night	Daily
Site Data							tos: 77.5%		9.6%	
Ra	rrier Height:	0.0 fee			Ме	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			F	Heavy Truc			10.8%	0.74%
Centerline Di		100.0 feet								
Centerline Dist.		100.0 feet		N	oise Sc	ource Elev	ations (in f	eet)		
Barrier Distance		0.0 feet				Autos:	2.000			
					Mediur	m Trucks:	4.000			
Observer Height	,	5.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 feet				· · · · · · · · · · · · · · · · · · ·	·:	£4\		
	Road Elevation: 0.0 feet						istance (in	reet)		
	Road Grade:	0.0%				Autos:	96.607			
	Left View:	-90.0 deg	rees		Mediur	m Trucks:	96.566			
	Right View:	90.0 deg	rees		Heav	y Trucks:	96.608			
FHWA Noise Mod	el Calculation	s								
VehicleType	REMEL	Traffic Flov	v Di	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	-0.9	98	-4.39		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-18.2	21	-4.39		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-22.	17	-4.39		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo ai	nd barr	ier attenu	ation)					
VehicleType	Leq Peak Hou	ır Leq E	ay ay	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	65	.2	63.3		61.5		55.5	64.′	1	64.7
Medium Trucks:	58	5.6	57.1		50.7		49.2	57.6	3	57.9
Heavy Trucks:	58	6.6	57.2		48.2		49.4	57.8	3	57.9
Vehicle Noise:	66	5.8	65.0		62.1		57.2	65.8	3	66.2
Contorlino Distan	co to Noiso C	ontour (in fa	of)							

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	52	112	242	521							
CNEL:	56	121	260	560							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Hubble Job Number: 8141 Road Segment: n/o ICD Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				Si	ite Cond	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	2,000 vehicles	s					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	200 vehicles	s		Hea	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		V	ehicle N	/liv					
Near/Far La	ne Distance:	52 feet		-		cleType	è	Day	Evening	Night	Daily
Site Data					V 0777		Autos:	77.5%	-	9.6%	-
	uuiau Ilaiadat.	0.0 foot			Me	dium T		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-W Centerline Dis	,	0.0 100.0 feet									
Centerline Dist.		100.0 feet		No	oise So	urce E	levatio	ns (in fe	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height (5.0 feet			Mediun	n Truck	s: 4	.000			
• ,	ad Elevation:	0.0 feet			Heav	/ Truck	s: 8	3.006	Grade Adj	iustment:	0.0
	ad Elevation: ad Elevation:	0.0 feet		1 2	ane Fai	ıivalen	t Distai	nce (in f	feet)		
	Road Grade:	0.0%				Auto		6.607			
•	Left View:		00		Mediun			6.566			
	Right View:	-90.0 degree				/ Truck / Truck		6.608			
	Right view.	90.0 degree	55		Heav	rruck	S. 30	.000			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite I	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-9.81	-	4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-27.05	-	4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-31.01	-	4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier at	ttenu	ation)						
VehicleType	Leq Peak Hou			q Eve		Leq	Night		Ldn	CI	VEL
Autos:	56	6.4	54.5		52.7		46	.7	55.3	3	55.9
Medium Trucks:	49	8.8	48.3		41.9		40	.3	48.8	3	49.0
Heavy Trucks:	49	8.	48.4		39.3		40	.6	48.9)	49.1
Vehicle Noise:	58	3.0	56.2		53.2		48	.4	56.9	9	57.4

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	13	29	62	134							
CNEL:	14	31	67	144							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: b/w Newport and Red Hill

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data				Site Con	ditions (Har	d=10, Se	oft = 15)		
Average Daily	Traffic (Adt):	55,500 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak H	our Volume:	5,550 vehicles	3	He	avy Trucks (3	3+ Axles):	15		
Ve	hicle Speed:	55 mph		Vehicle I	Mix				
Near/Far Lai	ne Distance:	88 feet			icleType	Day	Evening	Night	Daily
Site Data					Autos			9.6%	
Rai	rier Height:	0.0 feet		Me	edium Trucks	: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0		ŀ	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%
Centerline Dis	,	100.0 feet							
Centerline Dist.		100.0 feet		Noise So	ource Elevati		eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height (5.0 feet			n Trucks:	4.000			
	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 feet		Lane Eq	uivalent Dist	ance (in	feet)		
	Road Grade:	0.0%		<u> </u>	Autos:	89.850			
-	Left View:	-90.0 degree	es	Mediui		89.805			
	Right View:	90.0 degree		Heav		89.850			
FHWA Noise Mode									
VehicleType	REMEL	Traffic Flow	Distance	Finite		esnel	Barrier Att		m Atten
Autos:	71.78		-3.		-1.20	-4.87		000	0.000
Medium Trucks:	82.40	-12.62	-3.	92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-16.57	-3.9	92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	Leq	Evening	Leq Night	<u> </u>	Ldn	CI	VEL
Autos:	71	.3	69.4	67.6	6	61.6	70.2	2	70.8
Medium Trucks:	64	1.7	63.2	56.8	5	55.3	63.7	7	63.9
Heavy Trucks:	64	1.7	63.3	54.2	Ę	55.5	63.8	3	64.0

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn: ¯	132	285	614	1,322							
CNEL:	142	306	660	1,423							

68.1

71.8

63.3

72.3

71.1

72.9

Vehicle Noise:

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: b/w Red Hill and Browning

Job Number: 8141

Analyst: B. Lawson

SITE Highway Data	SPECIFIC IN	NPUT DATA		Site Condition			L INPUT	S	
	T - 65' - 75' 10	E4.400 1117		Site Contaition	3 (I Iai U				
,	, ,	54,100 vehicles				Autos:	15		
	Percentage:	10%		Medium 7		•			
Peak H	lour Volume:	5,410 vehicles	1	Heavy Tr	ucks (3+	· Axles):	15		
Ve	ehicle Speed:	50 mph		Vehicle Mix					
Near/Far La	ne Distance:	70 feet	-	VehicleTyp	ре	Day	Evening	Night	Daily
Site Data					Autos:	77.5%	12.9%	9.6%	97.42%
Ва	rrier Height:	0.0 feet		Medium	Trucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0		Heavy	Trucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		Noise Source	Flevatio	ne (in fa	20t)		
Centerline Dist.	to Observer:	100.0 feet		Aut		2.000	,		
Barrier Distance	to Observer:	0.0 feet		Medium Truc		1.000			
Observer Height	(Above Pad):	5.0 feet		Heavy Trucks: 8.006 Grade Adj					. 0.0
P	ad Elevation:	0.0 feet		Heavy Huc	ns. (5.000	Grade Adj	idotificit.	0.0
Ro	ad Elevation:	0.0 feet		Lane Equivale	nt Dista	nce (in i	feet)		
	Road Grade:	0.0%		Aut	os: 93	3.723			
	Left View:	-90.0 degree	s	Medium Truc	ks: 93	3.680			
	Right View:	90.0 degree		Heavy Truc	ks: 90	3.723			
FHWA Noise Mod	lel Calculation	ıs							
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	70.20	4.92	-4.2	20 -1.20)	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-12.31	-4.1	9 -1.20)	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-16.27	-4.2	20 -1.20)	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and b	barrier atter	nuation)					
VehicleType	Leq Peak Hou	ur Leq Day	Leq E	vening Le	q Night		Ldn	CI	VEL
Autos:	69	0.7 6	67.8	66.1	60	.0	68.6	3	69.2
Medium Trucks	63	3 6	S1 8	55 <i>4</i>	53	a	62.3	2	62.6

Unmitigated Nois	e Levels (withou	it Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	69.7	67.8	66.1	60.0	68.6	69.2
Medium Trucks:	63.3	61.8	55.4	53.9	62.3	62.6
Heavy Trucks:	63.7	62.3	53.3	54.5	62.9	63.0
Vehicle Noise:	71.4	69.7	66.6	61.8	70.4	70.9

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	106	229	493	1,062							
CNEL:	114	246	530	1,141							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Tustin Ranch Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA				N	OISE N	/ODE	L INPUT	S	
Highway Data				S	ite Con	ditions ((Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	48,200 vehicle	es				,	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	icks (2 A	Axles):	15		
Peak H	lour Volume:	4,820 vehicle	es		He	avy Truc	ks (3+ A	Axles):	15		
Ve	ehicle Speed:	55 mph		V	/ehicle l	Wix					
Near/Far La	ane Distance:	88 feet		-		icleType		Day	Evening	Night	Daily
Site Data								77.5%	Ū		97.42%
	rrier Height:	0.0 feet			Me	edium Tr		84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0 1661			F	leavy Tr	ucks:	86.5%		10.8%	0.74%
• • • •	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		^	loise Sc	ource Ele			eet)		
Barrier Distance		0.0 feet				Autos		000			
Observer Height		5.0 feet				n Trucks		000			
•	(Above Fau). Pad Elevation:	0.0 feet			Heav	y Trucks	s: 8.0	006	Grade Ad	iustment.	: 0.0
	ad Elevation:	0.0 feet						feet)			
	Road Grade:	0.0%				Autos		-			
	Left View:	-90.0 degre	200		Mediur	n Trucks					
	Right View:	90.0 degre				y Trucks					
	ragin view.	50.0 degre	.03		7.047	<i>j Traon</i> e					
FHWA Noise Mod	lel Calculation	ns		·							
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresn	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	3 4.01		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-13.23		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-17.19)	-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Ho	our Leq Da	У	Leq Ev	ening	Leq I	Night		Ldn	CI	NEL
Autos:	7	0.7	68.8		67.0		60.9)	69.6	6	70.2
Medium Trucks:	6	4.1	62.5		56.2		54.6	6	63.1	I	63.3
Heavy Trucks:	6	4.1	62.7		53.6		54.9)	63.2	2	63.4

67.5

70 dBA

120

129

62.7

65 dBA

259

279

71.2

60 dBA

559

601

71.7

55 dBA 1,204

1,295

Vehicle Noise:

72.2

Centerline Distance to Noise Contour (in feet)

70.5

Ldn: CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Jamboree Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT [DATA		NOISE MODEL INPUTS							
Highway Data					Site Co	nditions	(Hard	= 10, S	oft = 15)			
Average Daily	Traffic (Adt):	42,200	vehicles	;				Autos:	15			
Peak Hour	Percentage:	10%	6		М	edium Tr	ucks (2	2 Axles):	15			
Peak H	lour Volume:	4,220	vehicles	i	Н	eavy Tru	cks (3+	- Axles):	15			
Ve	hicle Speed:	55	mph		Vehicle Mix							
Near/Far La	ne Distance:	88	feet			hicleType	Э	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	J	9.6%	-	
Rai	rrier Height:	0.0	feet		٨	/ledium T	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dis	•	100.0			Naine () -	'l4!-	/: f	41			
Centerline Dist.		100.0			Noise S	Source E		•	eet)			
Barrier Distance	to Observer:	0.0	feet		Autos: 2.000 Medium Trucks: 4.000							
Observer Height (Above Pad):	5.0	5.0 feet 0.0 feet					4.000	Crada Ad	livotmont		
• ,	ad Elevation:	0.0				Heavy Trucks: 8.006 Grade Adjustment: 0.0						
Roa	ad Elevation:	0.0 feet			Lane E	quivalen	t Dista	nce (in	feet)			
1	Road Grade:	0.0	1%		Autos: 89.850 Medium Trucks: 89.805							
	Left View:	-90.0	degree	S								
	Right View:	90.0	degree	s	Hea	vy Truck	rs: 8	9.850				
FHWA Noise Mode	el Calculatio	าร										
VehicleType	REMEL	Traffic	Flow	Distance	Finite	e Road	Fre	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	3	3.43	-3.9	92	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40)	-13.81	-3.9	92	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40)	-17.76	-3.9	92	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	hout Top	oo and k	barrier atte	nuation))						
VehicleType	Leq Peak Ho	our L	Leq Day	Leq I	Evening	Leq	Night		Ldn	CI	VEL	
Autos:	7	0.1	6	88.2	66.4	4	60).4	69.0	0	69.6	
Medium Trucks:	6	3.5	6	62.0	55.0	6	54	l.1	62.5		62.8	
Heavy Trucks:	6	3.5	6	52.1	53.	1	54	1.3	62.7	7	62.8	
Vehicle Noise:	7	1.7		69.9	67.0)	62	2.1	70.0	6	71.1	

70 dBA

110

119

Ldn:

CNEL:

65 dBA

237

255

60 dBA

511

550

55 dBA

1,102

1,185

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Jamboree Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL				L INPUT	S				
Highway Data			S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt).	45,400 vehicle	S					Autos:	15				
Peak Hour Percentage.				Me	dium Tri	ucks (2	Axles):	15				
Peak Hour Volume:	4,540 vehicle	S		Heavy Trucks (3+ Axles): 15								
Vehicle Speed:	60 mph		1/	Vehicle Mix								
Near/Far Lane Distance.	76 feet		•		ehicleType Day Evening Night					Daily		
Site Data				VEIII		Autos:	77.5%	•	9.6%	_		
				1.10	r edium Ti		84.8%		10.3%	1.84%		
Barrier Height.							86.5%		10.3%	0.74%		
Barrier Type (0-Wall, 1-Berm).			Heavy Trucks: 86.5% 2.7% 10					10.076	0.7470			
Centerline Dist. to Barrier			Ν	loise Sc	urce El	levatio	ns (in fe	eet)				
Centerline Dist. to Observer					Auto	s: 2	2.000					
Barrier Distance to Observer				Medium Trucks: 4.000								
Observer Height (Above Pad)			Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet)					justment	: 0.0			
Pad Elevation												
Road Elevation.			L	ane Equ				reet)				
Road Grade					Auto		2.547					
Left View	3 -			Medium Trucks: 92.504								
Right View	90.0 degre	es		Heav	y Truck	s: 92	2.547					
FHWA Noise Model Calculation	ons											
VehicleType REMEL	Traffic Flow	Distan	ce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 73.2	22 3.37	-	4.11		-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 83.6	68 -13.87	-	4.11		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 87.3	-17.82	-	4.11		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier a	ttenu	ation)								
VehicleType Leq Peak H	lour Leq Day	/ Le	q Ev	ening	Leq	Night		Ldn	C	NEL		
Autos:	71.3	69.4		67.6		61	.6	70.2	2	70.8		
Medium Trucks:	64.5	63.0		56.6		55	.1	63.6	6	63.8		
Heavy Trucks:	64.2	62.8	_	53.7		55	5.0 63.3		3	63.5		
Vehicle Noise:	72.8	71.0		68.1		63	.2	71.7	7	72.2		
Centerline Distance to Noise	Contour (in feet)										

70 dBA

130

140

Ldn:

CNEL:

65 dBA

280

302

60 dBA

604

650

55 dBA 1,301

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: b/w SR-261 Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SF	PECIFIC INP	UT DATA		NOISE MODEL INPUTS								
Highway Data				Site Con	ditions (Har	d = 10, So	oft = 15)					
Average Daily Tr	affic (Adt): 44	,300 vehicles				Autos:	15					
Peak Hour Pe	ercentage:	10%		Medium Trucks (2 Axles): 15								
Peak Hou	ır Volume: 4	,430 vehicles		Heavy Trucks (3+ Axles): 15								
Vehic	cle Speed:	60 mph		Vehicle Mix								
Near/Far Lane	Distance:	76 feet			cleType	Day	Evening	Night	Daily			
Site Data					Autos		_	9.6%	-			
Barrie	er Height:	0.0 feet		Me	edium Trucks	: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-Wali	•	0.0		F	łeavy Trucks	: 86.5%	2.7%	10.8%	0.74%			
Centerline Dist.	to Barrier:	100.0 feet		Noisa Sa	urce Elevat	ions (in f	20t)					
Centerline Dist. to	Observer:	100.0 feet		110/30 00	Autos:	2.000						
Barrier Distance to	Observer:	0.0 feet		Modiuu	n Trucks:	4.000						
Observer Height (Al	oove Pad):	5.0 feet				8.006	Grade Ad	iustmant				
Pad	Elevation:	0.0 feet		пеач	y Trucks:	0.000	Grade Au	justin o nt.	0.0			
Road	Elevation:	0.0 feet		Lane Eq	uivalent Dis	ance (in	feet)					
Ro	ad Grade:	0.0%			Autos:	92.547						
	Left View:	-90.0 degrees	i	Mediui	n Trucks:	92.504						
F	Right View:	90.0 degrees	;	Heav	y Trucks:	92.547						
FHWA Noise Model	Calculations											
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten			
Autos:	73.22	3.26	-4.1	1	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	83.68	-13.97	-4.1	1	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	87.33	-17.93	-4.1	1	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise L	.evels (withou	ut Topo and ba	arrier atten	uation)								
VehicleType Le	eq Peak Hour	Leq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL			
Autos:	71.2	69	9.3	67.5	(61.5	70.	1	70.7			
Medium Trucks:	64.4	62	2.9	56.5	į	55.0	63.4	4	63.7			

Heavy Trucks:	64.1	62.7	53.6	54.9	63.2	63.4					
Vehicle Noise:	72.6	70.9	68.0	63.1	71.6	72.1					
Centerline Distance to Noise Contour (in feet)											
			70 dBA	65 dBA	60 dBA	55 dBA					
		Ldn:	128	276	594	1,280					

138

297

640

1,379

CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o SR-261 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS									
Highway Data			S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt).	45,600 vehicle	S					Autos:	15				
Peak Hour Percentage.				Me	dium Tr	ucks (2	Axles):	15				
Peak Hour Volume:	4,560 vehicle	S		Heavy Trucks (3+ Axles): 15								
Vehicle Speed:	60 mph		14	Vehicle Mix								
Near/Far Lane Distance.	76 feet		•		VehicleType Day Evening Night							
Site Data				VEIII		Autos:	77.5%	•	9.6%	<i>Daily</i> 97.42%		
				1.10	, edium T.		84.8%		10.3%	1.84%		
Barrier Height.							86.5%		10.3%	0.74%		
Barrier Type (0-Wall, 1-Berm).			Heavy Trucks: 86.5% 2.7% 10					10.0 /0	0.7470			
Centerline Dist. to Barrier			Ν	loise Sc	urce E	levatio	ns (in fe	eet)				
Centerline Dist. to Observer				Autos: 2.000								
Barrier Distance to Observer				Medium Trucks: 4.000								
Observer Height (Above Pad)			Heavy Trucks: 8.006 Grade Adjustment					: 0.0				
Pad Elevation			Lane Equivalent Distance (in feet)									
Road Elevation.			L	ane Equ				feet)				
Road Grade					Auto		2.547					
Left View	-90.0 degre	es		Medium Trucks: 92.504								
Right View	90.0 degre	es		Heav	y Truck	s: 92	2.547					
FHWA Noise Model Calculation	ons											
VehicleType REMEL	Traffic Flow	Distan	се	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 73.2	22 3.39	-	4.11		-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 83.6	68 -13.85	-	4.11		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 87.3	-17.80	-	4.11		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier a	ttenu	uation)								
VehicleType Leq Peak H	lour Leq Day	/ Le	q Ev	ening	Leq	Night		Ldn	C	NEL		
Autos:	71.3	69.4		67.6		61	.6	70.2	2	70.8		
Medium Trucks:	64.5	63.0		56.7		55	.1	63.6	6	63.8		
Heavy Trucks:	64.2	62.8		53.7		55	.0	63.4	4	63.5		
Vehicle Noise:	72.8	71.0		68.1		63	.2	71.7	7	72.2		
Centerline Distance to Noise	Contour (in feet)										

70 dBA

130

141

Ldn:

CNEL:

65 dBA

281

303

60 dBA

606

652

55 dBA 1,305

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Cor	nditions (Hai	d = 10, S	oft = 15)					
Average Daily Traffic (Adt):	39,000 vehicle	S			Autos.	: 15					
Peak Hour Percentage:	10%		Me	edium Trucks	(2 Axles).	: 15					
Peak Hour Volume:	3,900 vehicle	S	Heavy Trucks (3+ Axles): 15								
Vehicle Speed:	60 mph		Vehicle Mix								
Near/Far Lane Distance:	76 feet			VehicleType Day Evening Night							
Site Data			Ven	Autos		J	9.6%	<i>Daily</i> 97.42%			
			Λ.	Autos ledium Trucks			10.3%	1.84%			
Barrier Height:				ediam Trucks Heavy Trucks			10.8%	0.74%			
Barrier Type (0-Wall, 1-Berm).			11eavy 11ucks. 60.5% 2.1%					0.7470			
Centerline Dist. to Barrier.			Noise S	ource Eleva	tions (in f	eet)					
Centerline Dist. to Observer.			Autos: 2.000								
Barrier Distance to Observer.			Medium Trucks: 4.000								
Observer Height (Above Pad).			Heavy Trucks: 8.006 Grade Adjustment					: 0.0			
Pad Elevation.			Lane Equivalent Distance (in feet)								
Road Elevation.			Lane Eq	'		reet)					
Road Grade.				Autos:	92.547						
Left View.			Medium Trucks: 92.504								
Right View.	90.0 degre	es	Hear	vy Trucks:	92.547						
FHWA Noise Model Calculation	ons										
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road F	resnel	Barrier Att	en Ber	m Atten			
Autos: 73.2	22 2.71	-4	l.11	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 83.6	68 -14.53	-2	l.11	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 87.3	-18.48	-2	l.11	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)								
VehicleType Leq Peak H	lour Leq Day	/ Leq	Evening	Leq Nigh	t	Ldn	CI	VEL			
Autos:	70.6	68.7	67.0		60.9	69.5	5	70.1			
Medium Trucks:	63.8	62.3	56.0		54.4	62.9	9	63.1			
Heavy Trucks:	63.5	62.1	53.1		54.3	62.7	7	62.8			
Vehicle Noise:	72.1	70.3	67.4		62.5	71.	1	71.5			
Centerline Distance to Noise	Contour (in feet)									

70 dBA

118

127

Ldn:

CNEL:

65 dBA

253

273

60 dBA

546

588

55 dBA 1,176

Sunday,	May	20,	2012

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MO				DEL INPUTS				
Highway Data			Site Co	nditions (H	lard = 1	0, So	ft = 15)				
Average Daily Traffic (Adt).	39,500 vehicle	S			A	utos:	15				
Peak Hour Percentage.	10%		М	edium Truci	ks (2 Ax	des):	15				
Peak Hour Volume:	3,950 vehicle	S	Н	eavy Trucks	s (3+ A)	des):	15				
Vehicle Speed:	60 mph		Vehicle Mix								
Near/Far Lane Distance.	76 feet			VehicleType Day Evening Night							
Site Data			V G			7.5%		9.6%	<i>Daily</i> 97.42%		
				Aut Nedium Trud		7.5 <i>7</i> 6 4.8%		10.3%	1.84%		
Barrier Height.			//					10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm).			Heavy Trucks: 86.5% 2.7%					10.0 /6	0.7470		
Centerline Dist. to Barrier			Noise S	Source Elev	ations	(in fe	et)				
Centerline Dist. to Observer				Autos:	2.00	00					
Barrier Distance to Observer			Medio	Medium Trucks: 4.000							
Observer Height (Above Pad)			Heavy Trucks: 8.006 Grade Adjustment:					iustment.	: 0.0		
Pad Elevation											
Road Elevation.			Lane E	quivalent D			eet)				
Road Grade	0.0%			Autos:	92.54						
Left View	-90.0 degre	es	Medium Trucks: 92.504								
Right View	90.0 degre	es	Hea	vy Trucks:	92.54	47					
FHWA Noise Model Calculation	ons										
VehicleType REMEL	Traffic Flow	Distanc	e Finite	e Road	Fresne	1	Barrier Att	en Ber	m Atten		
Autos: 73.2	22 2.77	-4	4.11	-1.20	-4	4.87	0.0	000	0.000		
Medium Trucks: 83.6	68 -14.47		4.11	-1.20	-4	4.97	0.0	000	0.000		
Heavy Trucks: 87.3	-18.43	-4	4.11	-1.20	-{	5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier at	tenuation))							
VehicleType Leq Peak H	lour Leq Day	/ Led	g Evening	Leq Ni	ght		Ldn	CI	VEL		
Autos:	70.7	68.8	67.0)	61.0		69.6	6	70.2		
Medium Trucks:	63.9	62.4	56.0)	54.5		62.9	9	63.2		
Heavy Trucks:	63.6	62.2	53.	1	54.4		62.7	7	62.9		
Vehicle Noise:	72.2	70.4	67.	5	62.6		71.1	1	71.6		
Centerline Distance to Noise	Contour (in feet)									

70 dBA

119

128

Ldn:

CNEL:

65 dBA

255

275

60 dBA

550

593

55 dBA 1,186

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Yale Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data					Site Con	ditions (l	Hard =	10, Sc	ft = 15)			
Average Daily	Traffic (Adt):	42,800 vehicle	s				,	Autos:	15			
Peak Hour	Percentage:	10%			Ме	dium Truc	cks (2 A	xles):	15			
Peak H	lour Volume:	4,280 vehicles	S		He	avy Truck	rs (3+ A	xles):	15			
Ve	ehicle Speed:	60 mph		-	Vehicle i	Miv						
Near/Far La	ne Distance:	76 feet				icleType		Day	Evening	Night	Daily	
Site Data								77.5%		9.6%	-	
	rrier Height:	0.0 feet			М	edium Tru		84.8%		10.3%	1.84%	
Barrier Type (0-W	_	0.0 1661				Heavy Tru		86.5%		10.8%	0.74%	
Centerline Di	,	100.0 feet										
Centerline Dist.		100.0 feet		1	Noise So	ource Ele		•	et)			
Barrier Distance		0.0 feet				Autos:		000				
Observer Height		5.0 feet				m Trucks:		000				
_	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Adj	iustment.	0.0	
	ad Elevation:	0.0 feet		I	Lane Eq	uivalent l	Distand	e (in f	eet)			
	Road Grade:	0.0%				Autos:	92.5	547				
	Left View:	-90.0 degree	es		Mediu	m Trucks:	92.5	504				
	Right View:	90.0 degree			Heavy Trucks: 92.547							
FHWA Noise Mod			<u>.</u>	- 1		D /		- 1	D ' A		A ((
VehicleType	<i>REMEL</i> 73.22	Traffic Flow	Di	stance -4.11	Finite		Fresn		Barrier Atte		m Atten	
Autos: Medium Trucks:	_	3.11 -14.12		-4.11 -4.11		-1.20 -1.20		-4.87 -4.97		000	0.000	
Heavy Trucks:				-4.11 -4.11	-	-1.20 -1.20		-4.97 -5.16		000	0.000	
						-1.20		-5.70	0.0	,,,,,	0.000	
Unmitigated Nois		_								_		
VehicleType	Leq Peak Hot			Leq Ev		Leq N	_		Ldn		VEL	
Autos:		_	69.1		67.4		61.3		69.9		70.5	
Medium Trucks:	_		62.7		56.4		54.8		63.3		63.5	
Heavy Trucks:			62.5		53.5		54.7		63.1		63.2	
Vehicle Noise:	72	2.5	70.7		67.9		62.9		71.5)	71.9	
Centerline Distan	ce to Noise C	ontour (in feet)									
				70 c	dBA	65 d	BA	6	0 dBA	55	dBA	

125

135

Ldn:

CNEL:

270

290

581

625

1,251

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data			S	ite Con	ditions (Hard:	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 37,700 vehicle	es					Autos:	15		
Peak Hour Percentage				Me	dium Tru	cks (2	Axles):	15		
Peak Hour Volume		es		He	avy Truck	ks (3+	Axles):	15		
Vehicle Speed	: 60 mph		V	ehicle l	Miv					
Near/Far Lane Distance	: 76 feet				icleType		Day	Evening	Night	Daily
Site Data				V GI I		utos:	77.5%		9.6%	-
				1/1	יה edium Tru		84.8%		10.3%	1.84%
Barrier Height					Heavy Tru		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm)				,	leavy III	icns.	00.570	2.1 /0	10.070	0.7470
Centerline Dist. to Barrier			N	loise Sc	ource Ele	evatio	ns (in fe	eet)		
Centerline Dist. to Observer					Autos.	: 2	2.000			
Barrier Distance to Observer				Mediui	m Trucks.	: 4	1.000			
Observer Height (Above Pad,				Heav	y Trucks.	: 8	3.006	Grade Ad	justment:	0.0
Pad Elevation			,	ono Fa	ivolont	Diata	noo (in i	faatl		
Road Elevation			L	ane Eq	uivalent			reet)		
Road Grade					Autos.		2.547			
Left View	3				m Trucks.		2.504			
Right View	: 90.0 degre	ees		Heav	y Trucks.	: 92	2.547			
FHWA Noise Model Calculati	ons									
VehicleType REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 73.	22 2.56	6	-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 83.	68 -14.68	3	-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87.	33 -18.63	3	-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout Topo and	d barrier	attenu	ation)						
VehicleType Leq Peak F	Hour Leq Da	iy L	Leq Eve	ening	Leq N	light		Ldn	CI	VEL
Autos:	70.5	68.6		66.8		60	.7	69.4	4	70.0
Medium Trucks:	63.7	62.2		55.8		54	.3	62.7	7	63.0
Heavy Trucks:	63.4	62.0		52.9		54	.2	62.5	5	62.7
Vehicle Noise:	71.9	70.2		67.3		62	.4	70.9	9	71.4
Centerline Distance to Noise	Contour (in fee	et)								

70 dBA

115

124

Ldn:

CNEL:

65 dBA

248

267

60 dBA

534

575

55 dBA

1,150

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data		S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)					
Average Daily Tra	affic (Adt): 3	86,600 vehicles	S					Autos:	15			
Peak Hour Pe	. ,	10%			Me	dium Tru	ıcks (2	Axles):	15			
	•	3,660 vehicles	S		He	avy Truc	cks (3+	Axles):	15			
Vehic	le Speed:	60 mph			ehicle l	l <i>ilis</i>						
Near/Far Lane	Distance:	76 feet		V				Dov		Niaht	Doilu	
Cita Data					ven	icleType ,		Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		9.6%		
	er Height:	0.0 feet				edium Tr		84.8%		10.3%	1.84%	
Barrier Type (0-Wall,	,	0.0			,	leavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist.		100.0 feet		٨	loise So	ource El	evatio	ns (in f	eet)			
Centerline Dist. to		100.0 feet				Autos	s: 2	2.000				
Barrier Distance to	Observer:	0.0 feet			Mediui	n Trucks	s: 4	.000				
Observer Height (Ab	ove Pad):	5.0 feet				y Trucks		3.006	Grade Ad	iustment:	0.0	
Pad	Elevation:	0.0 feet				-						
Road	Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	nce (in	feet)			
Roa	ad Grade:	0.0%				Autos	s: 92	2.547				
	Left View:	-90.0 degree	es		Mediui	n Trucks	s: 92	2.504				
R	ight View:	90.0 degree	es		Heav	y Trucks	s: 92	2.547				
FHWA Noise Model (Calculations	<u> </u>										
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	73.22	2.43		-4.11		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-14.80		-4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-18.76		-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise L	evels (with	out Topo and	barrie	r attenu	ıation)							
VehicleType Le	eq Peak Hou	r Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	70.	.3	68.4		66.7		60	.6	69.2	2	69.8	
Medium Trucks:	63.	.6	62.1		55.7		54.	.2	62.6	6	62.8	
Heavy Trucks:	63.	.3	61.8		52.8		54.	.0	62.4	1	62.5	
Vehicle Noise:	71.	.8	70.1		67.2		62	.2	70.8	3	71.3	
Centerline Distance	to Noise Co	ntour (in feet)									

70 dBA

113

121

Ldn:

CNEL:

65 dBA

243

262

60 dBA

523

563

55 dBA

1,127

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Groveland

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA				N	IOISE	MODE	L INPUT	S	
Highway Data					,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	36,900) vehicles	S					Autos:	15		
Peak Hour	Percentage:	10)%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	3,690) vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60) mph			Vehicle l	Miv					
Near/Far La	ne Distance:	76	6 feet				icleType	,	Day	Evening	Night	Daily
Site Data						7011		Autos:	77.5%	_	9.6%	_
	vviav Uaiahti		0 foot			Me	edium T		84.8%		10.3%	
Barrier Type (0-W	rrier Height:	U .	.0 feet				leavy T		86.5%		10.8%	
	ist. to Barrier:		.0 .0 feet									
Centerline Dist.			.0 feet		1	Noise So			•	eet)		
Barrier Distance			.0 feet				Auto		2.000			
Observer Height			.0 feet				m Truck		.000		-	
J	ad Elevation:	_	.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0
	ad Elevation:		.0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:		.0%			•	Auto		2.547			
	Left View:		.0 degree	es		Mediui	m Truck	s: 92	2.504			
	Right View:		.0 degree			Heav	y Truck	s: 92	2.547			
FHWA Noise Mod												
VehicleType	REMEL		fic Flow	Di	stance	Finite		Fres		Barrier Att		m Atten
Autos:			2.47		-4.1		-1.20		-4.87		000	0.000
Medium Trucks:			-14.77		-4.1	-	-1.20		-4.97		000	0.000
Heavy Trucks:	87.33	3	-18.72		-4.1°	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (wit	hout To	opo and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	our	Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	7	0.4		68.5		66.7		60	.7	69.3	3	69.9
Medium Trucks:		3.6	(62.1		55.7		54	.2	62.7	7	62.9
Heavy Trucks:	6	3.3		61.9		52.8		54	.1	62.4	4	62.6
Vehicle Noise:	7	1.9		70.1		67.2		62	.3	70.8	3	71.3
Centerline Distan	ce to Noise C	ontou	r (in feet)								
			<u> </u>		70 d	dBA	65	dBA	6	60 dBA	55	dBA
											· · · · · · · · · · · · · · · · · · ·	

Ldn:

CNEL:

113

122

244

263

526

567

1,133

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Sand Canyon. Av.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
Highway Data				S	ite Con	ditions ('Hard = 1	0, Sc	oft = 15)		
Average Daily	Traffic (Adt):	39,500 vehicle	S				Α	utos:	15		
Peak Hour	Percentage:	10%			Med	dium Tru	cks (2 A	des):	15		
Peak H	lour Volume:	3,950 vehicle	s		Hea	avy Truc	ks (3+ A)	des):	15		
Ve	hicle Speed:	60 mph		V	ehicle II	Miy					
Near/Far La	ne Distance:	76 feet				cleType	1	Day	Evening	Night	Daily
Site Data					VOIII			7.5%	_	9.6%	_
	rrior Usiabti	0.0 feet			Me	edium Tri		4.8%		10.3%	
	rrier Height:	0.0 feet 0.0				leavy Tri		6.5%		10.8%	
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet									
Centerline Dist.		100.0 feet		N	oise So	urce Ele	evations	(in f	eet)		
		0.0 feet				Autos	: 2.0	00			
Barrier Distance					Mediun	n Trucks	: 4.0	00			
Observer Height (,	5.0 feet			Heav	y Trucks	: 8.0	06	Grade Ad	justment	: 0.0
	ad Elevation: ad Elevation:	0.0 feet 0.0 feet		1:	ane Fai	uivalent	Distance	ı (in	feet)		
	Road Grade:	0.0%			o <u></u> qe	Autos			1001)		
	Left View:				Modiur	n Trucks					
		-90.0 degre									
	Right View:	90.0 degre	es		neav _.	y Trucks	. 92.5	+1			
FHWA Noise Mod	el Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite	Road	Fresne	1	Barrier Att	en Be	rm Atten
Autos:	73.22	2.77	-	4.11		-1.20	-	4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.47	-	4.11		-1.20	-	4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.43	-	4.11		-1.20	-	5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo and	barrier at	ttenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	/ Le	q Eve	ening	Leq N	Vight		Ldn	С	NEL
Autos:	70	0.7	68.8		67.0		61.0		69.6	6	70.2
Medium Trucks:	Medium Trucks: 63.9 62.4		56.0 54.5 62.9			63.2					
Heavy Trucks:	6	3.6	62.2		53.1		54.4		62.7	7	62.9

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	119	255	550	1,186							
CNEL:	128	275	593	1,277							

67.5

62.6

71.1

71.6

70.4

Vehicle Noise:

72.2

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o SR-133 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)									
Highway Data					Site Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt).	43,	300 vehicles	;					Autos:	15		
Peak Hour Percentage.		10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume.	4,3	330 vehicles	;		He	avy Trud	cks (3+	Axles):	15		
Vehicle Speed:		60 mph			Vehicle I	Wix					
Near/Far Lane Distance.		76 feet				icleType	,	Day	Evening	Night	Daily
Site Data					70		Autos:	77.5%		9.6%	-
		0.0 feet			Me	edium Ti		84.8%		10.3%	1.84%
Barrier Height . Barrier Type (0-Wall, 1-Berm).		0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Centerline Dist. to Barrier		0.0 00.0 feet									
Centerline Dist. to Observer.		00.0 feet			Noise So			•	eet)		
Barrier Distance to Observer		0.0 feet				Auto		.000			
Observer Height (Above Pad)		5.0 feet				n Truck		.000			
Pad Elevation		0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment	: 0.0
Road Elevation.		0.0 feet			Lane Eq	uivalen	t Distar	nce (in i	feet)		
Road Grade		0.0%			<u> </u>	Auto		.547			
Left View.		90.0 degree	s		Mediui	n Truck	s: 92	.504			
Right View		90.0 degree			Heav	y Truck	s: 92	.547			
FHWA Noise Model Calculation											
VehicleType REMEL		raffic Flow	Di	stance	Finite		Fres		Barrier Att		m Atten
Autos: 73.2		3.16		-4.1		-1.20		-4.87		000	0.000
Medium Trucks: 83.6		-14.07		-4.1	-	-1.20		-4.97		000	0.000
Heavy Trucks: 87.3	3	-18.03		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thou	t Topo and I	barri	ier atten	uation)						
VehicleType Leq Peak H	our	Leq Day		Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	71.1	6	9.2		67.4		61.	4	70.0)	70.6
	64.3		32.8		56.4		54.	9	63.3		63.6
	64.0	(62.6		53.5		54.	8	63.1		63.3
Vehicle Noise:	72.6	7	70.8		67.9		63.	0	71.5	5	72.0
Centerline Distance to Noise	Cont	our (in feet)									
				70	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

126

136

272

293

1,261

1,358

585

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o O St.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)						
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	37,400 vehicle	es					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15			
Peak H	lour Volume:	3,740 vehicle	es		He	avy Tru	cks (3+	Axles):	15			
Ve	ehicle Speed:	60 mph		_	Vehicle i	Miv						
Near/Far La	ne Distance:	76 feet				icleType	2	Day	Evening	Night	Daily	
Site Data					7011		Autos:	77.5%		9.6%	-	
	urior Uoimbt.	0.0 feet			М	edium T		84.8%		10.3%	1.84%	
Barrier Type (0-W	rrier Height:	0.0 reet 0.0				Heavy T		86.5%		10.8%	0.74%	
,	ist. to Barrier:	0.0 100.0 feet										
Centerline Dist.		100.0 feet		1	Noise So				eet)			
Barrier Distance		0.0 feet				Auto		.000				
Observer Height		5.0 feet				m Truck		.000				
•	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	0.0	
	ad Elevation:	0.0 feet		1	Lane Eq	uivalen	t Distar	nce (in i	feet)			
	Road Grade:	0.0%				Auto		.547				
	Left View:	-90.0 degre	es		Mediu	m Truck		.504				
	Right View:	90.0 degre			Heav	y Truck	s: 92	.547				
FHWA Noise Mod												
VehicleType	REMEL	Traffic Flow		stance	Finite		Fres		Barrier Atte		m Atten	
Autos:				-4.11		-1.20		-4.87		000	0.000	
Medium Trucks:				-4.11		-1.20		-4.97		000	0.000	
Heavy Trucks:	87.33	-18.67	•	-4.11	1	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	nout Topo and	barri	ier atten	uation)							
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq E	vening	Leq	Night		Ldn	CI	VEL	
Autos:	70	0.4	68.5		66.8		60.	7	69.3	3	69.9	
Medium Trucks:	63	3.7	62.2		55.8		54.	2	62.7	7	62.9	
Heavy Trucks:	63	3.3	61.9		52.9		54.	1	62.5	5	62.6	
Vehicle Noise:	7′	1.9	70.1		67.3		62.	3	70.9)	71.4	
Centerline Distan	ce to Noise C	ontour (in fee	t)									
		, ,	<i>,</i>	70 c	dBA	65	dBA	6	60 dBA	55	dBA	
										•		

Ldn:

CNEL:

114

123

246

265

531

572

1,143

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o O St.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				3	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)			
Average Daily Ti	raffic (Adt):	40,000 vehicle	S					Autos:	15			
Peak Hour P	. ,	10%			Me	dium Tru	ıcks (2	Axles):	15			
	ur Volume:	4,000 vehicle	S		He	avy Truc	ks (3+	Axles):	15			
Vehi	icle Speed:	60 mph		,	/ehicle l	l <i>ilis</i>						
Near/Far Lane	e Distance:	76 feet		,				Day	Funning	Niosht	Doilu	
Cita Data					ven	icleType		Day 50/	Evening	Night	Daily	
Site Data					Λ./.		Autos:	77.5%		9.6%		
	ier Height:	0.0 feet				edium Tr		84.8%		10.3%	1.84%	
Barrier Type (0-Wa	,	0.0			r	l eavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist.		100.0 feet		^	loise Sc	ource El	evatio	ns (in fe	eet)			
Centerline Dist. to		100.0 feet				Autos	s: 2	.000	<u> </u>			
Barrier Distance to	Observer:	0.0 feet			Mediui	n Trucks	s: 4	.000				
Observer Height (A	bove Pad):	5.0 feet				y Trucks		.006	Grade Ad	iustment:	0.0	
	l Elevation:	0.0 feet				-						
Road	l Elevation:	0.0 feet		L	ane Eq	uivalent		•	feet)			
Re	oad Grade:	0.0%				Autos		2.547				
	Left View:	-90.0 degre	es		Mediui	n Trucks	s: 92	2.504				
ı	Right View:	90.0 degre	es		Heav	y Trucks	s: 92	2.547				
FHWA Noise Model	Calculation	s										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	73.22	2.82		-4.11		-1.20		<i>-4.</i> 87	0.0	000	0.000	
Medium Trucks:	83.68	-14.42		-4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-18.37		-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (with	out Topo and	barri	er atteni	uation)							
VehicleType L	eq Peak Hou	ır Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	70	.7	68.8		67.1		61.	.0	69.6	3	70.2	
Medium Trucks:	64	.0	62.4		56.1		54.	.5	63.0)	63.2	
Heavy Trucks:	63	5.6	62.2		53.2		54.	.4	62.8	3	62.9	
Vehicle Noise:	72	2.2	70.4		67.6		62.	.6	71.2	2	71.6	
Centerline Distance	to Noise Co	ontour (in feet)									

70 dBA

120

129

Ldn: CNEL: 65 dBA

258

277

60 dBA

555

598

55 dBA

1,196

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o A St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA	NOISE MODEL INPUTS								
Highway Data				S	ite Conditio	ns (Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	40,400 vehic	les				Autos:	15			
Peak Hour	Percentage:	10%			Medium	Trucks (2	2 Axles):	15			
Peak H	lour Volume:	4,040 vehic	les		Heavy 7	rucks (3+	+ Axles):	15			
Ve	hicle Speed:	60 mph		V	ehicle Mix						
Near/Far La	ne Distance:	76 feet			VehicleTy	/pe	Day	Evening	Night	Daily	
Site Data						Autos:	77.5%		9.6%		
Ra	rrier Height:	0.0 feet			Medium	Trucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			Heavy	Trucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Di		100.0 feet				=	/: 6	4)			
Centerline Dist.		100.0 feet		N	loise Source			eet)			
Barrier Distance		0.0 feet					2.000				
Observer Height		5.0 feet			Medium Tru		4.000				
•	ad Elevation:	0.0 feet			Heavy Tru	icks:	8.006	Grade Ad	iustment.	0.0	
	ad Elevation:	0.0 feet		L	ane Equival	ent Dista	nce (in	feet)			
	Road Grade:	0.0%			-		2.547	,			
	Left View:	-90.0 degi	ees		Medium Tru		2.504				
	Right View:	90.0 degi			Heavy Tru		2.547				
FHWA Noise Mod	al Calculation	ne									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite Road	d Fre	snel	Barrier Att	en Ber	m Atten	
Autos:	73.22			-4.11	-1.2		-4.87		000	0.000	
Medium Trucks:				-4.11	-1.2		-4.97		000	0.000	
Heavy Trucks:	87.33	-18.3	3	-4.11	-1.2	20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo an	d barrier	r attenu	ıation)						
VehicleType	Leq Peak Ho	our Leq D	ay	Leq Eve	ening L	eq Night		Ldn	CI	VEL	
Autos:	7	0.8	68.9		67.1	61	1.1	69.7	7	70.3	
Medium Trucks:	6	4.0	62.5		56.1	54	1.6	63.0)	63.3	
Heavy Trucks:	6	3.7	62.3		53.2	54	1.5	62.8	3	63.0	
Vehicle Noise:	7:	2.2	70.5		67.6	62	2.7	71.2	2	71.7	
Contarlina Diaton	oo to Noise C	Samtavu (in fa	-41								

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	120	259	559	1,204								
CNEL:	130	279	602	1,297								

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Irvine Bl. Job Number: 8141 Road Segment: w/o Z St. Analyst: B. Lawson

SITE			NO	DISE N	/IODE	L INPUT	S				
Highway Data					Site Con	ditions (Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	46,400 vehicles	S				,	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Trud	cks (2 A	(xles	15		
Peak H	lour Volume:	4,640 vehicles	3		He	avy Truck	ks (3+ A	(xles	15		
Ve	ehicle Speed:	60 mph		-	Vehicle i	Miv					
Near/Far La	ne Distance:	76 feet				icleType		Day	Evening	Night	Daily
Site Data								77.5%	Ŭ,	9.6%	-
	rrier Height:	0.0 feet			М	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0 reet 0.0				Heavy Tru		86.5%		10.8%	0.74%
Centerline Di		100.0 feet									
Centerline Dist.		100.0 feet		1	Noise So	ource Ele		•	eet)		
Barrier Distance		0.0 feet				Autos:		000			
Observer Height		5.0 feet				m Trucks:		000	0 , 4 ,		
_	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Adj	iustment:	0.0
	ad Elevation:	0.0 feet		1	Lane Eq	uivalent l	Distand	ce (in t	feet)		
	Road Grade:	0.0%				Autos:	92.	547	-		
	Left View:	-90.0 degree	es		Mediu	m Trucks:	92.	504			
	Right View:	90.0 degree			Heav	y Trucks:	92.	547			
FHWA Noise Mod			<u> </u>	- 4	- :.:	D /		- 1	D		A ((
VehicleType	<i>REMEL</i> 73.22	Traffic Flow	Di	stance -4.1	Finite		Fresn		Barrier Att		m Atten
Autos: Medium Trucks:	_	3.46 -13.77		-4.1 -4.1		-1.20 -1.20		-4.87 -4.97		000	0.000
Heavy Trucks:		-13.77		-4.1 -4.1	-	-1.20 -1.20		-4.97 -5.16		000	0.000
						-1.20		-3.10	0.0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.000
Unmitigated Nois	•				,					1	
VehicleType	Leq Peak Hou			Leq E		Leq N			Ldn		VEL
Autos:			69.5		67.7		61.7		70.3		70.9
Medium Trucks:	_	_	63.1		56.7		55.2		63.6		63.9
Heavy Trucks:			62.9		53.8		55.1		63.4		63.6
Vehicle Noise:	72	2.9	71.1		68.2		63.3	.	71.8	3	72.3
Centerline Distan	ce to Noise Co	ontour (in feet,)								
				70 c	dBA	65 d	BA	6	60 dBA	55	dBA

132

142

Ldn: CNEL: 284

306

613

660

1,320

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Z St.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NO	DISE N	10DE	L INPUTS	S	
Highway Data					Site Con	ditions (l	Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	48,000 vehicle	s				,	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truc	cks (2 A	xles):	15		
Peak H	lour Volume:	4,800 vehicle	s		He	avy Truck	rs (3+ A	xles):	15		
Ve	ehicle Speed:	60 mph		-	Vehicle l	Miv					
Near/Far La	ne Distance:	76 feet				icleType		Day	Evening	Night	Daily
Site Data								77.5%		9.6%	-
	rrier Height:	0.0 feet			Ме	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0 1661				Heavy Tru		86.5%		10.8%	0.74%
Centerline Di	,	100.0 feet									
Centerline Dist.		100.0 feet		1	Noise So	ource Ele		•	et)		
Barrier Distance		0.0 feet				Autos:		000			
Observer Height		5.0 feet				m Trucks:		000			
_	ad Elevation:	0.0 feet			Heav	y Trucks:	8.0	006	Grade Adj	iustment.	0.0
	ad Elevation:	0.0 feet		1	Lane Eq	uivalent l	Distand	e (in f	eet)		
	Road Grade:	0.0%				Autos:	92.5	547			
	Left View:	-90.0 degre	es		Mediui	m Trucks:	92.5	504			
	Right View:	90.0 degre			Heav	y Trucks:	92.5	547			
FHWA Noise Mod				- 4	F : . ''.	D /		- 1	D ' A		Α
VehicleType	<i>REMEL</i> 73.22	Traffic Flow	DI	stance -4.1	Finite		Fresn		Barrier Atte		m Atten
Autos: Medium Trucks:	_	3.61 -13.63		-4.1 -4.1		-1.20 -1.20		-4.87 -4.97		000	0.000
Heavy Trucks:				-4.1 -4.1	-	-1.20 -1.20		-4.97 -5.16		000	0.000
						-1.20		-5.70	0.0	,,,,,	0.000
Unmitigated Nois	•									_	
VehicleType	Leq Peak Hot			Leq E		Leq N	_		Ldn		VEL
Autos:		_	69.6		67.9		61.8		70.4		71.0
Medium Trucks:	_		63.2		56.9		55.3		63.8		64.0
Heavy Trucks:			63.0		54.0		55.2		63.6		63.7
Vehicle Noise:	73	3.0	71.2		68.3		63.4		72.0)	72.4
Centerline Distan	ce to Noise C	ontour (in feet)	-	-						
				70 c	dBA	65 d	BA	6	0 dBA	55	dBA

Ldn:

CNEL:

135

145

291

313

627

675

1,350

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Irvine Bl. Job Number: 8141 Road Segment: w/o LQ St. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOISE MODEL INPUTS						
Highway Data				3	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	45,600 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	4,560 vehicle	es		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		_	/ehicle l	Wix					
Near/Far La	ne Distance:	76 feet				icleTyp	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet							- 41		
Centerline Dist.		100.0 feet		<u> </u>	Voise So			•	et)		
Barrier Distance	to Observer:	0.0 feet			N / = = 15 · · ·	Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				n Truck	_	1.000	Grade Ad	iustmont	0.0
P	ad Elevation:	0.0 feet			неач	y Truck	(S. C	3.006	Grade Auj	justinent.	0.0
Road Elevation: 0.0 feet				L	ane Eq	uivalen	t Dista	nce (in f	eet)		
Road Grade: 0.0%						Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediui	n Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547			
FHWA Noise Mod	lel Calculation	18									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	3.39	1	-4.11	l	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-13.85	,	-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-17.80)	-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout Topo and	barri	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	vening	Leq	Night		Ldn	CI	VEL
Autos:	7′	1.3	69.4		67.6		61	.6	70.2	2	70.8
Medium Trucks:	64	4.5	63.0		56.7		55	.1	63.6	6	63.8
Heavy Trucks:	64	4.2	62.8		53.7		55	.0	63.4	1	63.5
Vehicle Noise:	72	2.8	71.0	.0 68.1 63.2 71.7				72.2			
Centerline Distan	ce to Noise C	ontour (in fee	t)		-			1			
				70 a	<i>IBA</i>	65	dBA	6	0 dBA	55	dBA

130

141

Ldn:

CNEL:

281

303

606

652

1,305

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o LQ St.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data					Site Con	ditions (H	lard = 10, Se	oft = 15)			
Average Daily	Traffic (Adt): 4	49,400 v	ehicles				Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Truci	ks (2 Axles):	15			
Peak H	lour Volume:	4,940 v	ehicles		He	avy Trucks	s (3+ Axles):	15			
Ve	hicle Speed:	60 r	nph	,	Vehicle .	Mix					
Near/Far La	ne Distance:	76 f	eet			icleType	Day	Evening	Night	Daily	
Site Data						• • • • • • • • • • • • • • • • • • • •	tos: 77.5%		9.6%		
Ra	rrier Height:	0.0	feet		M	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0	ieei		1	Heavy Truc			10.8%	0.74%	
Centerline Di	,	100.0	foot								
Centerline Dist.		100.0		ı	Noise S	ource Elev	ations (in f	eet)			
Barrier Distance		0.0				Autos:	2.000				
					Mediu	m Trucks:	4.000				
	Observer Height (Above Pad): Pad Elevation:		feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0	
					l ano Eo	uivalant D	istance (in	foot)			
Road Elevation: 0.0 feet		-	Laile Eq			ieei)					
	Road Grade:	0.0%				Autos:	92.547				
	Left View:		degrees			m Trucks:	92.504				
	Right View:	90.0	degrees	5	Heav	y Trucks:	92.547				
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos:	73.22		3.74	-4.1	1	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-	13.50	-4.1	1	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-	17.46	-4.1	1	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Top	o and b	arrier atten	uation)						
VehicleType	Leq Peak Hou	ır Le	eq Day	Leq E	/ening	Leq Ni	ght	Ldn	CI	VEL	
Autos:	71	.6	6	9.7	68.0		61.9	70.5	5	71.2	
Medium Trucks:	64	.9	63.4		57.0		55.5	63.9	9	64.2	
Heavy Trucks:	64	.6	63.1		54.1		55.3	63.7		63.8	
Vehicle Noise:	73	73.1 71.4		1.4	68.5 63.5		72.1		72.6		
Contorlino Distan	co to Noiso Co	ontour (i	in foot)								

Centerline Distance to Noise Contour (in feet)									
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	138	297	639	1,376					
CNEL:	148	319	688	1,483					

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS						
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume: Vehicle Speed:	10% 5,180 vehicle 60 mph			dium Trucks (2 avy Trucks (3- Mix	,	15 15 15			
Near/Far Lane Distance:	76 feet		Veh	icleType	Day	Evening	Night	Daily	
Site Data				Autos:	77.5%	12.9%	9.6%	97.42%	
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer:	0.0 100.0 feet		I	edium Trucks: Heavy Trucks: Durce Elevatio		2.7%	10.3% 10.8%	1.84% 0.74%	
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	0.0 feet 5.0 feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adju					0.0	
Road Elevation:			Lane Eq	uivalent Dista	•	feet)			
Road Grade: Left View: Right View:	-90.0 degree		Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547						
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fre	snel	Barrier Atte	en Ber	m Atten	
Autos: 73.2	22 3.94	-4	.11	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 83.6	-13.30	-4	.11	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 87.3	-17.25	-4	.11	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)						
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL	
Autos:	71.8	70.0	68.2	62	2.1	70.8	3	71.4	
Medium Trucks:	65.1	63.6	57.2	55	5.7	64.1	l	64.4	
Heavy Trucks:	64.8	63.3	54.3 55.6		5.6	63.9		64.0	
Vehicle Noise:	73.3	71.6	68.7	63	3.7	72.3	3	72.8	
Centerline Distance to Noise	Contour (in feet)							

70 dBA

142

153

Ldn:

CNEL:

65 dBA

306

330

60 dBA

659

710

55 dBA

1,421

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data						Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	42,400	vehicles	S					Autos:	15		
Peak Hour	Percentage:	10	%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	4,240	vehicles	S		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	60	mph			Vehicle I	Wix					
Near/Far La	ane Distance:	76	feet		-		icleType	1	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	_
	rrier Height:	^	0 feet			М	edium T		84.8%		10.3%	1.84%
Barrier Type (0-V		0. 0.					leavy T		86.5%		10.8%	0.74%
•••	ist. to Barrier:		0 feet									
Centerline Dist.			0 feet			Noise So			•	eet)		
Barrier Distance			0 feet				Auto		.000			
Observer Height			0 feet				m Truck		.000	0 1- 4-1		0.0
-	Pad Elevation:	_	0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	: 0.0
Ro	Road Elevation: 0.0 feet				Lane Eq	uivalen	t Distar	nce (in i	feet)			
	Road Grade:	0.	0%				Auto	s: 92	2.547			
	Left View:	-90.	0 degree	es		Mediu	n Truck	s: 92	2.504			
	Right View:	90.	0 degree	es		Heav	y Truck	s: 92	2.547			
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traff	ic Flow	Di	istance	Finite	Road	Fres	nel	Barrier Atte	en Ber	m Atten
Autos:	73.22		3.07		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		-14.17		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33		-18.12		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and	barr	ier atter	nuation)						
VehicleType	Leq Peak Ho	ur	Leq Day	′	Leq E	vening	Leq	Night		Ldn	CI	NEL
Autos:	7′	1.0	(69.1		67.3		61	.3	69.9	9	70.5
Medium Trucks:	64	1.2	(62.7		56.3		54	.8	63.3	3	63.5
Heavy Trucks:	63	3.9		62.5		53.4		54.	.7	63.0)	63.2
Vehicle Noise:	72	2.5		70.7		67.8		62	.9	71.4	4	71.9
Centerline Distan	ce to Noise C	ontoui	(in feet)								
					70	dBA	65	dBA	6	60 dBA	55	dBA

124

134

Ldn: CNEL: 268

288

577

621

1,243

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD/Edinger Av.

Road Segment: w/o Jamboree

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NC	DISE N	IODE	L INPUT	S	
Highway Data			Site Cor	nditions (F	Hard =	10, Sc	oft = 15)		
Average Daily Traffic (Adt):	27,200 vehicle	S			,	Autos:	15		
Peak Hour Percentage:	10%		Me	edium Truc	ks (2 A	(xles	15		
Peak Hour Volume:	2,720 vehicle	s	He	avy Truck	s (3+ A	(xles	15		
Vehicle Speed:	55 mph		Vehicle Mix						
Near/Far Lane Distance:	88 feet			icleType		Day	Evening	Night	Daily
Site Data						77.5%			97.42%
Barrier Height:	0.0 feet		М	edium Tru	cks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):				Heavy Truck		86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:			M-1 0			- <i>(</i> ' f	4)		
Centerline Dist. to Observer:			Noise S	ource Ele			eet)		
Barrier Distance to Observer:				Autos:		000			
Observer Height (Above Pad):			Medium Trucks: 4.000						
Pad Elevation:			Heav	vy Trucks:	8.0	006	Grade Ad	iustment:	0.0
Road Elevation:			Lane Eq	uivalent E	Distand	e (in	feet)		
Road Grade:				Autos:		•			
Left View:		es	Mediu	m Trucks:					
Right View:				vy Trucks:					
FHWA Noise Model Calculation									
VehicleType REMEL	Traffic Flow	Distance		Road	Fresn		Barrier Att		m Atten
Autos: 71.7	8 1.52	-3	3.92	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -15.72	-3	3.92	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -19.67	-3	3.92	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)						
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq N	ight		Ldn	CI	VEL
Autos:	68.2	66.3	64.5		58.5	1	67.1	l	67.7
Medium Trucks:	61.6	60.1	53.7		52.2		60.6	6	60.8
Heavy Trucks:	61.6	60.2			52.4		60.8	3	60.9
Vehicle Noise:	69.8	68.0	65.0		60.2		68.7	7	69.2
Centerline Distance to Noise	Contour (in feet)							

70 dBA

82

88

Ldn:

CNEL:

65 dBA

177

191

60 dBA

382

410

55 dBA

822

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD/Edinger Av.

Road Segment: e/o Jamboree

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	TA		NOISE MODEL INPUTS					
Highway Data				,	Site Cor	ditions (H	ard = 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	30,300 ve 10% 3,030 ve					Autos: (s (2 Axles): s (3+ Axles):			
Ve	ehicle Speed: ane Distance:	55 mp 88 fee	oh		Vehicle i		Day	Evening	Night	Daily
Site Data						Aut	os: 77.5%	12.9%	9.6%	97.42%
Barrier Type (0-W	•	0.0 fe				edium Truc Heavy Truc			10.3% 10.8%	1.84% 0.74%
	ist. to Barrier:	100.0 fe			Noise Source Elevations (in feet)					
Barrier Distance Observer Height	Centerline Dist. to Observer: 100.0 feet Carrier Distance to Observer: 0.0 feet Coserver Height (Above Pad): 5.0 feet Coserver Height (Above Pad): 0.0 feet Coserver Height (Above Pad): 0.0 feet			Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0					0.0	
Ro	Road Elevation: 0.0 feet				Lane Eq	uivalent D	istance (in	feet)		
	Road Grade: Left View: Right View:	0.0% -90.0 de 90.0 de	•			Autos: m Trucks: vy Trucks:	89.850 89.805 89.850			
FHWA Noise Mod	lel Calculation	ns								
VehicleType	REMEL	Traffic Fl	low D	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	3	1.99	-3.9	2	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40) -1	5.25	-3.9	2	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40) -19	9.20	-3.9	2	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo	and barı	rier atten	uation)					
VehicleType	Leq Peak Ho	our Leq	n Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL
Autos:	_	8.7	66.8	3	65.0		58.9	67.6	3	68.2
Medium Trucks:	6	2.0	60.5	5	54.2		52.6	61.1	I	61.3
Heavy Trucks:	6	2.1	60.7	<u> </u>	51.6		52.9	61.2	2	61.3
Vehicle Noise:	7	0.2	68.5	5	65.5		60.6	69.2	2	69.7

Centerline Distance to Noise Contour (in feet)									
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	88	190	410	883					
CNEL:	95	205	441	950					

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: e/o Hearthstone Bl. Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data		;	Site Condi	tions (Hard	d=10, So	oft = 15)		
Average Daily Traffic (Adt):	26,000 vehicles	3			Autos:	15		
Peak Hour Percentage:	10%		Mediu	ım Trucks (2 Axles):	15		
Peak Hour Volume:	2,600 vehicles	3	Heav	y Trucks (3	+ Axles):	15		
Vehicle Speed:	60 mph	,	Vehicle Miz	v				
Near/Far Lane Distance:	76 feet		Vehicle Will		Day	Evening	Night	Daily
Site Data				Autos	77.5%		9.6%	97.42%
Barrier Height:	0.0 feet		Medi	ium Trucks.	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		He	avy Trucks.	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		Noisa Sau	rce Elevati	ons (in f	201		
Centerline Dist. to Observer:	100.0 feet	-	VOISE SOUI	Autos:	2.000	ee t)		
Barrier Distance to Observer:	0.0 feet		Medium		4.000			
Observer Height (Above Pad):	5.0 feet					Grade Ad	iustmant	
Pad Elevation:	0.0 feet		Heavy	Trucks.	8.006	Grade Auj	justin o nt.	0.0
Road Elevation:	0.0 feet		Lane Equiv	valent Dist	ance (in	feet)		
Road Grade:	0.0%			Autos:	92.547			
Left View:	-90.0 degree	es	Medium	Trucks:	92.504			
Right View:	90.0 degree	es	Heavy	Trucks:	92.547			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite Ro	oad Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 73.22	0.95	-4.1	-	1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.68	-16.29	-4.1 <i>′</i>	-	1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.33	-20.24	-4.1	-4.11 -1.20 - <i>5.16</i> 0.000					0.000
Unmitigated Noise Levels (with	hout Topo and	barrier atten	uation)					
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL

Unmitigated Nois	Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL					
Autos:	68.9	67.0	65.2	59.1	67.8	68.4					
Medium Trucks:	62.1	60.6	54.2	52.7	61.1	61.4					
Heavy Trucks:	61.8	60.3	51.3	52.6	60.9	61.0					
Vehicle Noise:	70.3	68.6	65.7	60.7	69.3	69.8					

Centerline Distance to Noise Contour (in feet)		Centerline Distance to Noise Contour (in feet)									
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	90	193	416	897							
CNEL:	97	208	449	966							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: e/o Culver Dr. Analyst: B. Lawson

SITE SPECIFIC	SITE SPECIFIC INPUT DATA			NOISE MODEL INPUTS						
Highway Data			Site Cor	nditions (Har	d = 10, So	oft = 15)				
Average Daily Traffic (Adt).	26,900 vehicle	S			Autos:	15				
Peak Hour Percentage.	10%		Me	edium Trucks	(2 Axles):	15				
Peak Hour Volume.	2,690 vehicle	S	He	Heavy Trucks (3+ Axles): 15						
Vehicle Speed.	60 mph		Vehicle	Miv						
Near/Far Lane Distance	76 feet			nicleType	Day	Evening	Night	Daily		
Site Data			VEI	Autos		J	9.6%	97.42%		
				edium Trucks			10.3%	1.84%		
Barrier Height			Heavy Trucks: 84.8% 4.9%				10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm)			,	Heavy Trucks	. 00.57	2.1 /0	10.0 /0	0.7470		
Centerline Dist. to Barrier			Noise S	ource Elevat	ions (in f	eet)				
Centerline Dist. to Observer				Autos:	2.000					
Barrier Distance to Observer			Mediu	m Trucks:	4.000					
Observer Height (Above Pad)			Hear	vy Trucks:	8.006	Grade Ad	justment:	0.0		
Pad Elevation										
Road Elevation			Lane Eq	uivalent Dis		feet)				
Road Grade					92.547					
Left View	-90.0 degre	es	Medium Trucks: 92.504							
Right View	90.0 degre	es	Hea	vy Trucks:	92.547					
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten		
Autos: 73.2	22 1.10	-4	4.11	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 83.6	68 -16.14	-4	4.11	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 87.3	-20.10	-4	4.11	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier at	tenuation)							
VehicleType Leq Peak F	lour Leq Day	/ Led	q Evening	Leq Nigh	t	Ldn	CI	VEL		
Autos:	69.0	67.1	65.3	;	59.3	67.9	9	68.5		
Medium Trucks:	62.2	60.7	54.4	. !	52.8	61.3	3	61.5		
Heavy Trucks:	61.9	60.5	51.5	;	52.7	61.1	1	61.2		
Vehicle Noise:	70.5	68.7	65.8		60.9	69.4	4	69.9		
Centerline Distance to Noise	Contour (in feet)								

70 dBA

92

99

Ldn:

CNEL:

65 dBA

198

213

60 dBA

426

459

55 dBA

918

Sunday,	May	20,	2012

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Yale Av. And Fontaine Av. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS								
Highway Data			S	ite Con	ditions (F	lard :	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	10%			Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15							
Vehicle Speed:	•	•		ehicle l	Viix						
Near/Far Lane Distance:	76 feet			Veh	icleType		Day	Evening	Night	Daily	
Site Data					Au	tos:	77.5%	12.9%	9.6%	97.42%	
Barrier Height: Barrier Type (0-Wall, 1-Berm).	0.0				edium Trud Heavy Trud		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%	
Centerline Dist. to Barrier.			N	oise Sc	ource Elev	vatio	ns (in fe	eet)			
Centerline Dist. to Observer. Barrier Distance to Observer. Observer Height (Above Pad). Pad Elevation.	0.0 feet 5.0 feet	feet feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Road Elevation.				ane Eq	uivalent D	Distai	nce (in i	feet)			
Road Grade.					Autos:	92	2.547				
Left View. Right View.		-90.0 degrees 90.0 degrees		Medium Trucks: 92.504 Heavy Trucks: 92.547							
FHWA Noise Model Calculation	ons										
VehicleType REMEL	Traffic Flow	Distan	ce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos: 73.2	22 1.39		-4.11		-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 83.6	68 -15.84		-4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 87.3	-19.80	•	-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier a	ttenu	ation)							
VehicleType Leq Peak H	lour Leq Day	/ Le	q Eve	ening	Leq Ni	ight		Ldn	CI	VEL	
		67.4		65.6		59	.6	68.2	2	68.8	
		61.0		54.7		53		61.6	_	61.8	
·		60.8		51.8		53		61.4		61.5	
Vehicle Noise:	70.8	69.0		66.1		61	.2	69.7	7	70.2	
Centerline Distance to Noise	Contour (in feet)									

70 dBA

96

103

Ldn:

CNEL:

65 dBA

207

223

60 dBA

446

480

55 dBA

961

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: e/o Jeffrey Rd. Analyst: B. Lawson

SITE SPEC	IFIC INP	UT DATA		NOISE MODEL INPUTS							
Highway Data				Site Co	onditions (Hard	= 10, Sc	oft = 15)			
Average Daily Traffic	. ,		i				Autos:				
Peak Hour Perce	•	10%			1edium Tru	•	,				
Peak Hour V	olume: 4	,150 vehicles	3	l F	leavy Truc	ks (3+	Axles):	15			
Vehicle S	•	60 mph		Vehicle Mix							
Near/Far Lane Dis	stance:	76 feet		Ve	hicleType		Day	Evening	Night	Daily	
Site Data					Α	utos:	77.5%	12.9%	9.6%	97.42%	
Barrier H	leiaht:	0.0 feet		Medium Trucks: 84.8% 4.9% 10.						1.84%	
Barrier Type (0-Wall, 1-	•	0.0			Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to E	Barrier:				Source Ele	evatio	ns (in f	eet)			
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0									
				Lane F	quivalent	Dista	nce (in	feet)			
Road Elevation: 0.0 feet Road Grade: 0.0%			Autos		2.547	,					
		-90.0 degree	ie.	Medi	ium Trucks		2.504				
	t View:	90.0 degree		Heavy Trucks: 92.547							
FHWA Noise Model Cal	culations										
VehicleType RE	EMEL 7	Traffic Flow	Distance	Finit	te Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	73.22	2.98	-4	.11	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-14.26	-4	.11	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-18.21	-4	.11	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Leve	els (withou	ıt Topo and I	barrier atte	enuation)						
VehicleType Leq F	Peak Hour	Leq Day	Leq	Evening	Leq N	Vight		Ldn	CI	VEL	
Autos:	70.9	6	69.0	67.	2	61	.2	69.8	3	70.4	
Medium Trucks:	64.1	6	62.6	56.	2	54	.7	63.2	2	63.4	
Heavy Trucks:	63.8	6	62.4	53.	3	54	.6	62.9	9	63.1	
Vehicle Noise:	72.4	7	70.6	67.	7	62	.8	71.3	3	71.8	
Centerline Distance to I	Noise Con	tour (in feet)									

70 dBA

123

132

Ldn:

CNEL:

65 dBA

264

284

60 dBA

569

613

55 dBA

1,226

Sunday.	May 20	2012
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Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: w/o Sand Canyon. Av. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions (H	lard = 10, Se	oft = 15)				
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	26,100 vehicle 10% 2,610 vehicle					Autos: ks (2 Axles): s (3+ Axles):					
Near/Far La	ehicle Speed: ane Distance:	60 mph 76 feet	•		ehicle l Vehi	cleType	Day	Evening	Night	Daily		
Barrier Type (0-V		0.0 feet 0.0				Aut edium Trud leavy Trud		4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%		
Centerline Dist. Barrier Distance Observer Height F Ro	to Observer:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree) feet) feet) feet) feet) feet) feet) degrees		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547							
VehicleType Autos: Medium Trucks: Heavy Trucks:	73.22 83.68	7 Traffic Flow 0.97 -16.27	Dista	-4.11 -4.11 -4.11	Finite	-1.20 -1.20 -1.20	Fresnel -4.87 -4.97 -5.16	0.0	en Ber 000 000	0.000 0.000 0.000		
Unmitigated Nois VehicleType Autos:	Leq Peak Ho	ur Leq Day		attenu Leq Eve		Leq Ni	ght 59.2	<i>Ldn</i> 67.8		NEL 68.4		
Medium Trucks: Heavy Trucks: Vehicle Noise:	62 61	2.1 .8	60.6 60.4 68.6		54.2 51.3 65.7		52.7 52.6 60.8	61.1 60.9 69.3	1 9	61.4 61.1 69.8		

70 dBA

90

97

Ldn: CNEL: 65 dBA

194

209

60 dBA

418

450

55 dBA

900

969

Sunday.	May 20	2012
Sulluav.	IVIAV ZU.	2012

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: e/o Sand Canyon Av. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Hai	d = 10, So	oft = 15)				
Average Daily	Traffic (Adt):	19,500 vehicles	S			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15				
Peak H	lour Volume:	1,950 vehicles	S	Heavy Trucks (3+ Axles): 15							
Ve	ehicle Speed:	60 mph		Vehicle I	Mix						
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily		
Site Data					Autos		-	9.6%	-		
	rrier Height:	0.0 feet		Me	edium Trucks	s: 84.8%		10.3%	1.84%		
Barrier Type (0-W	•	0.0		ŀ	leavy Trucks	s: 86.5%	2.7%	10.8%	0.74%		
Centerline Di		100.0 feet									
Centerline Dist.		100.0 feet		Noise So	ource Elevat	· · · · · · · · · · · · · · · · · · ·	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
Observer Height		5.0 feet		Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment							
_	ad Elevation:	0.0 feet	0 feet		y Trucks:	8.006	Grade Ad	iustment	0.0		
Ro	ad Elevation:	0.0 feet	0.0 feet		uivalent Dis	tance (in	feet)				
	Road Grade:	0.0%			Autos:	92.547					
	Left View:	-90.0 degree	es	Medium Trucks: 92.504							
	Right View:	90.0 degree	es	Heavy Trucks: 92.547							
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos:	73.22	-0.30	-4.	11	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-17.54	-4.	11	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-21.49	-4.	11	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Ho			Evening	Leq Nigh	nt	Ldn	CI	VEL		
Autos:	6	7.6	65.7	63.9		57.9	66.5	5	67.1		
Medium Trucks:	6	0.8	59.3	53.0		51.4	59.9)	60.1		
Heavy Trucks:	6	0.5	59.1	50.1		51.3	59.7	7	59.8		
Vehicle Noise:	6	9.1	67.3	64.4		59.5	68.0)	68.5		
Contorling Dioton	aa ta Naisa C	Santauu /in faat	,								

70 dBA	65 dBA	60 dBA	55 dBA
74	160	344	741
80	172	370	798
	74	74 160	74 160 344

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Laguna Canyon Rd. and Discovery Analyst: B. Lawson

Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Medium Trucks: 84.8% 4.9% 10.3% Heavy Trucks: 86.5% 2.7% 10.8% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Medium Trucks: 92.547 Medium Trucks: 92.547 Medium Trucks: 92.547 Medium Trucks: 92.547	<i>Daily</i> 97.42% 1.84% 0.74%							
Peak Hour Percentage: 10% Peak Hour Volume: 1,790 vehicles Vehicle Speed: 60 mph Near/Far Lane Distance: 76 feet Vehicle Mix Vehicle Type Day Evening Night Vehicle Mix Vehicle Type Day Evening Night Vehicle Mix Vehicle Mix	97.42% 1.84%							
Peak Hour Volume: 1,790 vehicles Vehicle Speed: 60 mph Near/Far Lane Distance: 76 feet Vehicle Mix Vehicle Type Day Evening Night Vehicle Type Passage Night Vehicle Type Night N	97.42% 1.84%							
Vehicle Speed: Near/Far Lane Distance: 60 mph 76 feet Vehicle Mix Vehicle Type Day Evening Night Night Site Data Vehicle Mix Vehicle Type Day Evening Night Noise Autos: 77.5% 12.9% 9.6% Medium Trucks: 84.8% 4.9% 10.3% Heavy Trucks: 86.5% 2.7% 10.3% Heavy Trucks: 86.5% 2.7% 10.8% Noise Source Elevations (in feet) Noise Source Elevations (in feet) Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Barrier Distance (in feet) Pol.0 degrees Autos: 92.547 Medium Trucks: 8.006 Grade Adjustment: Barrier Nie View: -90.0 degrees Medium Trucks: 92.547 Medium Trucks: 92.547 FHWA Noise Model Calculations	97.42% 1.84%							
Near/Far Lane Distance: 76 feet Vehicle Type Day Evening Night	97.42% 1.84%							
Near/Far Lane Distance: 76 feet VehicleType Day Evening Night	97.42% 1.84%							
Site Data Autos: 77.5% 12.9% 9.6%	97.42% 1.84%							
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Right View: 90.0 degrees Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Autos: 73.22 -0.67 -4.11 -1.20 -4.87 0.000 Heavy Trucks: 86.5% 2.7% 10.8% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547 Medium Trucks: 92.547 Fresnel Barrier Atten Berm Autos: 73.22 -0.67 -4.11 -1.20 -4.87 0.000 Medium Trucks: 83.68 -17.91 -4.11 -1.20 -4.97 0.000								
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet	0.74%							
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Vehicle Type REMEL Traffic Flow Distance Distance Finite Road Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.504 Heavy Trucks: 92.547 FHWA Noise Model Calculations Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berrier Autos: 73.22 -0.67 -4.11 -1.20 -4.87 0.000 Medium Trucks: 83.68 -17.91 -4.11 -1.20 -4.97 0.000								
Noise Source Elevations (in feet) Autos: 2.000								
Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Autos: 92.547 Left View: -90.0 degrees Heavy Trucks: 92.504 Heavy Trucks: 92.547								
Observer Height (Above Pad): Pad Elevation: O.0 feet Road Elevation: O.0 feet Road Grade: O.0% Autos: 92.547 Lane Equivalent Distance (in feet) Road Grade: Left View: Pool of Right V								
Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 92.547 Left View: -90.0 degrees Medium Trucks: 92.504 Right View: 90.0 degrees Heavy Trucks: 92.547 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berner Autos: 73.22 -0.67 -4.11 -1.20 -4.87 0.000 Medium Trucks: 83.68 -17.91 -4.11 -1.20 -4.97 0.000								
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 92.547 Left View: -90.0 degrees Medium Trucks: 92.504 Right View: 90.0 degrees Heavy Trucks: 92.547 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Bern Autos: 73.22 -0.67 -4.11 -1.20 -4.87 0.000 Medium Trucks: 83.68 -17.91 -4.11 -1.20 -4.97 0.000	0.0							
Road Grade: 0.0% Autos: 92.547 Left View: -90.0 degrees Medium Trucks: 92.504 Heavy Trucks: 92.547 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Bern Autos: 73.22 -0.67 -4.11 -1.20 -4.87 0.000 Medium Trucks: 83.68 -17.91 -4.11 -1.20 -4.97 0.000								
Left View: Right View: -90.0 degrees Medium Trucks: 92.504 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Bern Autos: 73.22 -0.67 -4.11 -1.20 -4.87 0.000 Medium Trucks: 83.68 -17.91 -4.11 -1.20 -4.97 0.000								
Right View: 90.0 degrees Heavy Trucks: 92.547 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Bern Autos: 73.22 -0.67 -4.11 -1.20 -4.87 0.000 Medium Trucks: 83.68 -17.91 -4.11 -1.20 -4.97 0.000	Medium Trucks: 92.504							
FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berner Autos: 73.22 -0.67 -4.11 -1.20 -4.87 0.000 Medium Trucks: 83.68 -17.91 -4.11 -1.20 -4.97 0.000								
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Bern Autos: 73.22 -0.67 -4.11 -1.20 -4.87 0.000 Medium Trucks: 83.68 -17.91 -4.11 -1.20 -4.97 0.000								
Autos: 73.22 -0.67 -4.11 -1.20 -4.87 0.000 Medium Trucks: 83.68 -17.91 -4.11 -1.20 -4.97 0.000								
Medium Trucks: 83.68 -17.91 -4.11 -1.20 -4.97 0.000	Atten							
	0.000							
Heavy Trucks: 87.33 -21.87 -4.11 -1.20 -5.16 0.000	0.000							
Ticavy Trucks. 07.55 21.67 4.11 1.20 5.76 0.000	0.000							
Unmitigated Noise Levels (without Topo and barrier attenuation)								
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CN								
Autos: 67.2 65.3 63.6 57.5 66.1	<u>=</u> L							
Medium Trucks: 60.5 59.0 52.6 51.0 59.5	EL 66.7							
Heavy Trucks: 60.1 58.7 49.7 50.9 59.3								
Vehicle Noise: 68.7 66.9 64.1 59.1 67.7	66.7							

70 dBA

70

75

Ldn:

CNEL:

65 dBA

151

162

60 dBA

325

350

55 dBA

700

754

Centerline Distance to Noise Contour (in feet)

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: ICD Job Number: 8141 Road Segment: w/o Barranca Pkwy. Analyst: B. Lawson

SITE :	SPECIFIC IN	IPUT DATA		Si	NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
	Troffic (Adt): "	22 200 vobiolo	•		10 0011	uniono	(mara	Autos:				
Average Daily	. ,		S		140	dium Tr	uoko (Autos. 2 Axles):				
	Percentage:	10%	_				,	,				
	lour Volume:	2,220 vehicle	S		неа	avy Iru	CKS (3	+ Axles):	15			
	hicle Speed:	•				Vehicle Mix						
Near/Far La	ne Distance:	76 feet			Vehi	icleType	9	Day	Evening	Night	Daily	
Site Data						,	Autos:	77.5%	12.9%	9.6%	97.42%	
Bai	rrier Height:	0.0 feet			Ме	edium T	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			F	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dis	•	100.0 feet		N	nisa Sc	urce F	lovatio	ons (in fe	20t)			
Centerline Dist.	to Observer:	100.0 feet			0,50 00	Auto		2.000				
Barrier Distance	to Observer:	0.0 feet			Madiur	Auto n Truck		4.000				
Observer Height (Above Pad):	5.0 feet					_		Grade Ad	iustmant	. 00	
Pá	ad Elevation:	0.0 feet			пеач	y Truck	S.	8.006	Grade Au	usimemi	. 0.0	
Roa	ad Elevation:	0.0 feet		La	ane Eq	uivalen	t Dista	ance (in	feet)			
	Road Grade:	0.0%				Auto	s: 9	2.547				
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 9	2.504				
	Right View:	90.0 degree			Heav	y Truck	s: 9	2.547				
FHWA Noise Mode	el Calculation	S										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fre	esnel	Barrier Att	en Bei	rm Atten	
Autos:	73.22	0.26		-4.11		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-16.98		-4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-20.93		-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ation)							
VehicleType	Leq Peak Hou	ır Leq Day	/ L	Leq Eve	ening	Leq	Night		Ldn	C	NEL	
Autos:	68	.2	66.3		64.5		5	8.4	67.1		67.7	
Medium Trucks:	61	.4	59.9		53.5		5	2.0	60.4	1	60.7	

Vehicle Noise:	69.6	67.9	65.0	60.1	68.6	69.1
Centerline Distance to	Noise Contour (in feet))				
			70 dBA	65 dBA	60 dBA	55 dBA
	L	Ldn:	81	174	375	808
	CN	VEL:	87	187	404	870

50.6

60.2

51.9

60.4

59.7

61.1

Heavy Trucks:

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Barranca Pkwy. and Gateway Bl. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Si	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	23,600 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Medium Trucks (2 Axles): 15						
Peak H	lour Volume:	2,360 vehicle	es		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	60 mph	·		Vehicle Mix						
Near/Far La	ane Distance:	76 feet				cleType		Day	Evening	Night	Daily
Site Data						A	Autos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet			Мє	edium Tr	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			F	łeavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline D	ist. to Barrier:	100.0 feet		N	oise So	urce El	evatio	ns (in fe	eet)		
Centerline Dist.	to Observer:	100.0 feet				Autos		.000	/		
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks		.000			
Observer Height	(Above Pad):	5.0 feet				y Trucks		.006	Grade Ad	liustment	. 00
P	ad Elevation:	0.0 feet	H		r reav	y Trucke	<i>.</i> 0	.000		,4010	. 0.0
Ro	ad Elevation:	0.0 feet	.0 feet		ane Equ	uivalent	Distar	nce (in i	feet)		
	Road Grade:	0.0%	%			Autos	s: 92	.547			
	Left View:	-90.0 degre	es	Medium Trucks: 92.504							
	Right View:	90.0 degre	es	Heavy Trucks: 92.547							
FHWA Noise Mod	lel Calculation	ns									
VehicleType	REMEL	Traffic Flow	Distanc	е	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.53	-4	1.11		-1.20	-4.87		0.0	000	0.000
Medium Trucks:	83.68	-16.71	-2	4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.67	-4	4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier att	tenu	ation)						
VehicleType	Leq Peak Ho	our Leq Da	y Leq	_l Eve	ening	Leq	Night		Ldn	C	NEL
Autos:	6	8.4	66.5		64.8		58.	7	67.3	3	67.9
Medium Trucks:	6	1.7	60.2		53.8		52.	2	60.7	7	60.9
Heavy Trucks:	6	1.3	59.9		50.9		52.	1	60.5	5	60.6
Vehicle Noise:	6	9.9	68.1		65.3		60.	3	68.9	9	69.4

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	84	181	390	841
CNEL:	91	195	421	906

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD
Road Segment: b/w Gateway Bl.and Alton Pkwy.

Job Number: 8141 Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA							L INPUT	S	
Highway Data				S	ite Cor	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 2	20,900 vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ucks (2	Axles):	15		
Peak H	lour Volume:	2,090 vehicles	3		He	avy Trud	cks (3+	Axles):	15		
Ve	hicle Speed:	60 mph		ν	ehicle	Mix					
Near/Far La	ne Distance:	76 feet				icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	_
Ba	rrier Height:	0.0 feet			M	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			I	Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet		^	loise So	ource El	levatio	ns (in fe	eet)		
Centerline Dist.	to Observer:	100.0 feet			0,00 0	Auto		2.000	,		
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck:		1.000			
Observer Height ((Above Pad):	5.0 feet				y Truck	_	3.006	Grade Ad	iustmeni	. 00
Pa	ad Elevation:	0.0 feet									
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent	t Dista	nce (in i	feet)		
	Road Grade:	0.0%				Auto	s: 92	2.547			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 92	2.504			
	Right View:	90.0 degree	es		Heav	y Truck	s: 92	2.547			
FHWA Noise Mod	el Calculations	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Be	rm Atten
Autos:	73.22	0.00		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-17.24		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-21.19		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er attenu	ation)						
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	С	NEL
Autos:	67.	.9	66.0		64.2		58	.2	66.8	3	67.4
Medium Trucks:	61.	.1	59.6		53.3		51	.7	60.2	2	60.4
Heavy Trucks:	60.	.8	59.4		50.4		51	.6	60.0)	60.1
Vehicle Noise:	69	.4	67.6		64.7		59	.8	68.3	3	68.8

70 dBA

78

84

Ldn:

CNEL:

65 dBA

167

180

60 dBA

360

388

55 dBA 776

836

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Road Segment: b/w Alton Pkwy.and Spectrum

Job Number: 8141 Analyst: B. Lawson

1,176

546

SITE	SPECIFIC IN	PUT DATA					NOISE	MODE	L INPUT	S	
Highway Data				5	Site Con				oft = 15)		
Average Daily	Traffic (Adt): 3	84,900 vehicles	3					Autos:	15		
,	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	3,490 vehicles	3		He	avy Tru	cks (3+	- Axles):	15		
Ve	hicle Speed:	60 mph		,	/ehicle	N/iv					
Near/Far La	ne Distance:	76 feet		-		icleType	2	Day	Evening	Night	Daily
Site Data					VEII		Autos:	77.5%		9.6%	-
					1.4	edium T		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet				Heavy T		86.5%		10.3%	
Barrier Type (0-W	,	0.0			,	icavy i	rucks.	00.570	2.1 /0	10.070	0.7470
Centerline Di		100.0 feet		٨	loise S	ource E	levatio	ns (in fe	eet)		
Centerline Dist.		100.0 feet				Auto	s: 2	2.000			
Barrier Distance		0.0 feet			Mediu	m Truck	s: 4	4.000			
Observer Height (•	5.0 feet			Heav	y Truck	s: 8	3.006	Grade Adj	iustment	: 0.0
	ad Elevation:	0.0 feet		,	ano Fa	uivalan	t Dicto	nce (in i	foot)		
	ad Elevation:	0.0 feet			ane Eq			•	eet)		
	Road Grade:	0.0%			Modiu	Auto m Truck		2.547 2.504			
	Left View:	-90.0 degree				y Truck		2.504 2.547			
	Right View:	90.0 degree	es		пеач	y Truck	.S. 9.	2.347			
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fre	snel	Barrier Atte	en Bei	m Atten
Autos:	73.22	2.23		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-15.01		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.97		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	atteni	uation)						
VehicleType	Leg Peak Hou			Leg Ev		Leq	Night		Ldn	C	NEL
Autos:	70	.1 (68.2		66.5		60).4	69.0)	69.6
Medium Trucks:	63	.4	61.9		55.5		53	3.9	62.4	ļ.	62.6
Heavy Trucks:	63	.0	61.6	52.6 53.8 62.2				62.3			
Vehicle Noise:	71	.6	69.8		67.0		62	2.0	70.6	6	71.1
Centerline Distan	ce to Noise Co	ntour (in feet))								
		. ,		70 d	BA .	65	dBA	6	60 dBA	55	dBA
			Ldn:	10	9	2	:35	•	507	1,	092

CNEL:

118

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Pacifica and Enterprise Dr. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOI	SE MODE	L INPUT	S			
Highway Data				Site Con	ditions (Ha	ard = 10, Se	oft = 15)				
Average Daily	Traffic (Adt):	35,100 vehicle:	S			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Truck	s (2 Axles):	15				
Peak H	lour Volume:	3,510 vehicles	s	Heavy Trucks (3+ Axles): 15							
Ve	hicle Speed:	60 mph		Vehicle I	Mix						
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily		
Site Data					Auto	•	_	9.6%			
	rrier Height:	0.0 feet		Me	edium Truci	ks: 84.8%		10.3%	1.84%		
Barrier Type (0-W	•	0.0		F	leavy Truck	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Dis		100.0 feet	•								
Centerline Dist.		100.0 feet	•	Noise Sc		ations (in f	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
Observer Height (5.0 feet			m Trucks:	4.000					
,	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0		
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0%			Autos:	92.547					
•	Left View:	-90.0 degree	00	Mediur	n Trucks:	92.504					
	Right View:	90.0 degree			y Trucks:	92.547					
	Right view.	90.0 degree	es	Heav	y Trucks.	32.347					
FHWA Noise Mod	el Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road I	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	73.22	2.25	-4.′	11	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-14.99	-4.1	11	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-18.94	-4.1	11	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	nout Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq E	vening	Leq Nig	ıht	Ldn	CI	VEL		
Autos:	70	0.2	68.3	66.5		60.4	69.1	1	69.7		
Medium Trucks:	63	3.4	61.9	55.5		54.0	62.4	4	62.7		
Heavy Trucks:	60	3.1	61.6	52.6		53.9	62.2	2	62.3		
Vehicle Noise:	7′	1.6	69.9	67.0		62.0	70.6	6	71.1		
Cantarlina Diatan	aa ta Naisa C	antary (in fact									

Centerline Distance to Noise Contour (in feet)									
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	110	236	509	1,096					
CNEL:	118	254	548	1,180					

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Enterprise and I-405 SB Ramps Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				Γ	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	52,900 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	5,290 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	60 mph		V	/ehicle l	Miv					
Near/Far La	ne Distance:	76 feet		_		icleType	۵	Day	Evening	Night	Daily
Site Data					V 011		Autos:	77.5%		9.6%	,
	vvia v Haiadat.	0.0 foot			Me	edium T		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet				Heavy T		86.5%		10.8%	0.74%
Barrier Type (0-W Centerline Di	,	0.0 100.0 feet								. 0.070	5 11 176
Centerline Di		100.0 feet		۸	loise So	ource E	levatio	ns (in fe	eet)		
Barrier Distance		0.0 feet				Auto	os: 2	2.000			
Observer Height		5.0 feet			Mediu	m Truck	(s: 4	.000			
	(Above Pau). ad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Adj	iustment:	0.0
-	ad Elevation: ad Elevation:	0.0 feet		1	ane Fa	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0%		_		Auto		2.547			
	Left View:	-90.0 degre			Mediu	n Truck		2.504			
	Right View:	90.0 degre				y Truck		2.547			
	rugine viewi	oo.o dog.o	00			,					
FHWA Noise Mod	el Calculation	s		·							
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	4.03		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:		-13.20		-4.11		-1.20		-4.97		000	0.000
Heavy Trucks:	87.33	-17.16		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	71	.9	70.0		68.3		62	.2	70.8	3	71.4
Medium Trucks:	65	5.2	63.7		57.3		55	.8	64.2	2	64.4
Heavy Trucks:	64	.9	63.4		54.4		55	.6	64.0)	64.1
Vehicle Noise:	73	3.4	71.7		68.8		63	.8	72.4	1	72.9
Centerline Distan	ce to Noise Co	ontour (in feet	•)								
		-		70 d	BA	65	dBA	6	i0 dBA	55	dBA

Ldn:

CNEL:

144

155

669

720

1,441

1,552

310

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w I-405 SB Ramps and Research Dr. Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS						
Highway Data			Site Con	ditions (l	Hard =	10, Sc	$oft = \overline{15}$		
Average Daily Traffic (Adt):	13,400 vehicles	3			A	Autos:	15		
Peak Hour Percentage:	10%		Me	dium Truc	cks (2 A	xles):	15		
Peak Hour Volume:	1,340 vehicles	S	He	avy Truck	rs (3+ A	xles):	15		
Vehicle Speed:	65 mph		Vehicle	Mix					
Near/Far Lane Distance:	175 feet			icleType		Day	Evening	Night	Daily
Site Data						77.5%		9.6%	
Barrier Height:	0.0 feet		M	edium Tru	icks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		1	Heavy Tru	icks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet					<i>(: f</i>			
Centerline Dist. to Observer:	100.0 feet		Noise So	ource Ele		•	eet)		
Barrier Distance to Observer:	0.0 feet			Autos:		000			
Observer Height (Above Pad):	5.0 feet			m Trucks:			0 1- 4-1		0.0
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.0	006	Grade Ad	iustment:	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent l	Distand	e (in	feet)		
Road Grade:	0.0%			Autos:	48.5	505			
Left View:	-90.0 degree	es	Mediu	m Trucks:	48.4	123			
Right View:	90.0 degree		Heav	y Trucks:	48.5	506			
FHWA Noise Model Calculation	ns								
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos: 74.55	-2.28	0	.09	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 84.86	-19.52	0	.11	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 88.18	-23.47	0	.09	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier att	enuation)						
VehicleType Leq Peak Ho	our Leq Day	Leq	Evening	Leq N	light		Ldn	CI	VEL
Autos: 7	1.2	69.3	67.5		61.4		70.1	I	70.7
Medium Trucks: 6	-	62.7					3	63.5	
Heavy Trucks: 6	3.6	62.2	2 53.1 54.4 62.8					62.9	
Vehicle Noise: 7	2.6	70.8	68.0		63.0		71.5	5	72.0
Centerline Distance to Noise C	Contour (in feet	1							

70 dBA

126

136

Ldn:

CNEL:

65 dBA

272

293

60 dBA

586

631

55 dBA

1,262

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Research Dr. and Hubble Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DA	TA			NOISE	MODE	L INPUT	S	
Highway Data				S	ite Conditio	ns (Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	23,800 veh	nicles				Autos:	15		
Peak Hour	Percentage:	10%			Medium	Trucks (2	2 Axles):	15		
Peak H	lour Volume:	2,380 veh	nicles		Heavy 7	rucks (3+	+ Axles):	15		
Ve	hicle Speed:	60 mp	h	V	ehicle Mix					
Near/Far La	ne Distance:	76 fee	et		VehicleT	vpe	Day	Evening	Night	Daily
Site Data						Autos:	77.5%		9.6%	
Ra	rrier Height:	0.0 fe	ot		Mediun	n Trucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	CL		Heav	/ Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 fe	et				/: 6			
Centerline Dist.		100.0 fe		N	loise Source			eet)		
Barrier Distance		0.0 fe					2.000			
Observer Height		5.0 fe			Medium Tru		4.000			
•	ad Elevation:	0.0 fe			Heavy Tru	icks:	8.006	Grade Ad	iustment:	0.0
	ad Elevation:	0.0 fe		L	Lane Equivalent Distance (in feet)					
	Road Grade:	0.0%	Ot .		-		2.547	,		
	Left View:	-90.0 de	earees		Medium Tru		2.504			
	Right View:	90.0 de	•		Heavy Tru		2.547			
FHWA Noise Mod			5);- (Finite Dee	-/ -		Damian A	D	A ()
VehicleType	REMEL	Traffic Flo		Distance	Finite Road			Barrier Att		m Atten
Autos:).57	-4.11	-1.3		<i>-4.87</i>		000	0.000
Medium Trucks:			6.67	-4.11	-1.2		-4.97 5.40		000	0.000
Heavy Trucks:	87.33	3 -20	0.63	-4.11	-1.2	20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (witl	hout Topo a	and bar	rier attenu	ation)					
VehicleType	Leq Peak Ho		Day	Leq Eve	•	eq Night		Ldn		VEL
Autos:	6	8.5	66.6	6	64.8	58	3.8	67.4	1	68.0
Medium Trucks:	6	1.7	60.2	2	53.8	52	2.3	60.7	7	61.0
Heavy Trucks:	6	1.4	60.0)	50.9	52	2.2	60.5	5	60.7
Vehicle Noise:	7	0.0	68.2	2	65.3	60).4	68.9)	69.4
Cantarlina Diatan	aa ta Naisa C	\	£4\							

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	85	182	393	846
CNEL:	91	196	423	911

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Hubble and Bake Pkwy. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		7	NOISE MODE	L INPUT	S	
Highway Data		9	Site Conditions	(Hard = 10, S	oft = 15)		
Average Daily Traffic (Adt)	22,300 vehicles	S		Autos	: 15		
Peak Hour Percentage	10%		Medium Tr	rucks (2 Axles)	: 15		
Peak Hour Volume	2,230 vehicles	S	Heavy Tru	cks (3+ Axles)	: 15		
Vehicle Speed	: 60 mph	1	Vehicle Mix				
Near/Far Lane Distance	76 feet	<u></u>	VehicleType	e Day	Evening	Night	Daily
Site Data				Autos: 77.5%	6 12.9%	9.6%	97.42%
Barrier Height	: 0.0 feet		Medium T	rucks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)			Heavy T	rucks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Dist. to Barrier	: 100.0 feet	,	Noise Source E	levations (in t	eet)		
Centerline Dist. to Observer	: 100.0 feet	-	Auto				
Barrier Distance to Observer	: 0.0 feet		Medium Truck				
Observer Height (Above Pad)	5.0 feet		Heavy Truck		Grade Ad	iustment	. 0.0
Pad Elevation	: 0.0 feet		Tieavy Truck	.s. 0.000	Orado riaj	idoti i iorit.	0.0
Road Elevation	: 0.0 feet	L	Lane Equivalen	t Distance (in	feet)		
Road Grade	0.0%		Auto	s: 92.547			
Left View	: -90.0 degree	es	Medium Truck	s: 92.504			
Right View	: 90.0 degree	es	Heavy Truck	s: 92.547			
FHWA Noise Model Calculati	ons						
VehicleType REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Att	en Ber	m Atten
Autos: 73.:	22 0.28	-4.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.	-16.96	-4.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.	-20.91	-4.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	thout Topo and	barrier atten	uation)				

Unmitigated Nois	e Levels (without	t Topo and barri	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	68.2	66.3	64.5	58.5	67.1	67.7
Medium Trucks:	61.4	59.9	53.5	52.0	60.5	60.7
Heavy Trucks:	61.1	59.7	50.6	51.9	60.2	60.4
Vehicle Noise:	69.7	67.9	65.0	60.1	68.6	69.1

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	81	175	376	810						
CNEL:	87	188	405	872						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC Job Number: 8141

Road Name: ICD

Road Segment: b/w Bake Pkwy. and Muller Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data				Si	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt): 2	21,200 vehicles	3				Auto	s: 15					
	Percentage:	10%			Med	ium Truc	cks (2 Axles	s): 15					
Peak H	lour Volume:	2,120 vehicles			Heavy Trucks (3+ Axles): 15								
Vehicle Speed: Near/Far Lane Distance:		60 mph 76 feet			Vehicle Mix								
					VehicleType Day			Evening	Night	Daily			
Site Data					Verno		utos: 77.5	J		97.42%			
					Med	dium Tru			10.3%				
	rrier Height:	0.0 feet				eavy Tru			10.8%	0.74%			
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:		0.0				Javy 110		2.170	10.070	0.7 170			
		100.0 feet		N	oise Sou	ırce Ele	vations (in	feet)					
Centerline Dist.		100.0 feet				Autos:	2.000						
Barrier Distance to Observer:		0.0 feet			Medium Trucks: 4.000								
Observer Height (Above Pad):		5.0 feet			Heavy Trucks: 8.006			Grade Adjustment: 0.0					
Pad Elevation:		0.0 feet		1.	ano Equ	ivalent	Distance (i	n foot)					
Road Elevation:		0.0 feet			ane Lyu		·	ii ieeij					
Road Grade:		0.0%			Madium	Autos:							
Left View:		•	-90.0 degrees			Medium Trucks: 92.504 Heavy Trucks: 92.547							
Right View:		90.0 degree	es		пеачу	TTUCKS.	92.347						
FHWA Noise Mode	el Calculations	3											
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite F	Road	Fresnel	Barrier Att	ten Ber	m Atten			
Autos:	73.22	0.06		-4.11		-1.20	-4.8	7 0.0	000	0.000			
Medium Trucks:	83.68	-17.18		-4.11		-1.20	-4.9	7 0.0	000	0.000			
Heavy Trucks:	87.33	-21.13		-4.11		-1.20	-5.1	6 0.0	000	0.000			
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ation)								
VehicleType	Leq Peak Hou	r Leq Day	· [Leq Eve	ening	Leq N	light	Ldn	CI	NEL			
Autos:	68.	.0	66.1		64.3		58.2	66.9	9	67.5			
Medium Trucks:	61.	.2	59.7		53.3		51.8	60.2	2	60.5			
Heavy Trucks:	60.	.9	59.5		50.4		51.7	60.0	0	60.2			
Vehicle Noise:	69.	.4	67.7		64.8		59.9	68.	4	68.9			

70 dBA

78

84

Ldn:

CNEL:

65 dBA

169

182

60 dBA

364

392

55 dBA

783

843

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: b/w Muller and Tesla Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily Tra	nffic (Adt): 2	20.600 vehicles			Autos: 15							
	Peak Hour Percentage: 10%				Medium Trucks (2 Axles): 15							
	Peak Hour Volume: 2,060 vehicles				Heavy Trucks (3+ Axles): 15							
Vehic	Vehicle Speed: 60 mph				Vehicle Mix							
Near/Far Lane	Distance:	76 feet		-		icleType	,	Day	Evening	Night	Daily	
Site Data					Veri		Autos:	77.5%		9.6%	97.42%	
					1.10			84.8%		10.3%	1.84%	
	r Height:	0.0 feet						86.5%		10.8%	0.74%	
Barrier Type (0-Wall,	•	0.0			,	leavy II	iucns.	00.576	2.1 /0	10.0 /6	0.7470	
Centerline Dist. t		100.0 feet Noise Source Elevations							eet)			
Centerline Dist. to 0		100.0 feet				Auto	s: 2	2.000				
Barrier Distance to Observer:		0.0 feet			Medium Trucks: 4.000							
Observer Height (Above Pad):		5.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	iustment:	0.0	
Pad I	Elevation:	0.0 feet			,							
Road I	Elevation:	0.0 feet			Lane Equivalent Distance (in feet)							
Roa	ad Grade:	0.0%				Auto	s: 92	2.547				
Left View:		-90.0 degree	-90.0 degrees		Medium Trucks: 92.504							
Ri	ight View:	90.0 degree	es	Heavy Trucks: 92.547								
FHWA Noise Model C	Calculation	S										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	snel	Barrier Atten Berr		m Atten	
Autos:	73.22	-0.06		-4.11		-1.20 <i>-4.87</i>		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-17.30		-4.11	.11 -1.20			<i>-4.97</i> 0.00		000	0.000	
Heavy Trucks:	87.33	-21.26		-4.11		-1.20	0 -5.16		0.0	000	0.000	
Unmitigated Noise Lo	evels (with	out Topo and	barrier a	attenu	uation)							
VehicleType Le	q Peak Hou	ır Leq Day	Leq Day Leq		ening	Leq Night			Ldn	CI	VEL	
Autos:	Autos: 67.8		65.9		64.2 58		58.1 66.7		7	67.4		
Medium Trucks: 61.1		.1	59.6		53.2 51		1.7 60.1		l	60.4		
Heavy Trucks:	60	60.8 59.3			50.3 51.5		59.9		60.0			
Vehicle Noise: 69.3 67.6			67.6		64.7		59	.7	68.3	3	68.8	
Centerline Distance t	to Noise Co	ontour (in feet)									

70 dBA

77

83

Ldn:

CNEL:

65 dBA

166

178

60 dBA

357

384

55 dBA

768

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: ICD Job Number: 8141
Road Segment: w/o Lake Forest Dr. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data			Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	20,100 vehicles 10% 2,010 vehicles		Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15							
Vehicle Speed: Near/Far Lane Distance:	60 mph 76 feet		Vehicle Veh	Mix icleType	Day	Evening	Night	Daily		
Site Data				Autos:	77.5%	12.9%	9.6%	97.42%		
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 feet 0.0 100.0 feet		1	edium Trucks: Heavy Trucks: Durce Elevation	86.5%	2.7%	10.3% 10.8%	1.84% 0.74%		
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet 0.0 feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Road Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree		Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547							
FHWA Noise Model Calculatio	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten		
Autos: 73.22	2 -0.17	-4	.11	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 83.66 Heavy Trucks: 87.33				-1.20 -1.20	-4.97 -5.16		000	0.000 0.000		
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	enuation)							
VehicleType Leq Peak Ho	our Leq Day	Leq Day Leq		Leq Night		Ldn	CI	VEL		
Autos: 6	67.7 65.8		64.1 58		8.0	66.6		67.2		
			53.1 51.6		1.6	60.0		60.2		
Heavy Trucks: 6	rs: 60.6 59.2		50.2	50.2 51.4		59.8		59.9		
Vehicle Noise: 6	9.2	67.4	64.6	5	9.6	68.2	2	68.7		
Centerline Distance to Noise C	Contour (in feet))								

70 dBA

76

81

Ldn:

CNEL:

65 dBA

163

175

60 dBA

351

378

55 dBA

756

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Job Number: 8141
Road Segment: n/o Chapman/Santiago Cyn. Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S			
Highway Data				Site Conditions (Hard = 10, Soft = 15)						
Average Daily Traffic (Adt):	21,200 vehicles	S			Autos:	15				
Peak Hour Percentage:	10%		Medium Trucks (2 Axles): 15							
Peak Hour Volume:	2,120 vehicles	S	Heavy Trucks (3+ Axles): 15							
Vehicle Speed:	55 mph		Vehicle I	Miv						
Near/Far Lane Distance:	88 feet		VehicleType Day			Evening	Night	Daily		
Site Data			Veri	Autos			9.6%	97.42%		
			1/4	edium Trucks			10.3%	1.84%		
Barrier Height:	0.0 feet			leavy Trucks			10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm):			,	reavy Trucks	. 00.070	2.1 /0	10.070	0.7 4 70		
Centerline Dist. to Barrier:			Noise Source Elevations (in feet)							
Centerline Dist. to Observer:	100.0 feet 0.0 feet		Autos: 2.000							
Barrier Distance to Observer:			Medium Trucks: 4.000							
Observer Height (Above Pad):			Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Pad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
Road Elevation:	0.0 feet		Autos: 89.850							
Road Grade:										
Left View:		-90.0 degrees		Medium Trucks: 89.805 Heavy Trucks: 89.850						
Right View:	90.0 degree	es	пеач	y Trucks.	09.000					
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten		
Autos: 71.7	8 0.44	-3	.92	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -16.80	-3	.92	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	0 -20.75	-3	.92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)							
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Nigh	t	Ldn	CI	VEL		
Autos:	67.1	65.2		3.4 57.4		66.0		66.6		
Medium Trucks:	50.5 59.0		52.6	52.6 51.1		59.5		59.8		
Heavy Trucks:	0.5	59.1	50.1	50.1 51.3			59.7 59			
Vehicle Noise: 68.7 66.9 64.0 59.1					67.6	<u></u>	68.1			
Centerline Distance to Noise	Contour (in feet)	,							

70 dBA

70

75

Ldn:

CNEL:

65 dBA

150

161

60 dBA

323

348

55 dBA

696

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Jamboree Rd. Job Number: 8141 Analyst: B. Lawson Road Segment: s/o Chapman Av.

SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS								MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily Traffic (Ad	t): 15	5,200 vehicles	S					Autos:	15		
Peak Hour Percentag	e:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak Hour Volum	<i>e:</i> 1	,520 vehicles	S		He	avy Tru	icks (3+	Axles):	15		
Vehicle Spee	d:	55 mph		,	Vehicle l	Miv					
Near/Far Lane Distand	e:	88 feet				icleTyp	e	Day	Evening	Night	Daily
Site Data					V 011		Autos:	77.5%	J	•	97.42%
	-4-	0.0 foot			Me	edium 7		84.8%		10.3%	1.84%
Barrier Heigi		0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berr Centerline Dist. to Barri	,	100.0 feet									011 170
Centerline Dist. to Observ		100.0 feet		I	Noise So	ource E	levatio	ns (in fe	et)		
Barrier Distance to Observe		0.0 feet				Auto	os: 2	2.000			
Observer Height (Above Pa		5.0 feet			Mediui	n Truck	ks: 4	1.000			
Pad Elevation	•	0.0 feet			Heav	y Truck	ks: 8	3.006	Grade Ad	justment.	0.0
Road Elevatio		0.0 feet			Lane Eq	uivalen	nt Dista	nce (in t	eet)		
Road Grad		0.0%				Auto		9.850			
Left Vie		-90.0 degree	20		Mediu	n Truck		9.805			
Right Vie		90.0 degree				ry Truck		9.850			
rught vic	vv.	30.0 degree			77047	y maon	10.	7.000			
FHWA Noise Model Calcula	tions										
VehicleType REMEL		Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 7	.78	-1.00		-3.92	2	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82	2.40	-18.24		-3.92	2	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86	3.40	-22.20		-3.92	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (vitho	ut Topo and	barri	ier atten	uation)						
VehicleType Leq Peak				Leg E		Leg	Night		Ldn	CI	VEL
Autos:	65.7	7	63.8	·	62.0	<u> </u>	55	.9	64.6	6	65.2
Medium Trucks:	59.0)	57.5		51.2		49	.6	58.1	1	58.3
Heavy Trucks:	59.1		57.7		48.6		49	.9	58.2	2	58.4
Vehicle Noise:	67.2	2	65.5		62.5		57	.6	66.2	2	66.7
Centerline Distance to Nois	e Con	ntour (in feet)								
				70 c	dBA	65	dBA	6	0 dBA	55	dBA

56

60

Ldn:

CNEL:

120

129

259

278

558

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Job Number: 8141
Road Segment: s/o Canyon View Av. Analyst: B. Lawson

SITE		NOISE MODEL INPUTS											
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
	Traffic (Adt): Percentage: four Volume:	25,400 vehice 10% 2,540 vehice					Autos: ks (2 Axles): s (3+ Axles):						
Near/Far La	hicle Speed: ne Distance:	55 mph 88 feet		V	/ehicle Veh	Mix icleType	Day	Evening	Night	Daily			
Site Data							tos: 77.5%		9.6%				
Ba Barrier Type (0-W	rrier Height: /all, 1-Berm):	0.0 feet 0.0				edium Trud Heavy Trud			10.3% 10.8%	1.84% 0.74%			
Centerline Di	st. to Barrier:	100.0 feet		٨	loise S	ource Elev	ations (in fe	eet)					
Barrier Distance Observer Height P Ro	Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0%				Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 89.850								
	Left View: Right View:	-90.0 deg				m Trucks: yy Trucks:	89.805 89.850						
FHWA Noise Mod													
VehicleType	REMEL	Traffic Flov		istance			Fresnel	Barrier Att		m Atten			
Autos: Medium Trucks:	82.40	-16.0)1	-3.92 -3.92		-1.20 -1.20	-4.87 -4.97	0.0	000	0.000			
Heavy Trucks: Unmitigated Nois				-3.92 ier attenu		-1.20	-5.16	0.0	000	0.000			
VehicleType	Leg Peak Ho			Leg Ev		Leg Ni	aht	Ldn	CI	VEL			
Autos:		7.9	66.0	-1	64.2	. ,	58.2	66.8	1	67.4			
Medium Trucks:	6	1.3	59.8		53.4		51.9	60.3	3	60.6			
Heavy Trucks:	6	1.3	59.9		50.8		52.1	60.5	5	60.6			
Vehicle Noise:	6	9.5	67.7		64.7		59.9	68.4	1	68.9			

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	79	169	365	785
CNEL:	84	182	392	845

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: n/o Tustin Ranch Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIF	IC INP	UT DATA			N	OISE	MODE	L INPUT	S	
Highway Data				Site Cor	nditions (Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic (A Peak Hour Percent Peak Hour Volu	age:	300 vehicles 10% 730 vehicles			edium True eavy Truci	•				
Vehicle Spe		55 mph	5			ns (5+	Axies).	15		
Near/Far Lane Dista		88 feet		Vehicle						
	1100.	00 1001		Veh	icleType		Day	Evening	Night	Daily
Site Data						utos:	77.5%			97.42%
Barrier Hei Barrier Type (0-Wall, 1-Be	erm):	0.0 feet 0.0			edium Trı Heavy Trı		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Bar		100.0 feet		Noise S	ource Ele	evatio	ns (in fe	eet)		
Centerline Dist. to Obser Barrier Distance to Obser Observer Height (Above F Pad Eleva	rver: Pad):	0.0 feet 0.0 feet 5.0 feet 0.0 feet			Autos m Trucks vy Trucks	: 4	.000 .000 .006	Grade Ad	justment.	0.0
Road Eleva		0.0 feet		Lane Eq	uivalent	Distar	nce (in i	feet)		
Road Gr		0.0%		•	Autos		.850			
Left V		-90.0 degree	es	Mediu	m Trucks		.805			
Right V		90.0 degree		Heav	vy Trucks	: 89	.850			
FHWA Noise Model Calcu	lations									
VehicleType REM		raffic Flow	Distance		Road	Fres		Barrier Att	en Ber	m Atten
	71.78	1.54		.92	-1.20		-4.87		000	0.000
	82.40	-15.70		.92	-1.20		-4.97		000	0.000
Heavy Trucks:	86.40	-19.66	-3	.92	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels	(withou	t Topo and I	barrier att	enuation)						
VehicleType Leq Pea		Leq Day		Evening	Leq N	Night		Ldn		VEL
Autos:	68.2		66.3	64.5		58.		67.1		67.7
Medium Trucks:	61.6		50.1	53.7		52.2		60.6		60.9
Heavy Trucks:	61.6		60.2		51.2 52.4		4	60.8		60.9
Vehicle Noise:	69.8		68.0	65.1		60.	2	68.7	7	69.2
Centerline Distance to No	ise Con	tour (in feet)				-				

70 dBA

82

89

Ldn:

CNEL:

65 dBA

178

191

60 dBA

382

411

55 dBA

824

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: s/o Tustin Ranch Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOISE MODEL INPUTS							
Highway Data					Site Con	ditions (H	ard = 10, So	oft = 15)				
	Traffic (Adt): Percentage: Hour Volume:	27,400 vehice 10% 2,740 vehice					Autos: ks (2 Axles): s (3+ Axles):					
Ve	ehicle Speed: ne Distance:	55 mph 88 feet		1	/ehicle		Day	Evening	Night	Daily		
Site Data						Aut	tos: 77.5%	12.9%	9.6%			
Ba Barrier Type (0-W	rrier Height: /all, 1-Berm):	0.0 feet 0.0				edium Truc Heavy Truc			10.3% 10.8%	1.84% 0.74%		
Centerline Di	st. to Barrier:	100.0 feet		,	Voise So	ource Elev	ations (in fe	eet)				
Barrier Distance Observer Height P Ro	Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet				Mediu Heav Lane Eq	iustment:	stment: 0.0					
	Road Grade:	0.0%			N 4 = -1:	Autos:	89.850					
	Left View: Right View:	-90.0 deg				m Trucks: yy Trucks:	89.805 89.850					
FHWA Noise Mod	el Calculation	ns										
VehicleType	REMEL	Traffic Flow	/ Di	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	3 1.5	5	-3.92	2	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-15.6	8	-3.92	2	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-19.6	4	-3.92	2	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo an	d barri	ier atten	uation)							
VehicleType	Leq Peak Ho	our Leq D	ay	Leq Ev	rening	Leq Ni	ght	Ldn	CI	VEL		
Autos:	68	8.2	66.3		64.5		58.5	67.1	l	67.7		
Medium Trucks:	6	1.6	60.1		53.7		52.2	60.6	6	60.9		
Heavy Trucks:	6	1.6	60.2		51.2		52.4	60.8	3	60.9		
Vehicle Noise:	69	9.8	68.0		65.1		60.2	68.8	3	69.2		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	83	178	383	826
CNEL:	89	191	412	889

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: n/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Co.	nditions (H	ard = 10, So	oft = 15)		
Average Daily	Traffic (Adt):	27,500 vehicle	es			Autos:	15		
= -	Percentage:	10%		Me	edium Truck	ks (2 Axles):	15		
Peak H	our Volume:	2,750 vehicle	es	He	eavy Trucks	s (3+ Axles):	15		
Ve	hicle Speed:	55 mph		Vehicle	Mix				
Near/Far Lai	ne Distance:	88 feet			nicleType	Day	Evening	Night	Daily
Site Data					Aut		_	9.6%	
Bai	rier Height:	0.0 feet		N	ledium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Dis		100.0 feet		Noise S	ourse Flou	rations (in fe	204)		
Centerline Dist.	to Observer:	100.0 feet		Noise S		•	et)		
Barrier Distance	to Observer:	0.0 feet		N / = -1:-	Autos:	2.000			
Observer Height (Above Pad):	5.0 feet			ım Trucks:	4.000	Cuada Ad		
• .	ad Elevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adj	ustment.	0.0
Road Elevation: 0.0 feet				Lane Ed	quivalent D	istance (in	feet)		
	Road Grade:	0.0%			Autos:	89.850	-		
	Left View:	-90.0 degre	ees	Mediu	ım Trucks:	89.805			
	Right View:	90.0 degre		Hea	vy Trucks:	89.850			
FHWA Noise Mode	el Calculatio	ns							
VehicleType	REMEL	Traffic Flow	Distanc	e Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	71.78	3 1.57	7 -:	3.92	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.67	7 -:	3.92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.62	2 -:	3.92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo and	d barrier at	tenuation)					
VehicleType	Leq Peak Ho	our Leq Da	y Led	g Evening	Leq Ni	ght	Ldn	CI	VEL
Autos:	6	8.2	66.3	64.6	;	58.5	67.1		67.7
Medium Trucks:	6	1.6	60.1	53.7	•	52.2	60.7	7	60.9
Heavy Trucks:	6	1.7	60.2	51.2	2	52.4	60.8	3	60.9
Vehicle Noise:	6	9.8	68.0	65.1		60.2	68.8	₹	69.2

70 dBA

83

89

Ldn:

CNEL:

65 dBA

178

192

60 dBA

384

413

55 dBA

828

891

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project

Road Name: Jamboree Rd. Road Segment: s/o Irvine Bl.

Project Name: 2012 Great Park GPA/ZC

Job Number: 8141 Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE MODEL INPUTS								
Highway Data		-	S	ite Con	ditions (F	lard =	10, Sc	oft = 15)				
Average Daily Traffic (Adt):	37,500 vehicle	es					Autos:	15				
Peak Hour Percentage:	10%			Me	dium Truc	ks (2	Axles):	15				
Peak Hour Volume:	3,750 vehicle	es		He	avy Truck	s (3+	Axles):	15				
Vehicle Speed:	65 mph		ν	ehicle l	Wix							
Near/Far Lane Distance:	175 feet				icleType		Day	Evening	Night	Daily		
Site Data						itos:	77.5%	_	9.6%	97.42%		
Barrier Height:	0.0 feet			Me	edium Tru	cks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm).				H	leavy Tru	cks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier.				laisa Sa	ource Ele	vation	s (in f	not)				
Centerline Dist. to Observer.	100.0 feet		, , , , , , , , , , , , , , , , , , ,	ioise sc	Autos:		.000					
Barrier Distance to Observer.	0.0 feet			Modiuu	n Trucks:		.000					
Observer Height (Above Pad).	5.0 feet							Crada Ad	iuotmont	0.0		
Pad Elevation.	0.0 feet			Heav	y Trucks:	8.	006	Grade Ad	justinent.	0.0		
Road Elevation.	0.0 feet		L	ane Eq	uivalent E	Distan	ce (in	feet)				
Road Grade.	0.0%				Autos:	48	.505					
Left View.	-90.0 degre	es		Mediui	n Trucks:	48	.423					
Right View.	90.0 degre	es		Heav	y Trucks:	48	.506					
FHWA Noise Model Calculation	ons											
VehicleType REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos: 74.5	55 2.19		0.09		-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 84.8	36 -15.05	;	0.11		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 88.1	-19.00)	0.09		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier	r attenu	ation)								
VehicleType Leq Peak H	lour Leq Da	У	Leq Ev	ening	Leq N	ight		Ldn	CI	VEL		
Autos:	75.6	73.7		72.0		65.	9	74.5	5	75.1		
Medium Trucks:	68.7	67.2		60.9		59.	3	67.8	3	68.0		
Heavy Trucks:	68.1	66.7		57.6	57.6 58.9		9 67.2		2	67.3		
Vehicle Noise:	77.0	75.3		72.4		67.	4	76.0)	76.5		
Centerline Distance to Noise	Contour (in fee	t)										

70 dBA

251

270

Ldn: CNEL: 65 dBA

540

582

60 dBA

1,163

1,254

55 dBA

2,506

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: s/o Bryan Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT [DATA		NOISE MODEL INPUTS										
Highway Data					S	ite Con	ditions	(Hard:	= 10, Sc	oft = 15)					
Average Daily	Traffic (Adt):	39,200	vehicles	S					Autos:	15					
Peak Hour	Percentage:	109	%			Me	dium Tr	ucks (2	Axles):	15					
Peak F	lour Volume:	3,920	vehicles	S		Heavy Trucks (3+ Axles): 15									
	hicle Speed:	65	mph		ν	ehicle l	Vix								
Near/Far La	ne Distance:	175	feet			Vehi	icleType	,	Day	Evening	Night	Daily			
Site Data							,	Autos:	77.5%	12.9%	9.6%	97.42%			
Ba	rrier Height:	0.0	feet			Мє	edium T	rucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	_	0.0				F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%			
Centerline Di	•	100.0				loise Sc	urco E	lovatio	nc (in f	201					
Centerline Dist.	to Observer:	100.0) feet		N	ioise sc	Auto		2.000	et)					
Barrier Distance	to Observer:	0.0) feet			Modium	Auto n Truck		.000						
Observer Height	(Above Pad):	5.0) feet							Grade Ad	iuotmont				
	ad Elevation:	0.0) feet			Heav	y Truck	S. 8	3.006	Grade Au	jusimeni	. 0.0			
Ro	ad Elevation:	0.0) feet		L	ane Eq	uivalen	t Distai	nce (in i	feet)					
	Road Grade:	0.0)%				Auto	s: 48	3.505						
	Left View:	-90.0	degree	es		Mediur	n Truck	s: 48	3.423						
	Right View:		degree			Heav	y Truck	s: 48	3.506						
FHWA Noise Mod	el Calculation	16													
VehicleType	REMEL		Flow	Dista	ance	Finite	Road	Fres	snel	Barrier Att	en Bei	m Atten			
Autos:	74.55	5	2.38		0.09		-1.20		-4.87	0.0	000	0.000			
Medium Trucks:	84.86	6	-14.85		0.11		-1.20		-4.97	0.0	000	0.000			
Heavy Trucks:	88.18	3	-18.81		0.09		-1.20		-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	hout To	po and	barrier	r attenu	ation)									
VehicleType	Leg Peak Ho		Leq Day		Leg Ev		Leg	Night		Ldn	C	NEL			
Autos:		5.8		73.9	·	72.2	•	66	.1	74.7	7	75.3			
Medium Trucks:	68	8.9		67.4	61.0 59.5 68.0)	68.2				
Heavy Trucks:	68	8.3		66.8	8 57.8 59.1 67.4					67.5					
Vehicle Noise:	7	7.2		75.4		72.6		67	.6	76.2	2	76.7			

70 dBA

258

278

Ldn: CNEL: 65 dBA

556

599

60 dBA

1,198

1,291

55 dBA

2,581

2,782

Sunday.	May 20	2012
Juliuav.	IVIAV ZU.	2012

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: b/w El Camino Real and I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I		NOISE MODEL INPUTS								
Highway Data			5	Site Con	ditions (l	Hard =	10, Sc	oft = 15)		
Average Daily Traffic (Adt):	61,500 vehicles	S					Autos:	15		
Peak Hour Percentage:	10%			Me	dium Truc	ks (2 A	Axles):	15		
Peak Hour Volume:	6,150 vehicles	S		He	avy Truck	s (3+ A	Axles):	15		
Vehicle Speed:	65 mph		,	/ehicle l	Miv					
Near/Far Lane Distance:	175 feet				icleType		Day	Evening	Night	Daily
Site Data				V 0111		ıtos:	77.5%		9.6%	-
	0.0 foot			Me	edium Tru		84.8%		10.3%	1.84%
Barrier Height:	0.0 feet 0.0				Heavy Tru		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 100.0 feet									011 170
Centerline Dist. to Observer:	100.0 feet		^	Voise Sc	ource Ele	vation	s (in fe	eet)		
Barrier Distance to Observer:	0.0 feet				Autos:		000			
Observer Height (Above Pad):	5.0 feet				n Trucks:		000			
Pad Elevation:	0.0 feet			Heav	y Trucks:	8.	006	Grade Ad	iustment:	0.0
Road Elevation:	0.0 feet		L	Lane Eq	uivalent L	Distan	ce (in f	feet)		
Road Grade:	0.0%				Autos:		505	,		
Left View:	-90.0 degree	es		Mediur	n Trucks:		423			
Right View:	90.0 degree				y Trucks:		506			
	00.0 dog.0				,					
FHWA Noise Model Calculation										
VehicleType REMEL	Traffic Flow	Dis	stance	Finite		Fresr		Barrier Att		m Atten
Autos: 74.55			0.09		-1.20		-4.87		000	0.000
Medium Trucks: 84.86			0.11		-1.20		-4.97		000	0.000
Heavy Trucks: 88.18	-16.85		0.09	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrie	er atten	uation)						
VehicleType Leq Peak Ho	our Leq Day	/	Leq Ev	vening	Leq N	ight		Ldn	CI	VEL
Autos: 7	7.8	75.9		74.1		68.1		76.7	7	77.3
Medium Trucks: 7	0.9	69.4		63.0		61.5	5	69.9	9	70.2
Heavy Trucks: 7	0.2	68.8		59.8		61.0)	69.4	1	69.5
Vehicle Noise: 7	9.2	77.4		74.6		69.6	3	78.1	1	78.6
Centerline Distance to Noise C	Contour (in feet)								
11 11 11 11 11 11 11 11 11 11 11 11 11	(,	70 a	IBA	65 dl	ВА	6	i0 dBA	55	dBA

Ldn:

CNEL:

348

376

751

809

1,617

1,744

3,485

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Job Number: 8141
Road Segment: n/o Michelle Dr. Analyst: B. Lawson

SITE SPECIFIC	INP	UT DATA		NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions (F	Hard :	= 10, Sc	oft = 15)			
Average Daily Traffic (Ad	:): 60,	400 vehicles						Autos:	15			
Peak Hour Percentag	e <i>:</i>	10%			Me	dium Truc	ks (2	Axles):	15			
Peak Hour Volum	e: 6,	040 vehicles			He	avy Truck	is (3+	Axles):	15			
Vehicle Spee	d:	65 mph		V	ehicle l	Miy						
Near/Far Lane Distanc	e <i>:</i>	175 feet		-		icleType		Day	Evening	Night	Daily	
Site Data							ıtos:	77.5%		9.6%		
Barrier Heigh	4.	0.0 feet			Ме	edium Tru		84.8%		10.3%	1.84%	
Barrier Type (0-Wall, 1-Bern		0.0 feet 0.0				leavy Tru		86.5%		10.8%	0.74%	
Centerline Dist. to Barrie	•	0.0 100.0 feet										
Centerline Dist. to Observe		100.0 feet		N	oise Sc	ource Ele			eet)			
Barrier Distance to Observe		0.0 feet				Autos:		.000				
Observer Height (Above Pac		5.0 feet				m Trucks:		.000		_		
Pad Elevatio	•	0.0 feet			Heav	y Trucks:	8	.006	Grade Ad	justment.	0.0	
	Road Elevation: 0.0 feet					uivalent L	Distar	nce (in	feet)			
Road Grad		0.0%				Autos:	48	3.505				
Left Vie	v:	-90.0 degree	S		Mediur	m Trucks:	48	3.423				
Right Vie		90.0 degree			Heav	y Trucks:	48	3.506				
FHWA Noise Model Calculat	ions											
VehicleType REMEL	7	raffic Flow	Distanc	е	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos: 74	.55	4.26	(0.09		-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 84	.86	-12.98	(0.11		-1.20		<i>-4.</i> 97	0.0	000	0.000	
Heavy Trucks: 88	.18	-16.93	(0.09		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (v	vithou	t Topo and b	oarrier att	tenu	ation)							
VehicleType Leq Peak	Hour	Leq Day	Leq	j Eve	ening	Leq N	ight		Ldn		VEL	
Autos:	77.7	7	5.8		74.0		68.	.0	76.6	6	77.2	
Medium Trucks:	70.8	6	9.3		62.9		61.	.4	69.8		70.1	
Heavy Trucks:	70.1	6	8.7		59.7		60.9		69.3	3	69.4	
Vehicle Noise:	79.1	7	7.3		74.5		69.	.5	78.	1	78.5	
Centerline Distance to Noise	e Con	tour (in feet)										

70 dBA

344

371

Ldn:

CNEL:

65 dBA

742

800

60 dBA

1,598

1,723

55 dBA

3,443

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: s/o Michelle Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOI	SE MODE	L INPUT	S	
Highway Data			Site Cor	nditions (Ha	ard = 10, Sc	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage:	58,600 vehicles	5	Me	edium Trucks	Autos: s (2 Axles):			
Peak Hour Volume:	5,860 vehicles	S		eavy Trucks	,			
Vehicle Speed:	60 mph		Vehicle	Mix				
Near/Far Lane Distance:	76 feet		Veh	nicleType	Day	Evening	Night	Daily
Site Data				Auto	os: 77.5%	12.9%	9.6%	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			ledium Truck Heavy Truck			10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Barrier:	100.0 feet		Noise S	ource Eleva	ations (in f	eet)		
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet 0.0 feet		Mediu	Autos: ım Trucks: vy Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0
Road Elevation:	0.0 feet		Lane Ed	quivalent Di	stance (in	feet)		
Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree			Autos: ım Trucks: vy Trucks:	92.547 92.504 92.547			
FHWA Noise Model Calculatio	ns							
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road F	-resnel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 4.48	-4	.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.68	-12.76	-4	.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.33	-16.72	-2	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier att	enuation)					
VehicleType Leq Peak Ho	our Leq Day	Leq	Evening	Leq Nig	ht	Ldn	CI	VEL
Autos: 7	2.4	70.5	68.7	,	62.7	71.3	3	71.9
Medium Trucks: 6	5.6	64.1	57.7	•	56.2	64.7	7	64.9
Heavy Trucks:6	5.3	63.9	54.8	3	56.1	64.4	4	64.6
Vehicle Noise: 7	3.9	72.1	69.2)	64.3	72.8	3	73.3

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn	154	332	716	1,542
CNEL	: 166	358	771	1,661

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Job Number: 8141
Road Segment: n/o Edinger Av. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)		
Average Daily Traffic (Adt):	97,900 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Ме	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	9,790 vehicles	S	He	avy Trucks (3	3+ Axles):	15		
Vehicle Speed:	65 mph		Vehicle I	Mix				
Near/Far Lane Distance:	175 feet			icleType	Dov	Evening	Night	Doily
Site Date			veni		Day : 77.5%		9.6%	<i>Daily</i> 97.42%
Site Data			A 4.	Autos Autos Trusalsa				
Barrier Height:				edium Trucks			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			, F	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0
Pad Elevation:								
Road Elevation:	0.0 feet		Lane Eq	uivalent Dis		feet)		
Road Grade:	0.0%				48.505			
Left View:	-90.0 degree	es	Mediui		48.423			
Right View:	90.0 degree	es	Heav	y Trucks:	48.506			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite		resnel	Barrier Att	en Ber	m Atten
Autos: 74.5	5 6.36	0.	09	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 84.8	6 -10.88	0.	11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 88.1	8 -14.83	0.	09	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	nuation)					
VehicleType Leq Peak H			Evening	Leq Nigh	t	Ldn		VEL
Autos:	79.8	77.9	76.1	-	70.1	78.7	7	79.3
Medium Trucks:	72.9	71.4	65.0	(3.5	71.9	9	72.2
Heavy Trucks:	72.2	70.8	61.8	(63.0	71.4	1	71.5
Vehicle Noise:	31.2	79.4	76.6		71.6	80.2	2	80.6
Centerline Distance to Noise	Contour (in feet)	,					

70 dBA

475

512

Ldn: CNEL: 65 dBA

1,024

1,103

60 dBA

2,205

2,377

55 dBA

4,751

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: s/o Edinger Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data				Site Con	ditions (Hai	d = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	86,600 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles).	15		
Peak F	lour Volume:	8,660 vehicles	S	He	avy Trucks (3+ <i>Axles).</i>	15		
Ve	ehicle Speed:	65 mph		Vehicle I	Mix				
Near/Far La	ne Distance:	175 feet			icleType	Day	Evening	Night	Daily
Site Data					Autos		_	9.6%	-
Ra	rrier Height:	0.0 feet		Me	edium Trucks	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0		F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%
Centerline Di	,	100.0 feet							
Centerline Dist.		100.0 feet		Noise So	ource Elevat		eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height		5.0 feet			n Trucks:	4.000			
_	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)		
	Road Grade:	0.0%			Autos:	48.505	-		
	Left View:	-90.0 degree	es	Mediui	m Trucks:	48.423			
	Right View:	90.0 degree		Heav	y Trucks:	48.506			
FHWA Noise Mod	lel Calculation	าร							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	74.55	5.83	0.	09	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	84.86	-11.41	0.	11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	88.18	-15.37	0.	09	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (witl	hout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	Leq I	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos:	79	9.3	77.4	75.6		69.5	78.2	2	78.8
Medium Trucks:	7:	2.4	70.8	64.5		62.9	71.4	4	71.6
Heavy Trucks:	7	1.7	70.3	61.3		62.5	70.9	9	71.0

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	438	943	2,032	4,378						
CNEL:	472	1,017	2,191	4,720						

76.1

71.1

79.6

80.1

78.9

Vehicle Noise:

80.7

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: e/o SR-241 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPU	ΓDATA				NOIS	E MODE	L INPUT	S	
Highway Data				Site	e Condi	tions (Hard	d=10, Se	oft = 15)		
Average Daily Traffic (Adt	: 3,90	00 vehicles	;				Autos:	15		
Peak Hour Percentage		0%			Mediu	ım Trucks ((2 Axles):	15		
Peak Hour Volume	: 39	0 vehicles	;		Heav	y Trucks (3	3+ Axles).	15		
Vehicle Speed	<i>l:</i> 5	55 mph		Vol	hicle Mix	•				
Near/Far Lane Distance	o: 5	52 feet		ver			Day	Fuening	Niaht	Doily
Site Data					Vehicle		Day	Evening	Night	Daily
Site Data					Modi	Autos			9.6%	
Barrier Heigh		0.0 feet				ium Trucks			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm		0.0			неа	avy Trucks	: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrie		0.0 feet		Noi	ise Soul	rce Elevati	ons (in f	eet)		
Centerline Dist. to Observe		0.0 feet				Autos:	2.000			
Barrier Distance to Observe	r: (0.0 feet		٨	/ledium	Trucks:	4.000			
Observer Height (Above Pad): 5	5.0 feet			Heavy		8.006	Grade Ad	justment.	0.0
Pad Elevation	n: (0.0 feet								
Road Elevation	n: (0.0 feet		Lar	ne Equiv	valent Dist	•	feet)		
Road Grade	e: (0.0%					96.607			
Left Viev	<i>:</i> -90	0.0 degree	s	٨	/ledium		96.566			
Right Viev	<i>/:</i> 90	0.0 degree	es		Heavy	Trucks:	96.608			
FHWA Noise Model Calculate	ons									
VehicleType REMEL	Tra	ffic Flow	Distance	e l	Finite Ro	pad Fre	esnel	Barrier Att	en Ber	m Atten
<i>Aut</i> os: 71.	78	-6.91	-4	1.39	-	1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.	40	-24.15	-4	1.39	-	1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.	40	-28.11	-4	1.39	-	1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout 1	Topo and I	barrier att	enuat	tion)					
VehicleType Leq Peak	lour	Leq Day	Leq	Even	ning	Leq Night		Ldn	CI	VEL
Autos:	59.3	5	57.4		55.6	4	9.6	58.2	2	58.8
Medium Trucks:	52.7	5	51.2		44.8	4	3.2	51.7	7	51.9
Heavy Trucks:	52.7	5	51.3		42.2	4	3.5	51.8	3	52.0
Vehicle Noise:	60.9	5	59.1		56.1	5	1.3	59.8	3	60.3
Centerline Distance to Noise	Conto	ur (in feet)								

CNEL:	23	49	105	225

Ldn:

70 dBA

21

65 dBA

45

60 dBA

97

55 dBA

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: n/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NO	ISE MODE	L INPUT	S	
Highway Data			Site Con	ditions (H	lard = 10, S	oft = 15)		
Average Daily Traffic (Adt):	10,900 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Ме	dium Truci	ks (2 Axles):	15		
Peak Hour Volume:	1,090 vehicles	S	He	avy Trucks	s (3+ <i>Axles</i>):	15		
Vehicle Speed:	55 mph		Vehicle	Miv				
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data			V 011		tos: 77.5%		9.6%	-
	0.0 foot		M	edium Truc			10.3%	1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			Heavy Truc			10.8%	0.74%
Centerline Dist. to Barrier:	0.0 100.0 feet							
Centerline Dist. to Observer:	100.0 feet		Noise So		ations (in f	eet)		
Barrier Distance to Observer:	0.0 feet			Autos:	2.000			
Observer Height (Above Pad):	5.0 feet		Mediu	m Trucks:	4.000			
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent D	Distance (in	feet)		
Road Grade:	0.0%			Autos:	96.607	,		
Left View:	-90.0 degree	20	Mediu	m Trucks:	96.566			
Right View:	90.0 degree			y Trucks:	96.608			
rugin vieu.	oo.o dog.o.	30		,				
FHWA Noise Model Calculation								
VehicleType REMEL	Traffic Flow	Distance		Road	Fresnel	Barrier Att		m Atten
Autos: 71.78	_		.39	-1.20	-4.87		000	0.000
Medium Trucks: 82.40	-19.69	-4	.39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.40	-23.64	-4	.39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier att	enuation)					
VehicleType Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq Ni	ght	Ldn	CI	VEL
Autos: 6	3.7	61.8	60.1		54.0	62.6	6	63.2
Medium Trucks: 5	7.1	55.6	49.3		47.7	56.2	2	56.4
Heavy Trucks: 5	7.2	55.7	46.7		48.0	56.3	3	56.4
Vehicle Noise: 6	5.3	63.6	60.6		55.7	64.3	3	64.8

70 dBA

42

45

Ldn: CNEL: 65 dBA

90

96

60 dBA

193

207

55 dBA

416

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: n/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DAT	Α			NO	ISE MODE	L INPUT	s	
Highway Data				S	ite Con	ditions (H	lard = 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	34,100 vehi	cles				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truci	ks (2 Axles):	15		
Peak H	lour Volume:	3,410 vehi	cles		He	avy Trucks	s (3+ Axles):	15		
Ve	hicle Speed:	60 mph	1	V	ehicle l	Mix				
Near/Far La	ne Distance:	76 feet		-		icleType	Day	Evening	Night	Daily
Site Data						• • • • • • • • • • • • • • • • • • • •	tos: 77.5%		9.6%	
Ra	rrier Height:	0.0 fee	.		Me	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	; L		H	Heavy Truc			10.8%	0.74%
Centerline Di	,	100.0 fee	ıt.							
Centerline Dist.		100.0 fee		N	oise So	ource Elev	ations (in f	eet)		
Barrier Distance		0.0 fee				Autos:	2.000			
					Mediui	m Trucks:	4.000			
Observer Height	•	5.0 fee			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 fee		1	ano Fa	uivalant F	istance (in	foot)		
	ad Elevation:	0.0 fee	t	L	arie Eq			ieei)		
	Road Grade:	0.0%				Autos:	92.547			
	Left View:	-90.0 de	•			m Trucks:	92.504			
	Right View:	90.0 de	grees		Heav	y Trucks:	92.547			
FHWA Noise Mod	el Calculation	S								
VehicleType	REMEL	Traffic Flo	w Di	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.	13	-4.11		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-15.	11	-4.11		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-19.	.07	-4.11		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo a	nd barri	ier attenu	ation)					
VehicleType	Leq Peak Hou	ır Leq i	Day	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	70	.0	68.1		66.4		60.3	68.9	9	69.5
Medium Trucks:	63	.3	61.8		55.4		53.8	62.3	3	62.5
Heavy Trucks:	62	.9	61.5		52.5		53.7	62.1	1	62.2
Vehicle Noise:	71	.5	69.7		66.9		61.9	70.	5	71.0
Contarlina Distan	co to Noiso Co	ontour (in f	ootl							

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	108	232	499	1,075
CNEL:	116	249	537	1,158

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Jeffrey Rd. Job Number: 8141 Road Segment: n/o Bryan Av. Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA					NOISE	MODE	L INPUT	S	
Highway Data				3	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	36,000 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	3,600 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		,	Vehicle I	Mix					
Near/Far La	ne Distance:	76 feet				icleTyp	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	•	9.6%	-
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			F	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet		,	Voise So	ourco E	lovatio	ns (in fo	not)		
Centerline Dist.	to Observer:	100.0 feet		,	VOISE SC	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auic n Truck		1.000			
Observer Height	(Above Pad):	5.0 feet					_		Crada Ad	iuotmont	
•	ad Elevation:	0.0 feet			неач	y Truck	(S. E	3.006	Grade Ad	iustirierit.	0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Dista	nce (in t	feet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediui	n Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547			
FHWA Noise Mod	lel Calculation	18									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.36		-4.11	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.88		-4.11	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.83		-4.11	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Ev	ening/	Leq	Night		Ldn	CI	VEL
Autos:	70	0.3	68.4		66.6		60	.5	69.2	2	69.8
Medium Trucks:	63	3.5	62.0		55.6		54	.1	62.5	5	62.8
Heavy Trucks:	63	3.2	61.8		52.7		54	.0	62.3	3	62.5
Vehicle Noise:	71	1.7	70.0		67.1		62	.1	70.7	7	71.2
Centerline Distan	ce to Noise C	ontour (in feet)								
				70 d	<i>IBA</i>	65	dBA	6	60 dBA	55	dBA

111

120

Ldn:

CNEL:

240

259

517

557

1,115

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	47,000 vehicle	S			Autos:	15		
Peak Hour Percentage:			Me	dium Trucks (2 Axles):	15		
Peak Hour Volume:	4,700 vehicle	S	He	avy Trucks (3	+ Axles):	15		
Vehicle Speed:	60 mph		Vehicle I	Miv				
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data			VEII	Autos:	77.5%	J	9.6%	97.42%
			Λ <i>Λ</i> .	edium Trucks:	84.8%		10.3%	1.84%
Barrier Height:				J aium Trucks. J eavy Trucks:			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm).			'	leavy Trucks.	00.57	2.1 /0	10.076	0.7476
Centerline Dist. to Barrier.			Noise So	ource Elevation	ons (in f	eet)		
Centerline Dist. to Observer.				Autos:	2.000			
Barrier Distance to Observer:			Mediu	m Trucks:	4.000			
Observer Height (Above Pad).			Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0
Pad Elevation.						C = 4)		
Road Elevation:			Lane Eq	uivalent Dista		reet)		
Road Grade:					2.547			
Left View:					2.504			
Right View:	90.0 degre	es	Heav	y Trucks: 9	2.547			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fre	snel	Barrier Att	en Ber	m Atten
Autos: 73.2	22 3.52	-4	.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	68 -13.72	-4	.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.3	-17.67	-4	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	71.4	69.5	67.8	6	1.7	70.3	3	70.9
Medium Trucks:	64.7	63.1	56.8	5	5.2	63.7	7	63.9
Heavy Trucks:	64.3	62.9	53.9	5	5.1	63.5	5	63.6
Vehicle Noise:	72.9	71.1	68.3	6	3.3	71.9)	72.3
Centerline Distance to Noise	Contour (in feet)						

70 dBA

133

143

Ldn:

CNEL:

65 dBA

287

309

60 dBA

618

666

55 dBA 1,332

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: s/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S				
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)					
Average Daily Traffic (Adt):	51,600 vehicles	S			Autos:	15					
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15					
Peak Hour Volume:	5,160 vehicles	S	He	avy Trucks (3	3+ Axles):	15					
Vehicle Speed:	60 mph		Vehicle I	Mix							
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily			
Site Data			Vern	Autos	_		9.6%	97.42%			
			Λ./.	Autos edium Trucks			10.3%	1.84%			
Barrier Height:				leavy Trucks			10.8%	0.74%			
Barrier Type (0-Wall, 1-Berm):			,	icavy Trucks	. 00.570	2.1 /0	10.076	0.7476			
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)					
Centerline Dist. to Observer:				Autos:	2.000						
Barrier Distance to Observer:			Mediui	n Trucks:	4.000						
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0			
Pad Elevation:			Lane Equivalent Distance (in feet)								
Road Elevation:			Lane Ly		92.547	i cc i)					
Road Grade:			Medium Trucks: 92.504								
Left View:	3				92.504 92.547						
Right View:	90.0 degree	es	пеач	y Trucks.	92.547						
FHWA Noise Model Calculation	ns										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	resnel	Barrier Att	en Ber	m Atten			
Autos: 73.2	2 3.93	-4	.11	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 83.6	8 -13.31	-4	.11	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 87.3	3 -17.27	-4	.11	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)								
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Nigh	t	Ldn	CI	VEL			
Autos:	71.8	69.9	68.2	(62.1	70.7	7	71.3			
Medium Trucks:	65.1	63.6	57.2 55.6 64.1								
Heavy Trucks:	64.7	63.3	54.3	Ę	55.5	63.9	9	64.0			
Vehicle Noise:	73.3	71.5	68.7		63.7	72.3	3	72.8			
Centerline Distance to Noise	Contour (in feet,)	,								

70 dBA

142

153

Ldn:

CNEL:

65 dBA

305

329

60 dBA

658

708

55 dBA

1,417

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: b/w Roosevelt and I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE S	PECIFIC II	NPUT I	DATA		NOISE MODEL INPUTS									
Highway Data					S	ite Con	ditions (F	<i>lard</i> = 10, S	oft = 15)					
Average Daily T	raffic (Adt):	69,700	vehicles	3				Autos	: 15					
Peak Hour F	Percentage:	109	%			Med	dium Truc	ks (2 Axles)	: 15					
Peak Ho	our Volume:	6,970	vehicles	3		Heavy Trucks (3+ Axles): 15								
	icle Speed:		mph		V	ehicle N	Nix							
Near/Far Lan	e Distance:	76	feet			Vehi	cleType	Day	Evening	Night	Daily			
Site Data							Au	tos: 77.5%	6 12.9%	9.6%	97.42%			
Barı	rier Height:	0.0) feet			Me	edium Tru	cks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-Wa	•	0.0				H	leavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%			
Centerline Disa	,	100.0) feet		M	oiso So	urco Elo	vations (in t	foot)					
Centerline Dist. to	o Observer:	100.0) feet		/4	orse so	Autos:	2.000	eei)					
Barrier Distance to	o Observer:	0.0) feet			Madium	Autos: n Trucks:							
Observer Height (A	Above Pad):	5.0) feet					4.000	Crada Ad	livotmont				
• ,	d Elevation:	0.0) feet			Heav	y Trucks:	8.006	Grade Ad	justinent.	0.0			
Road	d Elevation:	0.0) feet		Lane Equivalent Distance (in feet)									
R	oad Grade:	0.0)%				Autos:	92.547						
	Left View:	-90.0	degree	es		Mediun	n Trucks:	92.504						
	Right View:) degree			Heav	y Trucks:	92.547						
FHWA Noise Mode	l Calculatio	าร												
VehicleType	REMEL	Traffic	Flow	Distanc	e	Finite	Road	Fresnel	Barrier Att	ten Ber	m Atten			
Autos:	73.22	<u> </u>	5.23	-4	1.11		-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	83.68	3	-12.01	-4	1.11		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	87.33	3	-15.96	-2	1.11		-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise	Levels (with	hout To	po and l	barrier att	enu	ation)								
VehicleType I	Leq Peak Ho	ur	Leq Day	Leq	Eve	ening	Leq N	ight	Ldn	CI	VEL			
Autos:	7:	3.1	7	71.2		69.5		63.4	72.0	0	72.6			
Medium Trucks:	6	6.4	6	64.9		58.5		57.0	65.4	4	65.6			
Heavy Trucks:	6	6.0	(64.6		55.6		56.8	65.2	2	65.3			
Vehicle Noise:	7-	4.6		72.8		70.0		65.0	73.0	6	74.1			

70 dBA

173

186

Ldn:

CNEL:

65 dBA

373

402

60 dBA

804

866

55 dBA

1,732

1,865

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: s/o Walnut Av./I-5 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S		
Highway Data			Site Cor	ditions (Har	d = 10, Se	oft = 15)			
Average Daily Traffic (Adt):	50,300 vehicle	es			Autos:	15			
Peak Hour Percentage:			Me	dium Trucks	(2 Axles):	15			
Peak Hour Volume:	5,030 vehicle	es	He	avy Trucks (3	3+ Axles):	15			
Vehicle Speed:	60 mph		Vehicle	Mix					
Near/Far Lane Distance:	76 feet				Dov	Evenina	Night	Doily	
Site Date			ven	icleType	Day : 77.5%	Evening 12.9%	Night 9.6%	Daily	
Site Data			A 4	Autos edium Trucks				97.42%	
Barrier Height:							10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm).			'	Heavy Trucks	: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier.			Noise S	ource Elevati	ions (in f	eet)			
Centerline Dist. to Observer.				Autos:	2.000				
Barrier Distance to Observer.			Mediu	m Trucks:	4.000				
Observer Height (Above Pad).				y Trucks:	8.006	Grade Ad	justment:	0.0	
Pad Elevation.			,						
Road Elevation.			Lane Eq	uivalent Dist	•	feet)			
Road Grade.	0.0%				92.547				
Left View.	-90.0 degre	es	Mediu	m Trucks:	92.504				
Right View.	90.0 degre	es	Heav	y Trucks:	92.547				
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten	
Autos: 73.2	22 3.82	-2	l.11	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 83.6	68 -13.42	-4	l.11	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 87.3	33 -17.38	-2	l.11	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)						
VehicleType Leq Peak H	lour Leq Day	y Leq	Evening	Leq Night	L	Ldn	CI	VEL	
Autos:	71.7	69.8	68.1	6	32.0	70.6	6	71.2	
Medium Trucks:	65.0	63.4	57.1	5	55.5	64.0)	64.2	
Heavy Trucks:	64.6	63.2	54.2 55.4 63.8						
Vehicle Noise:	73.2	71.4	68.6		3.6	72.2	2	72.6	
Centerline Distance to Noise	Contour (in feet	t)							

70 dBA

139

150

Ldn: CNEL: 65 dBA

300

323

60 dBA

647

696

55 dBA

1,393

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: s/o Irvine Center Drive

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS									
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)					
Average Daily	Traffic (Adt):	49,600 vehicle	es					Autos:	15					
Peak Hour	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15					
Peak H	lour Volume:	4,960 vehicle	es		Heavy Trucks (3+ Axles): 15									
Ve	ehicle Speed:	60 mph	•			/lix								
Near/Far La	ne Distance:	76 feet				cleType	,	Day	Evening	Night	Daily			
Site Data							Autos:	77.5%	J	9.6%	-			
Ba	rrier Height:	0.0 feet			Ме	dium T	rucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	_	0.0			H	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%			
Centerline Di	•	100.0 feet		N	oise So	urco E	lovatio	ne (in f	not)					
Centerline Dist.	to Observer:	100.0 feet		/4	oise so	Auto		000	, c ()					
Barrier Distance	to Observer:	0.0 feet			Modium			.000						
Observer Height	(Above Pad):	5.0 feet			Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0									
	Pad Elevation: 0.0 feet				Heav	y Iruck	s: 8	.006	Grade Adj	justrnent	0.0			
Ro	ad Elevation:	0.0 feet		Lá	ane Equ	ıivalen	t Distai	nce (in	feet)					
	Road Grade:	0.0%			Autos: 92.547									
	Left View:	-90.0 degre	es		Mediun	n Truck	s: 92	2.504						
	Right View:	90.0 degre			Heav	y Truck	s: 92	2.547						
FHWA Noise Mod			Dist		F:	D /			Davida A		A ((
VehicleType	REMEL	Traffic Flow	Dista		Finite		Fres		Barrier Att		m Atten			
Autos:				-4.11		-1.20		-4.87		000	0.000			
Medium Trucks:				-4.11		-1.20		-4.97		000	0.000			
Heavy Trucks:	87.33	3 -17.44	-	-4.11		-1.20		-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	hout Topo and	l barrier	attenu	ation)									
VehicleType	Leq Peak Ho	our Leq Da	y L	Leq Eve	ening	Leq	Night		Ldn	C	VEL			
Autos:	7	1.7	69.8		68.0		61.	.9	70.6	3	71.2			
Medium Trucks:	6	4.9	63.4		57.0		55.	.5	63.9	9	64.2			
Heavy Trucks:	6	4.6	63.2		54.1	55.4			63.7		63.8			
Vehicle Noise:	7	3.1	71.4		68.5		63	.5	72.′	1	72.6			

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	138	297	641	1,380							
CNEL:	149	320	690	1,487							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DAT	A		NOISE MODEL INPUTS					
Highway Data				S	ite Con	ditions (H	ard = 10, So	oft = 15)		
Average Daily	Traffic (Adt):	47,900 vehi	cles				Autos:	15		
Peak Hou	r Percentage:	10%			Me	dium Truck	s (2 Axles):	15		
Peak I	Hour Volume:	4,790 vehi	cles		He	avy Trucks	(3+ Axles):	15		
	ehicle Speed:	60 mph		V	ehicle i	Mix				
Near/Far La	ane Distance:	76 feet			Veh	icleType	Day	Evening	Night	Daily
Site Data						Aut	os: 77.5%	12.9%	9.6%	97.42%
Ва	arrier Height:	0.0 fee	t		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0	_		ŀ	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 fee	t	N	oise So	ource Flev	ations (in fe	pet)		
Centerline Dist.	to Observer:	100.0 fee	t		0,00 0	Autos:	2.000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Barrier Distance	to Observer:	0.0 fee	t		Mediu	m Trucks:	4.000			
Observer Height	(Above Pad):	5.0 fee	t				8.006	Grade Adj	iustmont:	0.0
Pad Elevation: 0.0 feet					пеач	y Trucks:	0.000	Grade Auj	iustili c iit.	0.0
Ro	ad Elevation:	0.0 fee	t	L	ane Eq	uivalent D	istance (in	feet)		
	Road Grade:	0.0%				Autos:	92.547			
	Left View:	-90.0 deg	rees		Mediui	m Trucks:	92.504			
	Right View:	90.0 deg			Heav	y Trucks:	92.547			
FHWA Noise Mod	lel Calculation	ıs								
VehicleType	REMEL	Traffic Flo	v Di	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos	73.22	3.	60	-4.11		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-13.	64	-4.11		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-17.	59	-4.11		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo a	nd barri	ier attenu	ation)					
VehicleType	Leq Peak Hou	ur Leq L	Day	Leq Eve	ening	Leq Nig	ght	Ldn	CI	VEL
Autos:	71	.5	69.6		67.8		61.8	70.4	1	71.0
Medium Trucks:	64	1.7	63.2	56.9 55.3 63.8					3	64.0
Heavy Trucks:	64	1.4	63.0		54.0		55.2	63.6	6	63.7
Vehicle Noise.	73	3.0	71.2		68.3		63.4	71.9	9	72.4

70 dBA

135

145

Ldn:

CNEL:

65 dBA

291

313

60 dBA

626

674

55 dBA

1,348

1,452

Sunday,	May 20), 2012

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: b/w Quailcreek and I-405 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA				N	IOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	57,800	vehicle	S					Autos:	15		
Peak Hour	Percentage:	10	%			Me	dium Tri	ucks (2	Axles):	15		
Peak H	lour Volume:	5,780	vehicle	S		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	60	mph			Vehicle i	Miv					
Near/Far La	ne Distance:	76	feet				icleType	.	Day	Evening	Night	Daily
Site Data						• • • • • • • • • • • • • • • • • • • •		Autos:	77.5%		9.6%	,
	vviov Hoimbt.	^	0 feet			М	edium Ti		84.8%		10.3%	
Barrier Type (0-W	rrier Height:	0. 0.					leavy T		86.5%		10.8%	
• • •	ist. to Barrier:		0 0 feet									
Centerline Dist.			0 feet			Noise So			•	eet)		
Barrier Distance			0 feet				Auto		.000			
Observer Height			0 feet				m Truck		.000			
•	ad Elevation:		0 feet			Heav	y Truck	s: 8	.006	Grade Ad	justment	: 0.0
	ad Elevation:		0 feet			Lane Eq	uivalen	t Distai	nce (in t	feet)		
	Road Grade:		0%				Auto		2.547	,		
	Left View:		0 degree	20		Mediu	n Truck		2.504			
	Right View:		0 degree				y Truck		2.547			
FHWA Noise Mod												
VehicleType	REMEL		ic Flow	Di	stance	Finite		Fres		Barrier Att		m Atten
Autos:	_		4.42		-4.1		-1.20		-4.87		000	0.000
Medium Trucks:			-12.82		-4.1		-1.20		-4.97		000	0.000
Heavy Trucks:	87.33	3	-16.78		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout To	po and	barri	ier atter	nuation)						
VehicleType	Leq Peak Ho		Leq Day		Leq E	vening	Leq	Night		Ldn		NEL
Autos:		2.3		70.4		68.7		62		71.2		71.8
Medium Trucks:		5.6		64.0		57.7		56		64.6		64.8
Heavy Trucks:	6	5.2		63.8		54.8		56	.0	64.4	4	64.5
Vehicle Noise:	7	3.8		72.0		69.2		64	.2	72.8	3	73.2
Centerline Distan	ce to Noise C	ontour	(in feet)								
					70	dBA	65	dBA	6	60 dBA	55	dBA
						· · · · · · · · · · · · · · · · · · ·						·

Ldn:

CNEL:

153

165

329

355

709

764

1,528

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd.

Road Segment: e/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	7,300 vehicles	S					Autos:	15		
	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak Ho	our Volume:	730 vehicles	3		He	avy Truc	cks (3+	Axles):	15		
Veh	nicle Speed:	55 mph		1/	'ehicle l	Miv					
Near/Far Lar	ne Distance:	52 feet		V		icleType		Day	Evening	Night	Daily
Site Data					VEII		Autos:	77.5%		9.6%	-
					1.4	ر edium Tı		84.8%		10.3%	1.84%
	rier Height:	0.0 feet				l eavy Tr		86.5%		10.8%	0.74%
Barrier Type (0-Wa	,	0.0			,	icavy ii	ucns.	00.570	2.1 /0	10.070	0.7470
Centerline Dis		100.0 feet		٨	loise So	ource El	evatio	ns (in fe	eet)		
Centerline Dist. t		100.0 feet				Autos	s: 2	.000			
Barrier Distance t		0.0 feet			Mediu	n Trucks	s: 4	.000			
Observer Height (A		5.0 feet			Heav	y Trucks	s: 8	.006	Grade Adj	iustment:	0.0
	d Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
	d Elevation:	0.0 feet		L	ane Eq				reet)		
F	Road Grade:	0.0%				Autos		5.607			
	Left View:	-90.0 degree				n Trucks		5.566			
	Right View:	90.0 degree	es		Heav	y Trucks	s: 96	5.608			
FHWA Noise Mode	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	-4.19		-4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-21.43		-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-25.38		-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (witho	ut Topo and	barrier a	ittenu	ıation)						
VehicleType	Leq Peak Houi	Leq Day	' Le	eq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	62.	0	60.1		58.3		52.	.3	60.9	9	61.5
Medium Trucks:	55.		53.9		47.5		46.		54.4	1	54.7
Heavy Trucks:	55.	4	54.0	45.0 46.2 54.6						54.7	
Vehicle Noise:	63.	6	61.8		58.9		54.	.0	62.5	5	63.0
Centerline Distance	e to Noise Co	ntour (in feet)								

70 dBA

32

34

Ldn: CNEL: 65 dBA

69

74

60 dBA

148

159

55 dBA

318

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd.

Road Segment: w/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT D	ATA			NOISE MODEL INPUTS								
Highway Data					5	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	12,000	vehicles	6					Autos:	15				
•	Percentage:	10%				Me	dium Tr	ucks (2	Axles):	15				
Peak H	lour Volume:	1,200	vehicles	3		He	avy Tru	cks (3+	Axles):	15				
Ve	hicle Speed:	50	mph		,	/ehicle l	N/ise							
Near/Far La	ne Distance:	70	feet		,			2	Dov	Evening	Night	Doily		
Cita Data						ven	icleType		Day	Evening 12.9%	Night	<i>Daily</i> 97.42%		
Site Data						Λ.4.		Autos:	77.5%					
	rrier Height:		feet				edium T		84.8%		10.3%	1.84%		
Barrier Type (0-W	•	0.0				r	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Di		100.0			^	Voise So	ource E	levatio	ns (in f	eet)				
Centerline Dist.	to Observer:	100.0					Auto		.000					
Barrier Distance	to Observer:	0.0	feet			Mediui	m Truck		.000					
Observer Height (Above Pad):	5.0	feet				y Truck		.006	Grade Ad	iustment.	: 0.0		
Pa	ad Elevation:	0.0	feet											
Roa	ad Elevation:	0.0	feet		L	ane Eq	uivalen		•	feet)				
	Road Grade:	0.0	%				Auto	s: 93	.723					
	Left View:	-90.0	degree	es		Mediui	m Truck	rs: 93	.680					
	Right View:	90.0	degree	es		Heav	y Truck	rs: 93	.723					
FHWA Noise Mod	el Calculatior	ıs												
VehicleType	REMEL	Traffic	Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	70.20		-1.62		-4.20)	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	81.00		-18.86		-4.19)	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	85.38		-22.81		-4.20)	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Top	o and l	barrie	r atteni	uation)								
VehicleType	Leq Peak Ho	ur L	eq Day		Leq Ev	rening	Leq	Night		Ldn	CI	NEL		
Autos:	63	3.2	6	31.3		59.5		53.	5	62.1	ĺ	62.7		
Medium Trucks:	56	6.8	5	55.2		48.9		47.	3	55.8	3	56.0		
Heavy Trucks:	57	7.2	Ę	55.7		46.7		48.	0	56.3	3	56.4		
Malifala Maia		4.0		20.4		00.4			_	20.6		040		

Sunday,	May	20,	2012

Vehicle Noise:

64.9

Centerline Distance to Noise Contour (in feet)

63.1

Ldn: CNEL: 60.1

70 dBA

39

42

55.3

65 dBA

84

90

63.9

60 dBA

181

194

64.3

55 dBA

389

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd.

Road Segment: e/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				1	VOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	16,900 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	1,690 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		V	'ehicle l	Miy					
Near/Far La	ne Distance:	70 feet				icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		-							
Centerline Dist.		100.0 feet		^	ioise Sc			ns (in fe	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				n Truck	_	1.000	Crada Ad		0.0
_	ad Elevation:	0.0 feet			Heav	y Truck	(S. E	3.006	Grade Ad	iustment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	os: 93	3.723			
	Left View:	-90.0 degre	es		Mediui	n Truck	rs: 93	3.680			
	Right View:	90.0 degre	es		Heav	y Truck	rs: 93	3.723			
FHWA Noise Mod	lel Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	70.20	-0.13		-4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-17.37		-4.19		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-21.32		-4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	ıation)						
VehicleType	Leq Peak Hou	ur Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	64	1.7	62.8		61.0		55	.0	63.6	3	64.2
Medium Trucks:	58	3.2	56.7		50.4		48	.8	57.3	3	57.5
Heavy Trucks:	58	3.7	57.2		48.2		49	.4	57.8	3	57.9
Vehicle Noise:	66	5.4	64.6		61.6		56	.8	65.3	3	65.8
Centerline Distan	ce to Noise C	ontour (in feet	•)								
				70 di	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

49

53

105

113

227

244

489

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd.

Road Segment: e/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)									
Average Daily	Traffic (Adt):	14,900 vehicle	s					Autos:	15					
Peak Hou	r Percentage:	10%			Me	dium Tru	icks (2	Axles):	15					
Peak I	Hour Volume:	1,490 vehicle	s		He	avy Truc	ks (3+	Axles):	15					
V	ehicle Speed:	50 mph		1	/ehicle l	Wiy								
Near/Far La	ane Distance:	70 feet		_		icleType		Day	Evening	Night	Daily			
Site Data							lutos:	77.5%		9.6%	,			
R	arrier Height:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-V	_	0.0			ŀ	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%			
• • • •	ist. to Barrier:	100.0 feet						<i>(</i> ' •						
Centerline Dist		100.0 feet			voise Sc	ource El			eet)					
Barrier Distance	to Observer:	0.0 feet			NA - P	Autos		.000						
Observer Height	(Above Pad):	5.0 feet				n Trucks		.000	Crada Ad	iuotmont				
F		Heav	y Trucks	s: 8	.006	Grade Adj	justinent.	0.0						
Road Elevation: 0.0 feet					ane Eq	uivalent	Distar	nce (in f	feet)					
	Road Grade:	0.0%				Autos	s: 93	.723						
	Left View:	-90.0 degre	es		Mediui	n Trucks	s: 93	.680						
	Right View:	90.0 degre	es		Heav	y Trucks	s: 93	.723						
FHWA Noise Mod	del Calculation	15												
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten			
Autos	70.20	-0.68		-4.20)	-1.20		-4.87	0.0	000	0.000			
Medium Trucks	: 81.00	-17.92		-4.19)	-1.20		-4.97	0.0	000	0.000			
Heavy Trucks	85.38	-21.87		-4.20)	-1.20		-5.16	0.0	000	0.000			
Unmitigated Nois	se Levels (with	nout Topo and	barri	er attenu	uation)									
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL			
Autos	: 64	4.1	62.2		60.5		54.	4	63.0)	63.6			
Medium Trucks	: 57	7.7	56.2		49.8		48.	3 56.7		7	57.0			
Heavy Trucks	. 58	8.1	56.7		47.7		48.	9	57.3		57.4			
Vehicle Noise	: 65	5.8	64.1		61.0		56.	2	64.8	3	65.3			
Centerline Distar	ice to Noise C	ontour (in feet)											
				70 d	<i>BA</i>	65 (dBA	6	60 dBA	55	dBA			

Ldn:

CNEL:

45

48

97

104

209

224

450

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeromino Rd.

Road Segment: w/o Los Alisos Bl.

Job Number: 8141

Analyst: B. Lawson

Highway Data Average Daily Traffic (Adt): Peak Hour Percentage:					NOISE MODEL INPUTS								
• • • • • • • • • • • • • • • • • • • •			Site Conditions (Hard = 10, Soft = 15)										
reak nour reidentade:	27,800 vehicles	S	Me	edium True	cks (2	Autos: Axles):	15 15						
Peak Hour Volume:	2,780 vehicles	S		eavy Truci	•	,							
Vehicle Speed:	50 mph		Vehicle	Mix									
Near/Far Lane Distance:	70 feet		VehicleType Day Evening Nig						Daily				
Site Data				A	utos:	77.5%	12.9%	9.6%	97.42%				
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			ledium Tru Heavy Tru		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%				
Centerline Dist. to Barrier:	100.0 feet		Noise Source Elevations (in feet)										
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet 0.0 feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: (
Road Elevation:	0.0 feet		Lane Eq	uivalent	Dista	nce (in	feet)						
Road Grade:	0.0%			Autos		3.723							
Left View: Right View:	-90.0 degree 90.0 degree		Medium Trucks: 93.680 Heavy Trucks: 93.723										
FHWA Noise Model Calculation	ns												
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten				
Autos: 70.20	2.03	-4	.20	-1.20		-4.87	0.0	000	0.000				
Medium Trucks: 81.00	-15.21	-4	.19	-1.20		-4.97		000	0.000				
Heavy Trucks: 85.38	-19.16	-4	.20	-1.20		-5.16	0.0	000	0.000				
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)										
VehicleType Leq Peak Ho	our Leq Day	Leq	Evening	Leq N	Vight		Ldn	CI	VEL				
Autos: 6	6.8	8 64.9			57	.1	65.7	7	66.3				
Medium Trucks: 6	60.4 58.9		52.5		51	.0	59.4	4	59.7				
Heavy Trucks: 6	60.8 59.4		50.4	50.4 51.6		.6	60.0		60.1				
Vehicle Noise: 6	8.5	66.8	63.7 59.0 67.5					5	68.0				

70 dBA

68

73

Ldn:

CNEL:

65 dBA

147

158

60 dBA

316

340

55 dBA

681

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeromino Rd.

Road Segment: e/o Los Alisos Bl.

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS											
Highway Data				9	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	23,600 vehicl	es					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tri	ucks (2	Axles):	15				
Peak H	lour Volume:	2,360 vehicl	es		He	avy Trud	cks (3+	Axles):	15				
Ve	ehicle Speed:	50 mph		,	Vehicle I	Wix							
Near/Far La	ne Distance:	70 feet				icleType)	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%	Ŭ I	9.6%	,		
	rrier Height:	0.0 feet			Me	edium Ti		84.8%		10.3%	1.84%		
Barrier Type (0-W	•	0.0				leavy T		86.5%		10.8%	0.74%		
Centerline Di	•	100.0 feet											
Centerline Dist.		100.0 feet			Voise So				eet)				
Barrier Distance		0.0 feet				Auto		.000					
Observer Height		5.0 feet				n Truck		.000	0 - 4 - 4 - 4		0.0		
_	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	0.0		
Road Elevation: 0.0 feet					Lane Eq	uivalent	t Distar	ice (in i	feet)				
	Road Grade:	0.0%				Auto	s: 93	.723					
	Left View:	-90.0 degr	ees		Mediui	n Truck	s: 93	.680					
	Right View:	90.0 degr	ees		Heav	y Truck	s: 93	.723					
FHWA Noise Mod	lel Calculation	S											
VehicleType	REMEL	Traffic Flow	D	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	70.20	1.3	2	-4.20)	-1.20		-4.87	0.0		0.000		
Medium Trucks:	81.00	-15.9	2	-4.19	9	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-19.8	7	-4.20)	-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo an	d barr	ier atten	uation)								
VehicleType	Leq Peak Hou	ır Leq Da	ay	Leq Ev	ening	Leq	Night		Ldn	CI	VEL		
Autos:	66	5.1	64.2		62.5		56.	4	65.0)	65.6		
Medium Trucks:	59).7	58.2		51.8		50.	3	58.7	7	59.0		
Heavy Trucks:	Heavy Trucks: 60.1 58.7				49.7		50.	9	59.3	3	59.4		
Vehicle Noise:	67	7.8	66.1		63.0		58.	2	66.8	3	67.3		
Centerline Distan	ce to Noise Co	ontour (in fee	et)										
				70 a	IBA	65	dBA	6	60 dBA	55	dBA		

Ldn:

CNEL:

61

66

132

141

284

305

611

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd.

Road Segment: s/o Alicia Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NOISE MODEL INPUTS										
Highway Data			Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt):	25,400 vehicle	es			Autos	: 15					
Peak Hour Percentage:	•		Me	dium Trucks	(2 Axles)	: 15					
Peak Hour Volume:	2,540 vehicle	es	Heavy Trucks (3+ Axles): 15								
Vehicle Speed:	50 mph		Vehicle Mix								
Near/Far Lane Distance:	70 feet				Day	Evening	Night	Doily			
Site Data			ven	icleType Auto		Evening 6 12.9%	9.6%	<i>Daily</i> 97.42%			
				Auto edium Truck			10.3%	1.84%			
Barrier Height:							10.3%	0.74%			
Barrier Type (0-Wall, 1-Berm).			'	Heavy Truck	s: 86.5%	6 Z.170	10.6%	0.74%			
Centerline Dist. to Barrier.			Noise S	ource Eleva	tions (in	feet)					
Centerline Dist. to Observer.				Autos:	2.000						
Barrier Distance to Observer.			Medium Trucks: 4.000								
Observer Height (Above Pad).			Heav	Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Pad Elevation.											
Road Elevation.			Lane Eq	uivalent Dis		teet)					
Road Grade.				Autos:	93.723						
Left View.	3 -	es		m Trucks:	93.680						
Right View.	90.0 degre	es	Heav	y Trucks:	93.723						
FHWA Noise Model Calculation											
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road F	resnel	Barrier Att	ten Ber	m Atten			
Autos: 70.2	20 1.64	-2	.20	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 81.0	00 -15.60	-2	.19	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 85.3	38 -19.55	-2	.20	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)								
VehicleType Leq Peak H	lour Leq Da	y Leq	Evening	Leq Nigl	nt	Ldn	CI	VEL			
Autos:	66.4	64.5	62.8		56.7	65.3	3	66.0			
	60.0	0.0 58.5			50.6	59.		59.3			
Heavy Trucks:	60.4	59.0	50.0 51.2			59.6		59.7			
Vehicle Noise:	68.1	66.4	63.3		58.6	67.	1	67.6			
Centerline Distance to Noise	Contour (in fee	t)									

70 dBA

64

69

Ldn:

CNEL:

65 dBA

138

148

60 dBA

298

320

55 dBA

642

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd. Job Number: 8141 Road Segment: b/w ICD and Discovery Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)									
Average Daily	Traffic (Adt):	6,800 vehicles	3					Autos:	15					
Peak Hou	Percentage:	10%			Me	dium Tru	icks (2	Axles):	15					
Peak I	Hour Volume:	680 vehicles	3		He	avy Truc	ks (3+ .	Axles):	15					
Ve	ehicle Speed:	55 mph			/ehicle l	Miv								
Near/Far La	ane Distance:	52 feet				icleType		Day	Evening	Night	Daily			
Site Data							utos:	77.5%		9.6%	-			
	rrier Height:	0.0 feet			Me	edium Tr		84.8%		10.3%	1.84%			
Barrier Type (0-V	•	0.0			ŀ	Heavy Tr	ucks:	86.5%		10.8%	0.74%			
, ,	ist. to Barrier:	100.0 feet		_										
Centerline Dist.		100.0 feet		۸	loise So	ource Ele			eet)					
Barrier Distance		0.0 feet				Autos		000						
Observer Height		5.0 feet				m Trucks		000						
Pad Elevation: 0.0 feet					Heav	y Trucks	s: 8.	006	Grade Adj	iustment:	0.0			
Road Elevation: 0.0 feet					ane Eq	uivalent	Distan	ce (in f	feet)					
_	Road Grade:	0.0%				Autos	s: 96	.607	-					
	Left View:	-90.0 degree	es		Mediui	m Trucks	s: 96	.566						
	Right View:	90.0 degree			Heav	y Trucks	s: 96	.608						
FHWA Noise Mod	lel Calculations													
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten			
Autos:	71.78	-4.50		-4.39)	-1.20		-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-21.74		-4.39)	-1.20		-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-25.69		-4.39)	-1.20		-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)									
VehicleType	Leq Peak Hou	r Leq Day	,	Leq Ev	rening	Leq I	Night		Ldn	CI	VEL			
Autos:	61.	7	59.8		58.0		52.	0	60.6		61.2			
Medium Trucks:	55.	.1	1 53.6				45.	7	54.1	l	54.4			
Heavy Trucks:	55.	.1	53.7		44.7		45.	9	54.3	3	54.4			
Vehicle Noise:	63.	3	61.5		58.6		53.	7	62.2	2	62.7			
Centerline Distan	ce to Noise Co	ntour (in feet,)											
				70 d	<i>BA</i>	65 d	dBA	6	60 dBA	55	dBA			

30

33

Ldn:

CNEL:

65

70

141

151

303

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: b/w Waterworks Wy. and ICD

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)									
Average Daily	Traffic (Adt):	6,900 vehicles	3					Autos:	15					
Peak Hour	Percentage:	10%			Me	dium Tr	rucks (2	Axles):	15					
Peak H	lour Volume:	690 vehicles	5		He	avy Tru	icks (3+	Axles):	15					
Ve	hicle Speed:	55 mph		ν	ehicle l	Mix								
Near/Far La	ne Distance:	52 feet				icleType	е	Day	Evening	Night	Daily			
Site Data							Autos:	77.5%	-	9.6%	-			
Ba	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	_	0.0			ŀ	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%			
Centerline Di	,	100.0 feet			laisa Sa	ource E	lovatio	ns (in fe	not)					
Centerline Dist.	to Observer:	100.0 feet			10/36 30	Auto		2.000						
Barrier Distance	to Observer:	0.0 feet			Mediu	Auto m Truck		1.000						
Observer Height	(Above Pad):	5.0 feet				y Truck	_	3.006	Grade Ad	iustment	. 0.0			
Pad Elevation: 0.0 feet					Heav	y Truck	13.	5.000	Orace Au	justinoni.	0.0			
Road Elevation: 0.0 feet					ane Eq	uivalen	t Dista	nce (in f	eet)					
	Road Grade:	0.0%				Auto	os: 96	6.607						
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 96	6.566						
	Right View:	90.0 degree	es		Heavy Trucks: 96.608									
FHWA Noise Mod	el Calculations	S												
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten			
Autos:	71.78	-4.43		-4.39		-1.20		-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-21.67		-4.39		-1.20		-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-25.63		-4.39		-1.20		-5.16	0.0	000	0.000			
Unmitigated Noise	e Levels (witho	out Topo and	barrie	er attenu	ıation)									
VehicleType	Leq Peak Hou	r Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL			
Autos:	61.	.8	59.9		58.1		52	.0	60.7	7	61.3			
Medium Trucks:	55.	.1	53.6		47.3		45	.7	54.2	2	54.4			
Heavy Trucks:	55.	.2	53.8	44.7 46.0 54.3					3	54.4				
Vehicle Noise:	63.	.3	61.6		58.6		53	.7	62.3	3	62.8			
Centerline Distan	ce to Noise Co	ntour (in feet))											
				70 di	BA	65	dBA	6	0 dBA	55	dBA			

Ldn:

CNEL:

31

33

66

71

142

153

306

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Job Number: 8141

Road Segment: n/o Alton Pkwy.

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Con	ditions	(Hard	= 10, So	ft = 15)			
Average Daily	Traffic (Adt):	6,100 vehicles	s					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15			
Peak F	lour Volume:	610 vehicles	s		He	avy Tru	icks (3+	Axles):	15			
Ve	ehicle Speed:	55 mph		V	/ehicle l	Mix						
Near/Far La	ane Distance:	52 feet		-		icleType	e	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	-	9.6%	-	
	nrrier Height:	0.0 feet			М	edium 7		84.8%		10.3%	1.84%	
Barrier Type (0-V	•	0.0			ŀ	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
	ist. to Barrier:	100.0 feet		_								
Centerline Dist.		100.0 feet		^	loise So			ns (in fe	eet)			
Barrier Distance	to Observer:	0.0 feet				Auto		2.000				
Observer Height		5.0 feet				m Truck	-	.000	Crada Ad			
•	Pad Elevation:	0.0 feet			Heav	y Truck	(S. E	3.006	Grade Ad	justment.	0.0	
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	eet)			
	Road Grade:	0.0%				Auto	s: 96	6.607				
	Left View:	-90.0 degree	es		Mediu	m Truck	ks: 96	6.566				
	Right View:	90.0 degree	es		Heav	y Truck	rs: 96	8.608				
FHWA Noise Mod	lel Calculations	S										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-4.97		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-22.21		-4.39)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-26.16		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)							
VehicleType	Leq Peak Hou			Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	_		59.3		57.6		51		60.1		60.7	
Medium Trucks:			53.1		46.7		45		53.7		53.9	
Heavy Trucks:			53.2		44.2		45		53.8		53.9	
Vehicle Noise:	62	.8	61.0		58.1		53	.2	61.8	3	62.2	
Centerline Distan	ce to Noise Co	ntour (in feet)									
				70 di	BA	65	dBA	6	0 dBA	55	dBA	

Ldn:

CNEL:

28

30

61

65

131

141

282

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: s/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIF	UT DATA		NOISE MODEL INPUTS										
Highway Data				Site Conditions (Hard = 10, Soft = 15)									
Average Daily Traffic (/ Peak Hour Percent Peak Hour Volu	age:	,600 vehicles 10% 960 vehicles			edium Tru eavy Truc	cks (2	,						
Vehicle Sp Near/Far Lane Dista	eed:	55 mph 52 feet		Vehicle		NS (ST	Day	Evening	Night	Daily			
Site Data						utos:	77.5%		9.6%				
Barrier Hei Barrier Type (0-Wall, 1-Be Centerline Dist. to Ba Centerline Dist. to Obse Barrier Distance to Obse Observer Height (Above F Pad Eleva Road Eleva Road Gr Left V	S S	Medium Trucks: 84.8% 4.9% 10.3% 1.8 Heavy Trucks: 86.5% 2.7% 10.8% 0.7 Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608											
FHWA Noise Model Calcu	lations												
VehicleType REM	EL 7	raffic Flow	Distance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten			
	71.78 82.40	-3.00 -20.24	-4. -4.		-1.20 -1.20		-4.87 -4.97		000	0.000			
	86.40	-20.24 -24.19	-4. -4.		-1.20		-4.97 -5.16		000	0.000			
Unmitigated Noise Levels	(withou	it Topo and b	arrier atte	nuation)									
VehicleType Leq Pea	ak Hour	Leq Day	Leq	Evening	Leq N	Vight		Ldn	CI	VEL			
Autos:	63.2		61.3			53.		62.1		62.7			
Medium Trucks:	56.6			48.7		47.		55.6		55.9			
Heavy Trucks:	56.6	56.6 55.2			2 47.4			55.8	3	55.9			
Vehicle Noise:	64.8	6	3.0	60.0		55.	2	63.7	7	64.2			

70 dBA

38

41

Ldn:

CNEL:

65 dBA

82

88

60 dBA

177

191

55 dBA

382

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: n/o Quail Hill Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE S	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions (Hard =	10, Sc	ft = 15)					
Average Daily	Traffic (Adt):	7,700 vehicles	6					Autos:	15					
Peak Hour I	Percentage:	10%			Me	dium Tru	cks (2 A	Axles):	15					
Peak Ho	our Volume:	770 vehicles	6		He	avy Truci	ks (3+ A	Axles):	15					
Vel	hicle Speed:	55 mph		V	/ehicle l	Wiv								
Near/Far Lar	ne Distance:	52 feet				icleType		Day	Evening	Night	Daily			
Site Data					7011			77.5%	J	9.6%	-			
	rior Hoight:	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%			
Barrier Type (0-Wa	rier Height:	0.0 reet 0.0				leavy Tru		86.5%		10.8%	0.74%			
Centerline Dis		100.0 feet												
Centerline Dist. t		100.0 feet		۸	loise So	ource Ele		•	eet)					
Barrier Distance t		0.0 feet				Autos		000						
Observer Height (A		5.0 feet				n Trucks		000						
• ,	nd Elevation:	0.0 feet			Heav	y Trucks	: 8.0	006	Grade Adj	iustment:	0.0			
Road Elevation: 0.0 feet					ane Eq	uivalent	Distan	ce (in f	eet)					
	Road Grade:	0.0%				Autos								
,	Left View:	-90.0 degree) C		Mediui	n Trucks								
	Right View:	90.0 degree				y Trucks.								
	rugin view.	oo.o dogree	,0			<i>y</i> 1100110								
FHWA Noise Mode	el Calculations	}		,										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn	el	Barrier Atte	en Ber	m Atten			
Autos:	71.78	-3.96		-4.39)	-1.20		-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-21.20		-4.39)	-1.20		-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-25.15		-4.39)	-1.20		-5.16	0.0	000	0.000			
Unmitigated Noise	Levels (witho	out Topo and I	barrie	er attenu	ıation)									
	Leg Peak Hou			Leq Ev		Leq N	light		Ldn	CI	VEL			
Autos:	62.	2 (60.3	· · · · · · · · · · · · · · · · · · ·	58.6	· ·	52.5	,	61.1		61.7			
Medium Trucks:	55.	6 5	54.1		47.7		46.2			7	54.9			
Heavy Trucks:	55.	7 .	54.2		45.2		46.4	ļ	54.8	3	54.9			
Vehicle Noise:	63.	8 (62.0		59.1		54.2)	62.8	3	63.2			
Centerline Distanc	e to Noise Co	ntour (in feet))											
				70 d	BA	65 d	BA	6	0 dBA	55	dBA			

Ldn:

CNEL:

33

35

71

76

330

355

153

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: s/o Quail Hill Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS										
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt)	: 12,100	vehicles					Autos:	15				
Peak Hour Percentage				Me	dium Truc	cks (2 .	Axles):	15				
Peak Hour Volume	: 1,210	vehicles		Heavy Trucks (3+ Axles): 15								
Vehicle Speed	: 55	mph		Vehicle Mix								
Near/Far Lane Distance		feet					Day	Funning	Niaht	Doily		
Site Data				veri	icleType ^.	ıtoo.	Day	Evening	Night	Daily		
Site Data				A 4		utos:	77.5%		9.6%			
Barrier Height		feet			edium Tru		84.8%		10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm				, <i>i</i>	Heavy Tru	ICKS:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrie				Noise So	ource Ele	vation	ıs (in fe	eet)				
Centerline Dist. to Observe		feet feet			Autos:	2.	.000					
Barrier Distance to Observe		Medium Trucks: 4.000										
Observer Height (Above Pad			y Trucks:		.006	Grade Ad	iustment.	0.0				
Pad Elevation												
Road Elevation	0.0	feet		Lane Eq	uivalent l		•	feet)				
Road Grade	e: 0.0)%			Autos:		.607					
Left View	<i>:</i> -90.0	degree	S	Mediu	m Trucks:		.566					
Right View	<i>:</i> 90.0	degree	s	Heav	y Trucks:	96	.608					
FHWA Noise Model Calculate	ons											
VehicleType REMEL	Traffic	Flow	Distance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
<i>Aut</i> os: 71.	78	-1.99	-4.3	39	-1.20		<i>-4.</i> 87	0.0	000	0.000		
Medium Trucks: 82.	40	-19.23	-4.3	39	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 86.	40	-23.19	-4.3	39	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (w	ithout To	po and b	parrier atte	nuation)								
VehicleType Leq Peak I	lour l	Leq Day	Leq I	Evening	Leq N	light		Ldn	CI	VEL		
Autos:	64.2	6	32.3	60.5		54.	5	63.1	1	63.7		
Medium Trucks:	57.6	7.6 56.1		49.7		48.	48.2 56.6		6	56.9		
Heavy Trucks:	57.6	57.6 56.2			47.2 48.4			56.8		56.9		
Vehicle Noise:	65.8	6	64.0	61.1		56.	2	64.7	7	65.2		
Centerline Distance to Noise	Contour	(in feet)										

70 dBA

45

48

Ldn:

CNEL:

65 dBA

96

103

60 dBA

207

222

55 dBA

445

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: n/o SR-73 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECI	IFIC INF	PUT DATA				N	OISE I	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions (Hard =	10, So	oft = 15)		
Average Daily Traffic	(Adt): 34	1,400 vehicles	3					Autos:	15		
Peak Hour Percer	ntage:	10%			Me	dium Tru	cks (2 A	Axles):	15		
Peak Hour Vo	olume: 3	3,440 vehicles	3		He	avy Truci	ks (3+ A	Axles):	15		
Vehicle S	peed:	55 mph		,	/ehicle l	Wiv					
Near/Far Lane Dist	tance:	52 feet		-		icleType		Day	Evening	Night	Daily
Site Data					V 011		utos:	77.5%	Ŭ,	9.6%	-
	oiaht.	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%
Barrier He Barrier Type (0-Wall, 1-B	•	0.0 reet 0.0				leavy Tru		86.5%		10.8%	0.74%
Centerline Dist. to B	,	100.0 feet									
Centerline Dist. to Obs		100.0 feet		1	Voise So	ource Ele	evation	s (in fe	eet)		
Barrier Distance to Obs		0.0 feet				Autos		000			
Observer Height (Above		5.0 feet				n Trucks		000			
Pad Elev	•	0.0 feet			Heav	y Trucks	<i>:</i> 8.	006	Grade Adj	iustment.	0.0
Road Elev		0.0 feet		L	Lane Eq	uivalent	Distan	ce (in f	feet)		
Road G		0.0%				Autos		607			
	View:	-90.0 degree	25		Mediui	n Trucks		566			
Right	View:	90.0 degree			Heav	y Trucks	<i>:</i> 96.	608			
3											
FHWA Noise Model Calc											
VehicleType REI		Traffic Flow	Di	stance	Finite		Fresr		Barrier Att		m Atten
Autos:	71.78	2.54		-4.39		-1.20		-4.87		000	0.000
Medium Trucks:	82.40	-14.70		-4.39		-1.20		-4.97		000	0.000
Heavy Trucks:	86.40	-18.65		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Level	ls (witho	ut Topo and I	barri	er atten	uation)						
VehicleType Leq Pe	eak Hour	Leq Day	,	Leq Ev	ening/	Leq N	light		Ldn	CI	VEL
Autos:	68.7	7	8.66		65.1		59.0)	67.6	3	68.2
Medium Trucks:	62.1	(6.06		54.2		52.7	7	61.2	2	61.4
Heavy Trucks:	62.2	2 (60.7		51.7		52.9	9	61.3	3	61.4
Vehicle Noise:	70.3	3	68.5		65.6		60.7	7	69.3	3	69.7
Centerline Distance to N	loise Cor	ntour (in feet))								
		<u> </u>		70 a	IBA	65 a	IBA	6	i0 dBA	55	dBA

Ldn:

CNEL:

89

96

193

207

415

446

894

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Hills Dr.

Road Segment: s/o Paseo de Valencia

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				S	ite Cond	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	24,100 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Med	lium Tri	ucks (2	Axles):	15		
Peak H	lour Volume:	2,410 vehicle	es		Hea	avy Trud	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		V	ehicle N	liy					
Near/Far La	ne Distance:	70 feet				cleType	,	Day	Evening	Night	Daily
Site Data					• • • • • • • • • • • • • • • • • • • •		Autos:	77.5%	•	9.6%	•
	vvia v Haiadat.	0.0 foot			Me	dium Ti		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet 0.0				leavy Ti		86.5%		10.8%	0.74%
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet									
Centerline Dist.		100.0 feet		N	oise So	urce El		•	eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height		5.0 feet			Mediun	n Truck	s: 4	.000			
	ad Elevation:	0.0 feet			Heav	/ Truck	s: 8	.006	Grade Ad	iustment	0.0
Road Elevation: 0.0 feet				Lá	ane Equ	ıivalen	t Distar	nce (in i	feet)		
	Road Grade:	0.0%				Auto		.723	,		
,	Left View:	-90.0 degre	.00		Mediun			.680			
	Right View:	90.0 degre				/ Truck		.723			
	ragin view.	90.0 degre	.C3		Hoav	rraon	o. 00	., 20			
FHWA Noise Mod	el Calculation	ns									
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite I	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	1.41		-4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-15.83		-4.19		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-19.78		-4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo and	barrier a	ttenu	ation)						
VehicleType	Leq Peak Ho			g Eve		Leg	Night		Ldn	CI	VEL
Autos:	6	6.2	64.3	-	62.6		56.	5	65.1	<u> </u>	65.7
Medium Trucks:	59	9.8	58.3		51.9		50.	4	58.8	3	59.1
Heavy Trucks:	6	0.2	58.8		49.7		51.	0	59.3	3	59.5
Vehicle Noise:	6	7.9	66.2	•	63.1		58.	3	66.9)	67.3

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	62	133	288	619
CNEL:	67	143	309	666

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Laguna Hills Dr.

Road Segment: w/o Moulton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECII	FIC INP	PUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (H	ard = 10, Sc	oft = 15)		
Average Daily Traffic (Adt): 30	,600 vehicles	3			Autos:	15		
Peak Hour Percent		10%		Med	dium Truck	ks (2 Axles):	15		
Peak Hour Volu	ume: 3	3,060 vehicles	6	Hea	avy Trucks	(3+ Axles):	15		
Vehicle Sp	eed:	55 mph		Vehicle I	1ix				
Near/Far Lane Dista	nce:	88 feet			cleType	Day	Evening	Night	Daily
Site Data					Aut			9.6%	
Barrier He	iaht·	0.0 feet		Ме	dium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Be	•	0.0		H	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Ba		100.0 feet		Noine Co	······	ations (in f	41		
Centerline Dist. to Obse		100.0 feet		Noise So		ations (in f	eet)		
Barrier Distance to Obse		0.0 feet			Autos:	2.000			
Observer Height (Above F		5.0 feet			n Trucks:	4.000			
Pad Eleva	,	0.0 feet		Heav	/ Trucks:	8.006	Grade Adj	ustment:	0.0
Road Eleva		0.0 feet		Lane Equ	ıivalent D	istance (in	feet)		
Road Gi		0.0%			Autos:	89.850	,		
Left \				Mediun	n Trucks:	89.805			
	-	-90.0 degree				89.850			
Right \	new.	90.0 degree	es	neav _.	/ Trucks:	09.000			
FHWA Noise Model Calcu	lations								
VehicleType REM	IEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	71.78	2.03	-3.9	92	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.20	-3.9	92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.16	-3.9	92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels	(withou	ut Topo and I	barrier atte	nuation)					
VehicleType Leq Pe	ak Hour	Leq Day	Leq E	vening	Leq Nig	ght	Ldn	CI	VEL
Autos:	68.7	•	66.8	65.0		59.0	67.6	5	68.2
Medium Trucks:	62.1	(60.6	54.2		52.7	61.1		61.4
Heavy Trucks:	62.1	(60.7	51.7		52.9	61.3	3	61.4
Vehicle Noise:	70.3		68.5	65.6	•	60.7	69.2	<u> </u>	69.7

70 dBA

89

96

Ldn:

CNEL:

65 dBA

192

206

60 dBA

413

444

55 dBA

889

957

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Rd.

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				NO	DISE I	MODE	L INPUT	s	
Highway Data					Site Con	ditions (l	Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	5,800 vehicle	s					Autos:	15		
• •	Percentage:	10%			Me	dium Truc	cks (2)	Axles):	15		
Peak H	lour Volume:	580 vehicle	S		He	avy Truck	(s (3+	Axles):	15		
Ve	hicle Speed:	35 mph		,	Vehicle I	Miv					
Near/Far La	ne Distance:	20 feet				icleType		Day	Evening	Night	Daily
Site Data					V 011		ıtos:	77.5%		9.6%	-
	rrior Hoimbt.	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 teet 0.0				Heavy Tru		86.5%		10.8%	0.74%
Centerline Di		0.0 100.0 feet									
Centerline Dist.		100.0 feet		1	Noise So	ource Ele			eet)		
Barrier Distance		0.0 feet				Autos:		000			
Observer Height (5.0 feet				n Trucks:		000			
	ad Elevation:	0.0 feet			Heav	y Trucks:	8.	006	Grade Ad	justment.	0.0
- '	ad Elevation:	0.0 feet		1	Lane Eq	uivalent l	Distan	ce (in f	feet)		
	Road Grade:	0.0%				Autos:	99.	544			
	Left View:	-90.0 degree	es		Mediui	n Trucks:	99.	504			
	Right View:	90.0 degree			Heav	y Trucks:	99.	544			
FHWA Noise Mod											
VehicleType	REMEL	Traffic Flow	Di	stance	Finite		Fresi		Barrier Att		m Atten
Autos:	64.30	-3.23		-4.59		-1.20		-4.87		000	0.000
Medium Trucks:	75.75	-20.46		-4.59		-1.20		-4.97		000	0.000
Heavy Trucks:	81.57	-24.42		-4.59	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	ier atten	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq E	/ening	Leq N	light		Ldn	CI	VEL
Autos:	55	.3	53.4		51.6		45.6	6	54.2	2	54.8
Medium Trucks:	49	.5	48.0		41.6		40.	1	48.5	5	48.8
Heavy Trucks:	51	.4	49.9		40.9		42.2	2	50.5	5	50.6
Vehicle Noise:	57	.5	55.8		52.4		48.0	o	56.5	5	56.9
Centerline Distance	ce to Noise Co	ontour (in feet)								
				70 c	<i>IBA</i>	65 d	BA	6	60 dBA	55	dBA

Ldn:

CNEL:

13

13

27

29

58

62

126

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS								
Highway Data				Site Con	ditions (Ha	ard = 10, Sc	oft = 15)					
Average Daily	Traffic (Adt):	18,000 vehicle	S			Autos:	15					
Peak Hour	Percentage:	10%		Me	dium Truck	s (2 Axles):	15					
Peak H	lour Volume:	1,800 vehicle	S	He	avy Trucks	(3+ Axles):	15					
Ve	hicle Speed:	50 mph		Vehicle I	Mix							
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily			
Site Data					Auto		-	9.6%				
	rrier Height:	0.0 feet		Me	edium Truci	ks: 84.8%		10.3%	1.84%			
Barrier Type (0-W	•	0.0		F	leavy Truci	ks: 86.5%	2.7%	10.8%	0.74%			
Centerline Di		100.0 feet										
Centerline Dist.		100.0 feet		Noise So		ations (in f	eet)					
Barrier Distance		0.0 feet			Autos:	2.000						
Observer Height		5.0 feet		Mediur	n Trucks:	4.000						
•	(Above Pau). ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment.	0.0			
		Lano Fai	uivalent Di	istance (in	foot)							
Ro		Lane Ly			icci)							
	Road Grade:	0.0%		A 4 1'	Autos:	93.723						
	Left View:	-90.0 degre			n Trucks:	93.680						
	Right View:	90.0 degree	es	Heav	y Trucks:	93.723						
FHWA Noise Mod	el Calculation	18										
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	70.20	0.14	-4.2	20	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	81.00	-17.09	-4.	19	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	85.38	-21.05	-4.2	20	-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)								
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq E	vening	Leq Nig	ght	Ldn	CI	VEL			
Autos:	65	5.0	63.1	61.3		55.2	63.9)	64.5			
Medium Trucks:	58	8.5	57.0	50.6		49.1	57.6	6	57.8			
Heavy Trucks:	58	8.9	57.5	48.5		49.7	58.1	1	58.2			
Vehicle Noise:	66	6.6	64.9	61.8		57.1	65.6	6	66.1			
Contouling Distan	t- Noi C)	,									

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	51	110	237	510
CNEL:	55	118	254	548

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Lake Forest Dr. Job Number: 8141 Road Segment: s/o SR-241 SB Ramps Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					N	OISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard =	= 10, So	oft = 15)		
Average Daily	Traffic (Adt): 2	7,600 vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	icks (2	Axles):	15		
Peak H	lour Volume:	2,760 vehicles	3		He	avy Truc	ks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		V	/ehicle l	Miv					
Near/Far La	ne Distance:	70 feet				icleType		Day	Evening	Night	Daily
Site Data							lutos:	77.5%		9.6%	-
	rrier Height:	0.0 feet			Me	edium Tr		84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0 feet 0.0			H	Heavy Tr	ucks:	86.5%		10.8%	0.74%
Centerline Dis		100.0 feet									
Centerline Dist.		100.0 feet		۸	loise So	ource El		•	eet)		
Barrier Distance		0.0 feet				Autos		.000			
Observer Height (5.0 feet				m Trucks		.000			
	ad Elevation:	0.0 feet			Heav	y Trucks	s: 8	.006	Grade Adj	iustment:	0.0
	ad Elevation: ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	ice (in f	feet)		
	Road Grade:	0.0%			•	Autos		.723			
,	Left View:	-90.0 degree	25		Mediui	m Trucks		.680			
	Right View:	90.0 degree				y Trucks		.723			
FHWA Noise Mode											
VehicleType	REMEL	Traffic Flow	Dis	stance		Road	Fres	nel	Barrier Att		m Atten
Autos:	70.20	2.00		-4.20		-1.20		-4.87		000	0.000
Medium Trucks:	81.00	-15.24		-4.19		-1.20		-4.97		000	0.000
Heavy Trucks:	85.38	-19.19		-4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (witho	out Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Hou	r Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	66.	8 (64.9		63.1		57.	1	65.7	7	66.3
Medium Trucks:	60.	4 :	58.9		52.5		51.	0	59.4	1	59.6
Heavy Trucks:	60.	8 :	59.4		50.3		51.	6	59.9	9	60.1
Vehicle Noise:	68.	5	66.7		63.7		58.	9	67.5	5	67.9
Centerline Distance	ce to Noise Co	ntour (in feet))								
		· ,		70 d	BA	65 (dBA	6	60 dBA	55	dBA

68

73

Ldn:

CNEL:

146

157

315

338

678

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Rancho Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	36,400 vehicle	es					Autos:	15				
Peak Hour	Percentage:	10%			Med	dium Tru	ucks (2	Axles):	15				
Peak F	lour Volume:	3,640 vehicle	es		Hea	avy Trud	cks (3+	Axles):	15				
Ve	hicle Speed:	50 mph		V	ehicle N	/liy							
Near/Far La	ne Distance:	70 feet				cleType	,	Day	Evening	Night	Daily		
Site Data					VOIII		Autos:	77.5%	•	9.6%	97.42%		
	uuiau Haiadat.	0.0 foot			Me	edium Ti		84.8%		10.3%	1.84%		
	rrier Height:	0.0 feet 0.0				leavy Ti		86.5%		10.8%	0.74%		
Barrier Type (0-W Centerline Di	*	0.0 100.0 feet											
Centerline Dist.		100.0 feet		N	oise So	urce El		•	eet)				
Barrier Distance		0.0 feet				Auto		.000					
Observer Height		5.0 feet			Mediun	n Truck	s: 4	.000					
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	iustment.	0.0		
Road Elevation: 0.0 feet				Lá	ane Equ	uivaleni	t Distar	ce (in i	feet)				
	Road Grade:	0.0%			o _ q	Auto		.723					
	Left View:	-90.0 degre	.00		Mediun	n Truck		.680					
	Right View:	90.0 degre				y Truck		.723					
	ragin view.	90.0 degre	:03		ricav.	y Truon	J. JO	., 20					
FHWA Noise Mod	el Calculation	ns											
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	70.20	3.20		-4.20		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-14.04		-4.19		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	3 -17.99		-4.20		-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	barrier a	ttenu	ation)								
VehicleType	Leq Peak Ho			q Eve		Leq	Night		Ldn	CI	VEL		
Autos:	6	8.0	66.1		64.3		58.	3	66.9)	67.5		
Medium Trucks:	6	1.6	60.1		53.7		52.	2	60.6	6	60.9		
Heavy Trucks:	6	2.0	60.6		51.5		52.	8	61.1	1	61.3		
Vehicle Noise:	6	9.7	68.0		64.9		60.	1	68.7	7	69.1		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	82	176	379	815
CNEL:	88	189	407	876

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

Site Conditions (Hard = 10, Soft = 15)	SITE	SPECIFIC I	NPUT DAT	ΓΑ		NOISE MODEL INPUTS								
Peak Hour Percentage: 10% 3,610 vehicles 15 Heavy Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15 Heavy Trucks (15 Highway Data				S	ite Conditi	ons (Ha	rd = 10, So	oft = 15)						
Peak Hour Volume: Vehicle Speed: Vehicle Speed: Near/Far Lane Distance: 50 mph Near/Far Lane Distance: 70 feet Vehicle Mix Vehicle Type Day Evening Night Daily Night Daily Night Daily Night Daily Night	Average Daily	Traffic (Adt):	36,100 veh	icles				Autos:	15					
Vehicle Speed: Near/Far Lane Distance: 50 mph 70 feet Vehicle Type Day Evening Night Daily Site Data Autos: 77.5% 12.9% 9.6% 97.42% Barrier Height: Barrier Height: Above Pad): 0.0 feet Autos: 34.8% 4.9% 10.3% 18.4% Barrier Height: Above Pad): 100.0 feet No feet Medium Trucks: 84.8% 4.9% 10.3% 10.3% 18.4% Centerline Dist. to Barrier: 100.0 feet No feet Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Day Elevation: 0.0 feet Autos: 93.723 Road Grade: 0.0% Autos: 93.723 Autos: 93.723 FHWA Noise Modeler Calculations Weiche Type REMEL Traffic Flow Distance Finite Road Frestel Barrier Attentors Barrier Atten Demonstration Vehicle Type REMEL Traffic Flow Distance Finite Road Frestel Page 1.20 -1.20 -4.87 0.000 0.000 -0.000 -0.000 -0.000 -0.000 -0.000	Peak Hour	Percentage:	10%			Mediun	n Trucks	s (2 Axles):	15					
Near/Far Lane Distance	Peak H	lour Volume:	3,610 veh	icles		Heavy	Trucks	(3+ Axles):	15					
Near/Far Lane Distance: 70 feet VehicleType Day Evening Night Daily	Ve	hicle Speed:	50 mp	h	V	ehicle Mix								
Site Data	Near/Far La	ne Distance:	70 feet	t			Туре	Dav	Evening	Night	Daily			
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Distance to Observer: 0.0 feet Centerline Dist. to Barrier: 100.0 feet Distance to Observer: 0.0 feet Distance feet feet feet feet feet feet feet fe	Site Data							_	J		_			
Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8% 0.74%	Ra	rrior Hoiaht:	0.0 fe	ot .		Mediu	m Truck	s: 84.8%	4.9%	10.3%	1.84%			
Noise Source Elevations (in feet) Noise Source Elevations (in feet)		_		Ci		Heav	vy Truck	ks: 86.5%	2.7%	10.8%	0.74%			
Centerline Dist. to Observer: 100.0 feet Autos: 2.000				et	A.	-: 0		4: (: £	4\					
Medium Trucks: 4.000 Heavy Trucks: 4.000 Heavy Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Heavy Trucks: 93.723 Medium Trucks: 93.723 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 70.20 3.17 -4.20 -1.20 -4.87 0.000 0.000 Medium Trucks: 81.00 -14.07 -4.19 -1.20 -4.97 0.000 0.000 Heavy Trucks: 85.38 -18.03 -4.20 -1.20 -5.16 0.000 0.000 Medium Trucks: 85.38 -18.03 -4.20 -1.20 -5.16 0.000 0.000 Medium Trucks: 85.38 -18.03 -4.20 -1.20 -5.16 0.000 0.000 Medium Trucks: 86.0 66.1 64.3 58.3 66.9 67.5 Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2 Medium Trucks: 62.0 60.5 60.					N	, ,								
Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.006 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 93.723 Left View: -90.0 degrees Medium Trucks: 93.680 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 70.20 3.17 -4.20 -1.20 -4.87 0.000 0.000 Medium Trucks: 81.00 -14.07 -4.19 -1.20 -4.97 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening	Barrier Distance	to Observer:	0.0 fee	et										
Pad Elevation: 0.0 feet Heavy Trucks: 8.006 Grade Adjustment. 0.0 Road Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 93.723 Left View: -90.0 degrees Medium Trucks: 93.680 Right View: 90.0 degrees Medium Trucks: 93.723 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 70.20 3.17 -4.20 -1.20 -4.87 0.000 0.000 Medium Trucks: 81.00 -14.07 -4.19 -1.20 -4.97 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos:	Observer Height (Above Pad):	5.0 fee	et					Crada Adi	i intmonti	0.0			
Road Grade:		,				Heavy II	rucks:	8.006	Grade Adj	usimeni.	0.0			
Left View: P00.0 degrees Medium Trucks: P3.680 Right View: P00.0 degrees Medium Trucks: P3.723 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 70.20 3.17 -4.20 -1.20 -4.87 0.000 0.000 Medium Trucks: 81.00 -14.07 -4.19 -1.20 -4.97 0.000 0.000 Heavy Trucks: 85.38 -18.03 -4.20 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.0 66.1 64.3 58.3 66.9 67.5 Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2	Ros						alent Dis	stance (in	feet)					
Right View: 90.0 degrees Heavy Trucks: 93.723 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 70.20 3.17 -4.20 -1.20 -4.87 0.000 0.000 Medium Trucks: 81.00 -14.07 -4.19 -1.20 -4.97 0.000 0.000 Heavy Trucks: 85.38 -18.03 -4.20 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.0 66.1 64.3 58.3 66.9 67.5 Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2		Road Grade:	0.0%			A	Autos:	93.723						
FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 70.20 3.17 -4.20 -1.20 -4.87 0.000 0.000 Medium Trucks: 81.00 -14.07 -4.19 -1.20 -4.97 0.000 0.000 Heavy Trucks: 85.38 -18.03 -4.20 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.0 66.1 64.3 58.3 66.9 67.5 Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2		Left View:	-90.0 de	grees		Medium Ti	rucks:	93.680						
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 70.20 3.17 -4.20 -1.20 -4.87 0.000 0.000 Medium Trucks: 81.00 -14.07 -4.19 -1.20 -4.97 0.000 0.000 Heavy Trucks: 85.38 -18.03 -4.20 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.0 66.1 64.3 58.3 66.9 67.5 Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2		Right View:	90.0 de	grees		Heavy Ti	rucks:	93.723						
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 70.20 3.17 -4.20 -1.20 -4.87 0.000 0.000 Medium Trucks: 81.00 -14.07 -4.19 -1.20 -4.97 0.000 0.000 Heavy Trucks: 85.38 -18.03 -4.20 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.0 66.1 64.3 58.3 66.9 67.5 Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2	FUMA Naisa Mad	al Calaulatia												
Autos: 70.20 3.17 -4.20 -1.20 -4.87 0.000 0.000 Medium Trucks: 81.00 -14.07 -4.19 -1.20 -4.97 0.000 0.000 Heavy Trucks: 85.38 -18.03 -4.20 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.0 66.1 64.3 58.3 66.9 67.5 Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2			_	ow Di	istance	Finite Ros	ad F	-resnel	Rarrier Δ#	en Ber	m Δtten			
Medium Trucks: 81.00 -14.07 -4.19 -1.20 -4.97 0.000 0.000 Heavy Trucks: 85.38 -18.03 -4.20 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.0 66.1 64.3 58.3 66.9 67.5 Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2														
Heavy Trucks: 85.38 -18.03 -4.20 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.0 66.1 64.3 58.3 66.9 67.5 Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2					_			_						
Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.0 66.1 64.3 58.3 66.9 67.5 Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2				_	_		_	_						
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 68.0 66.1 64.3 58.3 66.9 67.5 Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2						ation)								
Autos: 68.0 66.1 64.3 58.3 66.9 67.5 Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2		•					l ea Niai	ht	l dn	C	JFI			
Medium Trucks: 61.5 60.0 53.7 52.1 60.6 60.8 Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2	• • •			•	Ley Lve		Ley ivigi							
Heavy Trucks: 62.0 60.5 51.5 52.7 61.1 61.2														

70 dBA

81

87

Ldn:

CNEL:

65 dBA

175

188

60 dBA

376

404

55 dBA

811

871

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

0 0. 0011101	NPUT DATA			N	OISE	MODE	L INPUT	S	
Highway Data			Site Cor	nditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	41,100 vehicle	S				Autos:	15		
Peak Hour Percentage:	10%		Me	edium Tru	ıcks (2	Axles):	15		
Peak Hour Volume:	4,110 vehicle	s	He	eavy Truc	ks (3+	Axles):	15		
Vehicle Speed:	55 mph		Vehicle	Miv					
Near/Far Lane Distance:	88 feet			iicleType		Day	Evening	Night	Daily
Site Data			701		lutos:	77.5%		9.6%	97.42%
Barrier Height:	0.0 feet		M	Iedium Tr		84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			Heavy Tr		86.5%		10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet								
Centerline Dist. to Observer:	100.0 feet		Noise S	ource El			eet)		
Barrier Distance to Observer:	0.0 feet			Autos		2.000			
Observer Height (Above Pad):	5.0 feet			m Trucks		.000			
Pad Elevation:	0.0 feet		Hea	vy Trucks	s: 8	3.006	Grade Ad	iustment:	0.0
Road Elevation:		Lane Ed	uivalent	Dista	nce (in t	feet)			
Road Grade:			Autos		9.850	,			
Left View:	0.0% -90.0 degre	es	Mediu	m Trucks		9.805			
Right View:	90.0 degre			vy Trucks		9.850			
FHWA Noise Model Calculation									
VehicleType REMEL	Traffic Flow	Distanc		Road	Fres		Barrier Att		m Atten
Autos: 71.7			3.92	-1.20		-4.87		000	0.000
Medium Trucks: 82.4	0 -13.92	-;	3.92	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -17.88	-:	3.92	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier at	tenuation)						
VehicleType Leq Peak Ho	our Leq Day	/ Led	g Evening	Leq	Night		Ldn	CI	VEL
Autos: 7	0.0	68.1	66.3	1	60	.3	68.9)	69.5
Medium Trucks: 6	3.4	61.9	55.5		53	.9	62.4	1	62.6
Heavy Trucks:6	3.4	62.0	52.9	l	54	.2	62.5	5	62.7
Vehicle Noise: 7	1.6	69.8	66.8		62	.0	70.5	5	71.0

70 dBA

108

116

Ldn:

CNEL:

65 dBA

233

251

60 dBA

502

540

55 dBA 1,082

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: n/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPE	CIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traff	ic (Adt): 3	9,600 vehicle	es					Autos:	15		
Peak Hour Perd	, ,	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak Hour	Volume:	3,960 vehicle	s		Heavy Trucks (3+ Axles): 15						
Vehicle	Speed:	55 mph		1	/ehicle l	Wiy					
Near/Far Lane D	istance:	88 feet				icleType		Day	Evening	Night	Daily
Site Data					VOIII		Autos:	77.5%	-	9.6%	-
	I I a laula ta	0.0 (Me	, edium Tr		84.8%		10.3%	1.84%
Barrier	•	0.0 feet 0.0				leavy Tr		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1 Centerline Dist. to	,	0.0 100.0 feet								. 0.070	011 170
Centerline Dist. to O				Noise Source Elevations (in feet)							
		100.0 feet				Autos	s: 2	2.000			
Barrier Distance to O		0.0 feet			Mediui	n Trucks	s: 4	.000			
Observer Height (Abov	ve Pau). levation:	5.0 feet			Heav	y Trucks	s: 8	3.006	Grade Adj	iustment.	0.0
Road El		0.0 feet 0.0 feet		,	ane Fo	uivalent	· Distar	nce (in	feet)		
	evalion. I Grade:	0.0 feet 0.0%		-	.470 29	Autos).850	1001)		
	eft View:	-90.0 degre	00		Mediu	n Trucks).805			
	ht View:	90.0 degre				y Trucks		9.850			
rug	in view.	30.0 degre	63		77007	y Traone	<i>.</i> 00				
FHWA Noise Model Ca	alculations	3		•							
VehicleType R	PEMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3.15		-3.92	<u>:</u>	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-14.08		-3.92	!	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-18.04		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Lev	vels (witho	out Topo and	barrie	er attent	uation)						
VehicleType Leq	Peak Hou	r Leq Day	У	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	69.	8	67.9		66.1		60	.1	68.7	7	69.3
Medium Trucks:	63.	2	61.7		55.3		53.	.8	62.2	2	62.5
Heavy Trucks:	63.	2	61.8		52.8		54.	.0	62.4	1	62.5
Vehicle Noise:	71.	4	69.6		66.7		61	.8	70.4	1	70.8
Centerline Distance to	Noise Co	ntour (in feet	t)								

70 dBA

106

114

Ldn:

CNEL:

65 dBA

227

245

60 dBA

490

527

55 dBA

1,056

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S			
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)				
Average Daily Traffic (Adt)	: 40,400 vehicle	es			Autos:	15				
Peak Hour Percentage	•		Me	dium Trucks	(2 Axles):	15				
Peak Hour Volume	4,040 vehicle	es	Heavy Trucks (3+ Axles): 15							
Vehicle Speed	: 55 mph		Vehicle i	Mix						
Near/Far Lane Distance	: 88 feet			icleType	Day	Evening	Night	Daily		
Site Data			ven	Autos		_	9.6%	_		
			Λ.4.	Autos edium Trucks			10.3%	1.84%		
Barrier Height				J aium Trucks J eavy Trucks			10.3%	0.74%		
Barrier Type (0-Wall, 1-Berm)			'	leavy Trucks	. 60.57	0 2.1/0	10.0 /0	0.7470		
Centerline Dist. to Barrier			Noise So	ource Elevat	ions (in f	eet)				
Centerline Dist. to Observer				Autos:	2.000					
Barrier Distance to Observer			Mediu	m Trucks:	4.000					
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
Pad Elevation										
Road Elevation			Lane Eq	uivalent Dist		feet)				
Road Grade					89.850					
Left View	: -90.0 degre	es			89.805					
Right View	: 90.0 degre	es	Heav	y Trucks:	89.850					
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten		
Autos: 71.	78 3.24	-3.	92	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	-14.00	-3.	92	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	40 -17.95	-3.	92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (w	thout Topo and	l barrier atte	nuation)							
VehicleType Leq Peak F	lour Leq Da	y Leq	Evening	Leq Nigh	<u> </u>	Ldn	CI	VEL		
Autos:	69.9	68.0	66.2	6	60.2	68.8	3	69.4		
Medium Trucks:	63.3	61.8	55.4	Ę	53.9	62.3	3	62.6		
Heavy Trucks:	63.3	61.9	52.9	Ę	54.1	62.5	5	62.6		
Vehicle Noise:	71.5	69.7	66.8	(61.9	70.4	4	70.9		
Centerline Distance to Noise	Contour (in fee	t)								

70 dBA

107

115

Ldn: CNEL: 65 dBA

231

248

60 dBA

497

534

55 dBA

1,070

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: n/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPI	ECIFIC IN	PUT DATA			NOISE MODEL INPUTS						
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Trat	ffic (Adt): 3	31,300 vehicle	S					Autos:	15		
Peak Hour Per	. ,	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak Hour	Volume:	3,130 vehicle	s		Heavy Trucks (3+ Axles): 15						
Vehicle	e Speed:	55 mph		V	'ehicle l	Miv					
Near/Far Lane D	Distance:	88 feet		_		icleType		Day	Evening	Night	Daily
Site Data					V 0111		Autos:	77.5%		9.6%	-
	. 11-1-1-1-	0.0 foot			Me	, edium Tr		84.8%		10.3%	1.84%
	r Height:	0.0 feet				leavy Tr		86.5%		10.8%	0.74%
Barrier Type (0-Wall,	,	0.0					GONO.		2 70	101070	0.1 170
Centerline Dist. to		100.0 feet	Noise Source Elevations (in feet)								
Centerline Dist. to C		100.0 feet				Autos	s: 2	.000			
Barrier Distance to C		0.0 feet			Mediui	n Trucks	s: 4	.000			
Observer Height (Abo		5.0 feet			Heav	y Trucks	s: 8	.006	Grade Adj	iustment:	0.0
	levation:	0.0 feet		,	ono Fa	uivalant	Dietar	ago (in	footl		
	levation:	0.0 feet			ane Eq	uivalent		•	ieei)		
	d Grade:	0.0%				Autos		.850			
	eft View:	-90.0 degree				n Trucks		.805			
Rig	ght View:	90.0 degree	es		Heav	y Trucks	s: 89	.850			
FHWA Noise Model C	alculation	5									
VehicleType F	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	2.13		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.11		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.06		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Le	evels (with	out Topo and	barrie	r attenu	ation)						
VehicleType Led	q Peak Hou	r Leq Day	′	Leq Ev	ening	Leq I	Night		Ldn	CI	VEL
Autos:	68	.8	66.9		65.1		59.	.1	67.7	7	68.3
Medium Trucks:	62	.2	60.7		54.3		52.	.8	61.2	2	61.5
Heavy Trucks:	62	.2	60.8		51.8		53.	.0	61.4	1	61.5
Vehicle Noise:	70	4	68.6		65.7		60.	.8	69.3	3	69.8
Centerline Distance to	o Noise Co	ntour (in feet)								

70 dBA

90

97

Ldn:

CNEL:

65 dBA

194

209

60 dBA

419

451

55 dBA

903

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: n/o Rockfield Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DAT	Α		NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions (H	<i>lard</i> = 10, S	oft = 15)					
Average Daily	Traffic (Adt):	47,400 vehi	cles				Autos	: 15					
•	Percentage:	10%			Me	dium Truc	ks (2 Axles)	: 15					
Peak H	lour Volume:	4,740 vehi	cles		He	avy Truck	s (3+ Axles)	: 15					
Ve	hicle Speed:	55 mph	1	V	'ehicle l	Mix							
Near/Far La	ne Distance:	88 feet		V		icleType	Day	Evening	Night	Daily			
Site Data					veni		tos: 77.5%	J	9.6%	97.42%			
					1.1.	Au edium Truc			10.3%	1.84%			
	rrier Height:	0.0 fee	et						10.8%				
Barrier Type (0-W	•	0.0			r	leavy Trud	cks: 86.5%	% Z.1%	10.6%	0.74%			
Centerline Di		100.0 fee		٨	Noise Source Elevations (in feet)								
Centerline Dist.		100.0 fee				Autos:	2.000						
Barrier Distance		0.0 fee			Mediur	n Trucks:	4.000						
Observer Height	•	5.0 fee			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0			
	ad Elevation:	0.0 fee		_									
	ad Elevation:	0.0 fee	ŧt	L	ane Eq		istance (in	feet)					
	Road Grade:	0.0%				Autos:	89.850						
	Left View:	-90.0 de	grees			n Trucks:	89.805						
	Right View:	90.0 de	grees		Heav	y Trucks:	89.850						
FHWA Noise Mod	el Calculation	าร											
VehicleType	REMEL	Traffic Flo	w Di	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	71.78	3.	94	-3.92		-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-13.	30	-3.92		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-17.	26	-3.92		-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	hout Topo a	nd barri	ier attenu	ıation)								
VehicleType	Leq Peak Ho	ur Leq	Day	Leq Ev	ening	Leq Ni	ght	Ldn	CI	VEL			
Autos:	70	0.6	68.7		66.9		60.9	69.5	5	70.1			
Medium Trucks:	64	4.0	62.5		56.1		54.6	63.0)	63.3			
Heavy Trucks:	64	4.0	62.6		53.6		54.8	63.2	2	63.3			
Vehicle Noise:	7:	2.2	70.4		67.5					71.6			

70 dBA

119

128

Ldn:

CNEL:

65 dBA

256

276

60 dBA

553

594

55 dBA

1,190

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: b/w Rockfield Bl. and I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA **NOISE MODEL INPUTS** Site Conditions (Hard = 10, Soft = 15) Highway Data Autos: 15 Average Daily Traffic (Adt): 76,500 vehicles Medium Trucks (2 Axles): 15 Peak Hour Percentage: 10% Peak Hour Volume: 7,650 vehicles Heavy Trucks (3+ Axles): 15 Vehicle Speed: 55 mph **Vehicle Mix** Near/Far Lane Distance: 88 feet VehicleType Day Evening Night Daily Site Data Autos: 77.5% 12.9% 9.6% 97.42% Medium Trucks: 84.8% 4.9% 10.3% 1.84% Barrier Height: 0.0 feet Heavy Trucks: 86.5% 2.7% 10.8% 0.74% Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Noise Source Elevations (in feet) Centerline Dist. to Observer: 100.0 feet Autos: 2.000 Barrier Distance to Observer: 0.0 feet Medium Trucks: 4.000 Observer Height (Above Pad): 5.0 feet Grade Adjustment: 0.0 8.006 Heavy Trucks: Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Elevation: 0.0 feet Autos: 89.850 Road Grade: 0.0% Medium Trucks: 89.805 Left View: -90.0 degrees Heavy Trucks: 89.850 Right View: 90.0 degrees **FHWA Noise Model Calculations** VehicleType REMEL Traffic Flow Finite Road Barrier Atten Distance Fresnel Berm Atten -4.87 Autos: 71.78 6.01 -3.92-1.200.000 0.000 Medium Trucks: 82.40 -11.22 -3.92 -1.20 -4.97 0.000 0.000 Heavy Trucks: 0.000 86.40 -15.18 -3.92-1.20-5.160.000

Unmitigated Nois	Unmitigated Noise Levels (without Topo and barrier attenuation)											
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL						
Autos:	72.7	70.8	69.0	63.0	71.6	72.2						
Medium Trucks:	66.1	64.6	58.2	56.6	65.1	65.3						
Heavy Trucks:	66.1	64.7	55.6	56.9	65.2	65.4						
Vehicle Noise:	74.3	72.5	69.5	64.7	73.2	73.7						

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	164	353	760	1,638						
CNEL:	176	380	818	1,762						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Avenida Carlota/I-5 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA		NOISE MODEL INPUTS					
Highway Data			Site Cond	ditions (Hard	d=10, So	oft = 15)		
Average Daily Traffic (Adt):	22,900 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Med	lium Trucks ((2 Axles):	15		
Peak Hour Volume:	2,290 vehicles	S	Hea	vy Trucks (3	3+ Axles):	15		
Vehicle Speed:	60 mph		Vehicle M	lix				
Near/Far Lane Distance:	76 feet			cleType	Day	Evening	Night	Daily
Site Data				Autos			9.6%	97.42%
Barrier Height:	0.0 feet		Me	dium Trucks	: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		Н	eavy Trucks	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		Naina Ca	- []	(i £	4)		
Centerline Dist. to Observer:	100.0 feet		Noise So	urce Elevati		eet)		
Barrier Distance to Observer:	0.0 feet		A 4 - 1'	Autos:	2.000			
Observer Height (Above Pad):	5.0 feet			Trucks:	4.000	Crada Ad	iuotmont	0.0
Pad Elevation:	0.0 feet		Heavy	/ Trucks:	8.006	Grade Ad	justinent.	0.0
Road Elevation:	0.0 feet		Lane Equ	ivalent Dist	ance (in	feet)		
Road Grade:	0.0%			Autos:	92.547			
Left View:	-90.0 degree	es	Medium	Trucks:	92.504			
Right View:	90.0 degree	es	Heavy	Trucks:	92.547			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite I	Road Fro	esnel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 0.40	-4.1	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	8 -16.84	-4.1	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.3	3 -20.80	-4.1	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)					
VehicleType Leq Peak H	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL
Autos:	88.3	66.4	64.6	5	8.6	67.2	2	67.8
Medium Trucks:	31.5	60.0	53.7	5	2.1	60.6	6	60.8
Heavy Trucks:	51.2	59.8	50.8	5	2.0	60.4	4	60.5
Vehicle Noise:	69.8	68.0	65.1	6	0.2	68.7	7	69.2

70 dBA

82

89

Ldn:

CNEL:

65 dBA

178

191

60 dBA

383

412

55 dBA

824

888

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o ICD

Job Number: 8141

Analyst: B. Lawson

SITE SPI	ECIFIC IN	PUT DATA			NOISE MODEL INPUTS							
Highway Data				S	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)			
Average Daily Tra	ffic (Adt): 1	2,700 vehicles	3					Autos:	15			
Peak Hour Per		10%			Me	dium Tru	ucks (2	Axles):	15			
Peak Hour	•	1,270 vehicles	3		Heavy Trucks (3+ Axles): 15							
Vehicl	e Speed:	60 mph			/abiala l	· · · · · · · · · · · · · · · · · · ·						
Near/Far Lane I	•	76 feet			/ehicle l			D	F	N I auto I	D-11.	
0'4- 0-4-					veni	icleType		Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		9.6%		
Barrie	r Height:	0.0 feet				edium Ti		84.8%		10.3%	1.84%	
Barrier Type (0-Wall,	1-Berm):	0.0			F	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to		100.0 feet		٨	Noise Source Elevations (in feet)							
Centerline Dist. to C		100.0 feet				Auto	s: 2	2.000	-			
Barrier Distance to C	Observer:	0.0 feet			Mediur	n Truck	s: 4	.000				
Observer Height (Abo	ove Pad):	5.0 feet				y Truck		3.006	Grade Ad	iustment:	0.0	
Pad E	Elevation:	0.0 feet				-						
Road E	Elevation:	0.0 feet		L	ane Eq	uivalent	t Distai	nce (in	feet)			
Roa	nd Grade:	0.0%				Auto	s: 92	2.547				
L	₋eft View:	-90.0 degree	es		Mediur	n Truck	s: 92	2.504				
Ri	ght View:	90.0 degree	es		Heav	y Truck	s: 92	2.547				
FHWA Noise Model C	Calculations	S										
VehicleType I	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	73.22	-2.16		-4.11	1	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-19.40		-4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-23.36		-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Le	evels (with	out Topo and	barrier	atteni	uation)							
VehicleType Led	q Peak Hou	r Leq Day	·	Leq Ev	rening	Leq	Night		Ldn	CI	VEL	
Autos:	65.	7	63.8		62.1		56	.0	64.6	3	65.3	
Medium Trucks:	59.	0	57.5		51.1		49	.6	58.0)	58.3	
Heavy Trucks:	58.	7	57.2		48.2		49	.4	57.8	3	57.9	
Vehicle Noise:	67.	2	65.5		62.6		57	.6	66.2	2	66.7	
Centerline Distance t	o Noise Co	ntour (in feet)									

70 dBA

56

60

Ldn:

CNEL:

65 dBA

120

129

60 dBA

258

278

55 dBA

557

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: b/w Scientific Way and Tesla

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DAT	4		NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions (F	lard = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	21,900 vehic	cles				Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Axles).	15				
Peak H	lour Volume:	2,190 vehic	cles		He	avy Truck	s (3+ Axles).	15				
Ve	hicle Speed:	60 mph	60 mph			Vix						
Near/Far La	ne Distance:	76 feet		-		icleType	Day	Evening	Night	Daily		
Site Data							tos: 77.5%		9.6%	_		
Ra	rrier Height:	0.0 fee	<u> </u>		Me	edium True	cks: 84.8%	6 4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0			F	leavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%		
Centerline Di	•	100.0 feet		_								
Centerline Dist.		100.0 feet		^	Noise Source Elevations (in feet)							
Barrier Distance		0.0 feet				Autos:	2.000					
		5.0 feet			Mediui	n Trucks:	4.000					
Observer Height	(Above Pau). ad Elevation:	0.0 feet			Heavy Trucks: 8.006 Grade Adjustment: 0							
	ad Elevation:		0.0 feet			uivalent [Distance (in	feet)				
	Road Grade:	0.0 166		_	<u> </u>	Autos:	92.547					
	Left View:		*000		Modiuu	n Trucks:	92.504					
	Right View:	-90.0 deg				y Trucks:	92.547					
	right view.	90.0 deg	1662		Heav	y Trucks.	32.541					
FHWA Noise Mod	el Calculation	าร		ı								
VehicleType	REMEL	Traffic Flov	v Di	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	73.22	2. 0.2	20	-4.11		-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-17.0)3	-4.11		-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-20.9	99	-4.11		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	nout Topo ai	nd barri	ier attenu	ıation)							
VehicleType	Leq Peak Ho	ur Leq E	ay	Leq Ev	ening	Leq Ni	ight	Ldn	CI	VEL		
Autos:	68	8.1	66.2		64.4		58.4	67.0)	67.6		
Medium Trucks:	6′	1.3	59.8		53.5		51.9	9 60.4		60.6		
Heavy Trucks:	6′	1.0	59.6		50.6	.6 51.8 60.2			60.3			
Vehicle Noise:	69	9.6	67.8		64.9		60.0	68.5	5	69.0		

70 dBA

80

86

Ldn: CNEL: 65 dBA

172

186

60 dBA

371

400

55 dBA

800

862

Sunday,	May 20,	2012

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Job Number: 8141 Analyst: B. Lawson

Road Name: Lake Forest Dr. Road Segment: e/o Bake Pkwy.

SITE SPECIFIC	INPUT DATA			NOIS	SE MODE	EL INPUT	S			
Highway Data			Site Cor	ditions (Ha	rd = 10, S	oft = 15)				
Average Daily Traffic (Adt):	23,800 vehicle	es			Autos	: 15				
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles)	: 15				
Peak Hour Volume:	2,380 vehicle	es	Heavy Trucks (3+ Axles): 15							
Vehicle Speed:	60 mph		Vehicle Mix							
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily		
Site Data			Ven	Auto		_	9.6%	_		
			1.1	edium Truck			10.3%	1.84%		
Barrier Height:				Heavy Truck			10.3%	0.74%		
Barrier Type (0-Wall, 1-Berm).			'	leavy Truck	3. 00.57	0 2.1 /0	10.070	0.7470		
Centerline Dist. to Barrier.			Noise S	ource Eleva	tions (in t	feet)				
Centerline Dist. to Observer.				Autos:	2.000					
Barrier Distance to Observer.			Mediu	m Trucks:	4.000					
Observer Height (Above Pad).			Heav	y Trucks:	8.006	Grade Ad	ljustment.	0.0		
Pad Elevation.			I ama Fa			foot				
Road Elevation.			Lane Eq	uivalent Dis		reet)				
Road Grade.				Autos:	92.547					
Left View.	3 -			m Trucks:	92.504					
Right View.	90.0 degre	es	Heav	y Trucks:	92.547					
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road F	resnel	Barrier Att	ten Ber	m Atten		
Autos: 73.2	22 0.57	-4	.11	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 83.6	68 -16.67	-4	.11	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 87.3	-20.63	-4	.11	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)							
VehicleType Leq Peak H	lour Leq Day	y Leq	Evening	Leq Nigh	nt	Ldn	CI	VEL		
Autos:	68.5	66.6	64.8		58.8	67.4	4	68.0		
Medium Trucks:	61.7	60.2	2 53.8 52.3 60.7				61.0			
Heavy Trucks:	61.4	60.0	50.9		52.2	60.5	5	60.7		
Vehicle Noise:	70.0	68.2	65.3		60.4	68.9	9	69.4		
Centerline Distance to Noise	Contour (in feet	t)					,			

70 dBA

85

91

Ldn:

CNEL:

65 dBA

182

196

60 dBA

393

423

55 dBA

846

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Lake Forest Dr. Job Number: 8141 Road Segment: w/o Bake Pkwy. Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS							
Highway Data			S	ite Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily Traffic (Adt):	22,500 vehicle	S				,	Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tri	ıcks (2 A	(xles	15		
Peak Hour Volume:	2,250 vehicle	S		He	avy Trud	cks (3+ A	(xles	15		
Vehicle Speed:	55 mph		V	'ehicle l	Miv					
Near/Far Lane Distance:	52 feet				icleType		Day	Evening	Night	Daily
Site Data				• • • • • • • • • • • • • • • • • • • •			77.5%		9.6%	-
	0.0 foot			Ме	edium Tı		84.8%		10.3%	1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0				leavy Ti		86.5%		10.8%	0.74%
Centerline Dist. to Barrier:	0.0 100.0 feet									
Centerline Dist. to Observer:	100.0 feet		N	loise Sc		evations		eet)		
Barrier Distance to Observer:	0.0 feet				Auto		000			
Observer Height (Above Pad):	5.0 feet				n Truck		000			
Pad Elevation:	0.0 feet			Heav	y Truck	s <i>:</i> 8.0	006	Grade Adj	iustment:	0.0
Road Elevation:	0.0 feet		Li	ane Equ	uivalent	Distanc	e (in t	feet)		
Road Grade:	0.0%				Auto					
Left View:	-90.0 degre	es		Mediur	n Truck					
Right View:	90.0 degre			Heav	y Truck	s: 96.6	808			
FHWA Noise Model Calculation				T						
VehicleType REMEL	Traffic Flow	Dista		Finite		Fresn		Barrier Atte		m Atten
Autos: 71.78			-4.39		-1.20		-4.87	0.0		0.000
Medium Trucks: 82.4			-4.39		-1.20		-4.97		000	0.000
Heavy Trucks: 86.4	-20.49		-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier	attenu	ation)						
VehicleType Leq Peak Ho	our Leq Day	/ L	.eq Eve	ening	Leq	Night		Ldn	CI	VEL
Autos: 6	6.9	65.0		63.2		57.2		65.8	3	66.4
Medium Trucks: 6	0.3	58.8		52.4		50.9)	59.3	3	59.6
Heavy Trucks: 6	0.3	58.9		49.9		51.1		59.5	5	59.6
Tieavy Trucks.										
	8.5	66.7		63.7		58.9)	67.4	1	67.9
				63.7		58.9)	67.4	1	67.9

Ldn:

CNEL:

67

72

145

156

313

336

674

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS							
Highway Data				S	Site Con	ditions ((Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 2	22,600 vehicle:	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	icks (2	Axles):	15		
Peak H	lour Volume:	2,260 vehicles	S		He	avy Truc	ks (3+ .	Axles):	15		
Ve	hicle Speed:	50 mph		V	/ehicle l	Wiy					
Near/Far La	ne Distance:	70 feet		_		icleType		Day	Evening	Night	Daily
Site Data					VOIII		utos:	77.5%		9.6%	-
	uuiau Haiadat.	0.0 foot			Me	edium Tr		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet 0.0				Heavy Tr		86.5%		10.8%	0.74%
Barrier Type (0-W Centerline Di		0.0 100.0 feet			-				,0	. 0.070	011 170
Centerline Di Centerline Dist.		100.0 feet		٨	loise Sc	ource Ele	evation	s (in fe	eet)		
Barrier Distance		0.0 feet				Autos	s: 2.	000			
					Mediui	n Trucks	s: 4.	000			
Observer Height	•	5.0 feet			Heav	y Trucks	s: 8.	006	Grade Adj	iustment:	0.0
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet					ane Fo	uivalent	Distan	ce (in t	feet)		
Road Elevation: 0.0 feet Road Grade: 0.0%					.470 29	Autos		.723	000		
	Left View:	-90.0 degree	20		Mediu	n Trucks		.680			
	Right View:	90.0 degree				y Trucks		.723			
	right view.	30.0 degree	53		77007	y Traone	. 50	., 20			
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresi	nel	Barrier Atte	en Ber	m Atten
Autos:	70.20	1.13		-4.20)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-16.11		-4.19)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-20.06		-4.20)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	ening	Leq I	Vight		Ldn	CI	VEL
Autos:	65	.9	64.0		62.3		56.	2	64.8	3	65.4
Medium Trucks:	59	.5	58.0		51.6		50.	1	58.5	5	58.8
Heavy Trucks:	59	.9	58.5		49.5		50.	7	59.1	<u> </u>	59.2
Vehicle Noise:	67	.6	65.9		62.8		58.	1	66.6	6	67.1
Centerline Distan	ce to Noise Co	ontour (in feet)								
		· · · · · ·		70 d	BA	65 d	BA .	6	i0 dBA	55	dBA

Ldn:

CNEL:

59

64

128

137

275

296

593

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: s/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	SE MODE	L INPUTS	S			
Highway Data			Site Cond	ditions (Ha	rd = 10, So	oft = 15)				
Average Daily Traffic (Adt):	28,100 vehicles	S			Autos:	15				
Peak Hour Percentage:	10%		Med	lium Trucks	s (2 Axles):	15				
Peak Hour Volume:	2,810 vehicles	S	Hea	Heavy Trucks (3+ Axles): 15						
Vehicle Speed:	55 mph		Vehicle Mix							
Near/Far Lane Distance:	88 feet			cleType	Day	Evening	Night	Daily		
Site Data				Auto		_	9.6%	97.42%		
Barrier Height:	0.0 feet		Me	dium Truck	s: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):			Н	eavy Truck	s: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:			N-: 0-	- []	4: /: f:	4)				
Centerline Dist. to Observer:			Noise So	urce Eleva	•	eet)				
Barrier Distance to Observer:				Autos: 2.000						
Observer Height (Above Pad):			Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Pad Elevation: 0.0 feet			Heavy	/ Trucks:	8.006	Grade Adj	ustment:	0.0		
Road Elevation: 0.0 feet			Lane Equ	ivalent Dis	stance (in	feet)				
Road Grade:	0.0%			Autos:	89.850					
Left View:		es	Mediun	Trucks:	89.805					
Right View:	•		Heavy	/ Trucks:	89.850					
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distance	Finite I	Road F	resnel	Barrier Atte	en Ber	m Atten		
Autos: 71.7	8 1.66	-3.9	92	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -15.57	-3.9	92	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	0 -19.53	-3.9	92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	nuation)							
VehicleType Leq Peak H	our Leq Day	/ Leq E	Evening	Leq Nigi	ht	Ldn	CI	VEL		
Autos:	8.3	66.4	64.7		58.6	67.2	2	67.8		
Medium Trucks:	61.7	60.2	53.8		52.3	60.8	3	61.0		
Heavy Trucks:	61.7	60.3	51.3		52.5	60.9)	61.0		
Vehicle Noise:	69.9	68.1	65.2		60.3	68.9)	69.3		

70 dBA

84

90

Ldn:

CNEL:

65 dBA

181

195

60 dBA

390

419

55 dBA 840

904

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: e/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DAT	A			N	OISE N	/IODE	L INPUT	S		
Highway Data				5	Site Con	ditions (Hard =	10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	41,200 vehi	cles				,	Autos:	15			
	Percentage:	10%			Me	dium Tru	cks (2 A	Axles):	15			
Peak I	Hour Volume:	4,120 vehi	cles		Heavy Trucks (3+ Axles): 15							
Ve	ehicle Speed:	55 mph		_	/ehicle l	Wiv						
Near/Far La	ane Distance:	88 feet		-		icleType		Day	Evening	Night	Daily	
Site Data					V 011			77.5%		9.6%	-	
	vrior Hoimbt.	0.0 fee			Me	edium Tru		84.8%		10.3%	1.84%	
Barrier Type (0-V	rrier Height:	0.0 ree	τ		Heavy Trucks: 86.5% 2.7% 10.8% 0.74							
• • •	ist. to Barrier:	100.0 fee	•									
Centerline Dist.		100.0 fee			Voise So	ource Ele		-	eet)			
Barrier Distance		0.0 fee			Autos: 2.000							
Observer Height		5.0 fee			Medium Trucks: 4.000							
=	Pad Elevation:	0.0 fee			Heav	y Trucks	<i>:</i> 8.0	006	Grade Ad	iustment:	0.0	
	ad Elevation:	0.0 fee		Lane Equivalent Distance (in feet)								
710	Road Grade:	0.0%	•			Autos			,			
	Left View:	-90.0 deg	irees		Mediui	n Trucks						
	Right View:	90.0 deg	•			y Trucks						
FHWA Noise Mod												
VehicleType	REMEL	Traffic Flo		istance	Finite		Fresn		Barrier Att		m Atten	
Autos:			33	-3.92		-1.20		-4.87		000	0.000	
Medium Trucks:				-3.92		-1.20		-4.97		000	0.000	
Heavy Trucks:	86.40) -17.	87	-3.92	2	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (wit	hout Topo a	nd barr	ier atten	uation)							
VehicleType	Leq Peak Ho	our Leq L	Day	Leq Ev	rening	Leq N	light		Ldn	CI	VEL	
Autos:	7	0.0	68.1		66.3		60.3	3	68.9)	69.5	
Medium Trucks:	6	3.4	61.9		55.5		54.0)	62.4	1	62.7	
Heavy Trucks:	6	3.4	62.0		52.9		54.2	2	62.6	3	62.7	
Vehicle Noise:	7	1.6	69.8		66.8		62.0)	70.5	5	71.0	
Centerline Distan	ce to Noise C	Contour (in f	eet)									
		•						1		_		

70 dBA

108

117

Ldn:

CNEL:

65 dBA

234

251

60 dBA

503

541

55 dBA

1,084

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: w/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	36,300 v	ehicles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	3,630 v	ehicles		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	50 n	nph		Vehicle i	Wiy					
Near/Far La	ne Distance:	70 fe	eet			icleType	2	Day	Evening	Night	Daily
Site Data					Veri		Autos:	77.5%		•	97.42%
					Medium Trucks: 84.8% 4.9% 10.3%					1.84%	
	rrier Height:	0.0	teet			leavy T		86.5%		10.8%	0.74%
Barrier Type (0-W		0.0	£1			roavy r	raono.	00.070	2.1 70	10.070	0.7 170
Centerline Di		100.0			Noise So	ource E	levatio	ns (in fe	eet)		
Centerline Dist.		100.0				Auto	s: 2	2.000			
Barrier Distance		0.0			Mediu	n Truck	is: 4	.000			
	Observer Height (Above Pad): 5.0 feet				Heav	y Truck	rs: 8	3.006	Grade Adj	iustment:	0.0
Pad Elevation: 0.0 feet					Lana Fa	ui colon	4 Diete	noo (in	faat)		
	ad Elevation:	0.0			Lane Eq				reet)		
	Road Grade:	0.0%				Auto		3.723			
	Left View:		degrees		Medium Trucks: 93.680 Heavy Trucks: 93.723						
	Right View:	90.0	degrees		Heav	y Truck	(s: 93	3.723			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic I	Flow	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	70.20		3.19	-4.2	20	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-	14.05	-4.1	19	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-	18.00	-4.2	20	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	o and ba	rrier atte	nuation)						
VehicleType	Leq Peak Hou	ur Le	eq Day	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	68	3.0	66.	1	64.3		58	.3	66.9)	67.5
Medium Trucks:	61	.6	60.	1	53.7		52	.1	60.6	6	60.8
Heavy Trucks:	62	2.0	60.	6	51.5		52	.8	61.1	<u> </u>	61.3
Vehicle Noise:	69).7	67.	9	64.9		60	.1	68.7	7	69.1

Centerline Distance to Noise Contour (in feet)									
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	81	175	378	814					
CNEL:	87	188	406	875					

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: s/o Rockfield Bl./Fordview St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA	·	NOISE MODEL INPUTS								
Highway Data				S	ite Cond	litions (H	ard = 10, So	oft = 15)				
Average Daily	Traffic (Adt):	31,000 vehic	es				Autos:	15				
= -	Percentage:	10%			Med	lium Trucl	ks (2 Axles):	15				
Peak H	our Volume:	3,100 vehic	es		Hea	vy Trucks	cks (3+ Axles): 15					
Ve	hicle Speed:	55 mph		V	ehicle N	cle Mix						
Near/Far Lai	ne Distance:	88 feet				cleType	Day	Evening	Night	Daily		
Site Data						Aut	tos: 77.5%	12.9%	9.6%	97.42%		
Bai	rier Height:	0.0 feet			Me	dium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0			Н	eavy Truc	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Dis		100.0 feet		Noise Source Elevations (in feet)								
Centerline Dist.	to Observer:	100.0 feet		/\	oise so		•	eet)				
Barrier Distance	to Observer:	0.0 feet			N 4 - 1' -	Autos:	2.000					
Observer Height (5.0 feet				Trucks:	4.000	0 1- 4-1		0.0		
• .	Pad Elevation: 0.0 feet				Heavy	Trucks:	8.006	Grade Adj	ustment:	0.0		
Road Elevation: 0.0 feet			L	ane Equ	ivalent D	istance (in	feet)					
	Road Grade:	0.0%				Autos:	89.850					
_	Left View:	-90.0 degr	ees		Medium	Trucks:	89.805					
	Right View:	90.0 degr			Heavy	Trucks:	89.850					
FHWA Noise Mode	el Calculation	ns										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite I	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	3 2.0	9	-3.92		-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-15.1	5	-3.92		-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-19.1	0	-3.92		-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	hout Topo an	d barrie	r attenu	ation)							
VehicleType	Leq Peak Ho	our Leq Da	ay	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL		
Autos:	6	8.8	66.9		65.1		59.0	67.7	,	68.3		
Medium Trucks:	6	2.1	60.6		54.3		52.7	61.2	<u> </u>	61.4		
Heavy Trucks:	6	2.2	60.8		51.7		53.0	61.3	3	61.4		
Vehicle Noise:	7	0.3	68.6		65.6		60.7	69.3	₹	69.8		

70 dBA

90

96

Ldn:

CNEL:

65 dBA

193

208

60 dBA

416

448

55 dBA

897

965

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project

Project Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Job Number: 8141 Analyst: B. Lawson

Road Segment: b/w Avenida Carlota and Paseo de Valencia

SITE	SPECIFIC IN	NPUT DATA		NOISE MODEL INPUTS							
Highway Data			,	Site Conditions	(Hard =	10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	25,100 vehicles	3			Autos:	15				
Peak Hour	Percentage:	10%		Medium Trucks (2 Axles): 15							
Peak H	lour Volume:	2,510 vehicles	6	Heavy Tru	icks (3+ A	Axles):	15				
Ve	hicle Speed:	55 mph	,	Vehicle Mix							
Near/Far La	ne Distance:	88 feet		VehicleType Day Evening Night D							
Site Data					Autos:	77.5%	12.9%	9.6%	97.42%		
Ba	rrier Height:	0.0 feet		Medium 7	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0		Heavy Trucks: 86.5% 2.7% 10.8% 0							
Centerline Di	st. to Barrier:	100.0 feet		Noise Source Elevations (in feet)							
Centerline Dist.	to Observer:	100.0 feet	_	Auto		000	,,,				
Barrier Distance	to Observer:	0.0 feet		Medium Truck		000					
Observer Height ((Above Pad):	5.0 feet		Heavy Truck	_	006	Grade Ad	iustment	. 0 0		
Pa	ad Elevation:	0.0 feet		Ticavy Truci	13. 0.1	000	Orado riaj		0.0		
Roa	ad Elevation:	0.0 feet	I	Lane Equivaler	t Distan	ce (in t	feet)				
	Road Grade:	0.0%		Auto	os: 89.	850					
	Left View:	-90.0 degree	es	Medium Truci	ks: 89.	805					
	Right View:	90.0 degree	es	Heavy Truck	ks: 89.	850					
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresr	nel	Barrier Att	en Ber	m Atten		
Autos:	71.78	1.17	-3.92	2 -1.20		-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-16.06	-3.92	-3.92 -1.20 <i>-4.97</i> 0.000 0							
Heavy Trucks:	86.40	-20.02	-3.92	2 -1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Topo and	barrier atten	uation)							
VehicleType	Leg Peak Ho	ur Leg Day	Leg E	ening Lea	Night		Ldn	CI	VEL		

Unmitigated Nois	e Levels (without	t Topo and barri	er attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	67.8	65.9	64.2	58.1	66.7	67.3
Medium Trucks:	61.2	59.7	53.4	51.8	60.3	60.5
Heavy Trucks:	61.3	59.8	50.8	52.0	60.4	60.5
Vehicle Noise:	69.4	67.6	64.7	59.8	68.4	68.9

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	78	168	362	779
CNFI ·	84	181	389	838

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: w/o O St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA			NOISE MODEL INPUTS								
Highway Data				Si	ite Con	ditions (F	lard = 10, S	oft = 15)	-				
Average Daily	Traffic (Adt):	24,200 vehicle	es				Autos.	15					
Peak Hour	Percentage:	10%			Medium Trucks (2 Axles): 15								
Peak F	lour Volume:	2,420 vehicle	es		Heavy Trucks (3+ Axles): 15								
Ve	ehicle Speed:	55 mph	•			Vehicle Mix							
Near/Far La	ne Distance:	52 feet				icleType	Day	Evening	Night	Daily			
Site Data						Au	tos: 77.5%	6 12.9%	9.6%	97.42%			
Ba	rrier Height:	0.0 feet			Me	edium Tru	cks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-V	_	0.0			ŀ	Heavy True	cks: 86.5%	2.7%	10.8%	0.74%			
	ist. to Barrier:	100.0 feet		N	Noise Source Elevations (in feet)								
Centerline Dist.	to Observer:	100.0 feet			0,00 0	Autos:	2.000						
Barrier Distance	to Observer:	0.0 feet			Medium Trucks: 4.000								
Observer Height	(Above Pad):	5.0 feet				y Trucks:	8.006	Grade Adj	iustment:	0.0			
P	ad Elevation:	0.0 feet			rieav	y Trucks.	0.000	Grade Adj	astriciit.	0.0			
Ro	ad Elevation:	0.0 feet		La	ane Eq	uivalent E	Distance (in	feet)					
	Road Grade:	0.0%				Autos:	96.607						
	Left View:	-90.0 degre	es		Medium Trucks: 96.566								
	Right View:	90.0 degre	es		Heav	y Trucks:	96.608						
FHWA Noise Mod	lel Calculatio	ns											
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten			
Autos:	71.78	3 1.02		-4.39		-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-16.22		-4.39		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-20.18		-4.39		-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	hout Topo and	barrier a	attenu	ation)								
VehicleType	Leq Peak Ho	our Leq Day	y Le	eq Eve	ening	Leq Ni	ight	Ldn	CI	VEL			
Autos:	6	7.2	65.3	63.5 57.5 66.1					66.7				
Medium Trucks:	6	0.6	59.1		52.7		51.2	59.6	6	59.9			
Heavy Trucks:	6	0.6	59.2		50.2		51.4	59.8	3	59.9			
Vehicle Noise:	6	8.8	67.0		64.1		59.2	67.7	7	68.2			

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	71	152	328	707
CNEL:	76	164	353	761

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: e/o O St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site	Conditions (F	lard =	10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	26,800 vehicle	S			,	Autos:	15			
Peak Hour	Percentage:	10%		Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15							
Peak H	lour Volume:	2,680 vehicle	s								
Ve	ehicle Speed:	55 mph		Vehicle Mix							
Near/Far La	ane Distance:	52 feet			VehicleType		Day	Evening	Night	Daily	
Site Data							77.5%		9.6%		
Ra	rrier Height:	0.0 feet		-	Medium Tru	cks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V	•	0.0			Heavy Tru	cks:	86.5%	2.7%	10.8%	0.74%	
• • • •	ist. to Barrier:	100.0 feet					<i>/</i> • •	4)			
Centerline Dist.		100.0 feet		NOIS	e Source Ele		•	eet)			
Barrier Distance		0.0 feet			Autos:		000				
Observer Height (Above Pad): 5.0 feet					edium Trucks:		000				
_	ad Elevation:	0.0 feet		H	łeavy Trucks:	8.0	006	Grade Ad	justment	: 0.0	
	ad Elevation:	0.0 feet		Lane	Equivalent E	Distanc	e (in	feet)			
	Road Grade:	0.0%			Autos:	96.6					
	Left View:	-90.0 degre	6 8	Me	edium Trucks:	96.5					
	Right View:	90.0 degre			leavy Trucks:	96.6					
	ragni view.	50.0 degre	03		roary rrache.	00.0	300				
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distance	Fi	nite Road	Fresn	el	Barrier Att	en Ber	m Atten	
Autos:	71.78	1.46	-4.	39	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-15.78	-4.	39	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-19.74	-4.	39	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuatio	on)						
VehicleType	Leq Peak Ho	our Leq Day	/ Leq					NEL			
Autos:	6	7.6	65.7	6	64.0	57.9		66.5	5	67.2	

		_		·- ·	. .	
Centerline Distance to	Noise Contour (in feet)		_		
Vehicle Noise:	69.2	67.5	64.5	59.6	68.2	68.7
Heavy Trucks:	61.1	59.6	50.6	51.9	60.2	60.3
Medium Trucks:	61.0	59.5	53.2	51.6	60.1	60.3
Autos:	67.6	65.7	64.0	57.9	66.5	67.2

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	76	163	351	757
CNEL:	81	175	378	814

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy. Job Number: 8141 Road Segment: w/o D St. Analyst: B. Lawson

SITE S	PECIFIC IN	PUT DATA			NC	ISE MODE	EL INPUT	S	
Highway Data				Site Con	ditions (F	lard = 10, S	oft = 15)		
Average Daily Ti	raffic (Adt): 2	26,200 vehicles				Autos	: 15		
Peak Hour P	ercentage:	10%		Me	dium Truc	ks (2 Axles)	: 15		
Peak Ho	ur Volume:	2,620 vehicles		He	avy Truck	s (3+ Axles)	: 15		
Vehi	icle Speed:	55 mph		Vehicle	Miy				
Near/Far Lane	e Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data						tos: 77.5%	J	9.6%	
	ior Hoiabti	0.0 feet		М	edium Tru			10.3%	1.84%
Barrier Type (0-Wa	ier Height:	0.0 reet 0.0			Heavy Tru			10.8%	0.74%
Centerline Dist.	•	100.0 feet							
Centerline Dist. to		100.0 feet		Noise So	ource Ele	vations (in f	feet)		
Barrier Distance to		0.0 feet			Autos:	2.000			
				Mediu	m Trucks:	4.000			
Observer Height (A	,	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
	l Elevation:	0.0 feet		Lana Fa	ialam4 [Diatamaa (in	foot)		
	l Elevation:	0.0 feet		Lane Eq		Distance (in	reet)		
Ro	oad Grade:	0.0%			Autos:	96.607			
	Left View:	-90.0 degree	S	Mediu	m Trucks:	96.566			
ı	Right View:	90.0 degree	s	Heav	y Trucks:	96.608			
FHWA Noise Model	Calculations	s							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.36	-4.3	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.88	-4.3	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.83	-4.3	89	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and b	parrier atter	nuation)					
VehicleType L	.eq Peak Hou	r Leq Day	Leq E	vening	Leq N	ight	Ldn	CI	VEL
Autos:	67.	.5 6	5.6	63.9		57.8	66.4	4	67.1
Medium Trucks:	60.	.9 5	9.4	53.1		51.5	60.0)	60.2

Ommagated Hors	c Levels (William	t ropo ana barr	ci atteriaation,			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	67.5	65.6	63.9	57.8	66.4	67.1
Medium Trucks:	60.9	59.4	53.1	51.5	60.0	60.2
Heavy Trucks:	61.0	59.5	50.5	51.8	60.1	60.2
Vehicle Noise:	69.1	67.4	64.4	59.5	68.1	68.6

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	75	161	346	746							
CNFL:	80	173	372	802							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: e/o D St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT D	ATA				NC	ISE MODE	L INPUT	s	
Highway Data			-		S	ite Con	ditions (F	<i>lard</i> = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	23,600	vehicles	•				Autos.	15		
Peak Hour	Percentage:	10%	ó			Me	dium Truc	ks (2 Axles).	15		
Peak H	lour Volume:	2,360	vehicles	;		He	avy Truck	s (3+ <i>Axles</i>).	15		
Ve	ehicle Speed:	55	mph		V	ehicle l	Mix				
Near/Far La	ne Distance:	52	feet				icleType	Day	Evening	Night	Daily
Site Data							Au	tos: 77.5%	6 12.9%	9.6%	97.42%
Ra	rrier Height:	0.0	feet			Me	edium Tru	cks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	icci			ŀ	leavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Di		100.0	feet		A.				4)		
Centerline Dist.		100.0			N	oise Sc		ations (in f	eet)		
Barrier Distance			feet				Autos:	2.000			
Observer Height			feet				m Trucks:	4.000			
	ad Elevation:		feet			Heav	y Trucks:	8.006	Grade Ad	justment.	: 0.0
	feet		Lá	ane Eq	uivalent [Distance (in	feet)				
	ad Elevation: Road Grade:	0.0					Autos:	96.607	,		
	Left View:		degree	e		Mediui	m Trucks:	96.566			
	Right View:		degree				y Trucks:	96.608			
	ragin view.	30.0	degree	3		11001	y Traono.	00.000			
FHWA Noise Mod	lel Calculation	ıs			II.						
VehicleType	REMEL	Traffic	Flow	Distand	ce	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78		0.91	-	4.39		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40		-16.33	-	4.39		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40		-20.29	-	4.39		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Top	o and k	barrier at	ttenu	ation)					
VehicleType	Leq Peak Ho	ur L	eq Day	Le	q Eve	ening	Leq N	ight	Ldn	CI	NEL
Autos:	67	7.1	6	55.2		63.4	-	57.4	66.0	0	66.6
Medium Trucks:	60).5	5	59.0		52.6		51.1	59.	5	59.8
Heavy Trucks:	60).5	5	59.1		50.1		51.3	59.7	7	59.8
Vehicle Noise:	68	3.7	6	6.9		64.0		59.1	67.0	6	68.1
Contorlino Distan	co to Noiso C	ontour /	(in foot)								

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	70	150	323	695							
CNEL:	75	161	347	748							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy
Road Segment: w/o Great Park Blvd East
Job Number: 8141
Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data				Site Con	ditions (Hard	d = 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	23,900 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Trucks (2 Axles):	15		
Peak H	lour Volume:	2,390 vehicles	S	He	avy Trucks (3	+ Axles):	15		
Ve	ehicle Speed:	55 mph		Vehicle I	Miv				
Near/Far La	ane Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data				7077	Autos.	_	J	9.6%	•
	rrier Height:	0.0 feet		Me	edium Trucks.			10.3%	1.84%
Barrier Type (0-W	•	0.0 Teet 0.0			leavy Trucks.			10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet							
Centerline Dist.		100.0 feet		Noise So	ource Elevati	•	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
		5.0 feet		Mediui	m Trucks:	4.000			
Observer Height	(Above Pau). Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 feet		Lane Fo	uivalent Dist	ance (in	feet)		
	Road Grade:	0.0%				96.607			
	Left View:	-90.0 degree	20	Mediu		96.566			
		=				96.608			
	Right View:	90.0 degree	28	ricav	y Huchs.	90.000			
FHWA Noise Mod	lel Calculation	าร		1					
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.96	-4.	39	-1.20	<i>-4</i> .87	0.0	000	0.000
Medium Trucks:	82.40	-16.28	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.23	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq I	Evening	Leq Night		Ldn	CI	VEL
Autos:	67	7.1	65.2	63.5	5	7.4	66.′	1	66.7
Medium Trucks:	60	0.5	59.0	52.7	5	1.1	59.6	3	59.8
Heavy Trucks:	60	0.6	59.1	50.1	5	1.4	59.7	7	59.8

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	70	151	326	701							
CNEL:	75	163	350	754							

64.0

67.0

67.7

59.1

68.2

Vehicle Noise:

68.7

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy
Road Segment: w/o B St
Job Number: 8141
Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Si	ite Cond	ditions	(Hard =	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	27,100 vehicle	es					Autos:	15			
Peak Hour	Percentage:	10%			Med	dium Tru	ucks (2	Axles):	15			
Peak H	lour Volume:	2,710 vehicle	es		Hea	avy Trud	cks (3+	Axles):	15			
Ve	hicle Speed:	55 mph		V	ehicle N	/lix						
Near/Far La	ne Distance:	52 feet				cleType	,	Day	Evening	Night	Daily	
Site Data					• • • • • • • • • • • • • • • • • • • •		Autos:	77.5%	•	9.6%	•	
	uuiau Haisıbt.	0.0 foot			Me	dium Ti		84.8%		10.3%	1.84%	
	rrier Height:	0.0 feet 0.0				leavy Ti		86.5%		10.8%	0.74%	
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet										
Centerline Dist.		100.0 feet		N	oise So	urce El		•	eet)			
Barrier Distance		0.0 feet				Auto		.000				
Observer Height		5.0 feet			Mediun	n Truck	s: 4	.000				
	ad Elevation:	0.0 feet			Heav	/ Truck	s: 8	.006	Grade Ad	iustment	0.0	
	ad Elevation:	0.0 feet		Lá	ane Equ	ıivaleni	t Distar	ce (in i	feet)			
	Road Grade:	0.0%				Auto		.607	,			
	Left View:	-90.0 degre	.00		Mediun			.566				
	Right View:	90.0 degre				/ Truck		.608				
	ragin view.	90.0 degre	.C3		Hoav	rraon	<i>3.</i> 30	.000				
FHWA Noise Mod	el Calculation	ns										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite I	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	1.51		-4.39		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-15.73		-4.39		-1.20		<i>-4</i> .97	0.0	000	0.000	
Heavy Trucks:	86.40	-19.69		-4.39		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrier	attenu	ation)							
VehicleType	Leq Peak Ho			Leq Eve		Leg	Night		Ldn	CI	VEL	
Autos:	6	7.7	65.8	-	64.0	,	58.	0	66.6	5	67.2	
Medium Trucks:	6	1.1	59.6		53.2		51.	7	60.1	l	60.4	
Heavy Trucks:	6	1.1	59.7		50.7		51.	9	60.3	3	60.4	
Vehicle Noise:	6	9.3	67.5		64.6		59.	7	68.2	2	68.7	

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	76	164	354	763							
CNEL:	82	177	381	820							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy
Road Segment: e/o B St
Job Number: 8141
Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				NO	DISE M	ODE	L INPUT	S		
Highway Data				S	ite Con	ditions (Hard = 1	0, Sc	oft = 15)			
	Traffic (Adt): Percentage: Hour Volume:	20,400 vehicl 10% 2,040 vehicl				dium Truc avy Truck	cks (2 Ax	,				
Ve Near/Far La	ehicle Speed: ane Distance:	55 mph 52 feet	mph		ehicle l	Mix cleType	Ε	Day	Evening	Night	Daily	
Site Data								7.5%		9.6%		
Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium Tru leavy Tru		4.8% 6.5%		10.3% 10.8%	1.84% 0.74%	
Centerline Di	ist. to Barrier:	100.0 feet		N	oise Sc	urce Ele	vations	(in fe	eet)			
Barrier Distance Observer Height P	Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet				Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet)							
	ad Elevation:	0.0 feet		Li	ane Equ			•	feet)			
	Road Grade: Left View: Right View:	0.0% -90.0 degr 90.0 degr		Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608								
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Distanc	се	Finite	Road	Fresne	1	Barrier Att	en Ber	m Atten	
Autos:	71.78	0.2	7 -	4.39		-1.20	-4	4.87	0.0	000	0.000	
Medium Trucks:	82.40	-16.90	3 -	4.39		-1.20		4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-20.92	2 -	4.39		-1.20		5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	d barrier at	tenu	ation)							
VehicleType	Leq Peak Ho	our Leq Da	ay Le	q Eve	ening	Leq N	light		Ldn	Ci	NEL	
Autos:	60	6.5	64.6		62.8		56.7		65.4	4	66.0	
Medium Trucks:		9.8	58.3		52.0		50.4		58.9		59.1	
Heavy Trucks:	59	9.9	58.5		49.4		50.7		59.0)	59.2	
Vehicle Noise:	68	8.0	66.3		63.3		58.4		67.0)	67.5	

70 dBA

63

68

Ldn: CNEL: 65 dBA

136

146

60 dBA

293

315

55 dBA

631

679

Sunday.	May 20	2012
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Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: n/o Barranca Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIF	IC INP	PUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (A	A <i>dt):</i> 21	,400 vehicles	i				Autos:	15			
Peak Hour Percenta	age:	10%		Me	dium Tr	ucks (2	Axles):	15			
Peak Hour Volu	me: 2	2,140 vehicles	;	Heavy Trucks (3+ Axles): 15							
Vehicle Spe	eed:	55 mph		Vehicle i	Miv						
Near/Far Lane Distar	nce:	52 feet			icleType	2	Day	Evening	Night	Daily	
Site Data				VCII		Autos:	77.5%		9.6%	-	
	1-4	0.0.5==1		M	, edium T		84.8%		10.3%	1.84%	
Barrier Hei	_	0.0 feet			Heavy T		86.5%		10.8%	0.74%	
Barrier Type (0-Wall, 1-Be	,	0.0			roavy r	raono.	00.07	2.770	10.070	0.7 170	
Centerline Dist. to Bar		100.0 feet		Noise So	ource E	levatio	ns (in f	eet)			
Centerline Dist. to Obser		100.0 feet			Auto	s: 2	.000				
Barrier Distance to Obser		0.0 feet		Mediu	m Truck	s: 4	.000				
Observer Height (Above P	,	5.0 feet		Heav	y Truck	s: 8	.006	Grade Ad	justment.	0.0	
Pad Elevai											
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)						
Road Gra		0.0%		Autos: 96.607 Medium Trucks: 96.566							
Left V	-	-90.0 degree									
Right V	iew:	90.0 degree	S	Heav	y Truck	s: 96	.608				
FHWA Noise Model Calcul	lations										
VehicleType REMI	EL '	Traffic Flow	Distance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	0.48	-4.3	39	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-16.76	-4.3	39	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-20.71	-4.3	39	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels	(withou	ut Topo and I	barrier atte	nuation)							
VehicleType Leq Pea	ak Hour	Leq Day	Leq E	vening	Leq	Night		Ldn	CI	VEL	
Autos:	66.7	' 6	64.8	63.0		56.	9	65.6	6	66.2	
Medium Trucks:	60.1	5	58.5	52.2	52.2 50.6		59.	59.1			
Heavy Trucks:	60.1	60.1 58.7 49.6 50.9 59.2						59.4			
Vehicle Noise:	68.2	2 6	6.5	63.5 58.7 67.2 67.7							
Centerline Distance to No.	ise Con	ntour (in feet)									

70 dBA

65

70

Ldn:

CNEL:

65 dBA

140

151

60 dBA

302

325

55 dBA

652

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: s/o Barranca Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOIS	E MODE	L INPUT	S			
Highway Data			Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt):	13,700 vehicle	S			Autos:	15				
Peak Hour Percentage:	10%		Medium Trucks (2 Axles): 15							
Peak Hour Volume:	1,370 vehicles	S	Heavy Trucks (3+ Axles): 15							
Vehicle Speed:	55 mph		Vehicle I	Mix						
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data			Ven	Autos			9.6%	97.42%		
			Λ./.	Autos edium Trucks			10.3%	1.84%		
Barrier Height:	0.0 feet			-aium Trucks -leavy Trucks			10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm):	0.0		,	leavy Trucks	. 00.570	2.1 /0	10.076	0.7476		
Centerline Dist. to Barrier:	100.0 feet		Noise So	ource Elevati	ions (in f	eet)				
Centerline Dist. to Observer:	100.0 feet 0.0 feet			Autos:	2.000					
Barrier Distance to Observer:		Medium Trucks: 4.000								
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
Pad Elevation:	0.0 feet		1 5	······································		f = - 4\				
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist		reet)				
Road Grade:	0.0%				96.607					
Left View:	-90.0 degree		Medium Trucks: 96.566							
Right View:	90.0 degree	es	Heav	ry Trucks:	96.608					
FHWA Noise Model Calculatio	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten		
Autos: 71.78	8 -1.46	-4.	.39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -18.69	-4.	.39	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	0 -22.65	-4.	.39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	enuation)							
VehicleType Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq Night	<u> </u>	Ldn	CI	VEL		
Autos: 6	64.7	62.8	61.1	5	55.0	63.6	6	64.2		
Medium Trucks: 5	8.1	8.1 56.6 50.2 48.7 57.2					2	57.4		
Heavy Trucks: 5	8.2	56.7	47.7	4	18.9	57.3	3	57.4		
Vehicle Noise: 6	66.3	64.5	5 61.6 56.7 65.3 65.7							
Centerline Distance to Noise (Contour (in feet)								

70 dBA

48

52

Ldn:

CNEL:

65 dBA

104

112

60 dBA

225

242

55 dBA

484

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: n/o Rockfield Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT I	DATA			NOIS	E MODE	L INPUT	S			
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
	Traffic (Adt): r Percentage:	23,200 109			Me	dium Trucks	Autos: (2 Axles):					
Peak I	Hour Volume:	2,320	vehicles		Heavy Trucks (3+ Axles): 15							
	ehicle Speed: ane Distance:		mph feet		Vehicle Veh	Mix icleType	Day	Evening	Night	Daily		
Site Data						Autos		J	9.6%	,		
Barrier Type (0-V	0.0				edium Trucks Heavy Trucks	s: 84.8%	4.9%	10.3% 10.8%	1.84% 0.74%			
Centerline Dist	ist. to Barrier:	100.0			Noise So	ource Elevat	ions (in f	eet)				
Barrier Distance Observer Height	0.0 5.0	100.0 feet 0.0 feet 5.0 feet 0.0 feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0								
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)							
	Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608						
FHWA Noise Mod	del Calculatio	ns										
VehicleType	REMEL		Flow	Distance	Finite	Road Fr	resnel	Barrier Att	en Ber	m Atten		
Autos	: 71.78	3	0.83	-4.3	39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks	: 82.40)	-16.41	-4.3	39	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks	: 86.40)	-20.36	-4.3	39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	se Levels (wit	hout To	po and b	arrier atte	nuation)							
VehicleType	Leq Peak Ho	our I	Leq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL		
Autos	<i>:</i> 6	7.0	6	5.1	63.4	į	57.3	65.9	9	66.5		
Medium Trucks	<i>:</i> 6	0.4	58	3.9	52.5 51.0		51.0	59.5		59.7		
Heavy Trucks	:6	0.4	59	9.0	50.0	ţ	51.2	59.6	3	59.7		
Vehicle Noise		8.6		6.8	63.9		59.0	67.6	6	68.0		
Centerline Distar	nce to Noise C	Contour	(in feet)									

70 dBA

69

74

Ldn:

CNEL:

65 dBA

148

159

60 dBA

319

343

55 dBA

688

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: s/o Rockfield Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA		NOISE MODEL INPUTS						
Highway Data				Site Conditions (Hard = 10, Soft = 15)						
Peak Hou	Traffic (Adt): Percentage: Hour Volume:	23,900 vehicles 10% 2,390 vehicles			dium Trucks avy Trucks (,				
Ve	ehicle Speed: ane Distance:	55 mph 52 feet		Vehicle I		Day	Evening	Night	Daily	
Site Data					Auto	s: 77.5%	12.9%	9.6%	97.42%	
Barrier Type (0-V	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0			edium Truck Heavy Truck			10.3% 10.8%	1.84% 0.74%	
Centerline Dist. Barrier Distance Observer Height F	to Observer:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608						
FHWA Noise Mod VehicleType	lel Calculation REMEL	ns Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten	
Autos:			-4.		-1.20	-4.87		000	0.000	
Medium Trucks:	82.40	-16.28	-4.	39	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-20.23	-4.	39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	nout Topo and	barrier atte	nuation)						
VehicleType	Leq Peak Ho	ur Leq Day	Leq	Evening	Leq Nigh	nt	Ldn	CI	VEL	
Autos:	_		65.2	63.5 57.4		-	66.1		66.7	
Medium Trucks:			59.0	52.7		51.1	59.6		59.8	
Heavy Trucks:			59.1	50.1		51.4	59.7		59.8	
Vehicle Noise:	68	8.7	67.0	64.0		59.1	67.7	7	68.2	

70 dBA

70

75

Ldn:

CNEL:

65 dBA

151

163

60 dBA

326

350

55 dBA

701

754

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Meridian

Road Segment: n/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Con	ditions (Hard =	10, So	oft = 15)			
Average Daily	Traffic (Adt):	1,000 vehicles	3					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	Axles):	15			
Peak H	lour Volume:	100 vehicles	3		He	avy Truci	ks (3+ A	Axles):	15			
Ve	hicle Speed:	55 mph			/ehicle l	Miv						
Near/Far La	ne Distance:	52 feet				icleType		Day	Evening	Night	Daily	
Site Data					V 011		utos:	77.5%	Ŭ,	9.6%	-	
	rriar Haiahtı	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%	
Barrier Type (0-W	rrier Height:	0.0 feet 0.0				Heavy Tru		86.5%		10.8%	0.74%	
Centerline Di		100.0 feet										
Centerline Dist.		100.0 feet		٨	Voise So	ource Ele		•	eet)			
Barrier Distance		0.0 feet				Autos		000				
Observer Height		5.0 feet				m Trucks		000				
	ad Elevation:	0.0 feet			Heav	y Trucks	: 8.	006	Grade Adj	iustment.	0.0	
	ad Elevation:	0.0 feet		L	ane Ea	uivalent	Distan	ce (in f	feet)			
	Road Grade:	0.0%				Autos		607	,			
	Left View:	-90.0 degree	26		Mediu	m Trucks		566				
	Right View:	90.0 degree				ry Trucks		608				
	rugine viow.	oo.o acgree	,,			,						
FHWA Noise Mod	el Calculations	5		<u>'</u>								
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresr	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-12.82		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-30.06		-4.39)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-34.02		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)							
VehicleType	Leg Peak Hou			Leq Ev		Leq N	light		Ldn	CI	VEL	
Autos:	53.		51.5	· · · · · · · · · · · · · · · · · · ·	49.7	<u> </u>	43.6	3	52.3	3	52.9	
Medium Trucks:	46.	8	45.2		38.9		37.3	3	45.8	3	46.0	
Heavy Trucks:	46.	8	45.4		36.3		37.6	6	45.9	9	46.1	
Vehicle Noise:	54.	9 :	53.2		50.2		45.4	1	53.9)	54.4	
Centerline Distan	ce to Noise Co	ntour (in feet))									
				70 d	IBA	65 a	BA .	6	60 dBA	55	dBA	

Ldn:

CNEL:

8

9

39

42

85

91

18

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Modjeska Job Number: 8141 Road Segment: n/o Irvine Bl. Analyst: B. Lawson

SITE SPE	CIFIC INP	UT DATA		NOISE MODEL INPUTS							
Highway Data					Site Con	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily Traff	ic (Adt): 14	,000 vehicles	3					Autos:	15		
Peak Hour Perd	entage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour	Volume: 1	,400 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Vehicle	Speed:	35 mph		-	Vehicle l	Miy					
Near/Far Lane D	istance:	20 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
Barrier	Hoiaht:	0.0 feet			Me	edium T	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1	_	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to	,	100.0 feet									
Centerline Dist. to O		100.0 feet			Noise Sc			•	eet)		
Barrier Distance to O		0.0 feet				Auto		.000			
Observer Height (Abov		5.0 feet				n Truck		.000	0 - 4 - 4 - 4		0.0
• ,	evation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	iustment:	0.0
Road El	evation:	0.0 feet		1	Lane Eq	uivalen	t Distai	nce (in t	feet)		
Road	l Grade:	0.0%				Auto	s: 99	.544			
Le	eft View:	-90.0 degree	es		Mediur	n Truck	s: 99	.504			
Rig	ht View:	90.0 degree	es		Heav	y Truck	s: 99	.544			
FHWA Noise Model Ca	alculations										
		Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	64.30	0.60		-4.59		-1.20		-4.87		000	0.000
Medium Trucks:	75.75	-16.64		-4.59		-1.20		-4.97		000	0.000
Heavy Trucks:	81.57	-20.59		-4.59	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Lev	vels (withou	ut Topo and	barri	er atten	uation)						
	Peak Hour			Leg E		Leg	Night		Ldn	CI	VEL
Autos:	59.1		57.2	· · ·	55.4		49	.4	58.0)	58.6
Medium Trucks:	53.3	;	51.8		45.5		43	.9	52.4	1	52.6
Heavy Trucks:	55.2	!	53.8		44.7		46	.0	54.3	3	54.5
Vehicle Noise:	61.3	;	59.6		56.2		51	.8	60.3	3	60.8
Centerline Distance to	Noise Con	tour (in feet))								
				70 c	dBA	65	dBA	6	60 dBA	55	dBA

23

24

Ldn: CNEL: 49

52

105

112

226

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Job Number: 8141

Road Segment: e/o (s/o) Lake Forest

Analyst: B. Lawson

SITE S	SPECIFIC II	NPUT DATA	4	NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions (Hard =	= 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: our Volume:	31,500 vehice 10% 3,150 vehice 3,150 vehice 3				dium Tru avy Truci	icks (2	,			
Vel Near/Far Lar	nicle Speed: ne Distance:	55 mph 88 feet		V	ehicle l Vehi	Mix icleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%		9.6%	
Barrier Type (0-Wa Centerline Dist. t Centerline Dist. t Barrier Distance t Observer Height (7 Pa Roa	t. to Barrier: to Observer: to Observer:	0.0 feet 0.0 100.0 feet 100.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0% -90.0 deg	rees		Medium Trucks: 84.8% 4.9% Heavy Trucks: 86.5% 2.7% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adju Lane Equivalent Distance (in feet) Autos: 89.850 Medium Trucks: 89.805 Heavy Trucks: 89.850					10.3% 10.8% justment:	1.84% 0.74%
FHWA Noise Mode	el Calculation	IS									
VehicleType	REMEL	Traffic Flov	v Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos: Medium Trucks: Heavy Trucks:	71.78 82.40 86.40	-15.0	8(-3.92 -3.92 -3.92		-1.20 -1.20 -1.20		-4.87 -4.97 -5.16	0.0	000 000 000	0.000 0.000 0.000
Unmitigated Noise	Levels (with	out Topo ai	nd barrie	er attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq E	ay	Leq Eve	ening	Leq N	Vight		Ldn	CI	VEL
Autos:	68	3.8	66.9		65.2		59.	1	67.7	7	68.3
Medium Trucks:	62	2.2	60.7		54.3		52.	8	61.3	3	61.5
Heavy Trucks:	62	2.2	60.8	.8 51.8 53.0 61.4					61.5		
Vehicle Noise:	70).4	68.6		65.7		60.	8	69.4	4	69.8

70 dBA

91

98

Ldn:

CNEL:

65 dBA

195

210

60 dBA

421

453

55 dBA

906

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: e/o (s/o) Ridge Route

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT D	ATA		NOISE MODEL INPUTS							
Highway Data					Sit	e Con	ditions ((Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	38,800 v	ehicles	;					Autos:	15		
Peak Hour	Percentage:	10%				Med	lium Tru	icks (2	Axles):	15		
Peak H	lour Volume:	3,880 v	ehicles	;		Hea	avy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	55 r	nph		Ve	hicle N	/lix					
Near/Far La	ane Distance:	88 f	eet		•		cleType		Day	Evening	Night	Daily
Site Data								utos:	77.5%	_	9.6%	_
Ra	rrier Height:	0.0	feet			Ме	dium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0	1661			Н	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0	feet						<i>(</i> ; c			
Centerline Dist.		100.0			No	ise So	urce Ele		•	eet)		
Barrier Distance		0.0					Autos		.000			
Observer Height		5.0			1	Mediun	n Trucks	s: 4	.000			
_	(Above Fau). Pad Elevation:) feet			Heavy Trucks: 8.006 Grade Adjustment:						
	ad Elevation:	0.0			Lai	ne Eau	ıivalent	Distar	ce (in	feet)		
	Road Grade:	0.09					Autos		.850	,		
	Left View:		o degree	C	,	Mediun	n Trucks		.805			
	Right View:		degree		,		/ Trucks		.850			
	ragin view.	30.0	uegree	•		77007	rraono	. 00	.000			
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic	Flow	Distance)	Finite I	Road	Fres	nel	Barrier Att	en Bei	m Atten
Autos:	71.78	3	3.07	-3.	.92		-1.20		<i>-4.</i> 87	0.0	000	0.000
Medium Trucks:	82.40) -	14.17	-3.	.92		-1.20		<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks:	86.40) -	18.13	-3.	.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Top	o and l	barrier atte	enua	tion)						
VehicleType	Leq Peak Ho	ur Le	eq Day	Leq	Ever	ning	Leq l	Vight		Ldn	C	NEL
Autos:	6:	9.7	6	67.8		66.1		60.	0	68.6	3	69.2
Medium Trucks:	6	3.1	6	31.6		55.2		53.	7	62.2	2	62.4
Heavy Trucks:	6	3.1	6	31.7		52.7		53.	9	62.3	3	62.4
Vehicle Noise:	7	1.3	6	9.5		66.6		61.	7	70.3	3	70.7

70 dBA

104

112

Ldn: CNEL: 65 dBA

224

241

60 dBA

483

520

55 dBA

1,042

1,121

Sunday,	May	20,	2012

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Job Number: 8141

Road Segment: w/o (n/o) El Toro Rd.

Analyst: B. Lawson

SITE SPECIFIC	CINPU	T DATA			NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Ad	t): 43,9	00 vehicles						Autos:	15			
Peak Hour Percentag		10%			Me	dium Tru	ıcks (2	Axles):	15			
Peak Hour Volum		90 vehicles			He	avy Truc	ks (3+	Axles):	15			
Vehicle Spee	d:	55 mph		V	ehicle l	Miv						
Near/Far Lane Distand	e:	88 feet		•		icleType		Day	Evening	Night	Daily	
Site Data					VOIT		Autos:	77.5%		9.6%	-	
		0.0.61			Me	, edium Tr		84.8%		10.3%	1.84%	
Barrier Heigi		0.0 feet				leavy Tr		86.5%		10.8%	0.74%	
Barrier Type (0-Wall, 1-Berr	,	0.0				roavy 11	uono.	00.070	2.1 70	10.070	0.7 170	
Centerline Dist. to Barri		00.0 feet		Ν	oise Sc	ource El	evatio	ns (in fe	eet)			
Centerline Dist. to Observ		0.0 feet				Autos	s: 2	2.000				
Barrier Distance to Observ		0.0 feet			Mediui	n Trucks	s: 4	1.000				
Observer Height (Above Pa	•	5.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	justment:	0.0	
Pad Elevation		0.0 feet		,	ano Fa	uivalent	Dicta	nco (in i	foot)			
Road Elevation		0.0 feet			arie Ly			9.850	eei)			
Road Grad		0.0%			Madiu	Autos n Trucks						
Left Vie	_	0.0 degrees						9.805				
Right Vie	<i>w:</i> 9	0.0 degrees	3		неач	y Trucks	S. 8	9.850				
FHWA Noise Model Calcula	tions											
VehicleType REME	_ Tra	affic Flow	Distar	псе	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos: 7	1.78	3.60		-3.92		-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 82	2.40	-13.64		-3.92		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 86	6.40	-17.59		-3.92		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (without	Topo and b	arrier a	attenu	ation)							
VehicleType Leq Peak	Hour	Leq Day	L	eq Eve	ening	Leq	Night		Ldn	CI	VEL	
Autos:	70.3	6	8.4		66.6		60	.5	69.2	2	69.8	
Medium Trucks:	63.6	6	2.1		55.8		54	.2	62.7	7	62.9	
Heavy Trucks:	63.7	6	2.3		53.2		54	.5	62.8	3	63.0	
Vehicle Noise:	71.8	7	0.1		67.1		62	.2	70.8	3	71.3	
Centerline Distance to Nois	e Conto	our (in feet)										

70 dBA

113

122

Ldn:

CNEL:

65 dBA

244

262

60 dBA

525

565

55 dBA

1,131

1,217

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: e/o (s/o) El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPEC	IFIC INF	PUT DATA		NOISE MODEL INPUTS							
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic	: (Adt): 44	1,800 vehicles	3					Autos:	15		
Peak Hour Perce	ntage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Vo	olume: 4	1,480 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Vehicle S	Speed:	55 mph		-	Vehicle I	Mix					
Near/Far Lane Dis	stance:	88 feet		_		icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	Ŭ,	9.6%	_
	loiabtı	0.0 feet			Me	edium Ti		84.8%		10.3%	1.84%
Barrier H Barrier Type (0-Wall, 1-I	•	0.0 reet 0.0				leavy T		86.5%		10.8%	0.74%
Centerline Dist. to E	•	100.0 feet									
Centerline Dist. to Obs		100.0 feet		1	Noise So			•	eet)		
Barrier Distance to Obs		0.0 feet				Auto		.000			
Observer Height (Above		5.0 feet				m Truck		.000			
Pad Ele	•	0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	: 0.0
Road Ele		0.0 feet		I	Lane Eq	uivalen	t Distar	nce (in i	feet)		
	Grade:	0.0%			<u> </u>	Auto		 9.850			
	t View:	-90.0 degree	es		Mediu	m Truck	s: 89	.805			
Right	t View:	90.0 degree			Heav	y Truck	s: 89	.850			
FHWA Noise Model Cale					T						
,,		Traffic Flow	Di	stance		Road	Fres		Barrier Att		m Atten
Autos:	71.78	3.69		-3.92		-1.20		-4.87		000	0.000
Medium Trucks:	82.40	-13.55		-3.92		-1.20		-4.97		000	0.000
Heavy Trucks:	86.40	-17.50		-3.92	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Leve	els (witho	ut Topo and	barri	ier atten	uation)						
VehicleType Leq F	Peak Hour	Leq Day	,	Leq Ev	vening .	Leq	Night		Ldn	CI	NEL
Autos:	70.3		68.5		66.7		60	.6	69.3	3	69.9
Medium Trucks:	63.7		62.2		55.9		54.	.3	62.8		63.0
Heavy Trucks:	63.8		62.3		53.3		54.	.6	62.9	9	63.0
Vehicle Noise:	71.9)	70.2		67.2		62	.3	70.9	9	71.4
Centerline Distance to I	Noise Cor	ntour (in feet))								
				70 c	dBA	65	dBA	6	60 dBA	55	dBA

115

123

Ldn: CNEL: 247

266

532

572

1,146

1,233

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Job Number: 8141

Road Segment: b/w Glenwood/Indian Creek and Laguna Hills

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions ((Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	41,400 vehicle:	S					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tru	ıcks (2	Axles):	15		
Peak H	lour Volume:	4,140 vehicles	s		Hea	avy Truc	ks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		V	ehicle II	/liv					
Near/Far La	ne Distance:	88 feet		-		cleType		Day	Evening	Night	Daily
Site Data							lutos:	77.5%	_	9.6%	_
	rriar Haiabtı	0.0 foot			Мє	edium Tr		84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 feet 0.0				leavy Tr		86.5%		10.8%	0.74%
Centerline Di	•	100.0 feet									
Centerline Dist.		100.0 feet		N	oise So	urce Ele	evatio	ns (in fe	eet)		
Barrier Distance		0.0 feet				Autos		2.000			
					Mediun	n Trucks	s: 4	1.000			
Observer Height (ad Elevation:	5.0 feet 0.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	justment	0.0
	ad Elevation: ad Elevation:	0.0 feet		1.	ane Fai	uivalent	Dista	nce (in	feet)		
	Road Grade:	0.0%				Autos		9.850			
•	Left View:		00		Mediur	n Trucks		9.805			
		-90.0 degree				y Trucks		9.850			
	Right View:	90.0 degree	es		i icav	y TTUCKS	s. 03	9.000			
FHWA Noise Mod	el Calculation	าร		, ,							
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3.35		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-13.89		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-17.85		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	nout Topo and	barrier a	ttenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	/ Le	q Eve	ening	Leq I	Night		Ldn	C	NEL
Autos:	70	0.0	68.1		66.3		60	.3	68.9	9	69.5
Medium Trucks:	63	3.4	61.9		55.5		54	.0	62.4	4	62.7
Heavy Trucks:	63	3.4	62.0		53.0		54	.2	62.6	6	62.7

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	109	234	505	1,088
CNEL:	117	252	543	1,170

66.9

62.0

70.5

71.0

69.8

Vehicle Noise:

71.6

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: s/o Laguna Hills Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site	Conditions	(Hard	= 10, Sc	oft = 15)			
Average Daily T	raffic (Adt):	30,300	vehicles	3				Autos:	15			
Peak Hour F	Percentage:	109	%			Medium Tru	icks (2	Axles):	15			
Peak Ho	our Volume:	3,030	vehicles	;		Heavy Truc	ks (3+	Axles):	15			
Veh	icle Speed:	55	mph		Veh	icle Mix						
Near/Far Lan	e Distance:	88	feet		VCIII	VehicleType		Day	Evening	Night	Daily	
Site Data							lutos:	77.5%	•	-	97.42%	
	rier Height:	0.0	feet			Medium Tr	ucks:	84.8%		10.3%	1.84%	
Barrier Type (0-Wa	_	0.0				Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist	•	100.0										
Centerline Dist. to		100.0			Nois	e Source Ele		•	eet)			
Barrier Distance to) feet			Autos		2.000				
Observer Height (A) feet			edium Trucks		1.000			_	
	d Elevation:) feet		1	Heavy Trucks	s: 8	3.006	Grade Ad	justment.	0.0	
	d Elevation:) feet		Lane	e Equivalent	Dista	nce (in	feet)			
	Road Grade:	0.0				Autos		9.850				
,	Left View:) degree	es.	М	edium Trucks		9.805				
	Right View:		degree			Heavy Trucks		9.850				
		00.0	a a a g. a a			,						
FHWA Noise Model	I Calculation	ıs										
VehicleType	REMEL	Traffic	Flow	Distance	F	inite Road	Fres	snel	Barrier Att	ten Ber	m Atten	
Autos:	71.78		1.99	-3	.92	-1.20		<i>-4.</i> 87	0.0	000	0.000	
Medium Trucks:	82.40		-15.25	-3	.92	-1.20		<i>-4</i> .97	0.0	000	0.000	
Heavy Trucks:	86.40		-19.20	-3	.92	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (with	out To	po and l	barrier atte	enuati	on)						
VehicleType L	Leq Peak Ho	ur I	Leq Day	Leq	Evenii	ng Leq I	Night		Ldn	CI	VEL	
Autos:	68	3.7	6	66.8		65.0	58	.9	67.6	6	68.2	
Medium Trucks:	62	2.0	6	60.5		54.2	52	.6	61.	1	61.3	
Heavy Trucks:	62	2.1	6	60.7		51.6	52	.9	61.2	2	61.3	
Vehicle Noise:	70).2	(68.5		65.5	60	.6	69.2	2	69.7	

70 dBA

88

95

Ldn:

CNEL:

65 dBA

190

205

60 dBA

410

441

55 dBA

883

950

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: s/o Alicia Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Hai	rd = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	26,100 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak H	lour Volume:	2,610 vehicles	S	He	avy Trucks (3+ <i>Axles):</i>	15		
Ve	hicle Speed:	55 mph		Vehicle I	Mix				
Near/Far La	ne Distance:	88 feet			icleType	Day	Evening	Night	Daily
Site Data					Autos		J	9.6%	
Ra	rrier Height:	0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0		F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%
Centerline Di	*	100.0 feet		Naina Ca	= [1	(i	4		
Centerline Dist.		100.0 feet		Noise So	ource Eleva	•	eet)		
Barrier Distance	to Observer:	0.0 feet			Autos:	2.000			
Observer Height	(Above Pad):	5.0 feet			m Trucks:	4.000	0		
	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)		
	Road Grade:	0.0%			Autos:	89.850			
	Left View:	-90.0 degree	es	Mediui	m Trucks:	89.805			
	Right View:	90.0 degree		Heav	y Trucks:	89.850			
FHWA Noise Mod	el Calculation	าร							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.34	-3.	92	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.89	-3.	92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.85	-3.	92	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	enuation)					
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq	Evening	Leq Nigh	nt	Ldn	CI	VEL
Autos:	6	8.0	66.1	64.3		58.3	66.9	9	67.5
Medium Trucks:	6	1.4	59.9	53.5		52.0	60.4	4	60.7
Heavy Trucks:	6	1.4	60.0	51.0		52.2	60.6	5	60.7

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	80	172	371	800
CNEL:	86	185	399	860

64.9

60.0

68.5

69.0

67.8

Vehicle Noise:

69.6

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: w/o Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SP	ECIFIC IN	PUT DATA		NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)			
Average Daily Tra	affic (Adt): 1	6,600 vehicle	S					Autos:	15			
Peak Hour Pe	. ,	10%			Me	dium Tru	ucks (2	Axles):	15			
Peak Hou	r Volume:	1,660 vehicles	S		He	avy Truc	cks (3+	Axles):	15			
Vehic	ele Speed:	55 mph		V	ehicle l	Miv						
Near/Far Lane	Distance:	52 feet		_		icleType	1	Day	Evening	Night	Daily	
Site Data					V 011		Autos:	77.5%		9.6%	-	
		0.0 foot			Me	, edium Tı		84.8%		10.3%	1.84%	
	er Height:	0.0 feet 0.0			Heavy Trucks: 86.5% 2.7%				10.8%	0.74%		
Barrier Type (0-Wall,	,						40110.		2,0	101070	0.1 170	
Centerline Dist.		100.0 feet		Ν	loise So	ource El	evatio	ns (in fe	eet)			
Centerline Dist. to		100.0 feet				Autos	s: 2	.000				
Barrier Distance to		0.0 feet			Medium Trucks: 4.000							
Observer Height (Ab		5.0 feet			Heavy Trucks: 8.006 Grade Adjustme				iustment:	0.0		
	Elevation:	0.0 feet		,	Lane Equivalent Distance (in feet)							
	Elevation:	0.0 feet			ane Eq				reet)			
	ad Grade:	0.0%				Autos		5.607				
	Left View:	-90.0 degree			Medium Trucks: 96.566							
R	ight View:	90.0 degree	es		Heav	y Trucks	s: 96	5.608				
FHWA Noise Model (Calculations	5										
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-0.62		-4.39		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-17.86		-4.39		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-21.82		-4.39		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise L	evels (with	out Topo and	barrier a	attenu	ation)							
VehicleType Le	eq Peak Hou	r Leq Day	' L	eq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	65.	6	63.7		61.9		55	.8	64.5	5	65.1	
Medium Trucks:	59.	0	57.4		51.1		49	.5	58.0)	58.2	
Heavy Trucks:	59.	0	57.6		48.5		49.8		58.1	<u> </u>	58.3	
Vehicle Noise:	67.	1	65.4		62.4		57	.6	66.1		66.6	
Centerline Distance	to Noise Co	ntour (in feet)									

70 dBA

55

59

Ldn: CNEL: 65 dBA

119

127

60 dBA

255

275

55 dBA

550

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: e/o Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECI	FIC INF	PUT DATA				1	NOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (<i>Adt):</i> 19	9,700 vehicles	3					Autos:	15		
Peak Hour Percent	tage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak Hour Vol	ume: 1	1,970 vehicles	3		He	avy Tru	icks (3+	Axles):	15		
Vehicle Sp	peed:	50 mph		,	/ehicle l	Miv					
Near/Far Lane Dista	ance:	70 feet				icleType	e	Day	Evening	Night	Daily
Site Data					V 011		Autos:	77.5%		•	97.42%
	iorla4.	0.0 foot			Me	edium T		84.8%		10.3%	1.84%
Barrier He	_	0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Be Centerline Dist. to Ba	,	100.0 feet									011 170
Centerline Dist. to Obse		100.0 feet		^	Voise So	ource E	levatio	ns (in fe	eet)		
Barrier Distance to Obse		0.0 feet				Auto	os: 2	2.000			
		5.0 feet			Mediui	m Truck	ks: 4	1.000			
Observer Height (Above I Pad Eleva	•	0.0 feet			Heav	y Truck	ks: 8	3.006	Grade Ad	justment.	0.0
Road Eleva		0.0 feet		1	Lane Eq	uivalen	t Dista	nce (in t	feet)		
	Road Grade: 0.0%					Auto		3.723	001)		
Left View: -90.0 degrees					Mediu	m Truck		3.680			
Right \		90.0 degree				ry Truck		3.723			
Night	VIGVV.	90.0 degree	55		ricav	y ITUON	10.	5.720			
FHWA Noise Model Calcu	ulations										
VehicleType REM	1EL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	70.20	0.54		-4.20)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-16.70		-4.19)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-20.66		-4.20)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels	s (witho	ut Topo and	barri	er atteni	uation)						
	ak Hour			Leq Ev		Leg	Night		Ldn	CI	VEL
Autos:	65.3		63.4	•	61.7	•	55	.6	64.2	2	64.9
Medium Trucks:	58.9) :	57.4		51.0		49	.5	58.0)	58.2
Heavy Trucks:	59.3	3 :	57.9	9 48.9 50.1 58.5				5	58.6		
Vehicle Noise:	67.0) (65.3		62.2 57.5 66.0					66.5	
Centerline Distance to No	oise Cor	ntour (in feet))								
		·		70 a	IBA	65	dBA	6	i0 dBA	55	dBA

Ldn:

CNEL:

54

58

117

125

251

270

542

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: w/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Con	ditions (Hard	d = 10, Sc	oft = 15)					
Average Daily Traffic (Adt)	26,800 vehicle	S			Autos:	15					
Peak Hour Percentage	10%		Me	dium Trucks (2 Axles):	15					
Peak Hour Volume	2,680 vehicle	s	He	avy Trucks (3	+ Axles):	15					
Vehicle Speed	50 mph		Vehicle I	Miy							
Near/Far Lane Distance	70 feet			icleType	Day	Evening	Night	Daily			
Site Data				Autos.		Ū	9.6%	97.42%			
Barrier Height	0.0 feet		Me	edium Trucks.			10.3%	1.84%			
Barrier Type (0-Wall, 1-Berm)			Heavy Trucks:				10.8%	0.74%			
Centerline Dist. to Barrier											
Centerline Dist. to Observer			Noise So	ource Elevati	•	eet)					
Barrier Distance to Observer				Autos:	2.000						
Observer Height (Above Pad)			Mediu	m Trucks:	4.000						
Pad Elevation			Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0			
Road Elevation			Lane Fo	uivalent Dist	ance (in	feet)					
Road Grade					93.723	,					
Left View		00	Mediu	Medium Trucks: 93.680							
Right View	3 -				93.723						
raght view	90.0 degre	G 3	77007	y maono.	00.720						
FHWA Noise Model Calculation	ons										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten			
Autos: 70.2	20 1.87	-4	.20	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 81.0	00 -15.37	-4	.19	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 85.3	-19.32	-4	.20	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)								
VehicleType Leq Peak F	lour Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL			
Autos:	66.7	64.8	63.0	5	7.0	65.6	6	66.2			
Medium Trucks:	60.2	58.7	52.4	5	50.8 59.3		3	59.5			
Heavy Trucks:	60.7	59.2	50.2	5	51.5 59.8		3	59.9			
Vehicle Noise:	68.4	66.6	63.6	5	8.8	67.3	3	67.8			
Centerline Distance to Noise	Contour (in feet)									

70 dBA

66

71

Ldn:

CNEL:

65 dBA

143

154

60 dBA

309

332

55 dBA

665

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: e/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)			
	Percentage:	10%	, D				dium Tru avy Truc	•	,				
Ve Near/Far La	Hour Volume: chicle Speed: ane Distance:	50	30 vehicles 50 mph 70 feet		V	ehicle l		· · · · · · · · · · · · · · · · · · ·	Day	Evening	Night	Daily	
Site Data								Autos:	77.5%		9.6%		
Barrier Type (0-V	vall, 1-Berm):	0.0 0.0	feet				edium Tr Ieavy Tr		84.8% 86.5%		10.3% 10.8%		
Centerline D	ist. to Barrier:	100.0	feet		Noise Source Elevations (in feet)								
Centerline Dist. Barrier Distance Observer Height F	to Observer:	0.0 5.0	.0 feet .0 feet .0 feet .0 feet			Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Ro	ad Elevation:	0.0	0.0 feet			Lane Equivalent Distance (in feet)							
	Road Grade: Left View: Right View:		% degree degree		Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723								
FHWA Noise Mod	lel Calculation	าร											
VehicleType	REMEL	Traffic	Flow	Distanc	е	Finite	Road	Fres	nel	Barrier Att	en Bei	m Atten	
Autos:	70.20)	1.87	-4	4.20		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	81.00)	-15.37	-4	4.19		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	85.38	3	-19.32	-2	4.20		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Top	o and l	barrier att	tenu	ation)							
VehicleType	Leq Peak Ho	our L	eq Day	Leq	g Eve	ening	Leq	Night		Ldn	C	NEL	
Autos:		6.7		64.8		63.0		57.		65.6		66.2	
Medium Trucks:		0.2		58.7		52.4 50.8			59.3		59.5		
Heavy Trucks:		0.7	5	59.2		50.2		51.	5	59.8	3	59.9	
Vehicle Noise:	6	8.4	6	66.6		63.6		58	8	67.3	3	67.8	

70 dBA

66

71

Ldn: CNEL: 65 dBA

143

154

60 dBA

309

332

55 dBA

665

714

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: e/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	28,800 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15		
Peak F	lour Volume:	2,880 vehicle	s		Heavy Trucks (3+ Axles): 15						
Ve	hicle Speed:	50 mph	50 mph 70 feet		ehicle N	/lix					
Near/Far La	ne Distance:	70 feet				cleType	è	Day	Evening	Night	Daily
Site Data					VOIII		Autos:	77.5%		9.6%	
	uuiau Haisıbt.	0.0 foot			Me	dium T		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet									
Centerline Dist.		100.0 feet		N	oise So	urce E		•	eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height		5.0 feet			Mediun	n Truck	s: 4	.000			
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	justment	: 0.0
	ad Elevation:	0.0 feet			ane Equ	ıivalen	t Distar	nce (in i	feet)		
	Road Grade:	0.0%		-		Auto		3.723	,		
	Left View:	-90.0 degre	00	Medium Trucks: 93.680							
	Right View:	90.0 degre			Heavy Trucks: 93.723						
	ragin view.	90.0 degre	63		ricav.	y maon	0. 00	20			
FHWA Noise Mod	el Calculation	าร		II.							
VehicleType	REMEL	Traffic Flow	Distand	ce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	2.19	-	4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-15.05	-	4.19		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-19.01	-	4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier at	ttenu	ation)						
VehicleType	Leq Peak Ho				ening	Leq	Night		Ldn	C	NEL
Autos:	6	7.0	65.1		63.3		57.	.3	65.9	9	66.5
Medium Trucks:	6	0.6	59.0		52.7		51.	.1	59.6	6	59.8
Heavy Trucks:	6	1.0	59.6		50.5		51.	.8	60.1	1	60.2
Vehicle Noise:	6	8.7	66.9		63.9		59.	.1	67.7	7	68.1

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	70	150	324	698
CNEL:	75	161	348	749

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: s/o Los Alisos Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				S	ite Con	ditions (H	ard = 10, So	oft = 15)				
	Traffic (Adt): Percentage: Hour Volume:	24,200 vehicle 10% 2,420 vehicle					Autos: ks (2 Axles): s (3+ Axles):	15 15 15				
Near/Far La	ehicle Speed: nne Distance:	50 mph 70 feet	•		'ehicle Veh	icleType	Day	Evening	Night	Daily		
Site Data							tos: 77.5%		9.6%			
Ba Barrier Type (0-W	vall, 1-Berm):	0.0 feet 0.0				edium Truc Heavy Truc			10.3% 10.8%	1.84% 0.74%		
Centerline Di	ine Dist. to Barrier: 100.0 feet				Noise Source Elevations (in feet)							
-	to Observer:	er: 0.0 feet d): 5.0 feet on: 0.0 feet		L	Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet)							
	Road Grade:	0.0%			•	Autos:	93.723	,				
	Left View: Right View:	-90.0 degre				m Trucks: yy Trucks:	93.680 93.723					
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:			3	-4.20		-1.20	-4.87	0.0		0.000		
Medium Trucks:				-4.19		-1.20	-4.97	0.0		0.000		
Heavy Trucks:	85.38	3 -19.76	5	-4.20		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	l barrier	r attenu	ation)							
VehicleType	Leq Peak Ho	our Leq Da	У	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL		
Autos:	_	6.2	64.3		62.6		56.5	65.1	1	65.7		
Medium Trucks:	59	9.8	58.3		51.9 5		50.4	58.8	3	59.1		
Heavy Trucks:	60	0.2	58.8		49.8		51.0	59.4	1	59.5		
Vehicle Noise:	6	7.9	66.2		63.1		58.3	66.9	9	67.4		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	62	134	288	621
CNEL:	67	144	310	667

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: e/o Alicia Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECII	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt): 19	.900 vehicles	i					Autos:	15				
Peak Hour Percent		10%			Ме	dium Tru	ıcks (2	Axles):	15				
Peak Hour Volu	•	,990 vehicles			He	avy Truc	ks (3+	Axles):	15				
Vehicle Sp	eed:	50 mph		V	ehicle l	Miv							
Near/Far Lane Dista	nce:	70 feet		•		icleType		Day	Evening	Night	Daily		
Site Data					VOII		Autos:	77.5%	J	9.6%			
	• • •									10.3%	1.84%		
Barrier He	•	0.0 feet			Heavy Trucks: 86.5%					10.8%	0.74%		
Barrier Type (0-Wall, 1-Be	,	0.0				Tieavy Trucks. 80.576 2.176 10.8							
Centerline Dist. to Ba		100.0 feet		Ν	Noise Source Elevations (in feet)								
Centerline Dist. to Obse		100.0 feet				Autos	s: 2	2.000					
Barrier Distance to Obse		0.0 feet			Medium Trucks: 4.000								
Observer Height (Above F	,	5.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	iustment:	0.0		
Pad Eleva		0.0 feet		_									
Road Eleva					ane Eq	uivalent		•	reet)				
Road Gr		0.0%				Autos		3.723					
Left \	/iew:	-90.0 degree	S			m Trucks		3.680					
Right \	/iew:	90.0 degree	S		Heav	y Trucks	s: 90	3.723					
FHWA Noise Model Calcu	ılations												
VehicleType REM	IEL 7	raffic Flow	Distan	ice	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	70.20	0.58		-4.20		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-16.66		-4.19		-1.20		<i>-4</i> .97	0.0	000	0.000		
Heavy Trucks:	85.38	-20.61		-4.20		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels	(withou	it Topo and I	parrier a	ttenu	ation)								
VehicleType Leq Pe	ak Hour	Leq Day	Le	eq Eve	ening	Leq	Night		Ldn	CI	VEL		
Autos:	65.4	6	63.5		61.7		55	.7	64.3	3	64.9		
Medium Trucks:	58.9	5	57.4		51.1		49	.5	58.0)	58.2		
Heavy Trucks:	59.4		57.9		48.9		50.2		58.5		58.6		
Vehicle Noise:	67.1	(5.3		62.3		57	.5	66.0)	66.5		
Centerline Distance to No	ise Con	tour (in feet)											

70 dBA

55

59

Ldn: CNEL: 65 dBA

117

126

60 dBA

253

272

55 dBA

545

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Oak Cyn./Laguna Cyn. Rd.

Job Number: 8141

Road Segment: w/o Sand Canyon. Av.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Cond	ditions (Ha	rd = 10, So	oft = 15)				
Average Daily	Traffic (Adt):	6,400 vehicles	3			Autos:	15				
Peak Hour	Percentage:	10%		Med	lium Trucks	(2 Axles):	15				
Peak H	Hour Volume:	640 vehicles	6	Heavy Trucks (3+ Axles): 15							
Ve	ehicle Speed:	35 mph	_	Vehicle N	liv						
Near/Far La	ane Distance:	20 feet			cleType	Day	Evening	Night	Daily		
Site Data				VOIN	Auto	,	_	9.6%	97.42%		
	nrrier Height:	0.0 feet		Me	dium Truck			10.3%	1.84%		
Barrier Type (0-V	•	0.0 1661			eavy Truck			10.8%	0.74%		
• • • •	ist. to Barrier:	100.0 feet	-								
				Noise So	urce Eleva	tions (in fe	eet)				
Centerline Dist.		100.0 feet			Autos:	2.000					
Barrier Distance		0.0 feet		Mediun	Trucks:	4.000					
Observer Height	. ,	5.0 feet		Heav	Trucks:	8.006	Grade Adj	iustment:	0.0		
P	Pad Elevation:	0.0 feet	-								
Ro	ad Elevation:	0.0 feet		Lane Equ	ivalent Dis	tance (in	feet)				
	Road Grade:	0.0%			Autos:	99.544					
	Left View:	-90.0 degree	es	Mediun	Trucks:	99.504					
	Right View:	90.0 degree	es	Heavy	/ Trucks:	99.544					
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Distance	Finite I	Road F	resnel	Barrier Atte	en Ber	m Atten		
Autos:	64.30	-2.80	-4.5	59	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	75.75	-20.04	-4.5	59	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	81.57	-23.99	-4.5	-4.59 -1.20 <i>-5.16</i> 0.000					0.000		
Unmitigated Nois	e Levels (with	out Topo and I	barrier atte	nuation)							
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Nigh	nt	Ldn	CI	VEL		
Autos:	55	.7 5	53.8	52.1		46.0	54.6	3	55.2		

Unmitigated Nois	Unmitigated Noise Levels (without Topo and barrier attenuation)													
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL								
Autos:	55.7	53.8	52.1	46.0	54.6	55.2								
Medium Trucks:	49.9	48.4	42.1	40.5	49.0	49.2								
Heavy Trucks:	51.8	50.4	41.3	42.6	50.9	51.1								
Vehicle Noise:	57.9	56.2	52.8	48.4	56.9	57.4								

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	13	29	62	134							
CNEL:	14	31	67	144							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Orchard Hills/PA 1 Loop Job Number: 8141
Road Segment: n/o Portola Pkwy. Analyst: B. Lawson

SITE S	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,900 vehicles	3					Autos:	15		
	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak He	our Volume:	690 vehicles	S		He	avy Truc	cks (3+	Axles):	15		
Vel	hicle Speed:	35 mph		V	'ehicle l	Mix					
Near/Far Lar	ne Distance:	20 feet				icleType		Day	Evening	Night	Daily
Site Data					VEII		Autos:	77.5%		9.6%	-
					Λ //	ء edium Tı		84.8%		10.3%	1.84%
	rier Height:	0.0 feet				Heavy Tr		86.5%		10.8%	0.74%
Barrier Type (0-Wa		0.0			,	leavy II	ucns.	00.576	2.1 /0	10.0 /6	0.7476
Centerline Dis		100.0 feet		٨	loise Sc	ource El	evatio	ns (in fe	eet)		
Centerline Dist. t		100.0 feet				Autos	s: 2	.000			
Barrier Distance t		0.0 feet			Mediui	m Trucks	s: 4	.000			
Observer Height (5.0 feet			Heav	y Trucks	s: 8	.006	Grade Ad	iustment:	0.0
	nd Elevation:	0.0 feet		<u> </u>					-		
	Road Elevation: 0.0 feet					uivalent			feet)		
F	Road Grade:	0.0%				Autos).544			
	Left View:	-90.0 degree	es			m Trucks		.504			
	Right View:	90.0 degree	es		Heav	y Trucks	s: 99).544			
FHWA Noise Mode	el Calculations	i									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	64.30	-2.47		-4.59		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	75.75	-19.71		-4.59		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	81.57	-23.67		-4.59		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (witho	out Topo and	barrie	r attenu	ation)						
VehicleType	Leq Peak Hou	r Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	56.	0	54.1		52.4		46.	.3	54.9	9	55.6
Medium Trucks:	50.		48.7		42.4		40.		49.3		49.5
Heavy Trucks:	52.	1 :	50.7		41.7		42.	.9	51.3	3	51.4
Vehicle Noise:	58.	3	56.5		53.1		48.	.7	57.3	3	57.7
Centerline Distance	e to Noise Co	ntour (in feet)								

70 dBA

14

15

Ldn:

CNEL:

65 dBA

30

33

60 dBA

66

70

55 dBA

141

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Pacifica Job Number: 8141
Road Segment: w/o Fortune Dr. Analyst: B. Lawson

SITE SPECIFIC	INPUT	DATA			NC	ISE I	MODE	L INPUT	S		
Highway Data				Site Con	ditions (F	lard =	: 10, Sc	oft = 15)			
Average Daily Traffic (Adt)	: 10,70	0 vehicles	;				Autos:	15			
Peak Hour Percentage		0%		Ме	dium Truc	ks (2 /	Axles):	15			
Peak Hour Volume	: 1,07	0 vehicles	}	He	avy Truck	s (3+ /	Axles):	15			
Vehicle Speed	: 5	5 mph		Vehicle Mix							
Near/Far Lane Distance	: 5	2 feet			icleType		Day	Evening	Night	Daily	
Site Data				V 011		itos:	77.5%	•	9.6%	•	
) O f = -1		M	edium Tru		84.8%		10.3%	1.84%	
Barrier Height		0.0 feet			Heavy Tru		86.5%		10.8%	0.74%	
Barrier Type (0-Wall, 1-Berm,		0.0			Today 11a	ono.	00.070	2.1 70	10.070	0.1 170	
Centerline Dist. to Barrie		0.0 feet		Noise So	ource Elev	vation	s (in fe	eet)			
Centerline Dist. to Observe		0.0 feet			Autos:	2.	000				
Barrier Distance to Observe		0.0 feet		Mediu	m Trucks:	4.	000				
Observer Height (Above Pad,		5.0 feet		Heav	y Trucks:	8.	006	Grade Ad	justment.	0.0	
Pad Elevation	-	0.0 feet		Long For	uivalant F	lioton	oo (in i	faat)			
Road Elevation	_	0.0 feet		Larie Eq	uivalent E		-	reet)			
Road Grade		0.0%			Autos:		607				
Left View		0.0 degree			m Trucks:		566				
Right View	: 90	0.0 degree	s	Heav	y Trucks:	96.	608				
FHWA Noise Model Calculati	ons										
VehicleType REMEL	Traf	ffic Flow	Distance	Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten	
Autos: 71.	78	-2.53	-4.	39	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 82.	40	-19.77	-4.	39	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 86.	40	-23.72	-4.	39	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (w	ithout T	opo and l	barrier atte	enuation)							
VehicleType Leq Peak I	lour	Leq Day	Leq	Evening	Leq N	ight		Ldn	CI	VEL	
Autos:	63.7	6	61.8	60.0		53.9	9	62.6	3	63.2	
Medium Trucks:	57.0	5	55.5	49.2		47.6	6	56.	1	56.3	
Heavy Trucks:	57.1	5	55.7	46.6		47.9	9	56.2	2	56.4	
Vehicle Noise:	65.2	6	3.5	60.5		55.6	6	64.2	2	64.7	
Centerline Distance to Noise	Contou	ır (in feet)									

70 dBA

41

44

Ldn:

CNEL:

65 dBA

88

95

60 dBA

191

205

55 dBA

410

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Pacifica Job Number: 8141
Road Segment: w/o (n/o) Alton Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA		NOISE MODEL INPUTS								
Highway Data				Site Cor	nditions (Hai	d = 10, So	oft = 15)					
Average Daily	Traffic (Adt):	7,200 vehicle	es			Autos:	15					
Peak Hour	Percentage:	10%		Me	edium Trucks	(2 Axles):	15					
Peak H	lour Volume:	720 vehicle	es	He	eavy Trucks (3+ Axles):	15					
Ve	ehicle Speed:	55 mph		Vehicle Mix								
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily			
Site Data					Autos		J	9.6%	97.42%			
Ra	rrier Height:	0.0 feet		M	edium Trucks	s: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0			Heavy Trucks	s: 86.5%	2.7%	10.8%	0.74%			
Centerline Di	•	100.0 feet										
Centerline Dist.		100.0 feet		Noise S	ource Elevat	•	eet)					
Barrier Distance		0.0 feet			Autos:	2.000						
Observer Height		5.0 feet			m Trucks:	4.000 8.006		_				
_	ad Elevation:	0.0 feet		Hea	justment:	0.0						
	ad Elevation:	0.0 feet		Lane Ed	uivalent Dis	tance (in	feet)					
	Road Grade:	0.0%			Autos:	96.607						
	Left View:	-90.0 degre	.00	Mediu	m Trucks:	96.566						
	Right View:	90.0 degre			vy Trucks:	96.608						
	rugin vion.	oo.o degre	.00		.,	00.000						
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traffic Flow	Distance	e Finite		resnel	Barrier Att	en Ber	m Atten			
Autos:	71.78	-4.25	-4	.39	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-21.49	-4	.39	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-25.44	-4	.39	-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Topo and	barrier att	enuation)								
VehicleType	Leq Peak Hou	ur Leq Day	y Leq	Evening	Leq Nigh	t	Ldn	CI	VEL			
Autos:	61	.9	60.0	58.3 52.2 60					61.4			
Medium Trucks:	55	5.3	53.8	8 47.5 45.9 54.4					54.6			
Heavy Trucks:	55	5.4	53.9	44.9		46.2	54.5	5	54.6			
Vehicle Noise:	63	3.5	61.8	58.8		53.9	62.5	5	63.0			

70 dBA

32

34

Ldn:

CNEL:

65 dBA

68

73

60 dBA

146

157

55 dBA

315

339

0	N 4	~~	0040
Sunday.	ıvıav	20.	2012

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Road Segment: e/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (H	ard = 10, Sc	oft = $\overline{15}$)				
Average Daily	Traffic (Adt):	36,300 vehicle	s			Autos:	15				
Peak Hour	Percentage:	10%		Ме	dium Truck	s (2 Axles):	15				
Peak H	lour Volume:	3,630 vehicle	s	He	avy Trucks	(3+ Axles):	15				
Ve	hicle Speed:	50 mph		Vehicle Mix							
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily		
Site Data				7077	Aut	-		9.6%	97.42%		
	rrier Height:	0.0 feet		Me	edium Truc			10.3%	1.84%		
Barrier Type (0-W	_	0.0 reet 0.0			leavy Truc			10.8%	0.74%		
Centerline Di		100.0 feet									
Centerline Dist.		100.0 feet		Noise So	ource Elev	ations (in f	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
				Mediui	n Trucks:	4.000					
Observer Height	,	5.0 feet		Heav	iustment.	0.0					
	ad Elevation:	0.0 feet		Lama Fa	uiualant D	iatawaa (in	foot)				
	Road Elevation: 0.0 feet					istance (in	reet)				
	Road Grade:	0.0%		Autos: 93.723							
	Left View:	-90.0 degre		Medium Trucks: 93.680							
	Right View:	90.0 degre	es	Heav	y Trucks:	93.723					
FHWA Noise Mod	el Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	70.20	3.19	-4.	20	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-14.05	-4.	19	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-18.00	-4.	20	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq I	Evening	Leq Nig	ght	Ldn	CI	VEL		
Autos:	68	8.0	66.1	64.3		58.3	66.9	9	67.5		
Medium Trucks:	6	1.6	60.1	53.7		52.1	60.6	6	60.8		
Heavy Trucks:	62	2.0	60.6	51.5		52.8	52.8 61.1		61.3		
Vehicle Noise:	69	9.7	67.9	64.9		60.1	60.1 68.7		69.1		
Cantarlina Diatan		\	,								

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	81	175	378	814
CNEL:	87	188	406	875

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Road Segment: w/o Los Alisos Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I		NOISE MODEL INPUTS									
Highway Data				S	ite Conditi	ons (Hard	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	30,900 veh	icles				Autos:	15				
Peak Hour	Percentage:	10%			Mediur	n Trucks (2	2 Axles):	15				
Peak H	lour Volume:	3,090 veh	icles		Heavy	Trucks (3+	+ Axles):	15				
Ve	hicle Speed:	55 mpł	า	V	Vehicle Mix							
Near/Far La	ne Distance:	88 feet			Vehicle	Tvpe	Day	Evening	Night	Daily		
Site Data						Autos:	77.5%		9.6%			
Ra	rrier Height:	0.0 fee	1		Mediu	m Trucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0			Hea	vy Trucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Di		100.0 fee	et				/: 6	4)				
Centerline Dist.		100.0 fee		N	oise Sourc			eet)				
Barrier Distance		0.0 fee					2.000					
Observer Height		5.0 fee			Medium T		4.000					
•	ad Elevation:	0.0 fee			Heavy T	rucks:	8.006	Grade Ad	iustment.	0.0		
	ad Elevation:					alent Dista	nce (in	feet)				
	Road Grade:	0.0%			•		9.850	,				
	Left View:	-90.0 de	arees		Medium Trucks: 89.805							
	Right View:	90.0 de	-		Heavy T		9.850					
FHWA Noise Mod	al Calculation	ne										
VehicleType	REMEL	Traffic Flo	w Di	istance	Finite Roa	ad Fre	snel	Barrier Att	en Ber	m Atten		
Autos:	71.78		.08	-3.92		.20	-4.87		000	0.000		
Medium Trucks:				-3.92		.20	-4.97		000	0.000		
Heavy Trucks:	86.40			-3.92		.20	-5.16		000	0.000		
Unmitigated Nois	e Levels (with	hout Topo a	nd barr	ier attenu	ation)							
VehicleType	Leq Peak Ho	our Leq	Day	Leq Eve	ening	Leq Night		Ldn	CI	VEL		
Autos:	6	8.7	66.8		65.1	59	9.0	67.6	6	68.2		
Medium Trucks:	6	2.1	60.6		54.3	52	2.7	61.2	2	61.4		
Heavy Trucks:	6	2.2	60.7		51.7	52	52.9 61.3		3	61.4		
Vehicle Noise:	7	0.3	68.6		65.6	60).7	69.3	3	69.8		
Contorlina Diaton	oo to Noise C	Santaur (in f	'a-4\									

Centerline Distance to Noise Contour (in feet)	70 dBA 65 dBA 60 dBA 55 dBA Ldn: 89 193 415 895							
	70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:	89	193	415	895				
CNEL:	96	207	447	963				

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Road Segment: e/o Los Alisos Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS								
Highway Data				Site Con	ditions (H	ard = 10, Sc	oft = 15)			
Average Daily Traffic (Adt)	46,900	vehicles				Autos:	15			
Peak Hour Percentage	: 10	%		Me	dium Truck	s (2 Axles):	15			
Peak Hour Volume	4,690	vehicles		He	avy Trucks	(3+ Axles):	15			
Vehicle Speed	55	mph		Vehicle Mix						
Near/Far Lane Distance	: 88	feet			icleType	Day	Evening	Night	Daily	
Site Data					Aut		-	9.6%	97.42%	
Barrier Height	. 0	0 feet		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm)				ŀ	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier		0 feet					4)			
Centerline Dist. to Observer		0 feet		Noise So		ations (in f	eet)			
Barrier Distance to Observer		0 feet			Autos:	2.000 4.000				
Observer Height (Above Pad)	_	0 feet		Mediui	_	namt: 0.0				
	Pad Elevation: 0.0 feet				y Trucks:	8.006	Grade Ad	justment:	0.0	
Road Elevation: 0.0 feet				Lane Eq	uivalent D	istance (in	feet)			
Road Grade		0%		•	Autos:	89.850				
Left View		0 degree	9	Medium Trucks: 89.805						
Right View		0 degree			y Trucks:	89.850				
		o dog.co								
FHWA Noise Model Calculati	-									
VehicleType REMEL		c Flow	Distance	Finite		Fresnel	Barrier Att		m Atten	
Autos: 71.	78	3.89	-3.9	92	-1.20	<i>-4</i> .87	0.0	000	0.000	
Medium Trucks: 82.	40	-13.35	-3.9	92	-1.20	<i>-4</i> .97	0.0	000	0.000	
Heavy Trucks: 86.	40	-17.30	-3.9	92	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (w	thout To	po and k	parrier atte	nuation)						
VehicleType Leq Peak F	lour	Leq Day	Leq E	Evening	Leq Nig	ght	Ldn	CI	VEL	
Autos:	70.5	6	8.6	66.9		60.8	69.5	5	70.1	
Medium Trucks:	63.9	6	62.4	56.1		54.5	63.0)	63.2	
Heavy Trucks:	64.0	6	2.5	53.5	53.5 54.8 63.1			63.2		
Vehicle Noise:	72.1	7	' 0.4	67.4		62.5	71.1	1	71.6	

70 dBA

118

127

Ldn:

CNEL:

65 dBA

255

274

60 dBA

549

590

55 dBA

1,182

1,272

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Road Segment: w/o Alicia Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data					S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	36,400	vehicles	S					Autos:	15			
Peak Hour	Percentage:	109	%			Me	dium Tr	ucks (2	Axles):	15			
Peak F	lour Volume:	3,640	vehicles	S		He	avy Tru	cks (3+	Axles):	15			
	ehicle Speed:	55	mph		V	'ehicle l	Viix						
Near/Far La	ane Distance:	88	feet			Vehi	icleType)	Day	Evening	Night	Daily	
Site Data							,	Autos:	77.5%	12.9%	9.6%	97.42%	
Ba	rrier Height:	0.0	feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V	•	0.0				F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
• • •	ist. to Barrier:		feet		A	laisa Sa	uroo E	lovotio	no (in f	204)			
Centerline Dist.	to Observer:	100.0			N	loise Sc			•	et)			
Barrier Distance	to Observer:	0.0	feet			N 4 = -12	Auto		2.000				
Observer Height	(Above Pad):	5.0	feet			Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: (
_	ad Elevation:		feet			Heav	y Truck	Grade Ad	justment	: 0.0			
Road Elevation: 0.0 feet						ane Eq	uivalen	t Distai	nce (in i	feet)			
	Road Grade:	0.0					Auto	s: 89	9.850				
	Left View:		degree	es		Mediur	n Truck	s: 89	9.805				
	Right View:		degree			Heav	y Truck	s: 89	9.850				
FINALA Maias Mas	lal Oalawlatia												
FHWA Noise Mod VehicleType	REMEL		Flow	Die	tance	Finite	Road	Fres	enal	Barrier Att	en Rei	m Atten	
Autos:			2.79	Dis	-3.92		-1.20	1100	-4.87		000	0.000	
Medium Trucks:			-14.45		-3.92		-1.20		-4.97		000	0.000	
Heavy Trucks:			-18.41		-3.92		-1.20		-5.16		000	0.000	
							1.20		0.70	0.0		0.000	
Unmitigated Nois											Г		
VehicleType	Leq Peak Ho		Leq Day		Leq Eve		Leq	Night		Ldn		NEL	
Autos:		9.4		67.5 65.8 59.7					68.4		69.0		
Medium Trucks:		2.8		61.3						62.1			
Heavy Trucks:	6	2.9		61.4		52.4		53	.7	62.0)	62.1	
Vehicle Noise:	7	1.0	(69.3		66.3		61	.4	70.0)	70.5	

70 dBA

100

107

Ldn: CNEL: 65 dBA

215

231

60 dBA

463

498

55 dBA

998

1,074

Sunday.	May 20	2012
Sulluav.	IVIAV ZU.	2012

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Road Segment: e/o Alicia Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA			NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Hard =	: 10, Sc	oft = 15)			
Average Daily Traffic (Adt):	14,000 vehicles	S				Autos:	15			
Peak Hour Percentage:	10%		Me	dium Trud	cks (2 /	Axles):	15			
Peak Hour Volume:	1,400 vehicles	S	He	avy Trucl	ks (3+ /	Axles):	15			
Vehicle Speed:	50 mph		Vehicle	Miv						
Near/Far Lane Distance:	70 feet			icleType		Day	Evening	Night	Daily	
Site Data					utos:	77.5%		9.6%	97.42%	
Barrier Height:	0.0 feet		M	edium Tru		84.8%		10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):	0.0		1	Heavy Tru	ıcks:	86.5%		10.8%	0.74%	
Centerline Dist. to Barrier:	100.0 feet		M-:			· · / · · · · ·	4)			
Centerline Dist. to Observer:	100.0 feet		Noise So	ource Ele			eet)			
Barrier Distance to Observer:	0.0 feet			Autos:		000				
Observer Height (Above Pad):	5.0 feet			m Trucks.		000				
Pad Elevation:	0.0 feet		Heav	y Trucks:	: 8.	006	Grade Ad	iustment:	0.0	
	Road Elevation: 0.0 feet					ce (in t	feet)			
Road Grade:	0.0%			Autos:	: 93.	.723				
Left View:	-90.0 degree	es	Mediu	m Trucks:	: 93.	.680				
Right View:	90.0 degree		Heavy Trucks: 93.723							
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten	
Autos: 70.20	-0.95	-4	.20	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 81.00	-18.19	-4	.19	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 85.38	-22.14	-4	.20	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)							
VehicleType Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq N	light		Ldn	CI	VEL	
Autos: 6	3.9	62.0	60.2		54.	1	62.8	3	63.4	
Medium Trucks: 5	7.4	55.9	49.6		48.0	0	56.5	5	56.7	
Heavy Trucks: 5	7.8	56.4	47.4		48.6	6	57.0		57.1	
Vehicle Noise: 6	5.6	63.8	60.8		56.0	0	64.5	5	65.0	
Centerline Distance to Noise C	Contour (in feet)								

70 dBA

43

46

Ldn:

CNEL:

65 dBA

93

100

60 dBA

200

215

55 dBA

431

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Jamboree Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site (Conditions	(Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt)	: 15,80	00 vehicles	6				Autos:	15				
Peak Hour Percentage	-	10%			Medium Ti	rucks (2	Axles):	15				
Peak Hour Volume	: 1,58	30 vehicles	3		Heavy Tru	icks (3+	Axles):	15				
Vehicle Speed	: 5	50 mph		Vohis	Vehicle Mix							
Near/Far Lane Distance	: 7	70 feet				0	Day	Evening	Night	Doily		
Site Data					VehicleTyp		<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	Daily		
Site Data					Medium 7	Autos:						
Barrier Height		0.0 feet					84.8%		10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm)		0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrie		0.0 feet		Noise	e Source E	levatio	ns (in fe	eet)				
Centerline Dist. to Observe	_	0.0 feet			Auto	os: 2	2.000	· ·				
Barrier Distance to Observe		0.0 feet		Me	dium Truck	ks: 4	1.000					
Observer Height (Above Pad		5.0 feet		Heavy Trucks: 8.006 Grade Adjustm					justment.	nent: 0.0		
Pad Elevation		0.0 feet										
Road Elevation		0.0 feet		Lane Equivalent Distance (in feet)								
Road Grade	: (0.0%		Autos: 93.723								
Left View	: -90	0.0 degree	es	Me	Medium Trucks: 93.680							
Right View	: 90	0.0 degree	es	H	leavy Truck	ks: 93	3.723					
FHWA Noise Model Calculati	ons											
VehicleType REMEL	Tra	ffic Flow	Distanc	e Fi	nite Road	Fres	snel	Barrier Att	en Ber	m Atten		
<i>Aut</i> os: 70.	20	-0.42	-4	4.20	-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 81.	00	-17.66	-4	4.19	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 85.	38	-21.62	-2	4.20	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (w	ithout	Topo and I	barrier att	tenuatio	on)							
VehicleType Leq Peak I	lour	Leq Day		g Evenin	g Leq	Night		Ldn	CI	VEL		
Autos:	64.4	(62.5	6	0.7	54	.7	63.3	3	63.9		
Medium Trucks:	57.9		56.4		0.1	48	_	57.0		57.2		
Heavy Trucks:	58.4	ţ	56.9	47.9 49.2			57.5	5	57.6			
Vehicle Noise:	66.1	(64.3	6	1.3	56	.5	65.0)	65.5		
Centerline Distance to Noise	Conto	ur (in feet)	1									

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	47	101	217	467
CNEL:	50	108	233	502

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o SR-261 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				Site C	onditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic (Peak Hour Percen Peak Hour Vol	tage:	3,400 vehicles 10% 2,640 vehicles			Medium Ti Heavy Tru	•	,			
Vehicle Sp Near/Far Lane Dista		60 mph 76 feet	Vehicl	ehicleTyp		Day	Evening	Night	Daily	
Site Data Barrier He Barrier Type (0-Wall, 1-B	•	0.0 feet 0.0			Medium 1 Heavy 1		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%
Centerline Dist. to Ba Centerline Dist. to Obse Barrier Distance to Obse Observer Height (Above Pad Eleve Road Eleve Road G Left Right	erver: Pad): ation: ation: rade: View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustm Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547					ijustment.	. 0.0
VehicleType REM Autos: Medium Trucks: Heavy Trucks:		1.02 -16.22 -20.18	-4	Final .11 .11	-1.20 -1.20 -1.20	Fres	nel -4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
VehicleType Leq Pe	s (withou eak Hour 68.9	Leq Day		enuatior Evening 65	Leq	Night 59.	2	<i>Ldn</i> 67.8	_	V <i>EL</i> 68.4
Medium Trucks: Heavy Trucks: Vehicle Noise:	62.2 61.8 70.4	2 (60.6 60.4 68.6	54 51 65	.3 .4	52. 52. 60.	7 6	61.2 61.0	2	61.4 61.1 69.8

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn: ¯	91	195	421	906							
CNEL:	98	210	453	976							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o SR-261 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DA	ATA	NOISE MODEL INPUTS							
Highway Data				,	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	21,900 v	ehicles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak H	lour Volume:	2,190 v	ehicles		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	60 m	nph		Vehicle I	Wix					
Near/Far La	ne Distance:	76 fe	eet			icleType		Day	Evening	Night	Daily
Site Data							lutos:	77.5%	Ŭ,	9.6%	-
Ra	rrier Height:	0.0 1	feet		Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 f	feet		Noise So	ourco El	ovatio	ns (in fa	not)		
Centerline Dist.	to Observer:	100.0 f	feet		NOISE SC	Autos		.000	et)		
Barrier Distance	to Observer:	0.0 f	feet		Madiu						
Observer Height	(Above Pad):	5.0 f	feet		Medium Trucks: 4.000 Heavy Trucks: 8.006				Grade Adj	iustmant	
P	ad Elevation:	0.0 f	feet		неач	y Trucks	S. 8	.006	Grade Auj	usimeni.	0.0
Road Elevation: 0.0 feet					Lane Eq	uivalent	Distar	nce (in t	feet)		
Road Grade: 0.0%						Autos	s: 92	2.547			
	Left View:	-90.0	degrees		Mediui	n Trucks	s: 92	2.504			
	Right View:	90.0	degrees		Heavy Trucks: 92.547						
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic F	Flow D	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22		0.20	-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		17.03	-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-2	20.99	-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo	and barr	rier atten	uation)						
VehicleType	Leq Peak Ho	ur Le	eq Day	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	68	3.1	66.2		64.4		58	.4	67.0)	67.6
Medium Trucks:	61	.3	59.8	}	53.5		51.	.9	60.4	1	60.6
Heavy Trucks:	61	.0	59.6	.6 50.6 51.8 60.2				2	60.3		
Vehicle Noise:	69	9.6	67.8	}	64.9		60	.0	68.5	5	69.0
Centerline Distan	ce to Noise C	ontour (ii	n feet)							1	
				70 (dBA	65 (dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

80

86

172

186

371

400

800

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Culver Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOI	SE MODE	L INPUT	S	
Highway Data				Site Con	ditions (Ha	ard = 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	23,200 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Truck	s (2 Axles):	15		
Peak H	lour Volume:	2,320 vehicles	S	He	avy Trucks	(3+ Axles):	15		
Ve	hicle Speed:	60 mph		Vehicle I	Mix				
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data					Auto			9.6%	•
Ba	rrier Height:	0.0 feet		Me	edium Truck	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0		F	leavy Truck	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet		Noisa Sa	ource Eleva	otions (in f	oot)		
Centerline Dist.	to Observer:	100.0 feet		140/36 30	Autos:	2.000	<i>cci)</i>		
Barrier Distance	to Observer:	0.0 feet		Mediu	n Trucks:	4.000			
Observer Height ((Above Pad):	5.0 feet			ry Trucks:	8.006	Grade Ad	iustment	0.0
Pa	ad Elevation:	0.0 feet		,					0.0
Ros	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)					
	Road Grade:	0.0%			Autos:	92.547			
	Left View:	-90.0 degree	es		n Trucks:	92.504			
	Right View:	90.0 degree	es	Heav	y Trucks:	92.547			
FHWA Noise Mod	el Calculation	าร							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road I	-resnel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.45	-4.1	11	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.78	-4.1	11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.74	-4.1	11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho			vening	Leq Nig	ht	Ldn	CI	VEL
Autos:			66.5	64.7		58.6	67.3		67.9
Medium Trucks:		_	60.1	53.7 52.2		52.2	60.6		60.9
Heavy Trucks:	6	1.3	59.9	50.8		52.1	60.4	4	60.5

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	83	179	386	832							
CNEL:	90	193	416	896							

65.2

60.2

68.8

69.3

68.1

Vehicle Noise:

69.8

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOISE	MODE	L INPUT	S			
Highway Data			Site Condi	tions (Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	26,000 vehicles	S			Autos:	15				
Peak Hour Percentage:	10%		Mediu	ım Trucks (2	? Axles):	15				
Peak Hour Volume:	2,600 vehicles	S	Heavy Trucks (3+ Axles): 15							
Vehicle Speed:	60 mph		Vehicle Mix							
Near/Far Lane Distance:	76 feet		Vehicle		Day	Evening	Night	Daily		
Site Data				Autos:	77.5%		9.6%	97.42%		
Barrier Height:	0.0 feet		Med	ium Trucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		He	avy Trucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet				<i>'</i> : •					
Centerline Dist. to Observer:	100.0 feet		Noise Sou	rce Elevatio		eet)				
Barrier Distance to Observer:	0.0 feet				2.000					
Observer Height (Above Pad):	5.0 feet		Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0							
Pad Elevation:	0.0 feet									
Road Elevation:	0.0 feet		Lane Equiv	valent Dista	nce (in	feet)				
Road Grade:	0.0%		Autos: 92.547							
Left View:	-90.0 degree	es	Medium Trucks: 92.504							
Right View:	90.0 degree		Heavy	Trucks: 9	2.547					
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite R	oad Fre	snel	Barrier Att	en Ber	m Atten		
Autos: 73.2	2 0.95	-4.1	1 -	1.20	-4.87	0.0	000	0.000		
Medium Trucks: 83.6	8 -16.29	-4.1	1 -	1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 87.3	3 -20.24	-4.1	1 -	1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)							
VehicleType Leq Peak H	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL		
Autos:	88.9	67.0	65.2	59	9.1	67.8	3	68.4		
		60.6	54.2		52.7 61.			61.4		
Heavy Trucks:	61.8	60.3	51.3 52		2.6	60.9		61.0		
Vehicle Noise:	70.3	68.6	65.7	60).7	69.3	3	69.8		

70 dBA

90

97

Ldn:

CNEL:

65 dBA

193

208

60 dBA

416

449

55 dBA

897

966

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Sand Canyon. Av.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA	1		NOISI	MODE	L INPUT	S			
Highway Data			Site Cor	nditions (Hard	I = 10, Sc	oft = 15)				
Average Daily Traffic (Adt)	: 27,700 vehic	les			Autos:	15				
Peak Hour Percentage			Me	edium Trucks (2 Axles):	15				
Peak Hour Volume	: 2,770 vehic	les	He	Heavy Trucks (3+ Axles): 15						
Vehicle Speed	: 55 mph		Vehicle	Miss						
Near/Far Lane Distance	•				E ' N'. L . D.					
Site Date			ver	nicleType	Day	Evening	Night	Daily		
Site Data				Autos.			9.6%			
Barrier Height				ledium Trucks.			10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm)				Heavy Trucks.	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier			Noise S	ource Elevati	ons (in f	eet)				
Centerline Dist. to Observer				Autos:	2.000					
Barrier Distance to Observer	: 0.0 feet		Mediu	ım Trucks:	4.000					
Observer Height (Above Pad)	: 5.0 feet			vy Trucks:	Grade Ad	Adjustment: 0.0				
Pad Elevation	: 0.0 feet									
Road Elevation	: 0.0 feet		Lane Equivalent Distance (in feet)							
Road Grade	: 0.0%		Autos: 96.607							
Left View	: -90.0 degi	rees	Mediu	Medium Trucks: 9						
Right View	: 90.0 degi	rees	Hea	vy Trucks: 9	96.608					
FHWA Noise Model Calculati	ons									
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten		
Autos: 71.	78 1.6		4.39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.	40 -15.6	54 -	4.39	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.	40 -19.5	i9 -	4.39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (w.	ithout Topo an	d barrier at	tenuation)							
VehicleType Leq Peak F	Hour Leq D	ay Led	q Evening	Leq Night		Ldn	CI	VEL		
Autos:	67.8	65.9	64.1	5	8.1	66.7	7	67.3		
Medium Trucks:	61.2	59.7	53.3	5	1.8	60.2	2	60.5		
Heavy Trucks:	61.2	59.8	50.8	50.8 52		52.0 60.4		60.5		
Vehicle Noise:	69.4	67.6	64.7	5	9.8	68.3	3	68.8		
Centerline Distance to Noise	Contour (in fe	et)		T.						

70 dBA

77

83

Ldn:

CNEL:

65 dBA

167

179

60 dBA

359

386

55 dBA

774

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Sand Canyon. Av.

Job Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC II	NPUT DAT	ГА		NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions (l	Hard = 10, S	Soft = 15)					
Average Daily	Traffic (Adt):	23,300 veh	nicles				Autos	s: 15					
Peak Hour	Percentage:	10%			Med	lium Truc	cks (2 Axles) <i>:</i> 15					
Peak H	our Volume:	2,330 veh	nicles		Hea	avy Truck	s (3+ Axles) <i>:</i> 15					
Ve	hicle Speed:	55 mp	55 mph			Vehicle Mix							
Near/Far Lai	ne Distance:	52 fee	t			cleType	Day	Evening	Night	Daily			
Site Data						Αι	utos: 77.5	% 12.9%	9.6%	97.42%			
Bar	rier Height:	0.0 fe	et		Me	dium Tru	cks: 84.8	% 4.9%	10.3%	1.84%			
Barrier Type (0-W	_	0.0			H	leavy Tru	cks: 86.5	% 2.7%	10.8%	0.74%			
Centerline Dis	,	100.0 fe	et	N	loise So	urce Fle	vations (in	foot)					
Centerline Dist.	to Observer:	100.0 fe	et	74	0/30 00	Autos:	•	iccij					
Barrier Distance	to Observer:	0.0 fe	et		Modium	n Trucks:							
Observer Height (Above Pad):	5.0 fe	et					Grade Ad	Grade Adjustment: 0.				
Pa	ad Elevation:	0.0 fe	0.0 feet			,							
Roa	Road Elevation: 0.0 feet				ane Equ	ıivalent l	Distance (ir	r feet)					
ŀ	Road Grade:	0.0%			Autos: 96.607								
	Left View:	-90.0 de	egrees		Mediun	n Trucks:	96.566						
	Right View:	90.0 de	egrees		Heav	/ Trucks:	96.608						
FHWA Noise Mode	el Calculation	าร											
VehicleType	REMEL	Traffic Flo	ow Di	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	71.78	3 C).85	-4.39		-1.20	-4.87	7 0.0	000	0.000			
Medium Trucks:	82.40	-16	6.39	-4.39		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-20).34	-4.39		-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise	Levels (with	hout Topo a	and barri	ier attenu	ation)								
VehicleType	Leq Peak Ho	ur Leq	Day	Leq Eve	ening	Leq N	light	Ldn	CI	VEL			
Autos:	6	7.0	65.1		63.4		57.3	65.9	9	66.5			
Medium Trucks:	60	0.4	58.9		52.6		51.0	59.	5	59.7			
Heavy Trucks:	60	0.5	59.0		50.0 51.3			59.0	3	59.7			
Vehicle Noise:	68	8.6	66.9		63.9		59.0	67.0	6	68.1			

70 dBA

69

74

Ldn:

CNEL:

65 dBA

149

160

60 dBA

320

344

55 dBA 690

742

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Job Number: 8141

Road Segment: w/o Ridge Valley

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Si	te Con	ditions ((Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	24,600 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tru	icks (2	Axles):	15		
Peak H	lour Volume:	2,460 vehicle	es		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	55 mph	·			1ix					
Near/Far La	ane Distance:	52 feet				cleType		Day	Evening	Night	Daily
Site Data							lutos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet			Ме	dium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			H	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		No	nise Sn	urce Ele	evatio	ns (in fa	2et)		
Centerline Dist.	to Observer:	100.0 feet		7.00	0,30 00	Autos		.000	<i></i>		
Barrier Distance	to Observer:	0.0 feet			Modium	n Trucks		.000			
Observer Height	(Above Pad):	5.0 feet							Grade Ad	iustmont	. 0 0
P	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Ad				justinent	0.0		
Ro	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0%				Autos	s: 96	.607			
	Left View:	-90.0 degre	es		Mediun	n Trucks	s: 96	5.566			
	Right View:	90.0 degre			Heav	/ Trucks	s: 96	3.608			
FHWA Noise Mod	lel Calculation	ns									
VehicleType	REMEL	Traffic Flow	Distanc	е	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.09	-4	1.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.15	-4	4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.11	-2	4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier att	tenua	ation)						
VehicleType	Leq Peak Ho	our Leq Da	y Leq	g Eve	ening	Leq I	Night		Ldn	CI	VEL
Autos:	6	7.3	65.4		63.6		57.	.6	66.2	2	66.8
Medium Trucks:	6	0.7	59.2		52.8		51.	.2	59.7	7	59.9
Heavy Trucks:	6	0.7	59.3	50.2 51.5 59.8			3	60.0			
Vehicle Noise:	6	8.9	67.1		64.1		59.	.3	67.8	3	68.3

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	71	154	332	715							
CNEL:	77	166	357	769							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Ridge Valley

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt): 25,4	100 vehicles						Autos:	15				
Peak Hour Percentage		10%			Me	dium Tru	ıcks (2	Axles):	15				
Peak Hour Volume		2,540 vehicles			Heavy Trucks (3+ Axles): 15								
Vehicle Speed	l:	55 mph		1	/ehicle l	Miv							
Near/Far Lane Distance	e:	52 feet				icleType		Day	Evening	Night	Daily		
Site Data					Veri		Autos:	77.5%	J	9.6%	_		
		006			1/1	edium Tr		84.8%		10.3%	1.84%		
Barrier Heigh		0.0 feet				Heavy Tr		86.5%		10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm		0.0				loavy II	uono.	00.070	2.1 /0	10.070	0.7 4 70		
	enterline Dist. to Barrier: 100.0 feet				Noise Source Elevations (in feet)								
Centerline Dist. to Observe		00.0 feet				Autos	s: 2	2.000					
Barrier Distance to Observe		0.0 feet			Mediui	m Trucks	s: 4	1.000					
Observer Height (Above Pag		5.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	justment.	0.0		
Pad Elevation		0.0 feet		,	ano Ea	uivalant	Dicto	nco (in :	foot)				
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet) Autos: 96.607								
Road Grade		0.0%			N 4 1'								
Left View: -90.0 degrees				Medium Trucks: 96.566									
Right View: 90.0 degrees					Heavy Trucks: 96.608								
FHWA Noise Model Calculat	ions												
VehicleType REMEL	Tr	affic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 71	78	1.23 -		-4.39)	-1.20		-4.87			0.000		
Medium Trucks: 82	40	-16.01	16.01 -4.)	-1.20			0.0	000	0.000		
Heavy Trucks: 86	40	-19.97	7 -4.)	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (v	ithout	Topo and k	parrie	er atteni	uation)								
VehicleType Leq Peak	Hour	Leq Day		Leq Ev	rening	Leq	Night		Ldn	CI	VEL		
Autos:	67.4	65.5			63.7 57		7.7 66.3		3	66.9			
Medium Trucks:	60.8	59.3			52.9 51.4		.4	59.8		60.1			
Heavy Trucks:	60.8	59.4			50.4 51.6		.6	60.0		60.1			
Vehicle Noise:	69.0	.0 67.2			64.3 59.4		68.0		68.4				
Centerline Distance to Noise	Conto	our (in feet)											

70 dBA

73

79

Ldn: CNEL: 65 dBA

157

169

60 dBA

339

365

55 dBA

730

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: b/w Silverado and Portola Springs

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt).	27,200 vehicle	S			Autos:	15					
Peak Hour Percentage.			Me	dium Trucks (2	2 Axles):	15					
Peak Hour Volume:	2,720 vehicle	S	Hea	avy Trucks (3	+ Axles):	15					
Vehicle Speed:	55 mph		Vehicle Mix								
Near/Far Lane Distance.	•							Doily			
Site Date			verii			J	Night	Daily			
Site Data			A 4.	Autos:	77.5%		9.6%	97.42%			
Barrier Height				edium Trucks:	84.8%		10.3%	1.84%			
Barrier Type (0-Wall, 1-Berm)			F	łeavy Trucks:	86.5%	2.7%	10.8%	0.74%			
Centerline Dist. to Barrier			Noise Source Elevations (in feet)								
Centerline Dist. to Observer				Autos:	2.000						
Barrier Distance to Observer	0.0 feet		Mediur		4.000						
Observer Height (Above Pad)	5.0 feet				8.006	Grade Ad	justment:	0.0			
Pad Elevation	0.0 feet										
Road Elevation.	0.0 feet		Lane Equ	uivalent Dista	•	feet)					
Road Grade: 0.0%			Autos: 96.607								
Left View: -90.0 degrees			Medium Trucks: 96.566								
Right View	Heavy Trucks: 96.608										
FHWA Noise Model Calculation	ons										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Att	en Ber	m Atten			
Autos: 71.7	78 1.52	-4.	39	-1.20	-4.87	0.000		0.000			
Medium Trucks: 82.4	10 -15.72	-4.	39	-1.20	<i>-4.97</i>	0.0	000	0.000			
Heavy Trucks: 86.4	19.67	-4.	39	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	nuation)								
VehicleType Leq Peak H	lour Leq Day	y Leq	Evening	vening Leq Night		Ldn	CI	CNEL			
Autos:	67.7	65.8		64.0 58		.0 66.6		67.2			
Medium Trucks:	61.1	59.6		53.2 51.		60.1		60.4			
Heavy Trucks:	61.1	59.7		50.7 51.9		60.3		60.4			
Vehicle Noise:	69.3	67.5		64.6 59.7		68.3		68.7			
Centerline Distance to Noise	Contour (in feet	t)									

70 dBA

76

82

Ldn:

CNEL:

65 dBA

165

177

60 dBA

355

382

55 dBA

764

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Portola Springs

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt):	23,500 vehicles	5			Autos:	15					
Peak Hour Percentage:	10%		Medium Trucks (2 Axles): 15								
Peak Hour Volume:	2,350 vehicles	S	Heavy Trucks (3+ Axles): 15								
Vehicle Speed:	55 mph		Vehicle I	Mix							
Near/Far Lane Distance:	52 feet			cleType	Day	Evening	Night	Daily			
Site Data				Autos	: 77.5%	_	9.6%				
Barrier Height:	0.0 feet		Me	edium Trucks	: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-Wall, 1-Berm):	0.0		F	łeavy Trucks	: 86.5%	2.7%	10.8%	0.74%			
Centerline Dist. to Barrier:	100.0 feet		Noise Course Floretiens (in text)								
Centerline Dist. to Observer:	100.0 feet		Noise Source Elevations (in feet)								
Barrier Distance to Observer:	0.0 feet			Autos:	2.000						
Observer Height (Above Pad):	5.0 feet			n Trucks:	4.000	0 - 4 - 4 - 4		0.0			
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0			
Road Elevation:	0.0 feet		Lane Equivalent Distance (in feet)								
Road Grade: 0.0% Left View: -90.0 degrees			Autos: 96.607 Medium Trucks: 96.566								
											Right View: 90.0 degrees
FHWA Noise Model Calculation	ns										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten			
Autos: 71.7	8 0.89	-4.3	39	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 82.4	0 -16.35	-4.3	39	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 86.4	0 -20.31	-4.3	39	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (wit	hout Topo and	barrier attei	nuation)								
VehicleType Leq Peak He	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL			
Autos: 6	67.1	65.2		63.4		66.0		66.6			
Medium Trucks:	0.5 59.0		52.6 51.0		51.0	59.5		59.7			
Heavy Trucks:	0.5	59.1	50.0 5		51.3	59.6		59.8			
Vehicle Noise:	88.7	66.9	63.9		59.1	67.6	5	68.1			

70 dBA

69

75

Ldn:

CNEL:

65 dBA

149

161

60 dBA

322

346

55 dBA

693

746

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Cond	itions (Har	d=10, Se	oft = 15)				
Average Daily Peak Hour	Traffic (Adt): Percentage:	4,600 vehicles	3	Medi	um Trucks	Autos: (2 Axles):					
	lour Volume:	460 vehicles	3	Heav	y Trucks (3	3+ <i>Axles):</i>	15				
	hicle Speed: ne Distance:	50 mph 70 feet	1	Vehicle Mi Vehicl	i x leType	Day	Evening	Night	Daily		
Site Data					Autos			9.6%			
Bai Barrier Type (0-W	rrier Height: /all, 1-Berm):	0.0 feet 0.0			lium Trucks eavy Trucks			10.3% 10.8%	1.84% 0.74%		
Centerline Dis	st. to Barrier:	100.0 feet	1	Noise Sou	rce Elevati	ions (in f	eet)				
	to Observer: (Above Pad): ad Elevation:	100.0 feet 0.0 feet 5.0 feet 0.0 feet			Trucks:	2.000 4.000 8.006	Grade Adj	iustment:	0.0		
	ad Elevation:	0.0 feet		_ane Equi	valent Dist Autos:	93.723	reet)				
,	Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree		Medium Heavy	Trucks:	93.723 93.680 93.723					
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distance	Finite R	oad Fr	esnel	Barrier Att	en Beri	m Atten		
Autos:	70.20	-5.78	-4.20		-1.20	-4.87		000	0.000		
Medium Trucks:	81.00	-23.02	-4.19		-1.20	-4.97		000	0.000		
Heavy Trucks:	85.38	-26.98	-4.20)	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Topo and I	barrier atten	uation)							
	Leq Peak Hou			•	Leq Night		Ldn		VEL		
Autos:	59		57.1	55.4		19.3	57.9		58.5		
Medium Trucks:	52		51.1	44.7		13.2	51.6		51.9		
Heavy Trucks:	53		51.6	42.5		13.8	52.2		52.3		
Vehicle Noise:	60	.7	59.0	55.9	5	51.1	59.7	7	60.2		

70 dBA

21

22

Ldn:

CNEL:

65 dBA

44

48

60 dBA

95

102

55 dBA

205

221

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA					ISE MODE		S	
Highway Data				Si	ite Con	ditions (H	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	22,000 vehicle	s				Autos	: 15		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Axles)	: 15		
Peak F	lour Volume:	2,200 vehicle	s		He	avy Truck	s (3+ Axles)	: 15		
Ve	ehicle Speed:	55 mph		Ve	ehicle i	Mix				
Near/Far La	ne Distance:	88 feet				icleType	Day	Evening	Night	Daily
Site Data							tos: 77.5%	•	9.6%	-
Ba	rrier Height:	0.0 feet			Me	edium Trud	cks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	Heavy Truc	cks: 86.5%	6 2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		N	oise So	ource Flev	rations (in f	eet)		
Centerline Dist.	to Observer:	100.0 feet			0,00 0	Autos:	2.000			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks:	4.000			
Observer Height	(Above Pad):	5.0 feet				y Trucks:	8.006	Grade Ad	iustment	0.0
P	ad Elevation:	0.0 feet			rieav	y Trucks.	0.000	Grade Adj	idotificit.	0.0
Ro	ad Elevation:	0.0 feet		Lá	ane Eq	uivalent D	istance (in	feet)		
	Road Grade:	0.0%				Autos:	89.850			
	Left View:	-90.0 degre	es		Mediu	m Trucks:	89.805			
	Right View:	90.0 degre	es		Heav	y Trucks:	89.850			
FHWA Noise Mod	lel Calculation	ns								
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.60		-3.92		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.64		-3.92		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.59		-3.92		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier a	attenu	ation)					
VehicleType	Leq Peak Ho	our Leq Day	/ Le	eq Eve	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	6	7.3	65.4		63.6		57.5	66.2	2	66.8
Medium Trucks:	6	0.6	59.1		52.8		51.2	59.7	7	59.9
Heavy Trucks:	6	0.7	59.3		50.2		51.5	59.8	3	60.0
Vehicle Noise:	6	8.8	67.1		64.1		59.2	67.8	3	68.3

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	71	154	331	714
CNEL:	77	165	356	768

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA		NOISE MODEL INPUTS							
Highway Data					Site Con	ditions (H	lard = 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	31,700 ve	hicles				Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Truci	ks (2 Axles):	15			
Peak H	lour Volume:	3,170 ve	hicles		He	avy Trucks	s (3+ Axles):	15			
Ve	ehicle Speed:	55 mj	ph	,	/ehicle l	Mix					
Near/Far La	ne Distance:	88 fee	et	<u>'</u>		icleType	Day	Evening	Night	Daily	
Site Data							tos: 77.5%	J	9.6%	97.42%	
Ra	rrier Height:	0.0 fe	oot .		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%	
• • • • • • • • • • • • • • • • • • • •	ist. to Barrier:	100.0 fe	eet					4)			
Centerline Dist.		100.0 fe		1	voise Sc		ations (in f	eet)			
Barrier Distance		0.0 fe			Autos: 2.000						
		5.0 fe				n Trucks:	4.000				
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet					Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0	
	ad Elevation:	0.0 fe		1	Lane Eg	uivalent D	istance (in	feet)			
	Road Grade:	0.0%				Autos:	89.850	,			
	Left View:	-90.0 d			Mediur	n Trucks:	89.805				
	Right View:		legrees			y Trucks:	89.850				
	J										
FHWA Noise Mod											
VehicleType	REMEL	Traffic F		Distance	Finite		Fresnel	Barrier Att		m Atten	
Autos:			2.19	-3.92		-1.20	-4.87		000	0.000	
Medium Trucks:	82.40	-1	5.05	-3.92	2	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-1	9.01	-3.92	2	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo	and bar	rier atten	uation)						
VehicleType	Leq Peak Ho	ur Led	g Day	Leq Ev	ening/	Leq Ni	ght	Ldn	CI	VEL	
Autos:	68	3.8	66.9	9	65.2		59.1	67.7	7	68.4	
Medium Trucks:	62	2.2	60.	7	54.4		52.8	61.3	3	61.5	
Heavy Trucks:	62	2.3	60.8	8	51.8		53.1	61.4	1	61.5	
Vehicle Noise: 70.4 68.7					65.7 60.8 69.4 69					69.9	

70 dBA

91

98

Ldn: CNEL: 65 dBA

196

211

60 dBA

423

455

55 dBA

910

979

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Glenn Ranch Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS								
Highway Data			S	Site Con	ditions (H	ard = 10, Sc	oft = 15)			
Average Daily Traffic (Adt)	: 49,600 v	ehicles				Autos:	15			
Peak Hour Percentage	: 10%			Med	dium Truck	ks (2 Axles):	15			
Peak Hour Volume	4,960 v	ehicles		Hea	avy Trucks	(3+ <i>Axles</i>):	15			
Vehicle Speed	55 m	nph	V	/ehicle l	/liv					
Near/Far Lane Distance	: 88 fe	eet			cleType	Day	Evening	Night	Daily	
Site Data					Aut		-	9.6%	97.42%	
Barrier Height	: 0.0	foot		Мє	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm)		ieei		F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier		feet	_							
Centerline Dist. to Observer			٨	loise So		ations (in f	eet)			
Barrier Distance to Observer				Autos: 2.000						
Observer Height (Above Pad)					n Trucks:	4.000				
Pad Elevation		Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0			
Road Elevation	0.0		L	ane Equ	ıivalent D	istance (in	feet)			
Road Grade					Autos:	89.850	,			
Left View		degrees		Mediur	n Trucks:	89.805				
Right View		degrees			y Trucks:	89.850				
					,					
FHWA Noise Model Calculati										
VehicleType REMEL	Traffic I		Distance	Finite		Fresnel	Barrier Att		m Atten	
Autos: 71.	78	4.13	-3.92		-1.20	<i>-4</i> .87	0.0	000	0.000	
Medium Trucks: 82.	- 40	13.11	-3.92		-1.20	<i>-4</i> .97	0.0	000	0.000	
Heavy Trucks: 86.	40 -	17.06	-3.92		-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (w	thout Topo	o and ba	rrier attenu	uation)						
VehicleType Leq Peak F	lour Le	eq Day	Leq Ev	ening	Leq Ni	ght	Ldn	CI	VEL	
Autos:	70.8	68.	.9	67.1		61.1	69.7	7	70.3	
Medium Trucks:	64.2	62.	.7	56.3		54.8	63.2	2	63.5	
Heavy Trucks: 64.2 62.8						55.0	63.4	1	63.5	
Vehicle Noise: 72.4 70.6						62.8	71.3	3	71.8	

70 dBA

123

132

Ldn:

CNEL:

65 dBA

264

284

60 dBA

569

613

55 dBA

1,227

1,320

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Glenn Ranch Rd.

Job Number: 8141

Analyst: B. Lawson

Average Daily			SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
• •				S	ite Con	ditions (H	lard = 10, S	oft = 15)							
Peak Hour	Traffic (Adt): 3	4,500 vehicle	es				Autos	: 15							
i Gak i loui	Percentage:	10%			Med	dium Truci	ks (2 Axles).	: 15							
Peak H	our Volume:	3,450 vehicle	es		Hea	avy Trucks	s (3+ Axles)	: 15							
	hicle Speed:	55 mph		V	ehicle I	Mix									
Near/Far Lai	ne Distance:	88 feet				icleType	Day	Evening	Night	Daily					
Site Data						Au	tos: 77.5%	6 12.9%	9.6%	97.42%					
Bai	rier Height:	0.0 feet			Me	edium Truc	cks: 84.8%	6 4.9%	10.3%	1.84%					
Barrier Type (0-W	•	0.0			F	leavy Truc	cks: 86.5%	6 2.7%	10.8%	0.74%					
Centerline Dis	•	100.0 feet		A.	loiso Sa	vurco Elov	rations (in f	inat)							
Centerline Dist.	to Observer:	100.0 feet		/\	oise so		2.000	eei)							
Barrier Distance	to Observer:	0.0 feet			1.4 m alii	Autos:									
Observer Height (Above Pad):	5.0 feet				n Trucks:	4.000	Crada Ad	iuotmont						
• ,	ad Elevation:	0.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0					
Road Elevation: 0.0 feet					ane Equ	uivalent D	istance (in	feet)							
I	Road Grade:	0.0%				Autos:	89.850								
	Left View:	-90.0 degre	ees		Mediur	n Trucks:	89.805								
	Right View:	90.0 degre			Heav	y Trucks:	89.850								
FHWA Noise Mode	el Calculations	5													
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten					
Autos:	71.78	2.56	3	-3.92		-1.20	<i>-4</i> .87	0.0	000	0.000					
Medium Trucks:	82.40	-14.68	3	-3.92		-1.20	-4.97	0.0	000	0.000					
Heavy Trucks:	86.40	-18.64	ļ	-3.92		-1.20	-5.16	0.0	000	0.000					
Unmitigated Noise	Levels (with	out Topo and	l barri	er attenu	ation)										
VehicleType	Leq Peak Hou	r Leq Da	y	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL					
Autos:	69.	2	67.3		65.5		59.5	68.1	1	68.7					
Medium Trucks:	62.	6	61.1		54.7		53.2	61.6	3	61.9					
Heavy Trucks:	62.	6	61.2		52.2		53.4	61.8	3	61.9					
Vehicle Noise:	70.	8	69.0		66.1		61.2	69.8	3	70.2					

70 dBA

96

104

Ldn:

CNEL:

65 dBA

208

223

60 dBA

447

481

55 dBA 963

1,036

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy. East

Road Segment: s/o SR-241 SB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)			
Average Daily Traf	fic (Adt): 3	4,800 vehicle	S					Autos:	15			
Peak Hour Per	. ,	10%			Me	dium Tru	ıcks (2	Axles):	15			
Peak Hour	Volume:	3,480 vehicle	S		He	avy Truc	ks (3+	Axles):	15			
Vehicle	e Speed:	55 mph		V	'ehicle l	Miv						
Near/Far Lane D	Distance:	88 feet		_		icleType		Day	Evening	Night	Daily	
Site Data					V 011		lutos:	77.5%		9.6%	-	
	. I la la la la t	0.0 foot			Me	, edium Tr		84.8%		10.3%	1.84%	
	Height:	0.0 feet 0.0				leavy Tr		86.5%		10.8%	0.74%	
Barrier Type (0-Wall,	•				<u> </u>				2,0	101070	0.1 170	
Centerline Dist. to		100.0 feet		۸	loise Sc	ource El	evatio	ns (in fe	eet)			
Centerline Dist. to C		100.0 feet				Autos	s: 2	.000				
Barrier Distance to C		0.0 feet			Mediui	n Trucks	s: 4	.000				
Observer Height (Abo		5.0 feet			Heav	y Trucks	s: 8	.006	Grade Adj	iustment:	0.0	
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet					Fa		Diata	(:-	faa4)			
		0.0 feet			arie Eq	uivalent			reet)			
	d Grade:	0.0%				Autos		0.850				
	eft View:	-90.0 degre				n Trucks		.805				
Rig	ght View:	90.0 degre	es		Heav	y Trucks	s: 89	0.850				
FHWA Noise Model C	alculations	;										
VehicleType F	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	2.59		-3.92		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-14.65		-3.92		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-18.60		-3.92		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Le	vels (witho	out Topo and	barrie	r attenu	ıation)							
VehicleType Led	Peak Hou	r Leq Day	/	Leq Ev	ening	Leq I	Night		Ldn	CI	VEL	
Autos:	69.	3	67.4		65.6		59	.5	68.2	2	68.8	
Medium Trucks:	62.	6	61.1		54.8		53.	.2	61.7	7	61.9	
Heavy Trucks:	62.	7	61.3		52.2		53.	.5	61.8	3	61.9	
Vehicle Noise:	70.	8	69.1		66.1		61	.2	69.8	3	70.3	
Centerline Distance to	Noise Co	ntour (in feet)									

70 dBA

97

104

Ldn:

CNEL:

65 dBA

209

225

60 dBA

450

484

55 dBA

969

1,042

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: s/o Rancho Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPI		NOISE MODEL INPUTS							
Highway Data				Site Cond	ditions (Ha	ard = 10, Sc	oft = 15)		
Average Daily Tra	ffic (Adt):	59,800 vehicle	S			Autos:	15		
Peak Hour Per		10%		Med	dium Truck	s (2 Axles):	15		
Peak Hour	Volume:	5,980 vehicle	s	Hea	avy Trucks	(3+ Axles):	15		
Vehicle	e Speed:	55 mph		Vehicle N	1ix				
Near/Far Lane I	Distance:	88 feet			cleType	Day	Evening	Night	Daily
Site Data					Aut	os: 77.5%	12.9%	9.6%	97.42%
Barrie	r Height:	0.0 feet		Ме	dium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall,	•	0.0		H	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to		100.0 feet		Noise Se	uroo Elov	ations (in fe	204)		
Centerline Dist. to C	Observer:	100.0 feet		Noise So		•	et)		
Barrier Distance to C	Observer:	0.0 feet		A 4 a alii wa	Autos:	2.000			
Observer Height (Abo	ove Pad):	5.0 feet			n Trucks:	4.000	O		0.0
- ,	levation:	0.0 feet		Heav	y Trucks:	8.006	Grade Adj	ustment:	0.0
	levation:	0.0 feet		Lane Equ	ivalent Di	istance (in	feet)		
	d Grade:	0.0%			Autos:	89.850			
	.eft View:	-90.0 degre	es	Mediun	n Trucks:	89.805			
	ght View:	90.0 degre			/ Trucks:	89.850			
FHWA Noise Model C	alculation	<u> </u>							
	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	71.78	4.94	-3.	92	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-12.29	-3.	92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-16.25	-3.	92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Le	evels (with	out Topo and	barrier atte	nuation)					
VehicleType Led	η Peak Hou	ır Leq Day	/ Leq	Evening	Leq Nig	ght	Ldn	CI	VEL
Autos:	71	.6	69.7	67.9		61.9	70.5	5	71.1
Medium Trucks:	65	.0	63.5	57.1		55.6	64.0)	64.3
Heavy Trucks:	65	.0	63.6	54.6		55.8	64.2	2	64.3
Vehicle Noise:	73	5.2	71.4	68.5		63.6	72.1		72.6

70 dBA

139

150

Ldn:

CNEL:

65 dBA

299

322

60 dBA

645

694

55 dBA

1,390

1,495

Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Portola Pkwy./S. Margarita Pkwy.

Road Segment: e/o El Toro Rd.

Project Name: 2012 Great Park GPA/ZC

63.5

71.8

Job Number: 8141 Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS								
Highway Data				S	ite Cor	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	50,000 vehicle	es					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	2 Axles):	15				
Peak H	our Volume:	5,000 vehicle	es		He	avy Tru	cks (3-	+ Axles):	15				
Ve	hicle Speed:	55 mph		V	ehicle	Miy							
Near/Far Lai	ne Distance:	88 feet		-		icleType	9	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%		9.6%	_		
Bai	rier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0			ı	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dis	,	100.0 feet		N	loise S	ource F	levatio	ons (in fe	eet)				
Centerline Dist.	to Observer:	100.0 feet		7.	0,000	Auto		2.000	<i></i>				
Barrier Distance	0.0 feet			Mediu	m Truck		4.000						
Observer Height (5.0 feet				n Truck ∕y Truck	_	8.006	Grade Ad	iustmeni	. 00			
Pá	ad Elevation:	0.0 feet								dottriori	0.0		
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in	feet)				
I	Road Grade:	0.0%				Auto	s: 8	9.850					
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 8	9.805					
	Right View:	90.0 degre	es		Hear	y Truck	s: 8	9.850					
FHWA Noise Mode	el Calculation	ıs											
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fre	snel	Barrier Att	en Be	rm Atten		
Autos:	71.78	4.17		-3.92		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-13.07		-3.92		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-17.03		-3.92		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	out Topo and	barr	ier attenu	ation)								
VehicleType	Leq Peak Hou	ur Leq Da	У	Leq Ev	ening	Leq	Night		Ldn	С	NEL		
Autos: 70.8 68.9					67.2 61.1 69.7			7	70.3				
Medium Trucks: 64.2 62.7					56.3 54.8 63.3				63.5				

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	123	266	573	1,233
CNEL:	133	286	616	1,327

53.8

67.7

55.0

62.8

63.4

71.4

62.8

70.6

Heavy Trucks:

Vehicle Noise:

64.2

72.4

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Portola Springs

Job Number: 8141

Road Segment: s/o Portola Pkwy.

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Cor	nditions ((Hard = 1	10, Sc	oft = 15)			
Average Daily T	raffic (Adt):	6,400 vehicles	S			Α	utos:	15			
Peak Hour F	, ,	10%		Me	edium Tru	icks (2 A	xles):	15			
Peak Ho	our Volume:	640 vehicles	S	He	avy Truc	ks (3+ A	xles):	15			
Veh	icle Speed:	55 mph		Vehicle	Mix						
Near/Far Lan	e Distance:	52 feet			icleType		Day	Evening	Night	Daily	
Site Data				Ven			7.5%		9.6%	-	
				1.1	ے edium Tri		7.5% 34.8%		10.3%	1.84%	
	rier Height:	0.0 feet			Heavy Tri		36.5%		10.8%	0.74%	
Barrier Type (0-Wa	,	0.0		'	leavy III	uchs. C	0.570	2.1 /0	10.070	0.7470	
Centerline Dist		100.0 feet		Noise S	ource Ele	evations	(in fe	eet)			
Centerline Dist. to		100.0 feet			Autos	: 2.0	00				
Barrier Distance to		0.0 feet		Mediu	m Trucks	: 4.0	00				
Observer Height (A	Above Pad): d Elevation:	5.0 feet 0.0 feet		Heav	vy Trucks	: 8.0	06	Grade Adj	justment.	0.0	
		Long Fo	u ii valant	Diotono	o (in	faat)					
	d Elevation:	0.0 feet		Lane Eq	uivalent			ieei)			
R	Road Grade:	0.0%		A 4 1'	Autos						
	Left View:	-90.0 degree			m Trucks						
	Right View:	90.0 degree	es	Heav	vy Trucks	: 96.6	08				
FHWA Noise Mode	l Calculations	;									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresne	e/	Barrier Att	en Ber	m Atten	
Autos:	71.78	-4.76	-4	.39	-1.20	-	4.87	0.0	000	0.000	
Medium Trucks:	82.40	-22.00	-4	.39	-1.20	-	4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-25.95	-4	.39	-1.20	-	5.16	0.0	000	0.000	
Unmitigated Noise	Levels (witho	out Topo and	barrier atte	enuation)							
VehicleType	Leq Peak Hou	r Leq Day	Leq	Evening	Leq N	Vight		Ldn	CI	VEL	
Autos:	61.	4	59.5	57.8		51.7		60.3	3	60.9	
Medium Trucks:	54.	8	53.3	46.9		45.4		53.9	9	54.1	
Heavy Trucks:	54.	8	53.4	44.4		45.6		54.0)	54.1	
Vehicle Noise:	63.	0	61.2	58.3		53.4		62.0)	62.4	
Centerline Distance	e to Noise Co	ntour (in feet)								

70 dBA

29

31

Ldn: CNEL: 65 dBA

63

68

60 dBA

135

145

55 dBA

291

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Quail Hill Pkwy.

Road Segment: e/o Shady Canyon Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data			,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt):	19,600 vehicles	3					Autos:	15			
Peak Hour Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15			
Peak Hour Volume:	1,960 vehicles	3		He	avy Truc	cks (3+	Axles):	15			
Vehicle Speed:	55 mph			Vehicle i	Miv						
Near/Far Lane Distance:	52 feet				icleType		Day	Evening	Night	Daily	
Site Data				V 0//		Autos:	77.5%		9.6%	-	
	0.0 feet			M	edium Tı		84.8%		10.3%		
Barrier Height:	0.0 reet 0.0				Heavy Ti		86.5%		10.8%	0.74%	
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 100.0 feet										
Centerline Dist. to Observer:	100.0 feet			Noise So	ource El			eet)			
Barrier Distance to Observer:	0.0 feet				Auto		2.000				
Observer Height (Above Pad):				Mediu	m Trucks	s: 4	1.000				
Pad Elevation:	5.0 feet 0.0 feet			Heav	y Truck	s: 8	3.006	Grade Adj	iustment.	. 0.0	
Road Elevation:	0.0 feet			Lane Eq	uivalent	Dista	nce (in i	feet)			
Road Grade:	0.0%				Autos		6.607				
Left View:	-90.0 degree	00		Mediu	m Trucks		6.566				
Right View:	90.0 degree				y Trucks		6.608				
right view.	30.0 degree			77041	y Traoni	<i>J.</i> 00	3.000				
FHWA Noise Model Calculation	ıs										
VehicleType REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos: 71.78	0.10		-4.3	9	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 82.40	-17.14		-4.3	9	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 86.40	-21.09		-4.3	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (with	out Topo and	barrie	r atten	uation)							
VehicleType Leq Peak Ho				vening	Leq	Night		Ldn	CI	NEL	
Autos: 66	5.3	64.4		62.6		56	.6	65.2	2	65.8	
Medium Trucks: 59	9.7	58.2		51.8		50	.3	58.7	7	59.0	
Heavy Trucks: 59	9.7	58.3		49.3		50	.5	58.9	9	59.0	
Vehicle Noise: 67	7.9	66.1		63.1		58	.3	66.8	3	67.3	
Centerline Distance to Noise C	ontour (in feet)									
			70 (dBA	65	dBA	6	60 dBA	55	dBA	
		Ldn:	6	1	1;	32	1	285	6	514	

CNEL:

66

307

661

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Rancho Pkwy. S Job Number: 8141
Road Segment: w/o Bake Pkwy. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS						
Highway Data				Site C	onditions	(Hard =	10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	10,200 vehicle 10% 1,020 vehicle			/ledium Tr Heavy Tru	ucks (2 A	,			
	ehicle Speed: ane Distance:	50 mph 70 feet		Vehicl Ve	ehicleType		<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0			Medium T Heavy T	rucks: 8	34.8% 36.5%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre 90.0 degre		Med He Lane E	Source E Auto ium Truck avy Truck Equivalen Auto ium Truck avy Truck	s: 2.0 s: 4.0 s: 8.0 t Distanc s: 93.7 s: 93.6	000 000 006 ee (in 1 723	Grade Ad	iustment:	0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	70.20 81.00	Traffic Flow -2.32 -19.56	-4	e <i>Fini</i> 1.20 1.19 1.20	-1.20 -1.20 -1.20	•	el -4.87 -4.97 -5.16	0.0	en Ber 000 000	<i>m Atten</i> 0.000 0.000 0.000
Unmitigated Nois VehicleType	Leq Peak Ho	ur Leq Day	y Leq	Evening	Leq	Night		Ldn		VEL
Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	56 56	2.5 6.0 6.5 4.2	60.6 54.5 55.0	58 48 46	.2 .0	52.8 46.6 47.3		61.4 55.1 55.6 63.1	l S	62.0 55.3 55.7
veriicie ivoise.	04	+.∠	62.4	59	.4	54.6		03.	I	63.6

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	35	75	162	349						
CNEL:	38	81	174	375						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Rancho Pkwy.

Road Segment: w/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d=10, So	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	29,600 vehicles 10% 2,960 vehicles			dium Trucks (avy Trucks (3		15		
Vehicle Speed: Near/Far Lane Distance:	50 mph 70 feet		Vehicle l	· ·	Day	Evening	Night	Daily
Site Data				Autos		-	-	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer:	100.0 feet 100.0 feet		ŀ	edium Trucks Heavy Trucks Durce Elevati Autos:	: 86.5%	2.7%	10.3% 10.8%	1.84% 0.74%
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation:	5.0 feet 0.0 feet		Heav	m Trucks: yy Trucks: uivalent Dist	4.000 8.006	Grade Ad	justment:	0.0
Road Grade: Left View: Right View:	0.0% -90.0 degree			m Trucks:	93.723 93.680 93.723			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos: 70.2 Medium Trucks: 81.0 Heavy Trucks: 85.3	0 -14.93	-4.2 -4.2	19	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	000	0.000 0.000 0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	nuation)					
VehicleType Leq Peak H	our Leq Day	Leq E	vening	Leq Night	L	Ldn	CI	VEL
Medium Trucks:	60.7	65.2 59.2	63.4 52.8	5	57.4 51.3	66.0 59.7	7	66.6 60.0
		59.7 67.1	50.6 64.0		51.9 59.2	60.2 67.8		60.4 68.2
Centerline Distance to Noise	Contour (in feet))						

70 dBA

71

76

Ldn:

CNEL:

65 dBA

153

164

60 dBA

330

354

55 dBA

710

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Rancho Pkwy.

Road Segment: e/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DAT	ΓΑ		NOISE MODEL INPUTS						
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	20,000 veh	icles				Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Truck	s (2 Axles):	15			
Peak H	lour Volume:	2,000 veh	icles		He	avy Trucks	(3+ Axles):	15			
	ehicle Speed:	50 mp		V	ehicle l	Mix					
Near/Far La	ne Distance:	70 fee	t			icleType	Day	Evening	Night	Daily	
Site Data						Aut	os: 77.5%	12.9%	9.6%	97.42%	
Ва	rrier Height:	0.0 fe	et		Ме	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	_	0.0			F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%	
	st. to Barrier:	100.0 fee	et	N	nise Sc	urce Flev	ations (in fe	20t)			
Centerline Dist.	to Observer:	100.0 fee	et	74	0/30 00	Autos:	2.000	,,,,			
Barrier Distance	to Observer:	0.0 fee	et		Modium	n Trucks:	4.000				
Observer Height	(Above Pad):	5.0 fee	et				8.006	Grade Adj	iustmant:	0.0	
P	ad Elevation:	0.0 fee	et		пеач	y Trucks:	0.000	Grade Auj	usim e ni.	0.0	
Ro	ad Elevation:	0.0 fee	et	L	ane Eq	uivalent D	istance (in	feet)			
	Road Grade:	0.0%				Autos:	93.723				
	Left View:	-90.0 de	grees		Mediur	n Trucks:	93.680				
	Right View:	90.0 de	_		Heav	y Trucks:	93.723				
FHWA Noise Mod	lol Calculation	16									
VehicleType	REMEL	Traffic Flo	ow Di	stance	Finite	Road	Fresnel	Barrier Att	en Beri	m Atten	
Autos:			.60	-4.20		-1.20	-4.87	0.0		0.000	
Medium Trucks:	81.00	-16	.64	-4.19		-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	85.38	-20	.59	-4.20		-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo a	and barri	ier attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq	Day	Leg Eve	ening	Leq Nig	ght	Ldn	CI	VEL	
Autos:	65	5.4	63.5		61.7	<u> </u>	55.7	64.3	3	64.9	
Medium Trucks:	59	9.0	57.5		51.1		49.6	58.0)	58.2	
Heavy Trucks:	59	9.4	58.0		48.9		50.2	58.5	5	58.7	
Vehicle Noise:	67	7.1	65.4		62.3		57.5	66.1		66.5	

70 dBA

55

59

Ldn:

CNEL:

65 dBA

118

127

60 dBA

254

273

55 dBA 547

588

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Research Dr.

Road Segment: e/o ICD

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			N	OISE M	ODE	L INPUT	S	
Highway Data				Site Cor	nditions ((Hard = 1	0, Sc	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	8,900 vehicle 10% 890 vehicle				Au icks (2 Ax iks (3+ Ax	,			
Near/Far La	ehicle Speed: ane Distance:	55 mph 52 feet		Vehicle Veh	nicleType		ay	Evening	Night	Daily
Site Data							7.5%		9.6%	
Barrier Type (0-V	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0			ledium Tr Heavy Tr		4.8% 6.5%		10.3% 10.8%	1.84% 0.74%
Centerline D	ist. to Barrier:	100.0 feet		Noise S	ource Ele	evations	(in fe	eet)		
Ro	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet		Hea	Autos m Trucks vy Trucks juivalent Autos	2: 4.00 2: 8.00 Distance)0)6 : (in 1	Grade Adj	iustment.	0.0
	Left View: Right View:	-90.0 degree			m Trucks vy Trucks					
FHWA Noise Mod										
VehicleType	REMEL	Traffic Flow	Distance		Road	Fresne		Barrier Att		m Atten
Autos:				.39	-1.20		1.87		000	0.000
Medium Trucks: Heavy Trucks:				.39 .39	-1.20 -1.20		1.97 5.16		000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier att	enuation)						
VehicleType	Leq Peak Hot	ur Leq Day	/ Leq	Evening	Leq I	Vight		Ldn	CI	VEL
Autos:		_	61.0	59.2		53.1		61.8		62.4
Medium Trucks:			54.7	48.4		46.8		55.3		55.5
Heavy Trucks:	56	5.3	54.9	45.8		47.1		55.4	1	55.6
Vehicle Noise:	64	1.4	62.7	59.7	•	54.8		63.4	1	63.9

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	36	78	168	363						
CNEL:	39	84	181	391						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Research Dr.

Road Segment: w/o (n/o) Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	I = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	11,800 vehicle	S			Autos:	15		
Peak Hour Percentage:	·		Ме	dium Trucks (2 Axles):	15		
Peak Hour Volume:	1,180 vehicle	S	He	avy Trucks (3	+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle	Mix				
Near/Far Lane Distance:	52 feet				Dov	- Cyoning	Niaht	Doily
Site Date			ven	icleType	Day	Evening	Night	Daily
Site Data				Autos:			9.6%	97.42%
Barrier Height:				edium Trucks:			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			'	Heavy Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:			Noise So	ource Elevation	ons (in f	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet				8.006	Grade Ad	justment:	0.0
Pad Elevation:	0.0 feet							
Road Elevation:	0.0 feet		Lane Eq	uivalent Dista		feet)		
Road Grade:	0.0%				96.607			
Left View:	-90.0 degre	es	Mediu		96.566			
Right View:	90.0 degre	es	Heav	y Trucks: 9	96.608			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	'8 -2.10	-4	.39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -19.34	-4	.39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -23.30	-4	.39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	64.1	62.2	60.4	5	4.4	63.0)	63.6
Medium Trucks:	57.5	56.0	49.6	4	8.1	56.5	5	56.7
Heavy Trucks:	57.5	56.1	47.0	4	8.3	56.7	7	56.8
Vehicle Noise:	65.7	63.9	60.9	5	6.1	64.6	5	65.1
Centerline Distance to Noise	Contour (in feet)						

70 dBA

44

47

Ldn:

CNEL:

65 dBA

94

102

60 dBA

203

219

55 dBA 438

Sunday,	May	20,	2012

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Research Dr.

Road Segment: n/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				5	Site Con	ditions (Hard =	10, Sc	ft = 15)			
Average Daily	Traffic (Adt):	12,100 vehicle	s					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 /	Axles):	15			
Peak H	lour Volume:	1,210 vehicle	S		He	avy Truci	ks (3+ /	Axles):	15			
Ve	hicle Speed:	55 mph		1	/ehicle l	Wiv						
Near/Far La	ne Distance:	52 feet				icleType		Day	Evening	Night	Daily	
Site Data					V 011		utos:	77.5%		9.6%	-	
	rrior Hoimbt.	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%	
Barrier Type (0-W	rrier Height:	0.0 feet 0.0				leavy Tru		86.5%		10.8%	0.74%	
Centerline Dis		0.0 100.0 feet										
Centerline Dist.		100.0 feet		^	Voise So	ource Ele	evation	s (in fe	et)			
Barrier Distance		0.0 feet				Autos		000				
Observer Height (5.0 feet			Mediui	n Trucks	: 4.	000				
• ,	ad Elevation:	0.0 feet			Heav	y Trucks	: 8.	006	Grade Adj	iustment.	0.0	
	ad Elevation: ad Elevation:	0.0 feet		1	ane Eq	uivalent	Distan	ce (in t	eet)			
	Road Grade:	0.0%				Autos		607	,			
•	Left View:	-90.0 degree	26		Mediu	n Trucks		566				
	Right View:	90.0 degree				ry Trucks		608				
	ragne view.	30.0 degree			77047	y Traone		000				
FHWA Noise Mode	el Calculation	s		'								
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresr	nel	Barrier Atte	en Ber	m Atten	
Autos:	71.78	-1.99		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-19.23		-4.39)	-1.20		<i>-4.</i> 97	0.0	000	0.000	
Heavy Trucks:	86.40	-23.19		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and	barri	er atteni	uation)							
VehicleType	Leq Peak Hou			Leq Ev		Leq N	Vight		Ldn	CI	VEL	
Autos:	64	.2	62.3		60.5		54.5	5	63.1	l	63.7	
Medium Trucks:	57	.6	56.1		49.7		48.2	2	56.6	3	56.9	
Heavy Trucks:	57	.6	56.2		47.2		48.4	1	56.8	3	56.9	
Vehicle Noise:	65	3.8	64.0		61.1		56.2	2	64.7	7	65.2	
Centerline Distant	ce to Noise Co	ontour (in feet)									
				70 a	IBA	65 a	IBA	6	0 dBA	55	dBA	

Ldn:

CNEL:

45

48

96

103

207

222

445

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (H	ard = 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	9,000 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Truck	ks (2 Axles):	15		
Peak H	lour Volume:	900 vehicles	S	He	avy Trucks	(3+ Axles):	15		
Ve	hicle Speed:	50 mph		Vehicle	Mix				
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data					Aut		-	9.6%	-
	rrier Height:	0.0 feet		M	edium Truc	ks: 84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0		1	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet							
Centerline Dist.		100.0 feet		Noise So		ations (in f	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height (5.0 feet			m Trucks:	4.000			
,	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
	ad Elevation: ad Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)		
	Road Grade:	0.0%			Autos:	93.723	,		
,	Left View:	-90.0 degree	26	Mediu	m Trucks:	93.680			
	Right View:	90.0 degree			y Trucks:	93.723			
	rugine viewi	co.o dograd	50		,				
FHWA Noise Mod	el Calculation	s							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20	-2.87	-4.:	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-20.10	-4.	19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-24.06	-4.:	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Hou	ır Leq Day	Leq L	Evening	Leq Nig	ght	Ldn	CI	VEL
Autos:	61	.9	60.0	58.3		52.2	60.8	3	61.4
Medium Trucks:	55	.5	54.0	47.6		46.1	54.5	5	54.8
Heavy Trucks:	55	.9	54.5	45.5		46.7	55.1	1	55.2
Vehicle Noise:	63	.6	61.9	58.8		54.1	62.6	6	63.1
Cantarlina Diatan	aa ta Naias Os		\						

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	32	69	149	321
CNEL:	35	74	160	345

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: n/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Cor	ditions (Har	d = 10, So	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	7,100 vehicle: 10% 710 vehicle:			dium Trucks avy Trucks (3	'	15		
	ehicle Speed: ane Distance:	50 mph 70 feet		Vehicle Veh	Mix icleType Autos	Day: 77.5%	Evening 12.9%	Night 9.6%	Daily 97.42%
	nrrier Height: Vall, 1-Berm):	0.0 feet 0.0			Autos edium Trucks Heavy Trucks	: 84.8%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height F	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Mediu. Heav	m Trucks:	2.000 4.000 8.006	Grade Ad	ijustment:	0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	70.20 81.00	**Traffic Flow -3.90 -21.13 -25.09	-4	Finite .20 .19	Road Fr -1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	ten Ber 2000 2000 2000	<i>m Atten</i> 0.000 0.000 0.000
Unmitigated Nois VehicleType	Leq Peak Hou	ur Leq Day	/ Leq	Evening	Leq Nigh		Ldn		VEL
Autos: Medium Trucks: Heavy Trucks:	54 54	l.5 l.9	59.0 53.0 53.5	57.2 46.6 44.4	2	51.2 15.1 15.7	59.8 53.8 54.0	5 0	60.4 53.8 54.2
Vehicle Noise:	62	2.6	60.9	57.8	ţ	53.0	61.6	6	62.0

Centerline Distance to Noise Contour (in feet)									
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	27	59	127	274					
CNEL:	29	63	137	295					

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o Jeronimo Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				NO	ISE MODE	L INPUT	s	
Highway Data				S	ite Con	ditions (H	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	10,100 vehicle	es				Autos	: 15		
Peak Hour	Percentage:	10%			Med	dium Truci	ks (2 Axles)	: 15		
Peak H	lour Volume:	1,010 vehicle	es		Hea	avy Trucks	s (3+ Axles).	: 15		
Ve	ehicle Speed:	50 mph		V	ehicle N	Лix				
Near/Far La	ne Distance:	70 feet				cleType	Day	Evening	Night	Daily
Site Data							tos: 77.5%	J	9.6%	
Ra	rrier Height:	0.0 feet			Me	edium Truc	cks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			H	leavy Truc	ks: 86.5%	6 2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet								
Centerline Dist.		100.0 feet		Noise Source Elevations (in feet)						
Barrier Distance		0.0 feet				Autos:	2.000			
Observer Height		5.0 feet				n Trucks:	4.000			
•	ad Elevation:	0.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
	ad Elevation: ad Elevation:	0.0 feet		Li	ane Equ	uivalent D	istance (in	feet)		
	Road Grade:	0.0%				Autos:	93.723			
	Left View:	-90.0 degre	00		Mediun	n Trucks:	93.680			
	Right View:	90.0 degre				y Trucks:	93.723			
	ragin view.	90.0 degre	C 3		ricav.	y Truono.	50.720			
FHWA Noise Mod	lel Calculation	s		I						
VehicleType	REMEL	Traffic Flow	Distai	nce	Finite	Road	Fresnel	Barrier Att	ten Ber	m Atten
Autos:	70.20	-2.37		-4.20		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-19.60		-4.19		-1.20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks:	85.38	-23.56		-4.20		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenu	ation)					
VehicleType	Leq Peak Hou			eq Eve		Leg Ni	ght	Ldn	CI	VEL
Autos:	62	.4	60.5	-	58.8		52.7	61.3	3	62.0
Medium Trucks:	56	.0	54.5		48.1		46.6	55.0	0	55.3
Heavy Trucks:	56	.4	55.0		46.0		47.2	55.6	6	55.7
Vehicle Noise:		.1	62.4		59.3		54.6	63.	1	63.6
Contorlino Distan	co to Noisa Co	antour (in foot	<i>-</i>							

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	35	75	161	347						
CNEL:	37	80	173	373						

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	s	
Highway Data			Site Cor	nditions (Har	d = 10, So	oft = 15)		
Average Daily Traffic (Adt) Peak Hour Percentage		S	Me	edium Trucks	Autos: (2 Axles):	15 15		
Peak Hour Volume	: 810 vehicle	S	He	eavy Trucks (3	3+ Axles):	15		
Vehicle Speed Near/Far Lane Distance	•	•		Mix nicleType	Day	Evening	Night	Daily
Site Data			ven	Autos			9.6%	-
Barrier Height Barrier Type (0-Wall, 1-Berm)	<i>:</i> 0.0			edium Trucks Heavy Trucks	: 84.8%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Barrier			Noise Source Elevations (in feet)					
Centerline Dist. to Observer Barrier Distance to Observer Observer Height (Above Pad) Pad Elevation	0.0 feet 5.0 feet			Autos: m Trucks: vy Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0
Road Elevation		0.0 feet Lane Equivalent Distance (in feet)			feet)			
Road Grade Left View Right View	: -90.0 degre			m Trucks:	93.723 93.680 93.723			
FHWA Noise Model Calculati	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos: 70.	20 -3.32	-4	.20	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 81.	00 -20.56	-4	.19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 85.	38 -24.52	-4	.20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout Topo and	barrier atte	enuation)					
VehicleType Leq Peak F	Hour Leq Day	/ Leq	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos:	61.5	59.6	57.8	Į.	51.8	60.4	4	61.0
Medium Trucks:	55.0	53.5	47.2	4	4 5.6	54.1	1	54.3
Heavy Trucks:	55.5	54.0	45.0	4	16.3	54.6	3	54.7
Vehicle Noise:	63.2	61.4	58.4	ļ	53.6	62.′	1	62.6
Centerline Distance to Noise	Contour (in feet	·)						

70 dBA

30

32

Ldn:

CNEL:

65 dBA

65

69

60 dBA

139

149

55 dBA

299

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o Rockfield B.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NO	ISE MODE	L INPUT	S	
Highway Data				Site Co	onditions (H	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	18,000 vehicle	s			Autos:	15		
Peak Hour	Percentage:	10%		N	1edium Truci	ks (2 Axles):	15		
Peak F	lour Volume:	1,800 vehicle	s	F	leavy Trucks	s (3+ Axles):	15		
Ve	hicle Speed:	50 mph		Vehicle	- Mix				
Near/Far La	ne Distance:	70 feet			ehicleType	Day	Evening	Night	Daily
Site Data						tos: 77.5%	_	9.6%	-
Ra	rrier Height:	0.0 feet		1	Medium Truc	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			Heavy Truc	cks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet		Maine	0		41		
Centerline Dist.		100.0 feet		Noise (Source Elev		eet)		
Barrier Distance	to Observer:	0.0 feet		N 4 = -1	Autos:	2.000			
Observer Height	(Above Pad):	5.0 feet			ium Trucks:	4.000	Crada Ad	iuotmont	
P	ad Elevation:	0.0 feet		Hea	avy Trucks:	8.006	Grade Adj	usimeni.	0.0
Ro	ad Elevation:	0.0 feet		Lane E	quivalent D	istance (in	feet)		
	Road Grade:	0.0%			Autos:	93.723			
	Left View:	-90.0 degre	es	Medi	ium Trucks:	93.680			
	Right View:	90.0 degre	es	Hea	avy Trucks:	93.723			
FHWA Noise Mod	el Calculatior	18							
VehicleType	REMEL	Traffic Flow	Distance	e Finit	te Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	70.20	0.14	-4	1.20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-17.09	-4	l.19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-21.05	-4	1.20	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier att	enuation)				
VehicleType	Leq Peak Ho	, ,		Evening	Leq Ni	ght	Ldn	CI	VEL
Autos:	65	5.0	63.1	61.	3	55.2	63.9	9	64.5
Medium Trucks:	58	3.5	57.0	50.	6	49.1	57.6	6	57.8
Heavy Trucks:	58	3.9	57.5	48.	5	49.7	58.1		58.2
Vehicle Noise:	66	6.6	64.9	61.	8	57.1	65.6	3	66.1
Contouling Distan	t- N-! O								

Centerline Distance to Noise Contour (in feet)								
	70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:	51	110	237	510				
CNEL:	55	118	254	548				

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o (w/o) Avenida Carlota

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS					
Highway Data			Site Con	ditions (Hard	l = 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 14,900 vehicle	S			Autos:	15		
Peak Hour Percentage	•		Me	dium Trucks (2 Axles):	15		
Peak Hour Volume	: 1,490 vehicle	s	He	avy Trucks (3	+ Axles):	15		
Vehicle Speed	: 50 mph		Vehicle I	Miss				
Near/Far Lane Distance	. 70 feet	70 feet			Dov	- Cyoning	Niaht	Doily
Site Date			veni	icleType	Day	Evening	Night	Daily
Site Data			A 4.	Autos:			9.6%	97.42%
Barrier Height				edium Trucks:			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)			F	leavy Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier			Noise Source Elevations (in feet)					
Centerline Dist. to Observer				Autos:	2.000			
Barrier Distance to Observer	: 0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad)	5.0 feet				8.006	Grade Ad	justment:	0.0
Pad Elevation	: 0.0 feet							
Road Elevation	: 0.0 feet		Lane Eq	uivalent Dista		feet)		
Road Grade	: 0.0%				3.723			
Left View	: -90.0 degre	es	Mediur	m Trucks: 9	93.680			
Right View	: 90.0 degre	es	Heav	ry Trucks: 9	3.723			
FHWA Noise Model Calculati	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 70.3	20 -0.68	-4.	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 81.	00 -17.92	-4.	19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 85.5	38 -21.87	-4.	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout Topo and	barrier atte	enuation)					
VehicleType Leq Peak F	lour Leq Day	y Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	64.1	62.2	60.5	5	4.4	63.0)	63.6
Medium Trucks:	57.7	56.2	49.8	4	8.3	56.7	7	57.0
Heavy Trucks:	58.1	56.7	47.7	4	8.9	57.3	3	57.4
Vehicle Noise:	65.8	64.1	61.0	5	6.2	64.8	3	65.3
Centerline Distance to Noise	Contour (in feet	t)						

70 dBA

45

48

Ldn:

CNEL:

65 dBA

97

104

60 dBA

209

224

55 dBA

450

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr. Job Number: 8141 Road Segment: s/o (w/o) Moulton Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA		NOISE MODEL INPUTS				
Highway Data				Site Conditions	(Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	11,000 vehicles	S		Autos.	15		
Peak Hour	Percentage:	10%		Medium Ti	rucks (2 Axles).	15		
Peak H	lour Volume:	1,100 vehicles	S	Heavy Tru	cks (3+ Axles).	15		
Ve	ehicle Speed:	50 mph		Vehicle Mix				
Near/Far La	ane Distance:	70 feet		VehicleType	e Day	Evening	Night	Daily
Site Data					Autos: 77.5%	_	9.6%	
		0.0.61		Medium 7			10.3%	1.84%
	rrier Height:	0.0 feet 0.0		Heavy 7			10.8%	0.74%
Barrier Type (0-W					740110.	270	10.070	0
	ist. to Barrier:	100.0 feet		Noise Source E	levations (in f	eet)		
Centerline Dist.		100.0 feet		Auto	os: 2.000			
Barrier Distance		0.0 feet		Medium Truck	s: 4.000			
Observer Height	` '	5.0 feet		Heavy Truck	s: 8.006	Grade Adji	ustment:	0.0
	ad Elevation:	0.0 feet						
Ro	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)				
	Road Grade:	0.0%		Auto				
	Left View:	-90.0 degree	es	Medium Truck	rs: 93.680			
	Right View:	90.0 degree	es	Heavy Truck	s: 93.723			
FHWA Noise Mod	lel Calculation	ıs						
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	70.20	-1.99	-4.2	0 -1.20	-4.87	0.0	00	0.000
Medium Trucks:	81.00	-19.23	-4.1	9 -1.20	-4.97	0.0	00	0.000
Heavy Trucks:	85.38	-23.19	-4.2	0 -1.20	-5.16	0.0	00	0.000
Unmitigated Nois	e Levels (with	nout Topo and	barrier atter	nuation)				
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening Leq	Night	Ldn	CI	VEL
Autos:	62	2.8	60.9	59.1	53.1	61.7		62.3
Medium Trucks:	56	5.4	54.9	48.5	47.0	55.4		55.7

Unmitigated Noise Levels (without Topo and barrier attenuation)										
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL				
Autos:	62.8	60.9	59.1	53.1	61.7	62.3				
Medium Trucks:	56.4	54.9	48.5	47.0	55.4	55.7				
Heavy Trucks:	56.8	55.4	46.3	47.6	55.9	56.1				
Vehicle Noise:	64.5	62.8	59.7	54.9	63.5	63.9				

Centerline Distance to Noise Contour (in feet)								
	70 dBA	65 dBA	60 dBA	55 dBA				
Ldn:	37	79	170	367				
CNEL:	39	85	183	395				

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: e/o Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Cor	nditions (F	Hard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	9,500 vehicle	S			Autos:	15		
Peak Hour	r Percentage:	10%		Me	edium Truc	ks (2 Axles):	15		
Peak I	Hour Volume:	950 vehicle	S	He	eavy Truck	s (3+ <i>Axles</i>):	15		
Ve	ehicle Speed:	50 mph		Vehicle	Mix				
Near/Far La	ane Distance:	70 feet	70 feet		nicleType	Day	Evening	Night	Daily
Site Data						itos: 77.5%	•	9.6%	97.42%
Ra	nrrier Height:	0.0 feet		M	ledium Tru	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			Heavy Tru	cks: 86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		Naina C	-		4)		
Centerline Dist.		100.0 feet		Noise 5		vations (in f	eet)		
Barrier Distance		0.0 feet			Autos:				
Observer Height		5.0 feet			m Trucks:				
_	Pad Elevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adj	iustment:	0.0
	ad Elevation:	0.0 feet		Lane Eq	uivalent L	Distance (in	feet)		
	Road Grade:	0.0%			Autos:	93.723	,		
	Left View:	-90.0 degree	es	Mediu	m Trucks:				
	Right View:	90.0 degree			vy Trucks:				
FHWA Noise Mod	lel Calculation								
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:		-2.63	-4	1.20	-1.20	<i>-4</i> .87	0.0	000	0.000
Medium Trucks:	81.00	-19.87	-4	l.19	-1.20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks:	85.38	-23.83	-4	1.20	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	out Topo and	barrier att	enuation)					
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq	Evening	Leq N	ight	Ldn	CI	VEL
Autos:	62	2.2	60.3	58.5		52.5	61.1]	61.7
Medium Trucks:	55	5.7	54.2	47.9)	46.3	54.8	3	55.0
Heavy Trucks:	56	5.2	54.7	45.7	·	46.9	55.3	3	55.4
Vehicle Noise:	63	3.9	62.1	59.1		54.3	62.8	3	63.3

70 dBA

33

36

Ldn:

CNEL:

65 dBA

72

77

60 dBA

155

166

55 dBA

333

358

Sunday.	May 20	2012
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Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Ridge Valley

Road Segment: s/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECI	FIC INP	UT DATA		NOISE MODEL INPUTS					
Highway Data				Site Cor	nditions (F	Hard = 10,	Soft = 15)		
Average Daily Traffic ((Adt): 9	,800 vehicles				Auto	s: 15		
Peak Hour Percen	,	10%		Ме	edium Truc	ks (2 Axles	s): 15		
Peak Hour Vol	•	980 vehicles		He	eavy Truck	s (3+ Axles	s): 15		
Vehicle Sp	eed:	55 mph		Vehicle	Miss				
Near/Far Lane Dista	ance:	52 feet				Dov	Evening	Niaht	Doily
Site Data				ven	nicleType	Day utos: 77.5	_	Night 9.6%	<i>Daily</i> 97.42%
Barrier He	•	0.0 feet			ledium Tru			10.3%	1.84%
Barrier Type (0-Wall, 1-B	erm):	0.0		1	Heavy Tru	cks: 86.5	2.7%	10.8%	0.74%
Centerline Dist. to Ba	-	100.0 feet		Noise S	ource Ele	vations (in	feet)		
Centerline Dist. to Obse		100.0 feet			Autos:	•	·		
Barrier Distance to Obse	erver:	0.0 feet		Mediu	m Trucks:				
Observer Height (Above	Pad):	5.0 feet			vy Trucks:		Grade Ad	iustment:	0.0
Pad Eleva	ation:	0.0 feet							
Road Eleva	ation:	0.0 feet		Lane Equivalent Distance (in feet)					
Road G	rade:	0.0%			Autos:	96.607			
Left	View:	-90.0 degree	S	Mediu	m Trucks:	96.566			
Right '	View:	90.0 degree	S	Heav	vy Trucks:	96.608			
FHWA Noise Model Calcu	ulations								
VehicleType REM	1EL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	-2.91	-4.	39	-1.20	-4.8	7 0.0	000	0.000
Medium Trucks:	82.40	-20.15	-4.	39	-1.20	-4.9	7 0.0	000	0.000
Heavy Trucks:	86.40	-24.10	-4.	39	-1.20	-5.1	6 0.0	000	0.000
Unmitigated Noise Level	s (withou	ıt Topo and b	parrier atte	enuation)					
VehicleType Leq Pe	ak Hour	Leq Day	Leq	Evening	Leq N	ight	Ldn	CI	VEL
Autos:	63.3	6	51.4	59.6		53.6	62.2	2	62.8
Medium Trucks:	56.7	5	5.2	48.8		47.2	55.7	7	55.9
Heavy Trucks:	56.7	5	5.3	46.2		47.5	55.8	3	56.0
Vehicle Noise:	64.9	6	3.1	60.1 55.3 63.8 64					

	70 aBA	65 aBA	60 aBA	55 aBA
Ldn:	39	83	180	387
CNEL:	42	90	193	416

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: e/o Marine Wy

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS							
Highway Data				5	Site Con	ditions (Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	100 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 /	Axles):	15		
Peak H	lour Volume:	10 vehicles	3		He	avy Truc	ks (3+ /	Axles):	15		
Ve	ehicle Speed:	55 mph		1	/ehicle	Miv					
Near/Far La	ne Distance:	52 feet		_		icleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%		9.6%	-
	rrier Height:	0.0 feet			М	edium Tri		84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0 Teet 0.0				Heavy Tri		86.5%		10.8%	0.74%
, ,	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		^	Voise So	ource Ele		•	eet)		
Barrier Distance		0.0 feet				Autos		000			
Observer Height		5.0 feet				m Trucks		000	0 , 4 ,		
_	ad Elevation:	0.0 feet			Heav	y Trucks	: 8.	006	Grade Adj	iustment.	0.0
	ad Elevation:	0.0 feet		L	Lane Eq	uivalent	Distan	ce (in f	feet)		
	Road Grade:	0.0%				Autos	: 96.	607	-		
	Left View:	-90.0 degree	es		Mediu	m Trucks	<i>:</i> 96.	566			
	Right View:	90.0 degree			Heav	y Trucks	: 96.	608			
E104/A A1-1 84	1-1-0-11										
FHWA Noise Mod	REMEL	Traffic Flow	D:	stance	- Finite	Road	Fresr	201	Barrier Att	on Bor	m Atten
VehicleType Autos:		-22.82	Dis	-4.39		-1.20	riesi	-4.87		900 000	0.000
Medium Trucks:	_	-40.06		-4.39		-1.20		-4.97		000	0.000
Heavy Trucks:		-44.02		-4.39		-1.20		- 5 .16		000	0.000
·						1.20		0.70			0.000
Unmitigated Nois	•									0.1	
VehicleType	Leq Peak Hou			Leq Ev		Leq N	_		Ldn		VEL 10.0
Autos:	_		41.5		39.7		33.6		42.3		42.9
Medium Trucks:		_	35.2 35.4		28.9 26.3		27.3 27.6		35.8 35.9		36.0 36.1
Heavy Trucks: Vehicle Noise:			43.2		40.2		35.4		43.9		44.4
					40.2		33.4	+	43.8	7	44.4
Centerline Distan	ce to Noise Co	ntour (in feet))	70	ID A	05	ID A		YO 4D 4		dD 4
				70 a	IBA	65 c	IBA	6	60 dBA	55	dBA

2

2

4

4

8

9

Ldn:

CNEL:

18

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: e/o Sterling

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOISI	MODE	L INPUT	S	
Highway Data				Site Con	ditions (Hard	I = 10, Sc	oft = 15)		
Peak Hou	r Percentage:	100 vehicles			dium Trucks (,	15		
	Hour Volume:	10 vehicles	5	пе	avy Trucks (3	+ Axies).	15		
	ehicle Speed:	55 mph		Vehicle I	Mix				
Near/Far L	ane Distance:	52 feet		Veh	icleType	Day	Evening	Night	Daily
Site Data					Autos:	77.5%	12.9%	9.6%	97.42%
Barrier Type (0-1	•	0.0 feet 0.0			edium Trucks: Heavy Trucks:			10.3% 10.8%	1.84% 0.74%
	ist. to Barrier:	100.0 feet		Noise So	ource Elevati	ons (in fe	eet)		
Centerline Dist Barrier Distance Observer Height	e to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet				2.000 4.000 8.006	Grade Ad	justment:	0.0
	oad Elevation:	0.0 feet	-	Lane Eq	uivalent Dista	ance (in	feet)		
	Road Grade:	0.0%	-		Autos: 9	96.607			
	Left View:	-90.0 degree	es	Mediu	m Trucks: 9	6.566			
	Right View:	90.0 degree	es	Heav	y Trucks:	96.608			
FHWA Noise Mod	del Calculation	ıs							
VehicleType	REMEL	Traffic Flow	Distance				Barrier Att		m Atten
Autos			-4.3		-1.20	-4.87		000	0.000
Medium Trucks			-4.3		-1.20	-4.97		000	0.000
Heavy Trucks	: 86.40	-44.02	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	-			nuation)					
VehicleType	Leq Peak Ho		· ·	vening	Leq Night		Ldn		VEL
Autos			11.5	39.7		3.6	42.3		42.9
Medium Trucks			35.2	28.9		7.3	35.8		36.0
Heavy Trucks			35.4	26.3		7.6	35.9		36.1
Vehicle Noise			13.2	40.2	3	5.4	43.9	9	44.4
Centerline Distar	nce to Noise C	ontour (in feet)							

70 dBA

2

2

Ldn:

CNEL:

65 dBA

4

4

60 dBA

8

9

55 dBA

18

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: w/o Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPEC	CIFIC INF	PUT DATA			NO	ISE MODE	L INPUT	<u> </u>		
Highway Data			,	Site Cor	nditions (H	lard = 10, S	oft = 15)			
Average Daily Traffic	c (Adt): 7	,600 vehicles	,			Autos	15			
Peak Hour Perce	, ,	10%		Me	edium Truci	ks (2 Axles)	15			
Peak Hour V	olume:	760 vehicles	i	He	eavy Trucks	s (3+ Axles).	15			
Vehicle	Speed:	55 mph		Vehicle	Miv					
Near/Far Lane Dis	stance:	52 feet			nicleType	Day	Evening	Night	Daily	
Site Data				VCII		tos: 77.5%	_	9.6%	-	
				Λ1	ledium Truc			10.3%	1.84%	
Barrier I	•	0.0 feet			Heavy Truc			10.8%	0.74%	
Barrier Type (0-Wall, 1-		0.0		,	rieavy rruc	,NS. 00.5/	0 2.1/0	10.0 /6	0.7470	
Centerline Dist. to		100.0 feet		Noise S	ource Elev	ations (in f	eet)			
Centerline Dist. to Ob		100.0 feet			Autos:	2.000				
Barrier Distance to Ob		0.0 feet		Mediu	m Trucks:	4.000				
Observer Height (Abov	,	5.0 feet		Heav	vy Trucks:	8.006	Grade Ad	iustment:	0.0	
Pad Ele		0.0 feet								
Road Ele		0.0 feet	_	Lane Equivalent Distance (in feet)						
Road	Grade:	0.0%			Autos:	96.607				
Le	ft View:	-90.0 degree	S	Mediu	m Trucks:	96.566				
Righ	nt View:	90.0 degree	s	Heav	vy Trucks:	96.608				
FHWA Noise Model Ca	lculations									
VehicleType RE	EMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Beri	m Atten	
Autos:	71.78	-4.01	-4.3	9	-1.20	<i>-4</i> .87	0.0	000	0.000	
Medium Trucks:	82.40	-21.25	-4.3	9	-1.20	<i>-4</i> .97	0.0	000	0.000	
Heavy Trucks:	86.40	-25.21	-4.3	9	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Lev	els (withou	ut Topo and I	barrier atten	uation)						
VehicleType Leq	Peak Hour	Leq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL	
Autos:	62.2	. 6	60.3	58.5		52.5	61.1		61.7	
Medium Trucks:	55.6	5 5	54.1	47.7	•	46.1	54.6	6	54.8	
Heavy Trucks:	55.6	5 5	54.2	45.1		46.4	54.7	7	54.9	
Vehicle Noise:	63.8	3 (62.0	59.0		54.2	62.7	7	63.2	
Centerline Distance to	Noise Cor	ntour (in feet)								

70 dBA

33

35

Ldn:

CNEL:

65 dBA

70

76

60 dBA

152

163

55 dBA

327

Sunday,	May	20,	2012

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: w/o Lake Forest Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DA	TA			ſ	NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	15,600 ve	hicles					Autos:	15		
•	r Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	1,560 ve	hicles		Hea	avy Tru	cks (3+	Axles):	15		
V	ehicle Speed:	55 m	ph		Vehicle I	Miv					
Near/Far La	ane Distance:	52 fe	et			icleType	ė	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	Ū	9.6%	-
	arrier Height:	0.0 fe	not.		Me	edium T		84.8%		10.3%	
Barrier Type (0-V	•	0.0	EEL		F	leavy T	rucks:	86.5%		10.8%	
• • •	ist. to Barrier:	100.0 fe	20t	-							
Centerline Dist		100.0 fe			Noise Sc				eet)		
Barrier Distance		0.0 fe				Auto		2.000			
Observer Height		5.0 fe				n Truck	_	1.000			
ŭ	Pad Elevation:	0.0 fe			Heav	y Truck	(S: 8	3.006	Grade Ad	justment	: 0.0
Ro	oad Elevation:	0.0 fe			Lane Equ	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 d	legrees		Mediur	n Truck	rs: 96	6.566			
	Right View:		legrees		Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	del Calculation	s									
VehicleType	REMEL	Traffic F	low D	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos.	71.78	_	0.89	-4.3	39	-1.20		-4.87	0.0	000	0.000
Medium Trucks	82.40	-1	8.13	-4.3	39	-1.20		-4.97	0.0	000	0.000
Heavy Trucks.	86.40	-2	2.09	-4.3	39	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	out Topo	and bar	rier attei	nuation)						
VehicleType	Leq Peak Ho	ur Led	g Day	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos	65	5.3	63.4	1	61.6		55	.6	64.2	2	64.8
Medium Trucks	: 58	3.7	57.2	2	50.8		49	.3	57.7	7	58.0
Heavy Trucks.	58	3.7	57.3	3	48.3		49	.5	57.9	9	58.0
Vehicle Noise	: 66	5.9	65.1		62.2		57	.3	65.8	3	66.3
Centerline Distar	ice to Noise C	ontour (in	feet)								
				70	dBA	65	dBA	6	60 dBA	55	dBA

53

57

114

122

245

264

528

568

Ldn:

CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: w/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

Highway Data Average Daily Traffic (Adt): 24,000 vehicles Peak Hour Percentage: 10% Peak Hour Volume: 2,400 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 70 feet Site Data Barrier Height: 0.0 feet		Medi Heav Vehicle Mi Vehic Med	itions (Hard um Trucks (yy Trucks (3 ix leType Autos: lium Trucks:	Autos: 2 Axles): + Axles): Day 77.5%	15 15 15 Evening	Night	Daily
Peak Hour Percentage: 10% Peak Hour Volume: 2,400 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 70 feet Site Data Barrier Height: 0.0 feet		Heav Vehicle Mi Vehic Med	vy Trucks (3 ix leType Autos:	2 Axles): + Axles): Day 77.5%	15 15 Evening	Night	Daily
Peak Hour Volume: 2,400 vehicles Vehicle Speed: 50 mph Near/Far Lane Distance: 70 feet Site Data Barrier Height: 0.0 feet		Heav Vehicle Mi Vehic Med	vy Trucks (3 ix leType Autos:	+ Axles): Day 77.5%	15 Evening	Night	Daily
Vehicle Speed: 50 mph Near/Far Lane Distance: 70 feet Site Data Barrier Height: 0.0 feet		Vehicle Mi Vehic Med	i x leType Autos:	Day 77.5%	Evening	Night	Daily
Near/Far Lane Distance: 70 feet Site Data Barrier Height: 0.0 feet		Vehica Med	leType Autos:	77.5%		Night	Daily
Site Data Barrier Height: 0.0 feet		Vehica Med	leType Autos:	77.5%		Night	Daily
Barrier Height: 0.0 feet		Med	Autos:	77.5%			
9			lium Trucks:		12.9%	9.6%	
9		He		84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm): 0.0			avy Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier: 100.0 feet				<i>(</i> ; <i>6</i>			
Centerline Dist. to Observer: 100.0 feet		Noise Sou	rce Elevati	•	eet)		
Barrier Distance to Observer: 0.0 feet			Autos:	2.000			
Observer Height (Above Pad): 5.0 feet		Medium		4.000	0 , 4 ,		0.0
Pad Elevation: 0.0 feet		Heavy	Trucks:	8.006	Grade Ad	ustment:	0.0
Road Elevation: 0.0 feet	1	Lane Equi	valent Dist	ance (in i	feet)		
Road Grade: 0.0%		Autos: 93.723					
Left View: -90.0 degrees		Medium		3.680			
Right View: 90.0 degrees		Heavy	Trucks: 9	3.723			
FHWA Noise Model Calculations							
VehicleType REMEL Traffic Flow Dis	tance	Finite R	oad Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 70.20 1.39	-4.20	0	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 81.00 -15.84	-4.19	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 85.38 -19.80	-4.20	0	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (without Topo and barrie	er atten	uation)					
VehicleType Leq Peak Hour Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL
Autos: 66.2 64.3		62.5	5	6.5	65.1		65.7
Medium Trucks: 59.8 58.3		51.9	5	0.3	58.8	3	59.0
Heavy Trucks: 60.2 58.8		49.7	5	1.0	59.3	3	59.5
Vehicle Noise: 67.9 66.1		63.1	5	8.3	66.9)	67.3

70 dBA

62

66

Ldn:

CNEL:

65 dBA

133

143

60 dBA

287

308

55 dBA

618

664

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: e/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		_		NO	ISE MODE	L INPUT	s	
Highway Data				S	ite Con	ditions (H	ard = 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	24,100 vehicl 10% 2,410 vehicl					Autos: ks (2 Axles): s (3+ Axles):			
Ve	ehicle Speed: ane Distance:	50 mph 70 feet	C3	V	ehicle		Day	Evening	Night	Daily
Site Data						Aut	tos: 77.5%	12.9%	9.6%	97.42%
Ba Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium Truc Heavy Truc			10.3% 10.8%	1.84% 0.74%
Centerline Di	ist. to Barrier:	100.0 feet		٨	loise So	ource Elev	ations (in f	eet)		
Centerline Dist. Barrier Distance Observer Height P	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet			Heav	Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Adj	iustment:	0.0
Ro	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)						
	Road Grade: Left View: Right View:	0.0% -90.0 degr 90.0 degr				Autos: m Trucks: ry Trucks:	93.723 93.680 93.723			
FHWA Noise Mod	lel Calculation	ns								
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20	1.4	1	-4.20		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-15.8	3	-4.19		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	3 -19.7	8	-4.20		-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	d barrie	er attenu	ıation)					
VehicleType	Leq Peak Ho	our Leq Da	ay	Leq Ev	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	6	6.2	64.3		62.6		56.5	65.1	1	65.7
Medium Trucks:	5	9.8	58.3		51.9		50.4	58.8	3	59.1
Heavy Trucks:	6	0.2	58.8		49.7		51.0	59.3	3	59.5
Vehicle Noise:	6	7.9	66.2		63.1		58.3	66.9	9	67.3

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	62	133	288	619
CNEL:	67	143	309	666

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: e/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			N	OISE MODE	EL INPUT	S	
Highway Data			Site Cor	ditions (Hard = 10, S	oft = 15)		
Average Daily Traffic (Adt):	20,000 vehicle	s			Autos	: 15		
Peak Hour Percentage:	10%		Ме	dium Tru	cks (2 Axles)	: 15		
Peak Hour Volume:	2,000 vehicle	S	He	avy Truck	ks (3+ Axles)	: 15		
Vehicle Speed:	50 mph		Vehicle	Miv				
Near/Far Lane Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data			7011		utos: 77.5%	-	9.6%	97.42%
	0.0 foot		M	edium Tru			10.3%	1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			Heavy Tru			10.8%	0.74%
Centerline Dist. to Barrier:	0.0 100.0 feet							
Centerline Dist. to Observer:	100.0 feet		Noise So		evations (in f	feet)		
Barrier Distance to Observer:	0.0 feet			Autos.				
Observer Height (Above Pad):	5.0 feet		Mediu	m Trucks.	4.000			
Pad Elevation:	0.0 feet		Heav	y Trucks.	8.006	Grade Ad	iustment:	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent	Distance (in	feet)		
Road Grade:	0.0%	Autos: 93.723						
Left View:	-90.0 degre	20	Mediu	m Trucks.				
Right View:	90.0 degre			ry Trucks.				
rugin viou.	oo.o degre	00	7.70	,				
FHWA Noise Model Calculation								
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos: 70.20	0.60	-4	.20	-1.20	<i>-4.87</i>	0.0	000	0.000
Medium Trucks: 81.00	-16.64	-4	.19	-1.20	<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks: 85.38	-20.59	-4	.20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier att	enuation)					
VehicleType Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq N	light	Ldn	CI	VEL
Autos: 6	5.4	63.5	61.7		55.7	64.3	3	64.9
		57.5	51.1		49.6	58.0		58.2
Heavy Trucks: 5	9.4	58.0	48.9		50.2	58.5	5	58.7
Vehicle Noise: 6	7.1	65.4	62.3		57.5	66.1	1	66.5
Centerline Distance to Noise C								

70 dBA

55

59

Ldn:

CNEL:

65 dBA

118

127

60 dBA

254

273

55 dBA

547

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Roosevelt Job Number: 8141
Road Segment: w/o Jeffrey Rd. Analyst: B. Lawson

SITE S	PECIFIC IN	PUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (H	lard = 10, S	oft = 15)		
Average Daily T	raffic (Adt): 1	0,200 vehicles	;			Autos	: 15		
Peak Hour P	Percentage:	10%		Me	dium Truci	ks (2 Axles)	: 15		
Peak Ho	ur Volume:	1,020 vehicles	i	He	avy Trucks	s (3+ Axles)	: 15		
Vehi	icle Speed:	55 mph		Vehicle	Miy				
Near/Far Lane	e Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data				V 0//		tos: 77.5%	•	9.6%	-
	ing Hainlet	0.0 foot		M	edium Truc			10.3%	1.84%
	ier Height:	0.0 feet			Heavy Truc			10.8%	0.74%
Barrier Type (0-Wa	•	0.0		•	Todvy Trac	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0 2.170	10.070	0.7 4 70
Centerline Dist		100.0 feet		Noise So	ource Elev	ations (in t	feet)		
Centerline Dist. to		100.0 feet			Autos:	2.000			
Barrier Distance to		0.0 feet		Mediu	m Trucks:	4.000			
Observer Height (A	•	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
	d Elevation:	0.0 feet		,					
Road	d Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)		
Re	oad Grade:	0.0%			Autos:	96.607			
	Left View:	-90.0 degree	s	Mediu	m Trucks:	96.566			
ı	Right View:	90.0 degree	s	Heav	y Trucks:	96.608			
FHWA Noise Model	Calculations	s							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	-2.74	-4.3	9	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-19.97	-4.3	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-23.93	-4.3	9	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and b	barrier atter	nuation)					
VehicleType L	.eq Peak Hou	r Leq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL
Autos:	63.	.5 6	61.6	59.8		53.7	62.4	4	63.0
Medium Trucks:	56.	.8 5	55.3	49.0		47.4	55.9	9	56.1

			70 dBA	65 dBA	60 dBA	55 dBA				
Centerline Distance to Noise Contour (in feet)										
Vehicle Noise:	65.0	63.3	60.3	55.4	55.4 64.0					
Heavy Trucks:	56.9	55.5	46.4	47.7	56.0	56.1				
Medium Trucks:	56.8	55.3	49.0	47.4	55.9	56.1				

 Ldn:
 40
 86
 185
 398

 CNEL:
 43
 92
 199
 428

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Roosevelt Job Number: 8141
Road Segment: e/o Jeffrey Rd. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	20,800 vehicle	es				Autos:	15			
Peak Hour	Percentage:	10%		M	edium Tr	ucks (2 /	Axles):	15			
Peak H	lour Volume:	2,080 vehicle	es	H	eavy Trud	cks (3+)	Axles):	15			
Ve	ehicle Speed:	55 mph		Vehicle	Mix						
Near/Far La	ane Distance:	52 feet			hicleType)	Day	Evening	Night	Daily	
Site Data					/	Autos:	77.5%	12.9%	9.6%	97.42%	
Ba	rrier Height:	0.0 feet		Λ	1edium T	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V	•	0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier: 100.0 feet Noise So						levation	s (in fe	eet)			
Centerline Dist.	to Observer:	100.0 feet			Auto		000	,			
Barrier Distance	to Observer:	0.0 feet		Medi	ım Truck		000				
Observer Height	(Above Pad):	5.0 feet	Heavy Trucks: 8.006 Grade Adjustment:						0.0		
P	Pad Elevation: 0.0 feet					Ticavy Tracks. 0.000 Crado Flajadinoni. 0.0					
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)						
	Road Grade:	0.0%		Autos: 96.607							
	Left View:	-90.0 degre	es	Mediu	ım Truck	s: 96.	566				
	Right View:	90.0 degre		Hea	vy Truck	s: 96.	608				
FHWA Noise Moo	lel Calculatio	ns									
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	0.36	-4	.39	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-16.88	-4	.39	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-20.84	-4	.39	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (without Topo and barrier attenuation)											
VehicleType	Leq Peak Ho	our Leq Da	y Leq	Evening	Leq	Night		Ldn	CI	VEL	
Autos:	6	6.5	64.6	62.9)	56.8	3	65.4	4	66.1	
Medium Trucks:	5	9.9	58.4	52.1	I	50.5	5	59.0)	59.2	
Heavy Trucks:	6	0.0	58.5	49.5	5	50.8	3	59.	1	59.2	
Vehicle Noise:	6	8.1	66.4	63.4	1	58.5	5	67.	1	67.6	

Ldn:

CNEL:

70 dBA

64

69

65 dBA

138

148

60 dBA

297

319

55 dBA

639

688

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Roosevelt Job Number: 8141
Road Segment: w/o Sand Canyon Av. Analyst: B. Lawson

SITE S	SPECIFIC IN	PUT DATA			N	IOISE	MODE	L INPUT	S		
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily 1	Traffic (Adt):	8,600 vehicles	S				Autos:	15			
Peak Hour I	, ,	10%		Medium Trucks (2 Axles): 15							
	our Volume:	860 vehicles	Heavy Trucks (3+ Axles): 15								
Veh	nicle Speed:	55 mph		Vehicle Mix							
Near/Far Lan	•	52 feet					Davi		Nicolat	Daile	
0'4- 0-4-				ver	nicleType		Day	Evening	Night	Daily	
Site Data						Autos:	77.5%		9.6%		
Barı	rier Height:	0.0 feet			ledium Ti		84.8%		10.3%	1.84%	
Barrier Type (0-Wa	all, 1-Berm):	0.0			Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dis		100.0 feet		Noise S	ource El	levatio	ns (in fe	eet)			
Centerline Dist. t		100.0 feet 0.0 feet			Auto	s: 2	2.000	-			
Barrier Distance t	Barrier Distance to Observer:			Medium Trucks: 4.000							
Observer Height (A	Above Pad):	5.0 feet			vy Truck		3.006	Grade Ad	iustment.	0.0	
Pa	d Elevation:	0.0 feet									
Roa	d Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
F	Autos: 96.607										
	Left View: -90.0 degrees				Medium Trucks: 96.566						
	Right View:	90.0 degree	es	Hea	vy Truck	s: 96	8.608				
FHWA Noise Mode	l Calculations	3									
VehicleType	REMEL	Traffic Flow	Distanc	e Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-3.48	-4	1.39	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-20.72	-4	4.39	-1.20	-4.97		0.0	000	0.000	
Heavy Trucks:	86.40	-24.67	-4	4.39	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (with	out Topo and	barrier at	tenuation)							
VehicleType	Leq Peak Hou	r Leq Day	Lec	Evening	Leq	Night		Ldn	CI	VEL	
Autos:	62.	7	60.8	59.0 53		3.0 61.6		3	62.2		
Medium Trucks:	56.	.1	54.6	48.2	48.2 46.7		.7	55.1		55.4	
Heavy Trucks:	56.	.1	54.7	45.7	45.7 46.9		.9	55.3		55.4	
Vehicle Noise:	64.	3	62.5 59.6 54.7 63.2					63.7			
Centerline Distanc	e to Noise Co	ntour (in feet)								

70 dBA

35

38

Ldn:

CNEL:

65 dBA

76

82

60 dBA

165

177

55 dBA

355

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012

Road Name: Sand Canyon. Av. Road Segment: n/o Irvine Bl.

Project Name: 2012 Great Park GPA/ZC

Job Number: 8141 Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data					Site Conditions (Hard = 10, Soft = 15)						
	Percentage:	10%					Autos: ks (2 Axles):	15			
Ve	Hour Volume: chicle Speed: ane Distance:	2,670 vehicle 55 mph 52 feet	es	V	ehicle		S (3+ Axles): Day	15 Evening	Night	Daily	
Site Data							tos: 77.5%	J	9.6%	•	
Barrier Type (0-V	,	0.0 feet 0.0				edium Truc Heavy Truc			10.3% 10.8%	1.84% 0.74%	
Centerline Dist. Barrier Distance Observer Height	to Observer:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet		N	Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0						
Ro	ad Elevation:	0.0 feet		L	Lane Equivalent Distance (in feet)						
Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees						Autos: m Trucks: ry Trucks:	96.607 96.566 96.608				
FHWA Noise Mod	lel Calculation	ns									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos: Medium Trucks:				-4.39 -4.39		-1.20 -1.20	-4.87 -4.97		000	0.000	
Heavy Trucks: Unmitigated Nois				-4.39		-1.20	-5.16	0.0	000	0.000	
VehicleType	Leg Peak Ho			Leg Ev		Leg Ni	aht	Ldn	C	VEL	
Autos:		7.6	65.7	Ley Eve	64.0	Ley M	57.9	66.5		67.1	
Medium Trucks:	_	1.0	59.5		53.1		51.6	60.1		60.3	
Heavy Trucks:		1.1	59.6		50.6		51.8	60.2		60.3	
Vehicle Noise:		9.2	67.4		64.5		59.6	68.2		68.6	

70 dBA

76

81

Ldn:

CNEL:

65 dBA

163

175

60 dBA

350

377

55 dBA

755

812

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: s/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INP	UT DATA			NO	ISE MODE	L INPUT	s	
Highway Data				Site Con	ditions (H	lard = 10, S	oft = 15)		
Average Daily Traffic (Ad	,					Autos			
Peak Hour Percentag		10%				ks (2 Axles)			
Peak Hour Volum	,	180 vehicles		He	avy Truck	s (3+ Axles)	: 15		
Vehicle Spee		60 mph	-	Vehicle	Mix				
Near/Far Lane Distanc	e:	76 feet	-	Veh	icleType	Day	Evening	Night	Daily
Site Data					Au	tos: 77.5%	6 12.9%	9.6%	97.42%
Barrier Heigh	nt:	0.0 feet		M	edium Trud	cks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Bern		0.0		I	Heavy Truc	cks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Dist. to Barrie		00.0 feet		Noise So	ource Elev	ations (in t	feet)		
Centerline Dist. to Observe		00.0 feet	-		Autos:	2.000	,		
Barrier Distance to Observe	er:	0.0 feet		Mediu	m Trucks:	4.000			
Observer Height (Above Pad	•	5.0 feet			y Trucks:	8.006	Grade Ad	iustment:	0.0
Pad Elevation		0.0 feet							
Road Elevation		0.0 feet		Lane Eq		istance (in	feet)		
Road Grad	le:	0.0%			Autos:	92.547			
Left Vie	w: -	-90.0 degrees	S		m Trucks:	92.504			
Right Vie	W:	90.0 degrees	S	Heav	y Trucks:	92.547			
FHWA Noise Model Calcula	tions								
VehicleType REMEL		raffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos: 73	3.22	1.82	-4.1	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83	3.68	-15.41	-4.1	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87	'.33	-19.37	-4.1	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (v	vithou	t Topo and b	arrier atte	nuation)					
VehicleType Leq Peak	Hour	Leq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL
Autos:	69.7	6	7.8	66.1		60.0	68.6	6	69.2
Medium Trucks:	63.0	6	1.5	55.1		53.5	62.0)	62.2
Heavy Trucks:	62.6	6	1.2	52.2		53.4	61.8	3	61.9
Vehicle Noise:	71.2	6	9.4	66.6		61.6	70.2	2	70.7

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	103	221	476	1,026
CNEL:	111	238	513	1,105

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: n/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA	1			NO	ISE MODE	L INPUT	S	
Highway Data			S	ite Con	ditions (H	lard = 10, Sc	oft = 15)		
Average Daily Traffic (Adt).	27,900 vehic	les				Autos:	15		
Peak Hour Percentage.	10%			Med	dium Truck	ks (2 Axles):	15		
Peak Hour Volume.	2,790 vehic	les		Hea	avy Trucks	s (3+ Axles):	15		
Vehicle Speed.	60 mph		V	ehicle II	Nix				
Near/Far Lane Distance.	76 feet				cleType	Day	Evening	Night	Daily
Site Data						tos: 77.5%	J	9.6%	97.42%
Barrier Height	0.0 feet			Ме	edium Truc			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)					leavy Truc			10.8%	0.74%
Centerline Dist. to Barrier									
Centerline Dist. to Observer			N	oise So		ations (in f	eet)		
Barrier Distance to Observer					Autos:	2.000			
Observer Height (Above Pad)					n Trucks:	4.000			
Pad Elevation				Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0
Road Elevation			Li	ane Equ	ıivalent D	istance (in	feet)		
Road Grade					Autos:	92.547			
Left View		200		Mediur	n Trucks:	92.504			
Right View	3				y Trucks:	92.547			
rugin vien	. 00.0 409.	000			,				
FHWA Noise Model Calculation	ons		·						
VehicleType REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos: 73.2		6	-4.11		-1.20	-4.87		000	0.000
Medium Trucks: 83.6	68 -15.9	8	-4.11		-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.3	33 -19.9	4	-4.11		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo an	d barrier	attenu	ation)					
VehicleType Leq Peak H	lour Leq D	ay L	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	69.2	67.3		65.5		59.4	68.1	1	68.7
Medium Trucks:	62.4	60.9		54.5		53.0	61.4	1	61.7
Heavy Trucks:	62.1	60.7		51.6		52.9	61.2	2	61.3
Vehicle Noise:	70.6	68.9		66.0		61.0	69.6	6	70.1

Centerline Distance to Noise Contour (in feet)			, ,										
	70 dBA	65 dBA	60 dBA	55 dBA									
Ldn:	94	203	437	940									
CNEL:	101	218	470	1,013									

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: s/o Trabuco Rd.

Job Number: 8141

Analyst: B. Lawson

SITE S	PECIFIC IN	PUT DATA				NC	DISE	MODE	L INPUT	s	
Highway Data					Site Con	ditions (l	Hard =	10, Sc	oft = 15		
Average Daily T	raffic (Adt): 5	0,200 vehicles	3					Autos:	15		
Peak Hour F		10%			Me	dium Truc	ks (2 /	Axles):	15		
Peak Ho	our Volume:	5,020 vehicles	3		He	avy Truck	s (3+ A	Axles):	15		
Veh	icle Speed:	65 mph		,	Vehicle l	Wiy					
Near/Far Lan	e Distance:	175 feet				icleType		Day	Evening	Night	Daily
Site Data							ıtos:	77.5%		9.6%	
	rier Height:	0.0 feet			Ме	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-Wa	•	0.0 leet 0.0				leavy Tru		86.5%		10.8%	0.74%
Centerline Dist	,	100.0 feet									
Centerline Dist. to		100.0 feet		1	Noise So	ource Ele			eet)		
Barrier Distance to		0.0 feet				Autos:		000			
Observer Height (A		5.0 feet				n Trucks:		000	0 , 4 ,		
• ,	d Elevation:	0.0 feet			Heav	y Trucks:	8.	006	Grade Ad	justment:	0.0
Road	d Elevation:	0.0 feet		1	Lane Eq	uivalent l	Distan	ce (in f	feet)		
R	Road Grade:	0.0%				Autos:	48.	505			
	Left View:	-90.0 degree	es		Mediui	n Trucks:	48.	423			
	Right View:	90.0 degree	es		Heav	y Trucks:	48.	506			
FUNALA ALL'S SAGRES	10-11-4										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Pood	Fresr	201	Barrier Att	on Pon	m Atten
Autos:	74.55	3.46	Di	0.09		-1.20	riesi	-4.87		000	0.000
Medium Trucks:	84.86	-13.78		0.0		-1.20		-4.97		000	0.000
Heavy Trucks:	88.18	-17.74		0.09		-1.20		-5.16		000	0.000
_											0.000
Unmitigated Noise						/ A	l:l- (l ala	0/	\
VehicleType I Autos:	Leq Peak Houl 76.		75.0	Leq E	vening 73.2	Leq N	igrit 67.2)	Ldn 75.8		VEL 76.4
Medium Trucks:	70. 70.		68.5		62.1		60.6		69.0		69.3
Heavy Trucks:	70. 69.		67.9		58.9		60.		68.5		68.6
Vehicle Noise:	78.		76.5		73.7		68.7		77.3		77.7
Centerline Distance	e to Noise Co	ntour (in feet))								
		(1000)		70 d	dBA	65 dl	ВА	6	60 dBA	55	dBA

Ldn:

CNEL:

304

328

656

707

1,413

1,523

3,044

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av. Job Number: 8141
Road Segment: s/o Roosevelt Analyst: B. Lawson

Site Conditions (Hard = 10, Soft = 15)	Daily 97.42%
Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Volume: 5,300 vehicles Heavy Trucks (3+ Axles): 15 Vehicle Speed: 65 mph Vehicle Mix Near/Far Lane Distance: 175 feet Vehicle Type Day Evening Night Site Data Autos: 77.5% 12.9% 9.6% Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8%	-
Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Volume: 5,300 vehicles Heavy Trucks (3+ Axles): 15 Vehicle Speed: 65 mph Vehicle Mix Near/Far Lane Distance: 175 feet Vehicle Type Day Evening Night Site Data Autos: 77.5% 12.9% 9.6% Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8%	-
Vehicle Speed: 65 mph Vehicle Mix Near/Far Lane Distance: 175 feet Vehicle Type Day Evening Night Site Data Autos: 77.5% 12.9% 9.6% Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8%	-
Near/Far Lane Distance: 175 feet Vehicle Type Day Evening Night	-
Near/Far Lane Distance: 175 feet VehicleType Day Evening Night Site Data Autos: 77.5% 12.9% 9.6% Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8%	-
Site Data Autos: 77.5% 12.9% 9.6% Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8%	-
Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8%	0
Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8%	1.84%
Contacting Diet to Parrier 400.0 feet	
LANDANDA LIET TO BOTTON: THEFT TOO	
Centerline Dist to Observer: 100.0 foot	
Barrier Distance to Observer: 0.0 feet	
Observer Height (Above Pad): 5.0 feet Medium Trucks: 4.000	
Pad Elevation: 0.0 feet Heavy Trucks: 8.006 Grade Adjustment.	: 0.0
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)	
Road Grade: 0.0% Autos: 48.505	
Left View: -90.0 degrees Medium Trucks: 48.423	
Right View: 90.0 degrees Heavy Trucks: 48.506	
FHWA Noise Model Calculations	
	m Atten
Autos: 74.55 3.69 0.09 -1.20 -4.87 0.000	0.000
Medium Trucks: 84.86 -13.54 0.11 -1.20 -4.97 0.000	0.000
Heavy Trucks: 88.18 -17.50 0.09 -1.20 -5.16 0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)	
	NEL
Autos: 77.1 75.2 73.5 67.4 76.0	76.6
Medium Trucks: 70.2 68.7 62.4 60.8 69.3	69.5
Heavy Trucks: 69.6 68.2 59.1 60.4 68.7	68.8
Vehicle Noise: 78.5 76.8 73.9 68.9 77.5	78.0
Centerline Distance to Noise Contour (in feet)	

Ldn:

CNEL:

316

340

680

733

1,465

1,579

3,156

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: n/o I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA				ı	VOISE	MODE	L INPUT	S	
Highway Data						Site Cor	nditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	62,000) vehicles	3					Autos:	15		
Peak Hour	Percentage:	1(0%			Me	edium Tr	rucks (2	Axles):	15		
Peak H	Hour Volume:	6,200) vehicles	S		He	eavy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	65	5 mph			Vehicle	Miv					
Near/Far La	ane Distance:	175	5 feet				nicleType	e	Day	Evening	Night	Daily
Site Data						V 07		Autos:	77.5%	_	9.6%	-
	vrior Usinht.		0 foot			Μ	ledium T		84.8%		10.3%	
Barrier Type (0-V	rrier Height:		.0 feet .0				Heavy T		86.5%		10.8%	
	ist. to Barrier:		.0 .0 feet									
Centerline Dist.			.0 feet			Noise S			•	eet)		
Barrier Distance			.0 feet				Auto		2.000			
Observer Height			.0 feet				ım Truck		1.000		-	
ŭ	ad Elevation:	_	.0 feet			Hea	vy Truck	rs: 8	3.006	Grade Ad	justment	: 0.0
_	ad Elevation:		.0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:		.0%			•	Auto		3.505			
	Left View:		.0 degree	25		Mediu	ım Truck		3.423			
	Right View:		.0 degree			Hea	vy Truck	rs: 48	3.506			
FHWA Noise Mod												
VehicleType	REMEL		fic Flow	Di	stance		Road	Fres		Barrier Att		m Atten
Autos:			4.38		0.0		-1.20		-4.87		000	0.000
Medium Trucks:		-	-12.86		0.1		-1.20		-4.97		000	0.000
Heavy Trucks:	88.18	3	-16.82		0.0)9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (wit	hout T	opo and	barri	ier attei	nuation)						
VehicleType	Leq Peak Ho	our	Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	7	7.8	•	75.9		74.2		68	.1	76.7	7	77.3
Medium Trucks:	7	0.9		69.4		63.0)	61	.5	70.0)	70.2
Heavy Trucks:	7	0.3	(8.86		59.8	}	61	.0	69.4	4	69.5
Vehicle Noise:	7	9.2		77.4		74.6	;	69	.6	78.2	2	78.7
Centerline Distan	ce to Noise C	ontou	r (in feet)								
			. ,		70	dBA	65	dBA	6	60 dBA	55	dBA
						-		-		-		-

Ldn:

CNEL:

350

378

755

814

1,626

1,753

3,503

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Job Number: 8141

Road Segment: b/w I-5 SB Ramps and Burt Rd.

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT D	ATA			NOIS	E MODE	L INPUT	S	
Highway Data					Site Con	ditions (Har	d = 10, So	oft = 15)		
	Traffic (Adt): r Percentage: Hour Volume:	52,900 v 10% 5,290 v				dium Trucks avy Trucks (. ,	15		
	ehicle Speed: ane Distance:	60 r 76 f	•		Vehicle Veh	Mix icleType	Day	Evening	Night	Daily
Site Data						Autos	s: 77.5%	12.9%	9.6%	97.42%
Barrier Type (0-V	•	0.0	feet			edium Trucks Heavy Trucks			10.3% 10.8%	1.84% 0.74%
	ist. to Barrier:	100.0			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist Barrier Distance Observer Height	to Observer:	100.0 0.0 5.0 0.0	feet feet			Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0		_	Lane Eq	uivalent Dis	tance (in	feet)		
	Road Grade: Left View: Right View:		% degrees degrees			Autos: m Trucks: ry Trucks:	92.547 92.504 92.547			
FHWA Noise Mod	del Calculatio	ns								
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos	73.22	2	4.03	-4.1	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks	83.68	3 -	13.20	-4.1	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks	87.33	3 -	17.16	-4.1	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	hout Top	o and ba	arrier atte	nuation)					
VehicleType	Leq Peak Ho	our Le	eq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL
Autos	7	1.9	70	0.0	68.3		62.2	70.8	3	71.4
Medium Trucks	: 6	5.2	63	3.7	57.3		55.8	64.2	2	64.4
Heavy Trucks	6	4.9	63	3.4	54.4		55.6	64.0)	64.1
Vehicle Noise	: 7	3.4	71	.7	68.8		63.8	72.4	4	72.9
Centerline Distar	ce to Noise C	Contour (in feet)							

70 dBA

144

155

Ldn:

CNEL:

65 dBA

310

334

60 dBA

669

720

55 dBA 1,441

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1) Job Number: 8141

Road Name: Sand Canyon. Av. Road Segment: b/w Burt Rd. and Oak Cyn./Laguna Cyn. Rd.

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS							
Highway Data			,	Site Conditio	ns (Haro	l = 10, Sc	oft = 15)				
Average Daily	, ,		3			Autos:	15				
Peak Hour	Percentage:	10%		Medium	Trucks (2 Axles):	15				
Peak H	lour Volume:	5,380 vehicles	3	Heavy	Trucks (3	+ Axles):	15				
Ve	hicle Speed:	60 mph		Vehicle Mix							
Near/Far La	ne Distance:	76 feet		VehicleT	уре	Day	Evening	Night	Daily		
Site Data					Autos:	77.5%	12.9%	9.6%	97.42%		
Bai	rrier Height:	0.0 feet		Mediun	n Trucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0		Heav	y Trucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dis	st. to Barrier:	100.0 feet		Noise Source	e Flevatio	ons (in fe	net)				
Centerline Dist.	to Observer:	100.0 feet				2.000	,,,,				
Barrier Distance	to Observer:	0.0 feet		Medium Tru		4.000					
Observer Height ((Above Pad):	5.0 feet		Heavy Tru		8.006	Grade Ad	iustment	. 0 0		
Pa	ad Elevation:	0.0 feet						, a o a monte	0.0		
Roa	ad Elevation:	0.0 feet		Lane Equiva	lent Dista	ance (in i	feet)				
I	Road Grade:	0.0%		Α	utos: 9	2.547					
	Left View:	-90.0 degree	es	Medium Tru	ucks: 9	2.504					
	Right View:	90.0 degree	es	Heavy Tro	ucks: 9	2.547					
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	d Fre	esnel	Barrier Att	en Ber	m Atten		
Autos:	73.22	4.11	-4.1	1 -1.:	20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-13.13	-4.1	1 -1.:	20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-17.09	-4.1	1 -1.3	20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Topo and	barrier atten	uation)							
VehicleType	Lea Peak Hou	ır Lea Dav	Lea E	venina L	ea Niaht		Ldn	CI	VEL		

Unmitigated	Noise i	Leveis (withou	t Topo and barri	er attenuation)			
VehicleTyp	e L	.eq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Α	utos:	72.0	70.1	68.3	62.3	70.9	71.5
Medium Tru	ucks:	65.2	63.7	57.4	55.8	64.3	64.5
Heavy Tru	ıcks:	64.9	63.5	54.5	55.7	64.1	64.2
Vehicle N	oise:	73.5	71.7	68.8	63.9	72.5	72.9

Centerline Distance to Noise Contour (in feet)				Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA										
Ldn:	146	314	676	1,457										
CNEL:	157	338	728	1,569										

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: n/o ICD

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 43,200 vehicle	es			Autos:	15		
Peak Hour Percentage	: 10%		Me	dium Trucks (2	2 Axles):	15		
Peak Hour Volume	: 4,320 vehicle	es	He	avy Trucks (3-	+ Axles):	15		
Vehicle Speed	: 60 mph		Vehicle I	Miv				
Near/Far Lane Distance	76 feet			icleType	Day	Evening	Night	Daily
Site Data			VOII	Autos:	77.5%		9.6%	97.42%
				edium Trucks:	84.8%		10.3%	1.84%
Barrier Height				leavy Trucks:	86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm)			,	reavy Tracks.	00.070	2.1 /0	10.070	0.7 4 70
Centerline Dist. to Barrier			Noise So	ource Elevatio	ns (in fe	eet)		
Centerline Dist. to Observer				Autos:	2.000			
Barrier Distance to Observer			Mediui	m Trucks:	4.000			
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0
Pad Elevation			Lana Fa	ialant Diata		fa a 4 \		
Road Elevation			Lane Eq	uivalent Dista		reet)		
Road Grade					2.547			
Left View	3 -				2.504			
Right View	: 90.0 degre	es	Heav	ry Trucks: 9	2.547			
FHWA Noise Model Calculati	ons							
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fre	snel	Barrier Att	en Ber	m Atten
Autos: 73.5	22 3.15	-4	.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.0	68 -14.08	-4	.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.5	33 -18.04	4	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout Topo and	barrier att	enuation)					
VehicleType Leq Peak F	lour Leq Da	y Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	71.1	69.2	67.4	6′	1.3	70.0)	70.6
Medium Trucks:	64.3	62.8	56.4	54	1.9	63.3	3	63.6
Heavy Trucks:	64.0	62.6	53.5	54	1.8	63.1	<u> </u>	63.2
Vehicle Noise:	72.5	70.8	67.9	62	2.9	71.5	5	72.0
Centerline Distance to Noise	Contour (in fee	t)						

70 dBA

126

136

Ldn:

CNEL:

65 dBA

271

292

60 dBA

584

629

55 dBA

1,259

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: s/o Waterworks Wy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFI	C INP	UT DATA			NOISE MODEL INPUTS							
Highway Data				Site Cor	ditions (F	lard = 10, S	oft = 15)					
Average Daily Traffic (Ad	,			Ma	dium Truo	Autos ks (2 Axles)						
Peak Hour Percentag Peak Hour Volun		10% 890 vehicles				s (3+ Axles) s (3+ Axles)						
Vehicle Spe	,	60 mph				3 (OT AXICS)	. 10					
Near/Far Lane Distant		76 feet		Vehicle								
	<i>.</i> e.	70 1661		Veh	icleType	Day	Evening	Night	Daily			
Site Data						tos: 77.5%		9.6%				
Barrier Heig	ht:	0.0 feet			edium Trud			10.3%	1.84%			
Barrier Type (0-Wall, 1-Berr	n):	0.0		I	Heavy True	cks: 86.5%	6 2.7%	10.8%	0.74%			
Centerline Dist. to Barri	-	100.0 feet		Noise S	ource Elev	ations (in	feet)					
Centerline Dist. to Observ		100.0 feet			Autos:	2.000						
Barrier Distance to Observ		0.0 feet		Mediu	m Trucks:	4.000						
Observer Height (Above Pa	,	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0			
Pad Elevation		0.0 feet		Lana Fa	······································	Nietomas /im	faatl					
Road Elevation		0.0 feet		Lane Eq		Distance (in	reet)					
Road Grad		0.0%			Autos:	92.547						
Left Vie		-90.0 degree			m Trucks:	92.504						
Right Vie	ew:	90.0 degree	S	Heal	y Trucks:	92.547						
FHWA Noise Model Calcula	tions		l.									
VehicleType REME		raffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos: 73	3.22	2.70	-4.1	1	-1.20	<i>-4.87</i>		000	0.000			
Medium Trucks: 83	3.68	-14.54	-4.1	1	-1.20	<i>-4.</i> 97	0.0	000	0.000			
Heavy Trucks: 8	7.33	-18.50	-4.1	1	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (withou	t Topo and b	oarrier atter	nuation)								
VehicleType Leq Peak	Hour	Leq Day	Leq E	vening	Leq Ni	ight	Ldn	CI	VEL			
Autos:	70.6	6	8.7	66.9		60.9	69.5	5	70.1			
Medium Trucks:	63.8	6	56.0 54.4		54.4	62.9	9	63.1				
Heavy Trucks:	63.5	6	53.1 54.3			62.7		62.8				
Vehicle Noise:	72.1	7	0.3	67.4 62.5 71.0				71.5				

70 dBA

117

126

Ldn:

CNEL:

65 dBA

253

272

60 dBA

545

587

55 dBA

1,174

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: s/o Barranca Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)				
Average Daily Traffic (Adt):	39,300 vehicles	3			Autos:	15				
Peak Hour Percentage:	10%		Med	dium Trucks	(2 Axles):	15				
Peak Hour Volume:	3,930 vehicles	S	Hea	avy Trucks (3+ <i>Axles):</i>	15				
Vehicle Speed:	60 mph		Vehicle Mix							
Near/Far Lane Distance:	76 feet			cleType	Day	Evening	Night	Daily		
Site Data				Autos		_	9.6%	_		
Barrier Height:	0.0 feet		Мє	edium Trucks	s: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Trucks	s: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet									
Centerline Dist. to Observer:	100.0 feet		Noise So	urce Elevat		eet)				
Barrier Distance to Observer:	0.0 feet			Autos:	2.000					
Observer Height (Above Pad):		5.0 feet 0.0 feet		Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0						
Pad Elevation:										
Road Elevation:	0.0 feet		Lane Equ	uivalent Dis	tance (in	feet)				
Road Grade:	0.0%			Autos:	92.547					
Left View:	-90.0 degree	es	Mediur	n Trucks:	92.504					
Right View:	90.0 degree		Heav	y Trucks:	92.547					
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten		
Autos: 73.2	2 2.74	-4.1	1	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 83.6	8 -14.49	-4.1	1	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 87.3	3 -18.45	-4.1	1	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)							
VehicleType Leq Peak He	our Leq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL		
Autos: 7	0.7	68.8	67.0		60.9	69.6	6	70.2		
Medium Trucks:	3.9	62.4		;	54.5 62.9		9	63.2		
Heavy Trucks:	3.6	62.1	53.1	54.4		62.7		62.8		
Vehicle Noise:	' 2.1	70.4	67.5		62.5	71.	1	71.6		

70 dBA

118

127

Ldn:

CNEL:

65 dBA

255

274

60 dBA

549

591

55 dBA

1,182

1,273

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Job Number: 8141

Road Segment: b/w Alton Pkwy.and I-405 NB Ramps

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS							
Highway Data		9	Site Conditions	(Hard = 10, S	oft = 15)					
Average Daily Traffic (Adt):	41,500 vehicles	3		Autos	: 15					
Peak Hour Percentage:	10%		Medium Tru	icks (2 Axles)	: 15					
Peak Hour Volume:	4,150 vehicles	3	Heavy Trucks (3+ Axles): 15							
Vehicle Speed:	60 mph	1	Vehicle Mix							
Near/Far Lane Distance:	76 feet	_	VehicleType	Day	Evening	Night	Daily			
Site Data				lutos: 77.59		9.6%	-			
Barrier Height:	0.0 feet		Medium Tr	ucks: 84.8°	% 4.9%	10.3%	1.84%			
Barrier Type (0-Wall, 1-Berm):			Heavy Tı	ucks: 86.5°	% 2.7%	10.8%	0.74%			
Centerline Dist. to Barrier:			Noise Source El	ovations (in	foot)					
Centerline Dist. to Observer:	100.0 feet	,	Autos	•	ieet)					
Barrier Distance to Observer:	0.0 feet									
Observer Height (Above Pad):	5.0 feet		Medium Trucks		O					
,	Pad Elevation: 0.0 feet		Heavy Trucks	justment:	0.0					
Road Elevation:				Distance (in	feet)					
Road Grade:	0.0%		Autos	s: 92.547						
Left View:	-90.0 degree	es	Medium Trucks	s: 92.504						
Right View:	•		Heavy Trucks	s: 92.547						
FHWA Noise Model Calculation	ne									
VehicleType REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos: 73.2	2 2.98	-4.11	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 83.6	8 -14.26	-4.11	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 87.3	3 -18.21	-4.11	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (with	thout Topo and I	barrier atteni	uation)							
VehicleType Leq Peak H	our Leq Day	Leq Ev	rening Leq	Night	Ldn	CI	VEL			
Autos:	70.9	69.0	67.2	61.2	69.8	8	70.4			
Medium Trucks: 6	64.1	62.6	56.2 54.7		63.2	2	63.4			
Heavy Trucks:6	63.8	62.4	53.3 54.6		62.9	9	63.1			
Vehicle Noise:	72.4	70.6	67.7	62.8	71.3	3	71.8			

70 dBA

123

132

Ldn:

CNEL:

65 dBA

264

284

60 dBA

569

613

55 dBA

1,226

1,320

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Santa Maria Av. Job Number: 8141
Road Segment: s/o Moulton Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Har	d = 10, So	oft = 15)				
Average Daily	Traffic (Adt):	8,900 vehicles	3			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15				
Peak H	Hour Volume:	890 vehicles	3	He	avy Trucks (3+ Axles):	15				
Ve	ehicle Speed:	50 mph		Vehicle I	Mix						
Near/Far La	ane Distance:	70 feet			icleType	Day	Evening	Night	Daily		
Site Data					Autos		_	9.6%	-		
Ra	rrier Height:	0.0 feet		Me	edium Trucks	s: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-V	•	0.0		ŀ	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%		
• • • • • • • • • • • • • • • • • • • •	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		Noise Sc	ource Elevat	•	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
Observer Height		5.0 feet			m Trucks:	4.000					
	Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)				
	Road Grade:	0.0%			Autos:	93.723	-				
	Left View:	-90.0 degree	es	Mediui	m Trucks:	93.680					
	Right View:	90.0 degree		Heavy Trucks: 93.723							
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten		
Autos:	70.20	-2.91	-4.2	20	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-20.15	-4.	19	-1.20	<i>-4</i> .97	0.0	000	0.000		
Heavy Trucks:	85.38	-24.11	-4.2	20	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	Evening	Leq Nigh	t	Ldn	CI	VEL		
Autos:	61	.9	60.0	58.2	:	52.2	60.8	3	61.4		
Medium Trucks:	55	.5	53.9	47.6		46.0	54.5	5	54.7		
Heavy Trucks:	55	.9 !	54.5	45.4	•	46.7	55.0)	55.1		

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	32	69	148	319						
CNEL:	34	74	159	343						

58.8

54.0

62.6

61.8

63.0

Vehicle Noise:

63.6

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Santa Maria Av. Job Number: 8141
Road Segment: e/o Laguna Canyon Rd. Analyst: B. Lawson

SITE S	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site	Condition	s (Hard	= 10, Sc	oft = 15)			
	Traffic (Adt): Percentage: our Volume:	6,000 vehicle 10% 600 vehicle			Medium T Heavy Tr	•	,				
Near/Far Lar	hicle Speed: ne Distance:	45 mph 36 feet		Veh	i cle Mix VehicleTy _l		Day	Evening	Night	Daily	
Site Data Barrier Type (0-W	rrier Height: all, 1-Berm):	0.0 feet 0.0			Medium Heavy	Autos: Trucks: Trucks:	77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%	
Centerline Dist. to Barrier: Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Centerline Dist. to Barrier: 100.0 feet 0.0 feet				Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 98.412 Medium Trucks: 98.372 Heavy Trucks: 98.413						0.0	
FHWA Noise Mode VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 68.46 79.45 84.25	Traffic Flow -4.17 -21.41 -25.36	-2	e <i>F</i> I.51 I.51	inite Road -1.20 -1.20)	-4.87 -4.97 -5.16	0.0	en Ber 000 000	<i>m Atten</i> 0.000 0.000 0.000	
Unmitigated Noise VehicleType Autos:	Levels (with Leq Peak Hou 58	ır Leq Day		Eveni		q Night 48	.9	Ldn 57.5		V <i>EL</i> 58.1	
Medium Trucks: Heavy Trucks: Vehicle Noise:	52 53 60	.3 .2	50.8 51.8 58.7		44.5 42.7 55.5	42 44 50	.9 .0	51.4 52.3 59.4	4 3	51.6 52.4 59.8	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	20	42	91	196
CNEL:	21	45	98	210

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Santiago Canyon Rd.

Road Segment: e/o SR-241 NB Ramp

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				N	DISE N	/IODE	L INPUTS	S	
Highway Data				5	Site Con	ditions (Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	23,600 vehicle:	s				,	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	(xles	15		
Peak H	Hour Volume:	2,360 vehicles	s		He	avy Truck	ks (3+ A	(xles	15		
Ve	ehicle Speed:	50 mph		1	/ehicle l	Miv					
Near/Far La	ne Distance:	70 feet				icleType		Day	Evening	Night	Daily
Site Data								77.5%	J	9.6%	-
	rrier Height:	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0 leet 0.0				Heavy Tru		86.5%		10.8%	0.74%
, ,	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		^	Voise So	ource Ele		•	et)		
Barrier Distance		0.0 feet				Autos.		000			
Observer Height		5.0 feet				m Trucks.		000			
	ad Elevation:	0.0 feet			Heav	y Trucks.	: 8.0	006	Grade Adj	iustment:	0.0
	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distan	ce (in t	eet)		
	Road Grade:	0.0%				Autos.	93.	723	-		
	Left View:	-90.0 degree	es		Mediui	m Trucks.	93.0	680			
	Right View:	90.0 degree			Heav	y Trucks.	93.	723			
FHWA Noise Mod			Ο:	040.000	Finito	Dood			Dannian A44	on Don	A 44 a 10
VehicleType	<i>REMEL</i> 70.20	Traffic Flow 1.32	DI	stance -4.20	Finite	-1.20	Fresn	ei -4.87	Barrier Atte	en Ber 000	m Atten
Autos: Medium Trucks:		-15.92		-4.20 -4.19		-1.20 -1.20		-4.07 -4.97	0.0		0.000
Heavy Trucks:		-19.87		-4.18 -4.20		-1.20 -1.20		-4.97 -5.16	0.0		0.000
						1.20		0.70	0.0		0.000
Unmitigated Nois	•										
VehicleType	Leq Peak Hou			Leq Ev		Leq N	-		Ldn		VEL
Autos:			64.2		62.5		56.4		65.0		65.6
Medium Trucks:			58.2		51.8		50.3		58.7		59.0
Heavy Trucks:			58.7		49.7		50.9		59.3		59.4
Vehicle Noise:	67	.δ	66.1		63.0		58.2		66.8	5	67.3
Centerline Distan	ce to Noise Co	ontour (in feet)								
				70 d	IBA	65 d	BA	6	0 dBA	55	dBA

Ldn:

CNEL:

61

66

132

141

284

305

611

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Scientific Wy.

Road Segment: s/o ICD

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Hard	l = 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	1,700 vehicle	S			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Trucks (2 Axles):	15				
Peak H	lour Volume:	170 vehicle	s	He	avy Trucks (3	+ Axles):	15				
Ve	ehicle Speed:	55 mph		Vehicle I	Wix						
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data					Autos:	,	J	9.6%	-		
Ra	rrier Height:	0.0 feet		Ме	edium Trucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0		ŀ	Heavy Trucks:	86.5%	2.7%	10.8%	0.74%		
	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		Noise So	ource Elevation	•	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
Observer Height		5.0 feet		Medium Trucks: 4.0							
	2 ,			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet				Lane Eq	uivalent Dista	ance (in i	feet)				
	Road Grade:	0.0%				96.607					
	Left View:	-90.0 degre	D C	Mediu		96.566					
	Right View:	90.0 degre				96.608					
	ragine view.	50.0 degre	03	77047	y maono.	.0.000					
FHWA Noise Mod	lel Calculation	s		II.							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	-10.52	-4.3	39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-27.76	-4.3	39	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-31.71	-4.3	39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Hou	ur Leq Day	/ Leq I	Evening	Leq Night		Ldn	CI	VEL		
Autos:	55	5.7	53.8	52.0	4	5.9	54.6	3	55.2		
Medium Trucks:	49).1	47.5	41.2	39.6		48.1	1	48.3		
Heavy Trucks:	49).1	47.7	38.6	39.9 48.2		2	48.4			
Vehicle Noise:	57	7.2	55.5	52.5	47.7 56.2			2	56.7		

70 dBA

12

13

Ldn:

CNEL:

65 dBA

26

28

60 dBA

56

60

55 dBA

120

130

Sunday,	May 20), 2012

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Spectrum

Road Segment: w/o Fortune Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Cor	ditions (H	<i>lard</i> = 10, S	oft = 15)				
Average Daily Traffic (Adt):	2,900 vehicle	S			Autos	: 15				
Peak Hour Percentage:	10%		Me	dium Truck	ks (2 Axles)	: 15				
Peak Hour Volume:	290 vehicles	S	He	avy Trucks	s (3+ Axles)	: 15				
Vehicle Speed:	35 mph		Vehicle	Miv						
Near/Far Lane Distance:	20 feet			icleType	Day	Evening	Night	Daily		
Site Data			7011	Aut		_		97.42%		
	0.0 feet		М	edium Truc			10.3%	1.84%		
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 reet 0.0			Heavy Truc			10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet									
Centerline Dist. to Observer:	100.0 feet		Noise S		ations (in i	feet)				
Barrier Distance to Observer:	0.0 feet			Autos:	2.000					
Observer Height (Above Pad):	5.0 feet		Mediu	m Trucks:	4.000					
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
Road Elevation:	0.0 feet		Lane Fo	uivalent D	istance (in	feet)				
Road Grade:	0.0%		24.70 29	Autos:	99.544	1001)				
Left View:	-90.0 degree	00	Mediu	m Trucks:	99.504					
Right View:	90.0 degree			y Trucks:	99.544					
right view.	90.0 degree	53	77001	y Truono.	33.044					
FHWA Noise Model Calculation	าร		-							
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos: 64.30	-6.24	-4	.59	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 75.75	-23.47	-4	.59	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 81.57	-27.43	-4	.59	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	hout Topo and	barrier att	enuation)							
VehicleType Leq Peak Ho	ur Leq Day	/ Leq	Evening	Leq Nig	ght	Ldn	CI	VEL		
Autos: 5	2.3	50.4	48.6		42.6	51.2	2	51.8		
Medium Trucks: 4	6.5	45.0	38.6		37.1	45.5	5	45.8		
Heavy Trucks: 4	8.3	46.9	37.9 39.1			47.5		47.6		
Vehicle Noise: 5	4.5	52.8	49.3		45.0	53.5	5	53.9		
Centerline Distance to Noise C	Contour (in feet)								

70 dBA

8

8

Ldn:

CNEL:

65 dBA

17

18

60 dBA

37

39

55 dBA

79

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Sterling Job Number: 8141
Road Segment: b/w Rockfield Bl and Barrana Pkwy Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions ((Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	100 vehicles	S					Autos:	15		
	r Percentage:	10%			Me	dium Tru	cks (2	Axles):	15		
Peak I	Hour Volume:	10 vehicles	3		He	avy Truc	ks (3+	Axles):	15		
V	ehicle Speed:	35 mph		1	/ehicle l	Wiy					
Near/Far La	ane Distance:	20 feet		_		icleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%		9.6%	,
R	arrier Height:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
• • • • • • • • • • • • • • • • • • • •	ist. to Barrier:	100.0 feet			<i>1-1</i> 0			<i>(</i> * . *-	41		
Centerline Dist		100.0 feet			voise Sc	ource Ele			et)		
Barrier Distance	to Observer:	0.0 feet			N 4 = = 15	Autos		.000			
Observer Height	(Above Pad):	5.0 feet				n Trucks		.000	Grade Ad	iuotmont	
F	Pad Elevation:	0.0 feet			неач	y Trucks	: 8	.006	Grade Au	justinerit.	0.0
Ro	oad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	ice (in f	feet)		
	Road Grade:	0.0%				Autos	: 99	.544			
	Left View:	-90.0 degree	es		Mediui	n Trucks	: 99	.504			
	Right View:	90.0 degree	es		Heav	y Trucks	: 99	.544			
FHWA Noise Mod	del Calculation	S									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos	64.30	-20.86		-4.59)	-1.20		-4.87	0.0	000	0.000
Medium Trucks	75.75	-38.10		-4.59)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks	81.57	-42.05		-4.59)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	out Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	rening	Leq I	Vight		Ldn	CI	VEL
Autos	37	.7	35.8		34.0		27.	9	36.6	3	37.2
Medium Trucks	: 31	.9	30.4		24.0		22.	5	30.9	9	31.1
Heavy Trucks	33	.7	32.3		23.3		24.	5	32.9	9	33.0
Vehicle Noise	39	.9	38.2		34.7		30.	3	38.9	9	39.3
Centerline Distar	ce to Noise C	ontour (in feet)								
				70 d	IBA	65 c	BA	6	60 dBA	55	dBA

1

1

Ldn:

CNEL:

2

2

4

4

8

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Technology Dr. Job Number: 8141 Road Segment: e/o Barranca Pkwy. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				3	Site Con	ditions (Hard =	10, So	oft = 15)			
Average Daily	Traffic (Adt):	20,800 vehicle	s					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	Axles):	15			
Peak H	lour Volume:	2,080 vehicle	s		He	avy Truci	ks (3+ A	Axles):	15			
Ve	hicle Speed:	55 mph		_	Vehicle I	Miv						
Near/Far La	ne Distance:	52 feet				icleType		Day	Evening	Night	Daily	
Site Data					V 011			77.5%	Ŭ,	9.6%	-	
	rrior Hoimbt.	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%	
Barrier Type (0-W	rrier Height:	0.0 feet 0.0				Heavy Tru		86.5%		10.8%	0.74%	
Centerline Di		0.0 100.0 feet										
Centerline Dist.		100.0 feet		1	Noise So	ource Ele	evation	s (in fe	eet)			
Barrier Distance		0.0 feet				Autos		000				
Observer Height (5.0 feet				m Trucks		000				
	ad Elevation:	0.0 feet			Heav	y Trucks	: 8.0	006	Grade Adj	iustment.	0.0	
	ad Elevation: ad Elevation:	0.0 feet		L	Lane Eg	uivalent	Distan	ce (in t	feet)			
	Road Grade:	0.0%				Autos		607	,			
•	Left View:	-90.0 degree	es		Mediui	m Trucks		566				
	Right View:	90.0 degree			Heav	y Trucks.	: 96.	608				
FHWA Noise Mod		_										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite		Fresn		Barrier Att		m Atten	
Autos:	71.78	0.36		-4.39		-1.20		-4.87		000	0.000	
Medium Trucks:	82.40	-16.88		-4.39		-1.20		-4.97		000	0.000	
Heavy Trucks:	86.40	-20.84		-4.39	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and	barri	ier atten	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening'	Leq N	light		Ldn	CI	VEL	
Autos:	66	5.5	64.6		62.9		56.8	3	65.4	1	66.1	
Medium Trucks:	59	0.9	58.4		52.1		50.5	5	59.0)	59.2	
Heavy Trucks:	60	0.0	58.5		49.5		50.8	3	59.1	<u> </u>	59.2	
Vehicle Noise:	68	3.1	66.4		63.4		58.5	5	67.1	1	67.6	
Centerline Distant	ce to Noise Co	ontour (in feet)									
L				70 a	BA	65 d	IBA .	6	i0 dBA	55	dBA	

64

69

Ldn:

CNEL:

138

148

297

319

639

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Technology Dr.

Road Segment: w/o Barranca Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS											
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt): 16,0	00 vehicles						Autos:	15				
Peak Hour Percentage		10%			Me	dium Tru	ıcks (2	Axles):	15				
Peak Hour Volume		00 vehicles			He	avy Truc	ks (3+	Axles):	15				
Vehicle Speed	d:	55 mph		V	ehicle	Miv							
Near/Far Lane Distance	e:	52 feet		_		icleType		Day	Evening	Night	Daily		
Site Data					7011		Autos:	77.5%		9.6%	-		
	4.	0.0 foot			M	edium Tr		84.8%		10.3%	1.84%		
Barrier Heigh Barrier Type (0-Wall, 1-Berm		0.0 feet 0.0				Heavy Tr		86.5%		10.8%	0.74%		
Centerline Dist. to Barrie	'	0.0 0.0 feet											
Centerline Dist. to Observe		00.0 feet		٨	loise So	ource El	evatio	ns (in fe	eet)				
Barrier Distance to Observe		0.0 feet				Autos	s: 2	2.000					
					Mediu	m Trucks	s: 4	1.000					
Observer Height (Above Pad Pad Elevation		5.0 feet 0.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	iustment:	0.0		
Road Elevation		0.0 feet		,	ane Fa	uivalent	Dista	nce (in :	feet)				
Road Grade		0.0 feet 0.0%		_	anc Eq	Autos		6.607	(00)				
Road Grade Left Viev			_		Medium Trucks: 96.566								
	_	00.0 degree				y Trucks		5.608					
Right Viev	V. S	0.0 degree	S		пеач	y Trucks	s. 90	0.000					
FHWA Noise Model Calculat	ions												
VehicleType REMEL	Tra	affic Flow	Dist	ance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 71	78	-0.78		-4.39		-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 82	40	-18.02		-4.39		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 86	40	-21.98		-4.39		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (v	vithout	Topo and I	oarrie	r attenu	ation)								
VehicleType Leq Peak	Hour	Leq Day		Leq Ev	ening	Leq	Night		Ldn	CI	VEL		
Autos:	65.4	6	3.5		61.7		55	.7	64.3	3	64.9		
Medium Trucks:	58.8	5	7.3		50.9		49	.4	57.8	3	58.1		
Heavy Trucks:	58.8	5	7.4		48.4		49	.6	58.0)	58.1		
Vehicle Noise:	67.0		5.2		62.3		57	.4	65.9	9	66.4		
Centerline Distance to Noise	Conto	our (in feet)											

70 dBA

54

58

Ldn:

CNEL:

65 dBA

116

124

60 dBA

249

268

55 dBA

537

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Technology Dr.

Road Segment: e/o Laguna Canyon Rd.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (Ha	ard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 1	7,100 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Truck	s (2 Axles):	15		
Peak H	lour Volume:	1,710 vehicles	3	He	avy Trucks	(3+ Axles):	15		
Ve	ehicle Speed:	50 mph		Vehicle l	Mix				
Near/Far La	ane Distance:	50 feet			icleType	Day	Evening	Night	Daily
Site Data					Auto	-		9.6%	
	rrior Hojahtı	0.0 feet		Ме	edium Truci			10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 reet 0.0			leavy Truci			10.8%	0.74%
	ist. to Barrier:	100.0 feet							
Centerline Dist.		100.0 feet		Noise So	ource Eleva	ations (in fe	eet)		
		0.0 feet			Autos:	2.000			
Barrier Distance				Mediui	m Trucks:	4.000			
Observer Height	` ,	5.0 feet		Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0
	ad Elevation:	0.0 feet			· · · '· · · · / · · · · / · · · · / · · · ·	-1	C 4\		
	ad Elevation:	0.0 feet		Lane Eq		stance (in	reet)		
	Road Grade:	0.0%			Autos:	96.871			
	Left View:	-90.0 degree	es	Mediui	m Trucks:	96.830			
	Right View:	90.0 degree	es	Heav	ry Trucks:	96.871			
FHWA Noise Mod	lel Calculations	;							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road I	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20	-0.08	-4.4	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-17.32	-4.4	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-21.27	-4.4	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (witho	out Topo and I	barrier atter	uation)					
VehicleType	Leq Peak Hou	r Leq Day	Leq E	vening	Leq Nig	ıht	Ldn	CI	VEL
Autos:	64.	5 6	62.6	60.8		54.8	63.4	1	64.0
Medium Trucks:	58.	1 5	56.6	50.2		48.7	57.1	1	57.4
Heavy Trucks:	58.	5 5	57.1	48.0		49.3	57.6		57.8
Vehicle Noise:	66.	2 6	64.5	61.4		56.6	65.2	2	65.6
0 1 11 51 1									

70 dBA

48

51

Ldn:

CNEL:

65 dBA

103

110

60 dBA

221

238

55 dBA

477

512

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Toledo Wy.

Road Segment: e/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SF	PECIFIC IN	PUT DATA			NC	DISE	MODE	L INPUT	S	
Highway Data				Site Cor	nditions (F	Hard :	= 10, Sc	oft = 15)		
Average Daily Tr	• •	6,300 vehicles	3				Autos:	15		
Peak Hour Pe	•	10%			edium Truc	•	,	15		
	ır Volume:	630 vehicles	3	He	eavy Truck	is (3+	Axles):	15		
	cle Speed:	55 mph		Vehicle	Mix					
Near/Far Lane	Distance:	52 feet		Veh	icleType		Day	Evening	Night	Daily
Site Data					Αι	ıtos:	77.5%	_	9.6%	97.42%
Rarrie	er Height:	0.0 feet		М	ledium Tru	icks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wali	•	0.0			Heavy Tru	cks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist.	•	100.0 feet		Noise S	ource Ele	vatio	ns (in fa	eet)		
Centerline Dist. to	Observer:	100.0 feet		710/00 0	Autos:		.000	,,,		
Barrier Distance to	Observer:	0.0 feet		Modiu	m Trucks:		.000			
Observer Height (Al	bove Pad):	5.0 feet			vy Trucks:		.006	Grade Ad	iustmant	
Pad	Elevation:	0.0 feet		пеал	vy Trucks.	0	.006	Orace Au	justinent.	0.0
Road	Elevation:		Lane Eq	uivalent L	Distar	nce (in i	feet)			
Ro	ad Grade:	0.0%			Autos:	96	.607			
	Left View:	-90.0 degree	es	Mediu	m Trucks:	96	5.566			
F	Right View:	90.0 degree	es	Heav	vy Trucks:	96	3.608			
FHWA Noise Model	Calculations	S								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	-4.83	-4.	.39	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-22.07	-4.	.39	-1.20		<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks:	86.40	-26.02	-4.	.39	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise L	evels (with	out Topo and	barrier atte	enuation)						
VehicleType Le	eq Peak Hou	r Leq Day	Leq	Evening	Leq N	light		Ldn	CI	VEL
Autos:	61.	.4 !	59.5	57.7		51.	6	60.3	3	60.9
Medium Trucks:	54.	.7	53.2	46.9		45.	.3	53.8	3	54.0
Heavy Trucks:	54.	.8	53.4	44.3		45.	.6	53.9	9	54.1
Vehicle Noise:	62	.9	61.2	58.2		53.	.3	61.9	9	62.4
Centerline Distance	to Noise Co	ntour (in feet))							

Ldn: CNEL: 70 dBA

29

31

65 dBA

62

67

60 dBA

134

144

55 dBA

288

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Toledo Wy. Job Number: 8141 Road Segment: w/o Lake Forest Dr. Analyst: B. Lawson

SITE		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (F	lard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,200 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Ме	dium Truc	ks (2 Axles):	15		
Peak H	lour Volume:	620 vehicles	s	He	avy Truck	s (3+ <i>Axles</i>):	15		
Ve	ehicle Speed:	50 mph		Vehicle	Miy				
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data				7011		tos: 77.5%	•	9.6%	97.42%
	wwiaw Haimba	0.0 foot		M	edium Trud			10.3%	1.84%
	rrier Height:	0.0 feet 0.0			Heavy Truc			10.8%	0.74%
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet							
Centerline Dist.		100.0 feet		Noise So	ource Elev	ations (in f	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
				Mediu	m Trucks:	4.000			
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet				Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
		I ane Fo	uivalent Γ	Distance (in	feet)				
	ad Elevation: Road Grade:	0.0 feet 0.0%		Lune Lq	Autos:	93.723	1001)		
	Left View:			Modiu	m Trucks:	93.723			
	Right View:	-90.0 degree			y Trucks:	93.723			
	Right view.	90.0 degree	es	ricat	y Trucks.	93.723			
FHWA Noise Mod	lel Calculation	ıs							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20	-4.48	-4	.20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-21.72	-4	.19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-25.68	-4	.20	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)					
VehicleType	Leq Peak Hou	ur Leq Day	/ Leq	Evening	Leq Ni	ight	Ldn	CI	VEL
Autos:	60).3	58.4	56.7		50.6	59.2	2	59.8
Medium Trucks:	53	3.9	52.4	46.0		44.5	52.9	9	53.2
Heavy Trucks:	54	l.3	52.9	43.8		45.1	53.4	4	53.6
Vehicle Noise:	62	2.0	60.3	57.2		52.4	61.0)	61.5

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	25	54	116	251
CNEL:	27	58	125	269

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Toledo Wy.

Road Segment: w/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Condi	tions (Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	7,000 vehicles	3			Autos:	15				
Peak Hour Percentage:	10%		Medio	ım Trucks (2	2 Axles):	15				
Peak Hour Volume:	700 vehicles	3	Heav	y Trucks (3-	+ Axles):	15				
Vehicle Speed:	45 mph		Vehicle Mi	Y						
Near/Far Lane Distance:	36 feet		Vehicle		Day	Evening	Night	Daily		
Site Data				Autos:	77.5%		9.6%			
Barrier Height:	0.0 feet		Med	ium Trucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		He	avy Trucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet	_		=	<i>(* 6</i>	4)				
Centerline Dist. to Observer:	100.0 feet	-	Noise Sou	rce Elevatio		eet)				
Barrier Distance to Observer:	0.0 feet				2.000					
Observer Height (Above Pad):	5.0 feet		Medium		4.000	0 , 4 ,		0.0		
Pad Elevation:	0.0 feet		Heavy	Trucks:	8.006	Grade Ad	justment:	0.0		
Road Elevation:	0.0 feet		Lane Equi	valent Dista	nce (in	feet)				
Road Grade:	0.0%			Autos: 9	8.412					
Left View:	-90.0 degree	es	Medium	Trucks: 9	8.372					
Right View:	90.0 degree		Heavy	Trucks: 9	8.413					
FHWA Noise Model Calculation	15									
VehicleType REMEL	Traffic Flow	Distance	Finite R	oad Fre	snel	Barrier Att	en Ber	m Atten		
Autos: 68.46	-3.50	-4.5	1 -	1.20	-4.87	0.0	000	0.000		
Medium Trucks: 79.45	-20.74	-4.5	1 -	1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 84.25	-24.69	-4.5	1 -	1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	out Topo and I	barrier atten	uation)							
VehicleType Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL		
Autos: 59	9.2	57.3	55.6	49	9.5	58.1	1	58.8		
Medium Trucks: 55	3.0	51.5	45.1	43	3.6	52.0)	52.3		
Heavy Trucks: 5	3.8	52.4	43.4	44.6		53.0		53.1		
Vehicle Noise: 6	1.1	59.3	56.2	5	1.5	60.1	1	60.5		

70 dBA

22

23

Ldn:

CNEL:

65 dBA

47

50

60 dBA

101

108

55 dBA

217

233

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Toledo Wy.

Road Segment: e/o Ridge Route Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				5	Site Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Ad	t): 8	3,000 vehicles	3					Autos:	15			
Peak Hour Percentag	e:	10%			Me	dium Ti	rucks (2	Axles):	15			
Peak Hour Volum	e:	800 vehicles	3		He	avy Tru	icks (3+	Axles):	15			
Vehicle Spee	d:	50 mph		_	/ehicle l	Miv						
Near/Far Lane Distand	e:	70 feet		-		icleTyp	e	Day	Evening	Night	Daily	
Site Data					V 0111		Autos:	77.5%		•	97.42%	
	-4-	0.0 foot			Me	edium 7		84.8%		10.3%	1.84%	
Barrier Heigl		0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%	
Barrier Type (0-Wall, 1-Berri Centerline Dist. to Barri	,	0.0 100.0 feet									011 170	
Centerline Dist. to Observe		100.0 feet		1	Voise Sc	ource E	levatio	ns (in fe	eet)			
Barrier Distance to Observe		0.0 feet				Auto	os: 2	2.000				
Observer Height (Above Pa		5.0 feet			Mediui	n Truck	rs: 4	1.000				
Pad Elevation	•	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment.	0.0	
Road Elevatio		0.0 feet		1	ane Eq	uivalen	t Dista	nce (in t	feet)			
Road Grad		0.0 feet 0.0%		-	Larro Eq	Auto		3.723	001)			
Left Vie		-90.0 degree			Mediu	n Truck		3.680				
Right Vie		90.0 degree				y Truck		3.723				
Night vie	vv.	90.0 deglet	55		ricav	y ITUCI	.o. o.	5.720				
FHWA Noise Model Calcula	tions											
VehicleType REMEL	.	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos: 70).20	-3.38		-4.20)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 8°	.00	-20.62		-4.19)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 85	5.38	-24.57		-4.20)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (vithou	ut Topo and	barri	er atten	uation)							
VehicleType Leq Peak				Leq Ev		Leg	Night		Ldn	CI	VEL	
Autos:	61.4	. !	59.5		57.8	<u> </u>	51	.7	60.3	3	60.9	
Medium Trucks:	55.0) ;	53.5		47.1		45	.6	54.0)	54.3	
Heavy Trucks:	55.4		54.0		45.0		46	.2	54.6	5	54.7	
Vehicle Noise:	63.1		61.4		58.3		53	.5	62.′	1	62.6	
Centerline Distance to Nois	e Con	tour (in feet))									
		·		70 a	IBA	65	dBA	6	60 dBA	55	dBA	

Ldn:

CNEL:

30

32

64

69

138

148

297

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: b/w Culver Dr. and I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS									
Highway Data				5	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	38,500 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	3,850 vehicle	es		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		1	/ehicle l	Miy					
Near/Far La	ne Distance:	52 feet		_		icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Ме	edium 7	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	,	100.0 feet									
Centerline Dist.		100.0 feet		^	Voise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				n Truck	_	1.000	Crada Ad	iuotmont	
•	ad Elevation:	0.0 feet			Heav	y Truck	(S: E	3.006	Grade Adj	justinent.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	os: 96	6.607			
	Left View:	-90.0 degre	ees		Mediui	n Truck	rs: 96	6.566			
	Right View:	90.0 degre	ees		Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	lel Calculation	18									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3.03	3	-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-14.21	l	-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-18.16	6	-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	l barri	ier atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	ıy	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	69	9.2	67.3		65.6		59	.5	68.1	1	68.7
Medium Trucks:	62	2.6	61.1		54.7		53	.2	61.7	7	61.9
Heavy Trucks:	62	2.6	61.2		52.2		53	.4	61.8	3	61.9
Vehicle Noise:	70	0.8	69.0		66.1		61	.2	69.8	3	70.2
Centerline Distan	ce to Noise C	ontour (in fee	t)		ı						
				70 d	<i>IBA</i>	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

96

104

208

223

447

481

964

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o I-5 NB Ramps

Job Number: 8141

Analyst: B. Lawson

SITE S		NOISE MODEL INPUTS											
Highway Data				S	ite Cond	ditions ((Hard :	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	21,800 vehic	eles					Autos:	15				
Peak Hour	Percentage:	10%			Med	lium Tru	icks (2	Axles):	15				
Peak H	our Volume:	2,180 vehic	les		Hea	avy Truc	ks (3+	Axles):	15				
Vel	hicle Speed:	55 mph		V	ehicle N	lix							
Near/Far Lar	ne Distance:	52 feet				cleType		Day	Evening	Night	Daily		
Site Data							utos:	77.5%		9.6%	_		
Rar	rier Height:	0.0 feet			Me	dium Tr	ucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0			Н	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dis	•	100.0 feet		A/	oioo Co	oo Ele	ovetio	no (in f	2041				
Centerline Dist.	to Observer:	100.0 feet		//	oise so	urce Ele		•	eet)				
Barrier Distance	to Observer:	0.0 feet			Madium	Autos		.000					
Observer Height (Above Pad):	5.0 feet				1 Trucks		.000	Crada Ad	liuotmont:	0.0		
	nd Elevation:	0.0 feet			Heavy Trucks: 8.006 Grade Adjustment: 0.0								
Roa	Road Elevation: 0.0 feet					ıivalent	Distai	nce (in	feet)				
F	Road Grade:	0.0%				Autos	: 96	6.607					
	Left View:	-90.0 deg	rees		Mediun	n Trucks	: 96	6.566					
	Right View:	90.0 deg	rees		Heavy	/ Trucks	: 96	3.608					
FHWA Noise Mode	al Calculation	16											
VehicleType	REMEL	Traffic Flov	/ Dist	tance	Finite I	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	71.78			-4.39		-1.20		-4.87		000	0.000		
Medium Trucks:	82.40	-16.6	88	-4.39		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-20.6	3	-4.39		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	hout Topo ar	d barrie	r attenu	ation)								
	Leq Peak Ho			Leg Eve		Leq I	Vight		Ldn	CI	VEL		
Autos:	60	6.7	64.9		63.1		57	.0	65.7	7	66.3		
Medium Trucks:	60	0.1	58.6		52.3	.3 50.7			59.2		59.4		
Heavy Trucks:	60	0.2	58.7		49.7		51	.0	59.3	3	59.4		
Vehicle Noise:	66	8.3	66.6		63.6		58	.7	67.3	3	67.8		

70 dBA

66

71

Ldn:

CNEL:

65 dBA

142

153

60 dBA

306

329

55 dBA

660

710

Centerline Distance to Noise Contour (in feet)

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Trabuco Rd. Job Number: 8141 Road Segment: w/o Jeffrey Rd. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Con	ditions	(Hard =	: 10, So	oft = 15)			
Average Daily	Traffic (Adt):	19,300 vehicle	s					Autos:	15			
	Percentage:	10%			Me	dium Tru	icks (2	Axles):	15			
Peak H	Hour Volume:	1,930 vehicle	s		He	avy Truc	ks (3+ .	Axles):	15			
Ve	ehicle Speed:	55 mph		1	/ehicle l	Miv						
Near/Far La	ane Distance:	52 feet				icleType		Day	Evening	Night	Daily	
Site Data							lutos:	77.5%		9.6%	-	
	rrier Height:	0.0 feet			Me	edium Tr		84.8%		10.3%	1.84%	
Barrier Type (0-V	•	0.0			ŀ	Heavy Tr	ucks:	86.5%		10.8%	0.74%	
, ,	ist. to Barrier:	100.0 feet										
Centerline Dist.		100.0 feet		^	voise Sc	ource El			eet)			
Barrier Distance		0.0 feet				Autos		000				
Observer Height		5.0 feet				m Trucks		000	Crada Ad			
_	ad Elevation:	0.0 feet			Heav	y Trucks	s: 8.	006	Grade Adj	iustment.	0.0	
Ro	Road Elevation: 0.0 feet						Distan	ce (in t	feet)			
	Road Grade:	0.0%				Autos	s: 96	.607				
	Left View:	-90.0 degree	es		Mediui	m Trucks	s: 96	.566				
	Right View:	90.0 degree	es		Heav	y Trucks	s: 96	.608				
FHWA Noise Mod	lel Calculation	S										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	0.03		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-17.21		-4.39)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-21.16		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL	
Autos:	66	.2	64.3		62.6		56.	5	65.1	1	65.7	
Medium Trucks:	59	.6	58.1		51.7		50.	2	58.7	7	58.9	
Heavy Trucks:	59	.6	58.2		49.2		50.	4	58.8	3	58.9	
Vehicle Noise:	67	.8	66.0		63.1		58.	2	66.8	3	67.2	
Centerline Distan	ce to Noise Co	ontour (in feet)									
				70 d	<i>BA</i>	65 d	dBA	6	60 dBA	55	dBA	

61

65

Ldn:

CNEL:

131

141

282

304

608

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o Jeffrey Rd.

Job Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS									
Highway Data				3	Site Con	ditions (Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	19,400 vehicle	s				,	Autos:	15		
,	Percentage:	10%			Me	dium Tru	cks (2 A	(xles	15		
Peak H	lour Volume:	1,940 vehicle	s		He	avy Truci	ks (3+ A	(xles	15		
Ve	hicle Speed:	55 mph		_	/ehicle l	Miv					
Near/Far La	ne Distance:	52 feet				icleType		Day	Evening	Night	Daily
Site Data					V 011			77.5%	J	9.6%	-
	rrior Hoimbt.	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 feet 0.0				leavy Tru		86.5%		10.8%	0.74%
Centerline Di		0.0 100.0 feet									
Centerline Dist.		100.0 feet		1	Voise So	ource Ele		•	eet)		
Barrier Distance		0.0 feet				Autos		000			
Observer Height (5.0 feet				n Trucks		000			
	ad Elevation:	0.0 feet			Heav	y Trucks	: 8.0	006	Grade Adj	iustment:	0.0
	ad Elevation: ad Elevation:	0.0 feet		I	ane Eq	uivalent	Distand	ce (in f	eet)		
	Road Grade:	0.0%				Autos					
•	Left View:	-90.0 degree	29		Mediui	n Trucks					
	Right View:	90.0 degree				y Trucks.					
	g	00.0 d0g.0				,					
FHWA Noise Mod	el Calculation	s		·							
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresn	el	Barrier Atte	en Ber	m Atten
Autos:	71.78	0.06		-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-17.18		-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21.14		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	ier atten	uation)						
VehicleType	Leq Peak Hou			Leg Ev		Leq N	light		Ldn	CI	VEL
Autos:	66	.2	64.3	-	62.6		56.5		65.1		65.8
Medium Trucks:	59	.6	58.1		51.8		50.2		58.7	7	58.9
Heavy Trucks:	59	.7	58.2		49.2		50.5	<u> </u>	58.8	3	58.9
Vehicle Noise:	67	7.8	66.1		63.1		58.2		66.8	3	67.3
Centerline Distant	ce to Noise Co	ontour (in feet)								
				70 a	IBA	65 d	BA .	6	0 dBA	55	dBA

Ldn:

CNEL:

61

66

131

141

283

305

610

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o Sand Canyon

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				1	NOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	25,400 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	2,540 vehicle	es		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		1	/ehicle l	Miy					
Near/Far La	ne Distance:	52 feet				icleType	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Ме	edium 7	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0			F	Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		^	loise So			•	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	_	1.000	0 1- 4-1		0.0
_	ad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	os: 96	6.607			
	Left View:	-90.0 degre	ees		Mediui	m Truck	ks: 96	6.566			
	Right View:	90.0 degre	ees		Heav	y Truck	ks: 96	6.608			
FHWA Noise Mod	lel Calculatior	18									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.23	3	-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.01	l	-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.97	7	-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout Topo and	l barri	ier atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	ıy	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	67	7.4	65.5		63.7		57	.7	66.3	3	66.9
Medium Trucks:	60	0.8	59.3		52.9		51	.4	59.8	3	60.1
Heavy Trucks:	60	0.8	59.4		50.4		51	.6	60.0)	60.1
Vehicle Noise:	69	9.0	67.2		64.3		59	.4	68.0)	68.4
Centerline Distan	ce to Noise C	ontour (in fee	t)								
				70 d	BA	65	dBA	6	0 dBA	55	dBA

73

79

157

169

Ldn:

CNEL:

730

786

339

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o Bake Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT I	DATA				NC	ISE MODE	L INPUT	s			
Highway Data					S	ite Con	nditions (F	<i>lard</i> = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	27,900	vehicles	6				Autos	: 15				
Peak Hour	Percentage:	109	%			Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15							
Peak H	lour Volume:	2,790	vehicles	3									
Ve	hicle Speed:	55	mph		V	ehicle l	Mix						
Near/Far La	ne Distance:	88	feet				icleType	Day	Evening	Night	Daily		
Site Data								tos: 77.5%		9.6%			
Ra	rrier Height:	0.0	feet			Me	edium Tru	cks: 84.8%	6 4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0				H	Heavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%		
Centerline Di		100.0											
Centerline Dist.) feet		N	oise So		ations (in i	eet)				
Barrier Distance) feet				Autos:	2.000					
						Mediu	m Trucks:	4.000					
Observer Height	,		feet			Heav	y Trucks:	8.006	Grade Ad	ljustment.	0.0		
	ad Elevation:		feet			ono Fa	uivalant [Diotonoo (in	footl				
	ad Elevation:	0.0		L	arie Eq		Distance (in	reet)					
	Road Grade:	0.0					Autos:	89.850					
	Left View:	-90.0) degree	es			m Trucks:	89.805					
	Right View:	90.0) degree	es		Heav	y Trucks:	89.850					
FHWA Noise Mod	el Calculation	ıs											
VehicleType	REMEL	Traffic	Flow	Dista	nce	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78		1.63		-3.92		-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40		-15.60		-3.92		-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40		-19.56		-3.92		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out To	po and l	barrier	attenu	ation)							
VehicleType	Leq Peak Ho	ur I	Leq Day	L	eq Eve	ening	Leq N	ight	Ldn	CI	VEL		
Autos:	68	3.3	6	66.4		64.6		58.6	67.2	2	67.8		
Medium Trucks:	61	1.7	6	50.2		53.8		52.3	60.	7	61.0		
Heavy Trucks:	61	1.7	6	50.3		51.3		52.5	60.9	9	61.0		
Vehicle Noise:	69	9.9	(68.1		65.2		60.3	68.8	8	69.3		
Contorlino Distan	co to Noiso C	ontour	(in foot)										

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	84	180	388	836
CNEL:	90	194	417	899

Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Trabuco Rd. Road Segment: b/w Lake Forest Dr.and Ridge Route Dr. Project Name: 2012 Great Park GPA/ZC

Job Number: 8141 Analyst: B. Lawson

Highway Data	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
<u> </u>				Si	ite Con	ditions (H	lard = 10, Se	oft = 15)				
Average Daily	Traffic (Adt):	35,700 vehicle:	S				Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Truci	ks (2 Axles):	15				
Peak H	our Volume:	3,570 vehicles	s		He	avy Trucks	s (3+ Axles):	15				
Vei	hicle Speed:	55 mph		V	ehicle i	Mix						
Near/Far Lai	ne Distance:	88 feet				icleType	Day	Evening	Night	Daily		
Site Data							tos: 77.5%	J	9.6%	•		
Rai	rier Height:	0.0 feet			Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0			ŀ	Heavy Truc	cks: 86.5%	2.7%	10.8%	0.74%		
Centerline Dis		100.0 feet		N	oise So	ource Elev	rations (in f	eet)				
Centerline Dist.	to Observer:	100.0 feet				Autos:	2.000	,				
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks:	4.000					
Observer Height (Observer Height (Above Pad): 5.0 feet					y Trucks:	8.006	Grade Ad	iustment	: 0.0		
Pa	Pad Elevation: 0.0 feet				Lane Equivalent Distance (in feet)							
Roa	ad Elevation:	0.0 feet		La	ane Eq		•	feet)				
ŀ	Road Grade:	0.0%				Autos:	89.850					
	Left View:	-90.0 degree	es			m Trucks:	89.805					
	Right View:	90.0 degree	es		Heav	y Trucks:	89.850					
FHWA Noise Mode	el Calculation	18										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	2.70		-3.92		-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-14.53		-3.92		-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-18.49		-3.92		-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	ation)							
VehicleType	Leq Peak Ho	ur Leq Day	/ L	eq Eve	ening	Leq Ni	ght	Ldn	C	NEL		
Autos:	69	9.4	67.5		65.7		59.6	68.3	3	68.9		
Medium Trucks:	62	2.8	61.2		54.9		53.3	61.8	3	62.0		
Heavy Trucks:	62	2.8	61.4		52.3		53.6	61.9)	62.1		
Vehicle Noise:	70	0.9	69.2		66.2		61.4	69.9	<u> </u>	70.4		

70 dBA

99

106

Ldn: CNEL:

65 dBA

212

228

60 dBA

457

492

55 dBA

985

1,060

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: w/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume: Vehicle Speed: Near/Far Lane Distance:	10% 3,990 vehicles 55 mph		Vehicle	Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15 Vehicle Mix						
	oo leet		Veh	icleType	Day	Evening	Night	Daily		
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0			Autos: edium Trucks: Heavy Trucks:	77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%		
Centerline Dist. to Barrier:			Noise So	ource Elevatio	ns (in fe	eet)				
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	0.0 feet 5.0 feet			m Trucks:	2.000 4.000 8.006	Grade Adj	iustment:	0.0		
Road Elevation:			Lane Eq	uivalent Dista	nce (in f	feet)				
Road Grade: Left View: Right View:	-90.0 degree			m Trucks: 8	9.850 9.805 9.850					
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Att	en Ber	m Atten		
Autos: 71.7	8 3.19	-3.	92	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -14.05	-3.	92	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	0 -18.01	-3.	92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)							
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Night		Ldn	CI	VEL		
Autos:	69.8	67.9	66.2	60).1	68.7	7	69.4		
		61.7	55.4	53	3.8	62.3		62.5 62.5		
Heavy Trucks:	63.3	61.8	52.8 54.1 62.4							
Vehicle Noise:	71.4	69.7	66.7	61	1.8	70.4	1	70.9		
Centerline Distance to Noise	Contour (in feet))								

70 dBA

106

114

Ldn:

CNEL:

65 dBA

229

246

60 dBA

493

530

55 dBA

1,061

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o El Toro Rd.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFI	C INP	UT DATA							L INPUT	S		
Highway Data				S	ite Con	ditions	(Hard	= 10, So	oft = 15)			
Average Daily Traffic (A	dt): 23	,600 vehicles	S					Autos:	15			
Peak Hour Percenta	ge:	10%			Me	dium Tr	ucks (2	Axles):	15			
Peak Hour Volur	ne: 2	,360 vehicles	S		Heavy Trucks (3+ Axles): 15							
Vehicle Spe	ed:	50 mph		V	ehicle l	Miy						
Near/Far Lane Distan	ce:	70 feet		_		icleType	9	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	Ū	9.6%	-	
Barrier Heig	ht:	0.0 feet			М	edium T		84.8%		10.3%		
Barrier Type (0-Wall, 1-Ber		0.0			ŀ	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barr	,	100.0 feet										
Centerline Dist. to Observ		100.0 feet		۸	loise So			ns (in fe	eet)			
Barrier Distance to Observ		0.0 feet				Auto		2.000				
Observer Height (Above Pa		5.0 feet				m Truck		1.000				
Pad Elevati		0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0	
Road Elevati		0.0 feet		L	Lane Equivalent Distance (in feet)							
Road Gra		0.0%				Auto	s: 93	3.723				
Left Vie	ew:	-90.0 degree	es		Mediui	m Truck	s: 93	3.680				
Right Vie		90.0 degree			Heav	y Truck	s: 93	3.723				
FHWA Noise Model Calcula	tions											
VehicleType REME	L	Traffic Flow	Dista	ance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos: 7	0.20	1.32		-4.20		-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 8	1.00	-15.92		-4.19		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 8	5.38	-19.87		-4.20		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels	withou	ıt Topo and	barrier	attenu	ıation)							
VehicleType Leq Pear	(Hour	Leq Day	' I	Leq Ev	ening	Leq	Night		Ldn	C	NEL	
Autos:	66.1	(64.2		62.5		56	.4	65.0)	65.6	
Medium Trucks:	59.7	;	58.2		51.8		50	.3	58.7	7	59.0	
Heavy Trucks:	60.1	,	58.7		49.7		50	.9	59.3	3	59.4	
Vehicle Noise:	67.8		66.1		63.0		58	.2	66.8	3	67.3	
Centerline Distance to Nois	se Con	tour (in feet,)									

70 dBA

61

66

Ldn:

CNEL:

65 dBA

132

141

60 dBA

284

305

55 dBA

611

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: n/o Alicia Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	ATA		NOISE MODEL INPUTS							
Highway Data			-		Site Cor	nditions (H	lard = 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	26,400 v	ehicles				Autos:	15				
Peak Hour	Percentage:	10%			Medium Trucks (2 Axles): 15							
Peak H	lour Volume:	2,640 v	ehicles		He	eavy Trucks	s (3+ Axles):	15				
Ve	hicle Speed:	50 n	nph		Vehicle	Mix						
Near/Far La	ne Distance:	70 f	eet			icleType	Day	Evening	Night	Daily		
Site Data						Au	tos: 77.5%	12.9%	9.6%	97.42%		
Ra	rrier Height:	0.0	foot		М	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0	icci			Heavy Truc	cks: 86.5%	2.7%	10.8%	0.74%		
Centerline Di		100.0	feet		M-1 0			4)				
Centerline Dist.		100.0			Noise S		rations (in f	eet)				
Barrier Distance		0.0				Autos:	2.000					
Observer Height		5.0				m Trucks:	4.000					
	ad Elevation:	0.0			Hear	vy Trucks:	8.006	Grade Ad	justment:	0.0		
	ad Elevation: ad Elevation:	0.0			Lane Eo	uivalent D	istance (in	feet)				
	Road Grade:	0.09				Autos:	93.723	,				
	Left View:		degrees	e	Mediu	m Trucks:	93.680					
	Right View:		degrees			vy Trucks:	93.723					
	ragin view.	30.0	uegree.	3	7704	y maono.	00.720					
FHWA Noise Mod	el Calculation	s										
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	70.20		1.81	-4.2	0	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-	15.43	-4.1	9	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-	19.39	-4.2	0	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Top	o and b	arrier atter	nuation)							
VehicleType	Leq Peak Hou	ır Le	eq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL		
Autos:	66	5.6	6	4.7	62.9	-	56.9	65.5	5	66.1		
Medium Trucks:	60	.2	5	8.7	52.3		50.8	59.2	2	59.5		
Heavy Trucks:	60	.6	5	9.2	50.1		51.4	59.7	7	59.9		
Vehicle Noise:	68	3.3	6	6.6	63.5		58.7	67.3	3	67.7		
Contorlino Distan	co to Noiso C	ontour (i	in foot)									

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	66	142	306	658
CNFI ·	71	152	328	707

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: s/o Alicia Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS											
Highway Data			Site Co	nditions	(Hard	= 10, Sc	oft = 15)							
Average Daily Traffic (Adt):	13,700 vehicle	S				Autos:	15							
Peak Hour Percentage:	10%		Medium Trucks (2 Axles): 15											
Peak Hour Volume:	1,370 vehicles	S	Heavy Trucks (3+ Axles): 15											
Vehicle Speed:	50 mph		Vehicle Mix											
Near/Far Lane Distance:	70 feet			nicleType		Day	Evening	Night	Daily					
Site Data					Autos:	77.5%								
Barrier Height:	0.0 feet			ledium Tr		84.8%		10.3%	1.84%					
Barrier Type (0-Wall, 1-Berm):	0.0 reet 0.0			Heavy Tr		86.5%		10.8%	0.74%					
Centerline Dist. to Barrier:	100.0 feet			se Source Elevations (in feet)										
Centerline Dist. to Observer:	100.0 feet		Noise S				eet)	9% 10.3% 1.84%						
Barrier Distance to Observer:	0.0 feet			Autos		2.000								
Observer Height (Above Pad):	5.0 feet			ım Trucks		.000								
Pad Elevation:	0.0 feet		Hea	vy Trucks	s: 8	3.006	Grade Ad	justment:	0.0					
Road Elevation:	0.0 feet		Lane Ed	quivalent	Dista	nce (in	feet)							
Road Grade:	0.0%			Autos		3.723								
Left View:	-90.0 degree	20	Mediu	ım Trucks		3.680								
Right View:	90.0 degree			vy Trucks		3.723								
ragin view.	30.0 degree	00	7700	ry maone	<i></i> 00	20								
FHWA Noise Model Calculatio	ns													
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten					
Autos: 70.20	-1.04	-2	1.20	-1.20		-4.87	0.0	000	0.000					
Medium Trucks: 81.0	-18.28	-2	l.19	-1.20		-4.97	0.0	000	0.000					
Heavy Trucks: 85.3	3 -22.24	-2	1.20	-1.20		-5.16	0.0	000	0.000					
Unmitigated Noise Levels (wit	hout Topo and	barrier att	enuation)											
VehicleType Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq	Night		Ldn	CI	VEL					
Autos: 6	3.8	61.9	60.1		54	.0	62.7	7	63.3					
Medium Trucks: 5	7.3	55.8	49.5	;	47	.9	56.4	4	56.6					
Heavy Trucks:5	7.7	56.3	47.3	3	48	.5	56.9	9	57.0					
Vehicle Noise:	5.5	63.7	60.7	,	55	.9	64.4	4	64.9					
Centerline Distance to Noise (Contour (in feet)												

70 dBA

43

46

Ldn:

CNEL:

65 dBA

92

98

60 dBA

197

212

55 dBA

425

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Tustin Ranch Rd.

Road Segment: w/o Jamboree

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT [DATA			NO	ISE MC	DEI	_ INPUT	s			
Highway Data				Site Con	ditions (H	ard = 10), So	ft = 15)				
Average Daily Traffic (Adt)	: 11,700	vehicles				Au	tos:	15				
Peak Hour Percentage				Medium Trucks (2 Axles): 15								
Peak Hour Volume	: 1,170	vehicles		Heavy Trucks (3+ Axles): 15								
Vehicle Speed	55	mph		Vehicle I	Miy							
Near/Far Lane Distance	: 88	feet			icleType	Dá	av	Evening	Night	Daily		
Site Data					Aut		.5%	12.9%	9.6%	-		
Barrier Height	. 0.0	feet		Medium Trucks: 84.8% 4.9% 10.3%								
Barrier Type (0-Wall, 1-Berm					Heavy Truc		.5%		10.8%	1.84% 0.74%		
Centerline Dist. to Barrie			-									
Centerline Dist. to Observe				Noise So	ource Elev	•		et)				
Barrier Distance to Observe		feet			Autos:	2.00						
Observer Height (Above Pad		feet		Mediu	m Trucks:	4.000						
Pad Elevation		feet		Heav	y Trucks:	8.00	3	Grade Adj	iustment:	0.0		
Road Elevation		0.0 feet Lane Equivalent Distance (in feet)										
Road Grade					Autos:	89.85	•	,				
Left View		degrees		Mediu	m Trucks:	89.80						
Right View		degrees			ry Trucks:	89.85						
Right view	. 90.0	uegrees		77007	y Truono.	00.00	O					
FHWA Noise Model Calculate	ons		J.									
VehicleType REMEL	Traffic	Flow	Distance	Finite	Road	Fresnel	1	Barrier Atte	en Ber	m Atten		
Autos: 71.	78	-2.14	-3.9	92	-1.20	-4	.87	0.0	000	0.000		
Medium Trucks: 82.	40	-19.38	-3.9	92	-1.20	-4	.97	0.0	000	0.000		
Heavy Trucks: 86.	40	-23.33	-3.9	92	-1.20	-5	.16	0.0	000	0.000		
Unmitigated Noise Levels (w	ithout Top	oo and ba	arrier attei	nuation)								
VehicleType Leq Peak I	lour L	Leq Day	Leq E	vening	Leq Nig	ght		Ldn	CI	VEL		
Autos:	64.5	62	6	60.9		54.8		63.4		64.0		
Medium Trucks:	57.9	56	.4	50.0		48.5		57.0)	57.2		
Heavy Trucks:	57.9	56	.5	47.5 48.7 57.1					57.2			
Vehicle Noise:	66.1	64	.3	61.4		56.5		65.1		65.5		
Centerline Distance to Noise	Contour	(in feet)										

70 dBA

47

50

Ldn:

CNEL:

65 dBA

101

109

60 dBA

217

234

55 dBA

468

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Tustin Ranch Rd.

Road Segment: s/o Portola Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE S	PECIFIC IN	NPUT [ATA				NC	ISE MOE	EL INPU	TS	
Highway Data					Site	e Cond	ditions (F	Hard = 10,	$Soft = 1\overline{5}$		
Average Daily T	raffic (Adt):	31,400	vehicles	3				Auto	s: 15		
Peak Hour P	Percentage:	10%	6			Med	dium Truc	ks (2 Axles	s): 15		
Peak Ho	ur Volume:	3,140	vehicles	3		Hea	avy Truck	s (3+ Axles	s): 15		
	icle Speed:		mph		Vel	hicle N	1ix				
Near/Far Land	e Distance:	88	feet			Vehic	cleType	Day	Evening	g Night	Daily
Site Data							AL	tos: 77.5	12.9%	6 9.6%	6 97.42%
Barr	ier Height:	0.0	feet			Me	dium Tru	cks: 84.8	3% 4.9%	6 10.3%	6 1.84%
Barrier Type (0-Wa	•	0.0				Н	leavy Tru	cks: 86.5	5% 2.7%	6 10.8%	6 0.74%
Centerline Dist	,	100.0	feet		No	ica Sa	urco Elo	vations (in	foot		
Centerline Dist. to	Observer:	100.0	feet		740	13 e 30		2.000	i ieel)		
Barrier Distance to	Observer:	0.0	feet		١.,	\	Autos:				
Observer Height (A	bove Pad):	5.0	feet		/		n Trucks:	4.000	Crada A	م د د د د د د د د د د د د د د د د د د د	4. 0.0
• ,	d Elevation:		feet			Heavy	y Trucks:	8.006	Grade A	Adjustmen	t. 0.0
Road	d Elevation:		feet		Lai	ne Equ	ıivalent L	Distance (i	n feet)		
R	oad Grade:	0.0					Autos:	89.850			
	Left View:	-90.0	degree	es	/	Mediun	n Trucks:	89.805			
1	Right View:		degree			Heavy	/ Trucks:	89.850			
FHWA Noise Model	Calculation	ıs									
VehicleType	REMEL	Traffic	Flow	Distance)	Finite I	Road	Fresnel	Barrier A	Atten Be	erm Atten
Autos:	71.78		2.15	-3.	.92		-1.20	<i>-4.</i> 8	7 (0.000	0.000
Medium Trucks:	82.40		-15.09	-3.	.92		-1.20	-4.9	7 (0.000	0.000
Heavy Trucks:	86.40		-19.05	-3.	.92		-1.20	-5.1	6 (0.000	0.000
Unmitigated Noise	Levels (with	out Top	oo and l	barrier atte	enua	tion)					
VehicleType L	eq Peak Ho	ur L	eq Day	Leq	Ever	ning	Leq N	ight	Ldn	C	NEL
Autos:	68	3.8	(66.9		65.1		59.1	67	7.7	68.3
Medium Trucks:	62	2.2	6	60.7		54.3		52.8	61	1.2	61.5
Heavy Trucks:	62	2.2	(8.08		51.8		53.0	61	1.4	61.5
Vehicle Noise:	70).4	(68.6		65.7		60.8	69	9.3	69.8

70 dBA

90

97

Ldn:

CNEL:

65 dBA

195

210

60 dBA

420

452

55 dBA

905

973

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Tustin Ranch Rd.

Road Segment: n/o La Colina Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Con	ditions (l	Hard =	10, Sc	oft = 15)				
Average Daily	Traffic (Adt): 3	31,300 vehicles	S					Autos:	15				
	Percentage:	10%			Me	dium Truc	ks (2 /	Axles):	15				
Peak He	our Volume:	3,130 vehicles	s		He	avy Truck	is (3+ /	Axles):	15				
Vel	hicle Speed:	55 mph		-	Vehicle I	Miv							
Near/Far Lar	ne Distance:	88 feet				icleType		Day	Evening	Night	Daily		
Site Data					V 011		ıtos:	77.5%		9.6%	-		
	udau Haindat	0.0 foot			Me	edium Tru		84.8%		10.3%	1.84%		
	rier Height:	0.0 feet 0.0				Heavy Tru		86.5%		10.8%	0.74%		
Barrier Type (0-Wa Centerline Dis	,	0.0 100.0 feet									011 170		
Centerline Dist. t		100.0 feet			Noise So	ource Ele	vation	s (in fe	eet)				
Barrier Distance t		0.0 feet				Autos:		000					
Observer Height (5.0 feet				n Trucks:		000					
• •	ad Elevation:	0.0 feet			Heav	y Trucks:	8.	006	Grade Ad	justment.	0.0		
	nd Elevation:	0.0 feet			Lane Ea	uivalent l	Distan	ce (in f	feet)				
	Road Grade:	0.0%				Autos:		850	,				
•	Left View:	-90.0 degree	25		Mediui	n Trucks:		805					
	Right View:	90.0 degree				y Trucks:		850					
FHWA Noise Mode					-								
VehicleType	REMEL	Traffic Flow	Di	stance	Finite		Fresr		Barrier Att		m Atten		
Autos:	71.78	2.13		-3.9		-1.20		-4.87		000	0.000		
Medium Trucks:	82.40	-15.11		-3.9		-1.20		-4.97		000	0.000		
Heavy Trucks:	86.40	-19.06		-3.9	2	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	out Topo and	barri	ier atten	nuation)								
VehicleType	Leq Peak Hou	r Leq Day	,	Leq E	vening	Leq N	light		Ldn	CI	VEL		
Autos:	68.	.8	66.9		65.1		59.	1	67.7	7	68.3		
Medium Trucks:	62	.2	60.7		54.3		52.8	3	61.2	2	61.5		
Heavy Trucks:	62	.2	60.8		51.8		53.0)	61.4	1	61.5		
Vehicle Noise:	70	.4	68.6		65.7		60.8	3	69.3	3	69.8		
Centerline Distance	e to Noise Co	ntour (in feet)										
		,,		70	dBA	65 dl	ВА	6	0 dBA	55	dBA		

Ldn:

CNEL:

90

97

194

209

419

451

903

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Tustin Ranch Rd.

Road Segment: s/o Irvine Bl.

Job Number: 8141

Analyst: B. Lawson

	INPUT DATA				NO	ISE MOL	DEL INPUT	S	
Highway Data			Si	te Cond	itions (H	ard = 10,	Soft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage:	10%					Auto	s): 15		
Peak Hour Volume:	•	es		Heal	vy irucks	(3+ Axle	s): 15		
Vehicle Speed:	•		Ve	ehicle Mi	ix				
Near/Far Lane Distance:	88 feet			Vehic	leType	Day	/ Evening	Night	Daily
Site Data					Aut	os: 77.	5% 12.9%	9.6%	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm):					lium Truc eavy Truc			10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Barrier:	100.0 feet		N	oise Sou	ırce Elev	ations (ir	ı feet)		
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	0.0 feet 5.0 feet			Medium	Autos:	2.000 4.000 8.006	•	djustment	0.0
Road Elevation:			Lá	ne Equi	ivalent D	istance (in feet)		
Road Grade:	0.0%			Medium	Autos:	89.850			
Left View: Right View:					Trucks:	89.805 89.850			
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distan	ce	Finite R	Road	Fresnel	Barrier At	ten Ber	m Atten
Autos: 71.7	8 1.6	3 .	-3.92		-1.20	-4.8	37 0.	000	0.000
Medium Trucks: 82.4	0 -15.6	0 .	-3.92		-1.20	-4.9	<i>97</i> 0.	000	0.000
Heavy Trucks: 86.4	0 -19.5	6 .	-3.92		-1.20	-5.1	6 0.	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	d barrier a	ttenu	ation)					
VehicleType Leq Peak H	our Leq Da	ay Le	q Eve	ening	Leq Nig	ght	Ldn	CI	VEL
Autos:	68.3	66.4		64.6		58.6	67.	2	67.8
Medium Trucks:	61.7	60.2		53.8		52.3	60.	7	61.0
Heavy Trucks:	61.7	60.3		51.3		52.5	60.	9	61.0
Vehicle Noise:	69.9	68.1		65.2		60.3	68.	8	69.3

70 dBA

84

90

Ldn:

CNEL:

65 dBA

180

194

60 dBA

388

417

55 dBA

836

Sunday,	May	20,	2012

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: University Dr.

Road Segment: b/w I-405 SB Ramps and Michelson Dr.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)		
Average Daily Traffic (Adt):	60,000 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	6,000 vehicles	S	He	avy Trucks (3+ Axles):	15		
Vehicle Speed:	60 mph		Vehicle I	Miv				
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data			Veri	Autos			9.6%	97.42%
			Λ/ι	edium Trucks			10.3%	1.84%
Barrier Height:	0.0 feet			Heavy Trucks			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm):				Todvy Traone	. 00.070	2.170	10.070	0.7 4 70
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:	0.0 feet		Lano Ea	uivalent Dis	tanco (in	footl		
Road Elevation:	0.0 feet		Lane Ly		92.547	i cc i)		
Road Grade:			Modiu		92.54 <i>1</i> 92.504			
Left View:	3							
Right View:	90.0 degree	es	пеач	y Trucks:	92.547			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 4.58	-4	.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	8 -12.66	-4	.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.3	3 -16.61	-4	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier att	enuation)					
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos:	7 2.5	70.6	68.8		62.8	71.4	4	72.0
Medium Trucks:	65.7	64.2	57.8	!	56.3	64.8	3	65.0
Heavy Trucks:	65.4	64.0	54.9	;	56.2	64.5	5	64.7
Vehicle Noise:	74.0	72.2	69.3		64.4	72.9	9	73.4
Centerline Distance to Noise	Contour (in feet,)						

70 dBA

157

169

Ldn:

CNEL:

65 dBA

338

364

60 dBA

727

783

55 dBA

1,567

1,688

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av. Job Number: 8141
Road Segment: w/o Jamboree Analyst: B. Lawson

SITE		NOISE MODEL INPUTS									
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	22,300 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15		
Peak F	lour Volume:	2,230 vehicle	s		Hea	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	60 mph		V	ehicle I	Vix					
Near/Far La	ne Distance:	76 feet				cleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	_
	rrior Hoiabti	0.0 feet			Ме	edium T		84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Centerline Di	*	100.0 feet									
Centerline Dist.		100.0 feet		N	oise So			•	eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height		5.0 feet			Mediur	n Truck	s: 4	.000			
_	ad Elevation:	0.0 feet			Heav	y Truck	rs: 8	.006	Grade Ad	justment	: 0.0
	ad Elevation:	0.0 feet		L	ane Equ	uivalen	t Distar	nce (in	feet)		
	Road Grade:	0.0%				Auto		2.547	,		
	Left View:	-90.0 degre	00		Mediur	n Truck		2.504			
	Right View:	90.0 degre				y Truck		2.547			
	ragin view.	30.0 degre	63		riouv.	y Traon	0. 02				
FHWA Noise Mod	el Calculation	ns		'							
VehicleType	REMEL	Traffic Flow	Distand	се	Finite	Road	Fres	nel	Barrier Att	en Bei	m Atten
Autos:	73.22	2 0.28	-	4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	3 -16.96	-	4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.91	-	4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier at	tenu	ation)						
VehicleType	Leq Peak Ho				ening	Leq	Night		Ldn	C	NEL
Autos:	6	8.2	66.3		64.5		58.	.5	67.	1	67.7
Medium Trucks:	6	1.4	59.9		53.5		52.	.0	60.5	5	60.7
Heavy Trucks:	6	1.1	59.7		50.6		51.	.9	60.2	2	60.4
Vehicle Noise:	6	9.7	67.9		65.0		60	.1	68.6	3	69.1

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	81	175	376	810
CNEL:	87	188	405	872

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av.

Road Segment: e/o Jamboree

Job Number: 8141

Analyst: B. Lawson

SITE S	SITE SPECIFIC INPUT DATA NOISE MOI							MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
	Percentage: ur Volume:	10% 2,350 vehicles				dium Tru avy Truc	•				
	icle Speed:	60 mph		V	ehicle l	Wix					
Near/Far Lan	e Distance:	76 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						A	lutos:	77.5%	12.9%	9.6%	97.42%
Barr Barrier Type (0-Wa Centerline Dist		0.0 feet 0.0 100.0 feet			F	edium Tr Heavy Tr ource El	ucks:	84.8% 86.5%	2.7%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Barrier Distance to Observer Height (A Pac	Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet			Mediur	Autos m Trucks y Trucks	s: 2 s: 4	.000 .000 .006	Grade Ad	justment:	0.0
R	d Elevation: oad Grade: Left View: Right View:	0.0 feet 0.0% -90.0 degree 90.0 degree		L	Mediur	uivalent Autos m Trucks ry Trucks	s: 92 s: 92	nce (in 1 1.547 1.504 1.547	feet)		
FHWA Noise Model	Calculation	S									
VehicleType	REMEL	Traffic Flow	Distar	се	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.51		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.73		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.68		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier a	ttenu	ation)						
VehicleType L	.eq Peak Ho	ur Leq Day	Le	eq Eve	ening	Leq I	Night		Ldn	CI	VEL
Autos:	68	3.4	66.5		64.8		58.	7	67.3	3	67.9
Medium Trucks:			60.1		53.8		52.		60.7		60.9
Heavy Trucks:	61	.3	59.9		50.9		52.	.1	60.5	5	60.6
Vehicle Noise:	69	0.9	68.1		65.2		60.	3	68.9	9	69.3

70 dBA

84

90

Ldn:

CNEL:

65 dBA

181

195

60 dBA

389

419

55 dBA

839

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av. Job Number: 8141
Road Segment: w/o Culver Dr. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				NOISE MODEL INPUTS					
Highway Data				Si	ite Con	ditions (H	lard = 10, S	oft = 15)			
		26,200 vehicles	S				Autos				
	Percentage:	10%					ks (2 Axles)				
	lour Volume:	2,620 vehicles	S		He	avy Trucks	s (3+ <i>Axles</i>)	: 15			
	hicle Speed:	55 mph		Ve	ehicle l	Mix					
Near/Far La	ne Distance:	52 feet			Vehi	cleType	Day	Evening	Night	Daily	
Site Data						Aut	tos: 77.5°	6 12.9%	9.6%	97.42%	
Ba	rrier Height:	0.0 feet			Мє	edium Truc	cks: 84.89	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			F	leavy Truc	cks: 86.59	6 2.7%	10.8%	0.74%	
Centerline Di	st. to Barrier:	100.0 feet		No	oise Sc	urce Elev	rations (in	feet)			
Centerline Dist.	to Observer:	100.0 feet				Autos:	2.000				
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks:	4.000				
Observer Height (Above Pad):	5.0 feet				y Trucks:	8.006	Grade Ad	iustment:	0.0	
Pa	ad Elevation:	0.0 feet				-				0.0	
Roa	ad Elevation:	0.0 feet		Lá	ane Equ	uivalent D	istance (in	feet)			
	Road Grade:	0.0%				Autos:	96.607				
	Left View:	-90.0 degree	es		Mediur	n Trucks:	96.566				
	Right View:	90.0 degree	es		Heav	y Trucks:	96.608				
FHWA Noise Mod	el Calculatior	18									
VehicleType	REMEL	Traffic Flow	Distanc	е	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos:	71.78	1.36		4.39		-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-15.88		4.39		-1.20	<i>-4.</i> 97	0.0	000	0.000	
Heavy Trucks:	86.40	-19.83		4.39		-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	nout Topo and	barrier at	tenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	/ Led	q Eve	ening	Leq Ni	ght	Ldn	CI	VEL	
Autos:	67	7.5	65.6		63.9		57.8	66.4	4	67.1	
Medium Trucks:	60	0.9	59.4		53.1		51.5	60.0)	60.2	
Heavy Trucks:	6′	1.0	59.5		50.5		51.8	60.′	1	60.2	
Vehicle Noise:	69	9.1	67.4		64.4		59.5	68.	1	68.6	

70 dBA

75

80

Ldn:

CNEL:

65 dBA

161

173

60 dBA

346

372

55 dBA

746

802

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av. Job Number: 8141
Road Segment: e/o Culver Dr. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISI	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	l = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	25,900 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Ме	dium Trucks (2 Axles):	15		
Peak Hour Volume:	2,590 vehicle	S	He	avy Trucks (3	+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Miss				
Near/Far Lane Distance:	52 feet				Dov	Funning	Niaht	Doily
Cita Data			veni	icleType	Day 77.5%	Evening	Night	Daily
Site Data				Autos:			9.6%	97.42%
Barrier Height:				edium Trucks.			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			F	leavy Trucks.	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:			Noise So	ource Elevati	ons (in fe	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0
Pad Elevation:								
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist		feet)		
Road Grade:	0.0%				96.607			
Left View:	-90.0 degre	es	Mediui	m Trucks:	96.566			
Right View:	90.0 degre	es	Heav	ry Trucks: 9	96.608			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 1.31	-4.	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -15.93	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -19.88	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H			Evening	Leq Night		Ldn		VEL
Autos:	67.5	65.6	63.8	5	7.8	66.4	4	67.0
Medium Trucks:	60.9	59.4	53.0	5	1.5	59.9	9	60.2
Heavy Trucks:	60.9	59.5	50.5	5	1.7	60.1	<u> </u>	60.2
Vehicle Noise:	69.1	67.3	64.4	5	9.5	68.0)	68.5
Centerline Distance to Noise	Contour (in feet)	,		1			

70 dBA

74

80

Ldn:

CNEL:

65 dBA

159

171

60 dBA

343

369

55 dBA

740

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av.

Road Segment: e/o Yale Av.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIF	IC INF	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic (A	\ <i>dt):</i> 13	3,000 vehicles	3					Autos:	15		
Peak Hour Percenta	age:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volu	me: ´	1,300 vehicles	3		He	avy Trud	cks (3+	Axles):	15		
Vehicle Spe	eed:	55 mph		,	Vehicle I	Mix					
Near/Far Lane Distar	псе:	52 feet				icleType	ڊ	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	Ŭ I	9.6%	-
	aht.	0.0 feet			Me	edium Ti		84.8%		10.3%	1.84%
Barrier Hei Barrier Type (0-Wall, 1-Be		0.0 reet 0.0				leavy T		86.5%		10.8%	0.74%
Centerline Dist. to Bar	•	100.0 feet									
Centerline Dist. to Obser		100.0 feet		1	Noise So			•	eet)		
Barrier Distance to Obser		0.0 feet				Auto		.000			
Observer Height (Above P		5.0 feet				m Truck		.000			
Pad Elevai	,	0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	0.0
Road Elevai		0.0 feet		1	Lane Eq	uivalen	t Distar	nce (in i	feet)		
Road Gra		0.0%				Auto		5.607			
Left V		-90.0 degree	es		Mediu	m Truck	s: 96	5.566			
Right V	iew:	90.0 degree			Heav	y Truck	s: 96	3.608			
FHWA Noise Model Calcul					T						
VehicleType REMI		Traffic Flow	Di	istance		Road	Fres		Barrier Att		m Atten
	71.78	-1.68		-4.39		-1.20		-4.87		000	0.000
	82.40	-18.92		-4.39		-1.20		-4.97		000	0.000
Heavy Trucks:	86.40	-22.88		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels	(witho	ut Topo and	barr	ier atten	uation)						
VehicleType Leq Pea	ak Hour	Leq Day	,	Leq E	vening /	Leq	Night		Ldn	CI	VEL
Autos:	64.5	5 (62.6		60.8		54.	.8	63.4	1	64.0
Medium Trucks:	57.9		56.4		50.0		48		56.9	9	57.2
Heavy Trucks:	57.9	9 ;	56.5		47.5		48		57.1	1	57.2
Vehicle Noise:	66.1	1 (64.3		61.4		56	.5	65.0)	65.5
Centerline Distance to No.	ise Cor	ntour (in feet))								
		·		70 c	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

47

50

101

108

217

233

467

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av./I-5 SB Ramps Road Segment: w/o Jeffrey Rd.

Job Number: 8141 Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NO	ISE MODE	L INPUTS	5	
Highway Data				Site Con	ditions (H	lard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 1	9,500 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Truci	ks (2 Axles):	15		
Peak H	lour Volume:	1,950 vehicles	3	He	avy Trucks	s (3+ Axles):	15		
Ve	hicle Speed:	55 mph		Vehicle I	Miy				
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data					Au	tos: 77.5%	_	9.6%	97.42%
Ba	rrier Height:	0.0 feet		Me	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0		F	Heavy Truc	cks: 86.5%	2.7%	10.8%	0.74%
Centerline Di	,	100.0 feet		Noice Se	nuroo Elou	rations (in fe	204)		
Centerline Dist.	to Observer:	100.0 feet		Noise St		•	et)		
Barrier Distance	to Observer:	0.0 feet		Madiu	Autos: m Trucks:	2.000 4.000			
Observer Height ((Above Pad):	5.0 feet			ry Trucks:	8.006	Grade Adj	ustmant	
Pa	ad Elevation:	0.0 feet		пеач	y Trucks.	0.000	Orace Auj	ustinent.	0.0
Roa	ad Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)		
	Road Grade:	0.0%			Autos:	96.607			
	Left View:	-90.0 degree	es	Mediui	n Trucks:	96.566			
	Right View:	90.0 degree	es	Heav	y Trucks:	96.608			
FHWA Noise Mod	el Calculations	3							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	71.78	0.08	-4.3	39	-1.20	-4.87	0.0	00	0.000
Medium Trucks:	82.40	-17.16	-4.3	39	-1.20	-4.97	0.0	00	0.000
Heavy Trucks:	86.40	-21.12	-4.3	39	-1.20	-5.16	0.0	00	0.000
Unmitigated Noise	e Levels (witho	out Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Hou	r Leq Day	Leq L	Evening	Leq Ni	ght	Ldn	CI	VEL
Autos:	66.	3	64.4	62.6		56.5	65.2		65.8

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	61	132	284	612
CNEL:	66	142	306	659

51.8

49.2

63.1

50.2

50.5

58.3

58.7

58.8

66.8

58.9

59.0

67.3

58.1

58.3

66.1

Medium Trucks:

Heavy Trucks:

Vehicle Noise:

59.7

59.7

67.8

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Warner Av. Job Number: 8141
Road Segment: w/o Paseo Westpark Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions (H	lard = 10, Se	oft = 15)					
Average Daily	Traffic (Adt):	10,900 vehic	es				Autos:	15					
Peak Hour	Percentage:	10%			Me	dium Truci	ks (2 Axles):	15					
Peak H	lour Volume:	1,090 vehic	es		He	avy Trucks	s (3+ Axles):	15					
Ve	hicle Speed:	55 mph		V	ehicle l	Mix							
Near/Far La	ne Distance:	52 feet				icleType	Day	Evening	Night	Daily			
Site Data							tos: 77.5%		9.6%				
Ra	rrier Height:	0.0 feet			Me	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0 1661			ŀ	Heavy Truc			10.8%	0.74%			
Centerline Di		100.0 feet											
Centerline Dist.		100.0 feet		N	oise Sc	ource Elev	ations (in f	eet)					
Barrier Distance		0.0 feet				Autos:	2.000						
					Mediui	m Trucks:	4.000						
Observer Height	,	5.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0			
	ad Elevation:	0.0 feet		1.	ano Fa	uivalant D	istance (in	foot)					
	Road Elevation: 0.0 feet				arre Eq			ieei)					
	Road Grade:	0.0%				Autos:	96.607						
	Left View:	-90.0 degr				m Trucks:	96.566						
	Right View:	90.0 degr	ees		Heav	y Trucks:	96.608						
FHWA Noise Mod	el Calculation	s											
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	71.78	-2.4	5	-4.39		-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-19.6	9	-4.39		-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-23.6	4	-4.39		-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Topo an	d barr	ier attenu	ation)								
VehicleType	Leq Peak Hou	ur Leq Da	ay	Leq Eve	ening	Leq Ni	ght	Ldn	CI	VEL			
Autos:	63	3.7	61.8		60.1		54.0	62.6	3	63.2			
Medium Trucks:	57	' .1	55.6		49.3		47.7	56.2	.2				
Heavy Trucks:	57	. .2	55.7		46.7		48.0			56.4			
Vehicle Noise:	65	5.3	3 63.6			60.6 55.7 64.3				64.8			
Contorlino Distan	co to Noiso C	ontour (in fo	a#)										

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	42	90	193	416
CNEL:	45	96	207	447

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Warner Av. Job Number: 8141
Road Segment: w/o Culver Dr. Analyst: B. Lawson

SITE SPEC	IFIC INF	PUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic			5			.г т.	-1 - (0	Autos:	15		
Peak Hour Perce	•	10%				dium Tru +	,	,	15		
Peak Hour Vo		1,040 vehicles	6		He	avy Truc	cks (3+	Axies):	15		
Vehicle S	•	55 mph		V	ehicle l	Mix					
Near/Far Lane Dis	tance:	52 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						A	Autos:	77.5%	12.9%	9.6%	97.42%
Barrier H	leiaht:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-	•	0.0			ŀ	Heavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to E		100.0 feet		N	loise So	ource El	evatio	ns (in fe	eet)		
Centerline Dist. to Obs		100.0 feet				Autos	s: 2	2.000	<u> </u>		
Barrier Distance to Obs		0.0 feet			Mediui	m Trucks		1.000			
Observer Height (Above	Pad):	5.0 feet				y Trucks		3.006	Grade Ad	iustment:	0.0
Pad Ele		0.0 feet		_							
Road Ele		0.0 feet	L	ane Eq	uivalent			feet)			
	Grade:	0.0%				Autos		6.607			
Left	t View:	-90.0 degree	es			m Trucks		5.566			
Right	t View:	90.0 degree	es		Heav	y Trucks	s: 96	6.608			
FHWA Noise Model Cale	culations										
VehicleType RE	MEL	Traffic Flow	Dista	nce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-2.65		-4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-19.89		-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-23.85		-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Leve	els (witho	ut Topo and	barrier	attenu	ation)						
VehicleType Leq F	Peak Hour	Leq Day	L	.eq Ev	ening	Leq i	Night		Ldn	CI	VEL
Autos:	63.5	5 (31.6		59.9		53	.8	62.4	1	63.0
Medium Trucks:	56.9) :	55.4				47	.5	56.0)	56.2
Heavy Trucks:	57.0	55.5			46.5 47.7			56.1		56.2	
Vehicle Noise:	65.1		63.4		60.4		55	.5	64.1	1	64.6
Centerline Distance to I	Noise Cor	ntour (in feet))								

70 dBA

40

43

Ldn:

CNEL:

65 dBA

87

93

60 dBA

187

201

55 dBA

403

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Warner Av. Job Number: 8141
Road Segment: b/w Culver Dr.and W. Yale Loop Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)					
Average Daily	, ,	11,200 vehicle	es		Mo	dium Tru	icks (2	Autos:						
	Percentage: lour Volume:	1,120 vehicle				avy Truc	•	,						
	hicle Speed:	,	2 5		1100	avy IIuc	,ns (ST	AXICS).	10					
ve. Near/Far Lai	•	55 mph 52 feet		ν	'ehicle l	Mix								
Neal/Fal Lai	rie Distance.	52 Teet			Vehi	cleType		Day	Evening	Night	Daily			
Site Data						A	lutos:	77.5%	12.9%	9.6%	97.42%			
Baı	rrier Height:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0			F	łeavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%			
Centerline Dis		100.0 feet		۸	loise So	urce El	evatio	ns (in f	eet)					
Centerline Dist. Barrier Distance Observer Height (to Observer:	100.0 feet 0.0 feet 5.0 feet	0.0 feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adju					justment:	0.0			
	Road Elevation: 0.0 feet				ane Equ	uivalent	Dista	nce (in	feet)					
	Road Grade: 0.0%					Autos		 6.607						
	Left View:	-90.0 degre	es		Mediur	n Trucks	s: 96	6.566						
	Right View:	90.0 degre			Heav	y Trucks	s: 96	8.608						
FHWA Noise Mode	el Calculation	าร												
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten			
Autos:	71.78	-2.33	}	-4.39		-1.20		-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-19.57	•	-4.39		-1.20		-4.97	0.0	000	0.000			
Heavy Trucks:	86.40	-23.52		-4.39		-1.20		-5.16	0.0	000	0.000			
Unmitigated Noise	e Levels (with	hout Topo and	l barrier	r attenu	ation)									
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	ening	Leq	Night		Ldn	CI	VEL			
Autos:	60	3.9	62.0		60.2		54	.1	62.8	3	63.4			
Medium Trucks:	57	7.2	55.7		49.4		47	.8	56.3	56.3				
Heavy Trucks:	57	7.3	55.9		46.8		48	.1	56.4	1	56.6			
Vehicle Noise:	65	5.4	63.7		60.7 55.8 64.4				64.9					
Centerline Distance	ce to Noise C	ontour (in fee	t)											

70 dBA

42

46

Ldn:

CNEL:

65 dBA

91

98

60 dBA

196

211

55 dBA

423

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: W. Yale Loop Job Number: 8141
Road Segment: s/o Barranca Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA		NOISE MODEL INPUTS						
Highway Data				Site Cor	nditions (H	ard = 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	6,500 vehicles	S			Autos:	15			
Peak Hour	Percentage:	10%		Me	edium Truck	ks (2 Axles):	15			
Peak H	lour Volume:	650 vehicles	S	He	eavy Trucks	(3+ Axles):	15			
Ve	ehicle Speed:	55 mph		Vehicle	Miy					
Near/Far La	ne Distance:	52 feet			nicleType	Day	Evening	Night	Daily	
Site Data				701	Aut		J	9.6%		
		0.0.6		М	edium Truc			10.3%	1.84%	
	rrier Height:	0.0 feet 0.0			Heavy Truc			10.8%	0.74%	
Barrier Type (0-W	vaп, т-вепп). ist. to Barrier:	0.0 100.0 feet							011 170	
Centerline Di		100.0 feet		Noise S	ource Elev	ations (in fe	eet)			
Barrier Distance		0.0 feet			Autos:	2.000				
				Mediu	m Trucks:	4.000				
Observer Height	(Above Pau). ad Elevation:	5.0 feet		Hear	Heavy Trucks: 8.006 Grade Adju				0.0	
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet				Lane Fo	uivalent D	istance (in	feet)			
	Road Grade:	0.0%			Autos:	96.607				
	Left View:	-90.0 degree	20	Mediu	m Trucks:	96.566				
	Right View:	90.0 degree			vy Trucks:	96.608				
	rugine view.	50.0 degree	55	7704	y mucho.	00.000				
FHWA Noise Mod	lel Calculation	ıs								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-4.69	-4	.39	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-21.93	-4	.39	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-25.89	-4	.39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)						
VehicleType	Leq Peak Hot	ur Leq Day	Leq	Evening	Leq Nig	ght	Ldn	CI	VEL	
Autos:	61	.5	59.6	57.8		51.8	60.4	1	61.0	
Medium Trucks:	54	1.9	53.4	47.0		45.5	53.9	9	54.2	
Heavy Trucks:	54	1.9	53.5	44.5		45.7	54.1	1	54.2	
Vehicle Noise:	63	3.1	61.3	58.4		53.5	62.0)	62.5	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	29	63	137	294
CNEL:	32	68	147	317

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: W. Yale Loop

Road Segment: s/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DA	TA		NOISE MODEL INPUTS						
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	12,300 ve	hicles					Autos:	15		
	r Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	1,230 ve	hicles		Hea	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 m	ph		Vehicle I	Miv					
Near/Far La	ane Distance:	52 fe	et			icleType	2	Day	Evening	Night	Daily
Site Data					VCIII		Autos:	77.5%	Ū	9.6%	-
		001	4		Me	edium T		84.8%		10.3%	
	nrrier Height:	0.0 f	eet			leavy T		86.5%		10.8%	
Barrier Type (0-V		0.0				rouvy r	raono.	00.070	2.1 70	10.070	0.7 170
Centerline Di Centerline Dist.	ist. to Barrier:	100.0 fo			Noise Sc	urce E	levatio	ns (in fe	eet)		
		0.0 fe				Auto		2.000			
Barrier Distance					Mediur	n Truck	rs: 4	.000			
Observer Height	(Above Pau). Pad Elevation:	5.0 f			Heav	y Truck	rs: 8	3.006	Grade Ad	justment	: 0.0
-	ad Elevation: ad Elevation:	0.0 fo			Lane Equ	uivalen	t Dista	nce (in t	feet)		
	Road Grade:	0.0%			Luno Lq	Auto		6.607	001)		
	Left View:				Modiur	n Truck		6.566			
	Right View:	-90.0 d	legrees legrees			ry Truck		6.608			
	Right view.	90.0 0	legrees		Heav	y Truck	.s. 30	.000			
FHWA Noise Mod	lel Calculation	s		I							
VehicleType	REMEL	Traffic F	low D	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-	1.92	-4.3	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-1	9.16	-4.3	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-2	3.12	-4.3	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	out Topo	and bar	rier atter	nuation)						
VehicleType	Leq Peak Ho		q Day		vening	Leq	Night		Ldn	C	NEL
Autos:	64	1.3	62.4	1	60.6		54	.5	63.2	2	63.8
Medium Trucks:	57	' .7	56.1		49.8		48	.2	56.7	7	56.9
Heavy Trucks:	57	' .7	56.3	3	47.2		48	.5	56.8	3	57.0
Vehicle Noise:	65	5.8	64.1		61.1		56	.3	64.8	3	65.3
Centerline Distan	ce to Noise C	ontour (in	feet)								
				70	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

45

48

97

104

209

225

450

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: b/w Portola and Arborwood Analyst: B. Lawson

Highway Data	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
			Site Con	ditions (H	ard = 10, Se	oft = 15)							
Average Daily Traffic (Adt):	6,000 vehicle	S			Autos:	15							
Peak Hour Percentage:	10%		Med	dium Truck	ks (2 Axles):	15							
Peak Hour Volume:	600 vehicle	S	Hea	avy Trucks	(3+ <i>Axles</i>):	15							
Vehicle Speed:	35 mph		Vehicle I	/liv									
Near/Far Lane Distance:	20 feet			cleType	Day	Evening	Night	Daily					
Site Data			V 01111	Aut		_	9.6%	,					
	0051		Me	edium Truc			10.3%	1.84%					
Barrier Height:				leavy Truc			10.8%	0.74%					
Barrier Type (0-Wall, 1-Berm):							10.070	0.7 170					
Centerline Dist. to Barrier.			Noise So	urce Elev	ations (in f	eet)							
Centerline Dist. to Observer.				Autos:	2.000								
Barrier Distance to Observer:			Mediun	n Trucks:	4.000								
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0					
Pad Elevation:	0.0 .001		Lana Fau	.iala.at D	intonno (in	f4\							
Road Elevation:			Lane Equ		istance (in	reet)							
Road Grade:				Autos:	99.544								
Left View.				n Trucks:	99.504								
Right View:	90.0 degre	es	Heav	y Trucks:	99.544								
FHWA Noise Model Calculation	ons												
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten					
Autos: 64.3	3.08	-4.5	i9	-1.20	-4.87	0.0	000	0.000					
Medium Trucks: 75.7	' 5 -20.32	-4.5	9	-1.20	-4.97	0.0	000	0.000					
Heavy Trucks: 81.5	-24.27	-4.5	9	-1.20	-5.16	0.0	000	0.000					
Unmitigated Noise Levels (wi	thout Topo and	barrier atter	nuation)										
VehicleType Leq Peak H	our Leq Day	/ Leq E	vening	Leq Nig	ght	Ldn	CI	VEL					
Autos:	55.4	53.5	51.8		45.7	54.3	3	54.9					
Medium Trucks:	49.6	48.1	41.8		40.2	48.7	7	48.9					
Heavy Trucks:	51.5	50.1	41.0		42.3	50.7	7	50.8					
Vehicle Noise:	57.7	55.9	52.5		48.1	56.6	3	57.1					

70 dBA

13

14

Ldn:

CNEL:

65 dBA

28

30

60 dBA

60

64

55 dBA 129

138

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: b/w Park Pl. and Irvine Bl. Analyst: B. Lawson

Peak Hour Percentage: 10% Peak Hour Volume: 1,170 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 52 feet Vehicle Mix Vehicle Type Day Evenue	: 15) 15 15 15	
Peak Hour Percentage: 10% Peak Hour Volume: 1,170 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 52 feet Site Data Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): Pad Elevation: 0.0 feet Pad Elevation: 0.0 feet Peak Hour Volume: 1,170 vehicles Heavy Trucks (2 Axles): 1 Heavy Trucks (3+ Axles): 1 Heavy Trucks (3+ Axles): 1 Heavy Trucks (3+ Axles): 1 Heavy Trucks (8+ Axles): 1 Heavy Trucks (8+ Axles): 1 Heavy Trucks (8+ Axles): 1 Heavy Trucks: 84.8% Heavy Trucks: 86.5% Noise Source Elevations (in feet) Medium Trucks: 4.000 Heavy Trucks: 8.006 Gra	15	
Peak Hour Volume: 1,170 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 52 feet Site Data Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Pad Elevation: 1,170 vehicles Heavy Trucks (3+ Axles): 1 Wehicle Mix Vehicle Mix Vehicle Mix Near/Far Lane Distance Nedium Trucks: 84.8% Heavy Trucks: 86.5% Noise Source Elevations (in feet) Medium Trucks: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Gra		
Vehicle Speed:55 mphNear/Far Lane Distance:52 feetVehicle MixSite DataAutos:77.5%1Barrier Height:0.0 feetMedium Trucks:84.8%Barrier Type (0-Wall, 1-Berm):0.0Heavy Trucks:86.5%Centerline Dist. to Barrier:100.0 feetNoise Source Elevations (in feet)Centerline Dist. to Observer:100.0 feetAutos:2.000Barrier Distance to Observer:0.0 feetMedium Trucks:4.000Observer Height (Above Pad):5.0 feetHeavy Trucks:8.006GrantPad Elevation:0.0 feetHeavy Trucks:8.006Grant	15	
Near/Far Lane Distance: 52 feet Near/Far Lane Distance: 52 feet Nehicle Type Autos: 77.5% 1 Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Gra		
Near/Far Lane Distance:52 feetVehicleTypeDayEvented EventsSite DataAutos:77.5%1Barrier Height:0.0 feetMedium Trucks:84.8%Barrier Type (0-Wall, 1-Berm):0.0Heavy Trucks:86.5%Centerline Dist. to Barrier:100.0 feetNoise Source Elevations (in feet)Centerline Dist. to Observer:100.0 feetAutos:2.000Barrier Distance to Observer:0.0 feetMedium Trucks:4.000Observer Height (Above Pad):5.0 feetHeavy Trucks:8.006GrantPad Elevation:0.0 feetHeavy Trucks:8.006Grant		
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Medium Trucks: 84.8% Heavy Trucks: 86.5% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Graves	ening Nig	ight Dail
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 7ad Elevation: 0.0 feet Pad Elevation: 0.0 feet Heavy Trucks: 86.5% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Gra		9.6% 97.42
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Heavy Trucks: 86.5% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Gra	4.9% 10	0.3% 1.84
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Gra	2.7% 10	0.8% 0.74
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Noise Source Elevations (In feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Gra		
Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Medium Trucks: 4.000 Heavy Trucks: 8.006 Gra		
Observer Height (Above Pad): 5.0 feet Heavy Trucks: 4.000 Pad Elevation: 0.0 feet Heavy Trucks: 8.006 Gra		
Pad Elevation: 0.0 feet	l- A -l'(-	
	ade Adjustr	ment: 0.0
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet))	
Road Grade: 0.0% Autos: 96.607		
Left View: -90.0 degrees Medium Trucks: 96.566		
Right View: 90.0 degrees Heavy Trucks: 96.608		
FHWA Noise Model Calculations		
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Bari	rier Atten	Berm Atte
Autos: 71.78 -2.14 -4.39 -1.20 -4.87	0.000	0.0
Medium Trucks: 82.40 -19.38 -4.39 -1.20 -4.97	0.000	0.0
Heavy Trucks: 86.40 -23.33 -4.39 -1.20 -5.16	0.000	0.0
Unmitigated Noise Levels (without Topo and barrier attenuation)		
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldr	n	CNEL
Autos: 64.0 62.1 60.4 54.3	62.9	6
Medium Trucks: 57.4 55.9 49.6 48.0	56.5	50
Heavy Trucks: 57.5 56.0 47.0 48.3	56.6	50
Vehicle Noise: 65.6 63.9 60.9 56.0		

70 dBA

44

47

Ldn:

CNEL:

65 dBA

94

101

60 dBA

202

218

55 dBA 436

469

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: n/o Bryan Av. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NC	DISE MODE	L INPUT	S	
Highway Data			Site Cor	nditions (F	Hard = 10, S	oft = 15)		
Average Daily Traffic (Adt)	: 8,600 vehicl	es			Autos:	15		
Peak Hour Percentage	•		Ме	edium Truc	ks (2 Axles):	15		
Peak Hour Volume	: 860 vehicl	es	He	avy Truck	s (3+ Axles):	15		
Vehicle Speed	: 55 mph		Vehicle	Mix				
Near/Far Lane Distance	. 52 feet			iviix nicleType	Day	Evening	Night	Daily
Site Data			ven		utos: 77.5%		9.6%	97.42%
				edium Tru			10.3%	1.84%
Barrier Height				edidili Tru Heavy Tru			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm)			· '	neavy mu	CNS. 00.57	0 2.1/0	10.0 /6	0.7470
Centerline Dist. to Barrier			Noise S	ource Ele	vations (in f	eet)		
Centerline Dist. to Observer				Autos:	2.000			
Barrier Distance to Observer			Mediu	m Trucks:	4.000			
Observer Height (Above Pad)			Heav	vy Trucks:	8.006	Grade Ad	iustment:	0.0
Pad Elevation						C ()		
Road Elevation			Lane Eq		Distance (in	reet)		
Road Grade				Autos:				
Left View	3			m Trucks:				
Right View	: 90.0 degr	ees	Heav	vy Trucks:	96.608			
FHWA Noise Model Calculati	ons		1					
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos: 71.	78 -3.48	8 -4.	.39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.	40 -20.7	2 -4.	.39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.	40 -24.6	7 -4.	.39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout Topo and	d barrier atte	enuation)					
VehicleType Leq Peak F	Hour Leq Da	ay Leq	Evening	Leq N	light	Ldn	CI	VEL
Autos:	62.7	60.8	59.0		53.0	61.6	6	62.2
Medium Trucks:	56.1	54.6	48.2		46.7	55.1		55.4
Heavy Trucks:	56.1	54.7	45.7		46.9	55.3		55.4
Vehicle Noise:	64.3	62.5	59.6		54.7	63.2	2	63.7
Centerline Distance to Noise	Contour (in fee	et)						

70 dBA

35

38

Ldn: CNEL: 65 dBA

76

82

60 dBA

165

177

55 dBA

355

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: n/o Trabuco Rd. Analyst: B. Lawson

SITE SPECIFIC	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Con	ditions	(Hard	= 10, So	ft = 15)					
Average Daily Traffic (Adt): 10	,000 vehicles	3					Autos:	15					
Peak Hour Percentage	e <i>:</i>	10%			Me	dium Ti	rucks (2	Axles):	15					
Peak Hour Volume	e: 1	,000 vehicles	S		He	avy Tru	icks (3+	Axles):	15					
Vehicle Speed	<i>1:</i>	55 mph		-	Vehicle I	Miv								
Near/Far Lane Distance) <i>:</i>	52 feet		_		icleTyp	e	Day	Evening	Night	Daily			
Site Data					V 011		Autos:	77.5%	J	•	97.42%			
	4.	0.0 foot			Me	edium 7		84.8%		10.3%	1.84%			
Barrier Heigh		0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%			
Barrier Type (0-Wall, 1-Berm Centerline Dist. to Barrie		0.0 100.0 feet									011 170			
Centerline Dist. to Observe		100.0 feet		1	Voise So	ource E	levatio	ns (in fe	et)					
Barrier Distance to Observe		0.0 feet				Auto	os: 2	2.000						
Observer Height (Above Pag		5.0 feet			Mediui	n Truck	ks: 4	1.000						
Pad Elevation		0.0 feet			Heav	y Truck	ks: 8	3.006	Grade Ad	justment.	0.0			
Road Elevation		0.0 feet		,	Lane Eq	uivalen	t Dista	nce (in t	eet)					
Road Grade		0.0 feet 0.0%		-	zano zy	Auto		6.607	001)					
Left View		-90.0 degree	20		Mediu	n Truck		6.566						
Right View	-	90.0 degree				y Truck		6.608						
Night view	<i>'</i> .	90.0 deglet	55		ricav	y ITUCI	13. 30	0.000						
FHWA Noise Model Calculat	ions													
VehicleType REMEL	-	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten			
Autos: 71	78	-2.82		-4.39	9	-1.20		-4.87	0.0	000	0.000			
Medium Trucks: 82	40	-20.06		-4.39	9	-1.20		-4.97	0.0	000	0.000			
Heavy Trucks: 86	40	-24.02		-4.39	9	-1.20		-5.16	0.0	000	0.000			
Unmitigated Noise Levels (v	ithou	ut Topo and	barri	er atten	uation)									
VehicleType Leq Peak				Leg Ev		Leg	Night		Ldn	CI	VEL			
Autos:	63.4	. (61.5		59.7	<u> </u>	53	.6	62.3	3	62.9			
Medium Trucks:	56.8	;	55.2		48.9		47	.3	55.8	3	56.0			
Heavy Trucks:	56.8	;	55.4	4 46.3 47.6 55.9					56.1					
Vehicle Noise:	64.9)	63.2		60.2 55.4 63.9					64.4				
Centerline Distance to Noise	Con	tour (in feet))											
		·		70 c	IBA	65	dBA	6	0 dBA	55	dBA			

Ldn:

CNEL:

39

42

85

91

392

422

182

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: n/o Walnut Av. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE MOI	DEL INPUT	S	
Highway Data			Site Conditio	ns (Hard = 10,	Soft = 15)		
Average Daily Traffic (Adt) Peak Hour Percentage Peak Hour Volume	10%			Auto Trucks (2 Axle Trucks (3+ Axle	s): 15		
Vehicle Speed Near/Far Lane Distance	•	1	Vehicle Mix VehicleT			Night	Daily
Site Data Barrier Height Barrier Type (0-Wall, 1-Berm)	0.0			Autos: 77. n Trucks: 84. y Trucks: 86.	8% 4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%
Centerline Dist. to Barrier Centerline Dist. to Observer Barrier Distance to Observer Observer Height (Above Pad) Pad Elevation Road Elevation Road Grade Left View Right View	100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre	ees	A Medium Tru Heavy Tru Lane Equival	ucks: 8.006 lent Distance (utos: 96.871 ucks: 96.830	Grade Ad	ljustment.	0.0
VehicleType REMEL Autos: 70 Medium Trucks: 81 Heavy Trucks: 85	Traffic Flow -1.14	-4.4	1 -1.2	20 -4.8 20 -4.9	97 0.0	ten Ber 000 000 000	0.000 0.000 0.000
Unmitigated Noise Levels (w VehicleType Leq Peak F				eq Night 53.7	Ldn 62.4		VEL 63.0
Medium Trucks: Heavy Trucks: Vehicle Noise:	57.0 57.4 65.1	55.5 56.0 63.4	49.1 47.0 60.4	47.6 48.2 55.6	56. 56. 64.	1 6	56.3 56.7 64.6

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	41	87	188	405
CNEL:	44	94	202	435

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: s/o Walnut Av. Analyst: B. Lawson

SITE S	PECIFIC IN	IPUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Ti Peak Hour P	ercentage:	10%				dium Tru	•	,			
Peak Ho	ur Volume:	1,210 vehicles	3		He	avy Truc	ks (3+	Axles):	15		
	icle Speed:	55 mph		V	ehicle l	Mix					
Near/Far Lane	e Distance:	52 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						A	lutos:	77.5%	12.9%	9.6%	97.42%
Barr	ier Height:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wa	•	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist	to Barrier:	100.0 feet		N	oise Sc	ource El	evatio	ns (in fe	eet)		
Centerline Dist. to		100.0 feet				Autos		.000			
Barrier Distance to		0.0 feet			Mediui	n Trucks	s: 4	.000			
Observer Height (A	,	5.0 feet			Heav	y Trucks	s: 8	.006	Grade Ad	iustment:	0.0
	l Elevation:	0.0 feet		_		-			• 4		
	l Elevation:	0.0 feet		L	ane Eq	uivalent			reet)		
Ro	oad Grade:	0.0%				Autos		5.607			
	Left View:	-90.0 degree				n Trucks		5.566			
ı	Right View:	90.0 degree	es		Heav	y Trucks	s: 96	5.608			
FHWA Noise Model	Calculation	s									
VehicleType	REMEL	Traffic Flow	Distar		Finite		Fres		Barrier Att		m Atten
Autos:	71.78	-1.99		-4.39		-1.20		<i>-4.</i> 87		000	0.000
Medium Trucks:	82.40	-19.23		-4.39		-1.20		<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks:	86.40	-23.19		-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier a	attenu	ation)						
VehicleType L	eq Peak Hou	ır Leq Day	L	eq Eve	ening	Leq I	Night		Ldn	CI	VEL
Autos:	64	.2	52.3		60.5		54	.5	63.1	I	63.7
Medium Trucks:	57	.6	56.1		49.7		48	.2	56.6	3	56.9
Heavy Trucks:	57	.6	56.2		47.2		48	.4	56.8	3	56.9
Vehicle Noise:	65	6.8	64.0		61.1		56	.2	64.7	7	65.2

70 dBA

45

48

Ldn:

CNEL:

65 dBA

96

103

60 dBA

207

222

55 dBA

445

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av.

Road Segment: b/w Deerfield Dr. and ICD

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	d=10, So	oft = 15)		
Average Daily Traffic (Adt):	12,900 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks ((2 Axles):	15		
Peak Hour Volume:	1,290 vehicles	S	He	avy Trucks (3	3+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Miss				
Near/Far Lane Distance:	52 feet				Dou	Funning	Niaht	Doily
Cita Data			ven	icleType	Day	Evening	Night	Daily
Site Data			A 4.	Autos.			9.6%	97.42%
Barrier Height:	0.0 feet			edium Trucks			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		ļ ,	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		Noise So	ource Elevati	ons (in fe	eet)		
Centerline Dist. to Observer:	100.0 feet			Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0
Pad Elevation:	0.0 feet							
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist	•	feet)		
Road Grade:	0.0%				96.607			
Left View:	-90.0 degree	es	Mediui	m Trucks:	96.566			
Right View:	90.0 degree	es	Heav	ry Trucks:	96.608			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fro	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 -1.72	-4.	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -18.95	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -22.91	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	enuation)					
VehicleType Leq Peak He	our Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL
Autos: 6	84.5	62.6	60.8	5	54.8	63.4	4	64.0
Medium Trucks: 5	57.9	56.3	50.0	4	8.4	56.9	9	57.1
Heavy Trucks:5	57.9	56.5	47.4	4	8.7	57.0)	57.2
Vehicle Noise:	66.0	64.3	61.3	5	6.5	65.0)	65.5
Centerline Distance to Noise (Contour (in feet)	,					

70 dBA

46

50

Ldn:

CNEL:

65 dBA

100

108

60 dBA

216

232

55 dBA

465

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Job Number: 8141
Road Segment: b/w ICD and Yale Lp. Analyst: B. Lawson

SITE SPECIFIC	INPU	JT DATA				1	NOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	11,2	200 vehicles	3					Autos:	15		
Peak Hour Percentage		10%			Me	dium Tı	rucks (2	Axles):	15		
Peak Hour Volume	1,1	120 vehicles	3		He	avy Tru	icks (3+	Axles):	15		
Vehicle Speed		55 mph		,	/ehicle l	Miv					
Near/Far Lane Distance		52 feet		_		icleType	e	Day	Evening	Night	Daily
Site Data					V 011		Autos:	77.5%	•	•	97.42%
		0.0 foot			Me	edium T		84.8%		10.3%	1.84%
Barrier Height		0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm) Centerline Dist. to Barrier		0.0 00.0 feet									011 170
Centerline Dist. to Observer		00.0 feet		1	Voise So	ource E	levatio	ns (in fe	eet)		
Barrier Distance to Observer		0.0 feet				Auto	os: 2	2.000			
Observer Height (Above Pad)		5.0 feet			Mediui	m Truck	ks: 4	1.000			
Pad Elevation		0.0 feet			Heav	y Truck	ks: 8	3.006	Grade Adj	iustment:	0.0
Road Elevation		0.0 feet		,	ane Fo	uivalen	nt Dista	nce (in f	feet)		
Road Grade		0.0 feet 0.0%		_	zano zq	Auto		6.607	001)		
Left View		0.0 / ₀ 90.0 degree			Mediu	m Truck		6.566			
Right View		90.0 degree 90.0 degree				ry Truck		5.608			
Ngh view	•	90.0 degree	;5		ricav	y ITUCK	10.	3.000			
FHWA Noise Model Calculation	ons										
VehicleType REMEL	Tr	raffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 71.7	'8	-2.33		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.4	10	-19.57		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.4	10	-23.52		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	thout	t Topo and I	barri	er atten	uation)						
VehicleType Leq Peak F		Leq Day		Leg Ev		Leq	Night		Ldn	CI	VEL
Autos:	63.9	(52.0	· ·	60.2	•	54	.1	62.8	3	63.4
Medium Trucks:	57.2	į	55.7		49.4		47	.8	56.3	3	56.5
Heavy Trucks:	57.3	Ę	55.9		46.8		48	.1	56.4	1	56.6
Vehicle Noise:	65.4	(3.7		60.7		55	.8	64.4	1	64.9
Centerline Distance to Noise	Conto	our (in feet))								
				70 a	IBA	65	dBA	6	i0 dBA	55	dBA

Ldn:

CNEL:

42

46

91

98

423

455

196

Project Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 1)

Road Name: Thomas Job Number: 8141 Road Segment: n/o Muirlands Bl. Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA				N	OISE N	ИODE	L INPUT	S	
Highway Data				5	Site Con	ditions (Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	1,600 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	Axles):	15		
Peak H	lour Volume:	160 vehicles	S		He	avy Truci	ks (3+ A	Axles):	15		
Ve	hicle Speed:	40 mph		1	/ehicle	Miv					
Near/Far La	ne Distance:	12 feet				icleType		Day	Evening	Night	Daily
Site Data					***			77.5%		9.6%	-
	rrior Hoights	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 reet 0.0				Heavy Tru		86.5%		10.8%	0.74%
Centerline Di	,	100.0 feet									
Centerline Dist.		100.0 feet		^	Voise So	ource Ele		•	eet)		
Barrier Distance		0.0 feet				Autos		000			
Observer Height		5.0 feet				m Trucks		000			
	ad Elevation:	0.0 feet			Heav	y Trucks.	: 8.0	006	Grade Adj	iustment.	0.0
	ad Elevation: ad Elevation:	0.0 feet		L	Lane Eq	uivalent	Distan	ce (in f	feet)		
	Road Grade:	0.0%				Autos		865	,		
	Left View:	-90.0 degree	26		Mediu	m Trucks		825			
	Right View:	90.0 degree				y Trucks		865			
	ragne view.	oo.o degree	50			<i>y</i> 110.01.0					
FHWA Noise Mod	el Calculation	S		'							
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresr	nel	Barrier Att	en Ber	m Atten
Autos:	66.51	-9.40		-4.61		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	77.72	-26.64		-4.61	ļ	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	82.99	-30.59		-4.61	I	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atteni	uation)						
VehicleType	Leg Peak Hou			Leg Ev		Leq N	light		Ldn	CI	VEL
Autos:	51		49.4	·	47.6	· · ·	41.6	3	50.2	2	50.8
Medium Trucks:	45	.3	43.8		37.4		35.9)	44.3	3	44.6
Heavy Trucks:	46	.6	45.2		36.1		37.4	ļ	45.7	7	45.9
Vehicle Noise:	53	.3	51.6		48.3		43.8	3	52.3	3	52.7
Centerline Distan	ce to Noise Co	ontour (in feet,)								
				70 a	IBA	65 a	IBA	6	60 dBA	55	dBA

7

7

Ldn:

CNEL:

14

15

31

33

66

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Thomas

Road Segment: s/o Muirlands Bl.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NO	OISE N	/IODE	L INPUT	S	
Highway Data				Site Cor	nditions (Hard =	10, Sc	oft = 15)		
Average Daily	/ Traffic (Adt):	8,000 vehicles	S			,	Autos:	15		
Peak Hou	r Percentage:	10%		Me	edium Truc	cks (2 A	(xles	15		
Peak .	Hour Volume:	800 vehicle	S	He	eavy Truck	ks (3+ A	(xles	15		
V	ehicle Speed:	40 mph		Vehicle	Miy					
Near/Far L	ane Distance:	12 feet			nicleType		Day	Evening	Night	Daily
Site Data							77.5%		9.6%	
	arrier Height:	0.0 feet		M	ledium Tru		84.8%		10.3%	1.84%
Barrier Type (0-\	•	0.0 feet 0.0			Heavy Tru		86.5%		10.8%	0.74%
• • •	vall, 1-berril). Dist. to Barrier:	0.0 100.0 feet								
Centerline Dist		100.0 feet		Noise S	ource Ele		•	eet)		
Barrier Distance		0.0 feet			Autos:		000			
Observer Height		5.0 feet		Mediu	ım Trucks.	: 4.0	000			
•	Pad Elevation:	0.0 feet		Hea	vy Trucks.	: 8.0	006	Grade Ad	justment:	0.0
	ad Elevation: oad Elevation:	0.0 feet		Lane Eo	uivalent	Distand	ce (in i	feet)		
7.0	Road Grade:	0.0%			Autos			,		
	Left View:	-90.0 degree	20	Mediu	ım Trucks.					
	Right View:	90.0 degree			vy Trucks:					
	rugric rioni.	co.c dog.c.	50		.,					
FHWA Noise Mod	del Calculation	s								
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos		-2.41		l.61	-1.20		-4.87		000	0.000
Medium Trucks	: 77.72	-19.65	-4	l.61	-1.20		-4.97	0.0	000	0.000
Heavy Trucks	: 82.99	-23.60	-4	l.61	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	out Topo and	barrier att	enuation)						
VehicleType	Leq Peak Hou	ır Leq Day	/ Leq	Evening	Leq N	light		Ldn	CI	VEL
Autos	: 58	.3	56.4	54.6	,	48.6	;	57.2	2	57.8
Medium Trucks	<i>:</i> 52	3	50.8	44.4		42.8	}	51.3	3	51.5
Heavy Trucks	<i>:</i> 53	5.6	52.2	43.1		44.4		52.7	7	52.9
Vehicle Noise	: 60	0.3	58.6	55.3	3	50.7	,	59.3	3	59.7
Centerline Distar	nce to Noise Co	ontour (in feet)							
		(,				1			

70 dBA

19

21

Ldn:

CNEL:

65 dBA

42

44

60 dBA

90

96

55 dBA

193

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o "F" St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DAT	Α		NOISE MODEL INPUTS					
Highway Data				9	Site Cond	litions (H	ard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	43,100 vehi	cles				Autos:	15		
= -	Percentage:	10%			Med	ium Truck	ks (2 Axles):	15		
Peak H	our Volume:	4,310 vehi	cles		Hea	vy Trucks	(3+ <i>Axles</i>):	15		
Ve	hicle Speed:	60 mph	ı	1	/ehicle M	'ix				
Near/Far La	ne Distance:	76 feet				leType	Day	Evening	Night	Daily
Site Data						Aut		_	9.6%	
Bai	rier Height:	0.0 fee	t		Med	dium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0	•		H	eavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Dis		100.0 fee	t		Vaina Car	waa Elaw	ations (in fe	2041		
Centerline Dist.	to Observer:	100.0 fee	t	′	voise soi		•	eet)		
Barrier Distance	to Observer:	0.0 fee	t		1 4 a alia ana	Autos:	2.000			
Observer Height (Above Pad):	5.0 fee	t			Trucks:	4.000	Cup do Ad		0.0
- ,	ad Elevation:	0.0 fee			Heavy	Trucks:	8.006	Grade Adj	ustment:	0.0
Roa	ad Elevation:	0.0 fee		L	ane Equ	ivalent D	istance (in	feet)		
	Road Grade:	0.0%				Autos:	92.547	-		
	Left View:	-90.0 deg	rees		Medium	Trucks:	92.504			
	Right View:	90.0 deg			Heavy	Trucks:	92.547			
FHWA Noise Mode	el Calculatio	ns								
VehicleType	REMEL	Traffic Flo	N Di	stance	Finite F	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	73.22	2 3.	14	-4.11		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	3 -14.	09	-4.11		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3 -18.	05	-4.11		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo a	nd barri	er atten	uation)					
VehicleType	Leq Peak Ho	our Leq L	Day	Leq Ev	rening	Leq Ni	ght	Ldn	CI	VEL
Autos:	7	1.1	69.2		67.4		61.3	70.0)	70.6
Medium Trucks:	6	4.3	62.8		56.4		54.9	63.3	3	63.6
Heavy Trucks:	6	4.0	62.5		53.5		54.8	63.1	<u> </u>	63.2
Vehicle Noise:	7	2.5	70.8		67.9		62.9	71.5		72.0

70 dBA

126

135

Ldn:

CNEL:

65 dBA

271

292

60 dBA

583

628

55 dBA

1,257

1,354

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o "F" St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	71,500 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	7,150 vehicle	es		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		,	/ehicle	Miv					
Near/Far La	ne Distance:	76 feet				icleType	,	Day	Evening	Night	Daily
Site Data					***		Autos:	77.5%	_	9.6%	-
	urior Uoimbt.	0.0 feet			М	edium Ti		84.8%		10.3%	1.84%
	rrier Height:	0.0 reet 0.0				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-W	ist. to Barrier:	0.0 100.0 feet									
Centerline Dist.		100.0 feet		^	Voise So				eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height		5.0 feet				m Truck		.000		_	
•	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	0.0
	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distar	nce (in i	feet)		
	Road Grade:	0.0%			-	Auto		.547			
	Left View:	-90.0 degre	es		Mediu	m Truck		.504			
	Right View:	90.0 degre			Heav	y Truck	s: 92	.547			
FHWA Noise Mod			1								
VehicleType	REMEL	Traffic Flow		stance	Finite		Fres		Barrier Atte		m Atten
Autos:				-4.11		-1.20		-4.87		000	0.000
Medium Trucks:				-4.11	='	-1.20		-4.97		000	0.000
Heavy Trucks:	87.33	-15.85		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	73	3.2	71.4		69.6		63.	5	72.2	2	72.8
Medium Trucks:	66	6.5	65.0		58.6		57.	1	65.5	5	65.8
Heavy Trucks:	66	6.2	64.7		55.7		57.	0	65.3	3	65.4
Vehicle Noise:	74	4.7	73.0		70.1		65.	.1	73.7	7	74.2
Centerline Distan	ce to Noise C	ontour (in fee	t)								
		•	-	70 a	IBA	65	dBA	6	60 dBA	55	dBA
			_					-			

176

190

Ldn:

CNEL:

379

409

818

880

1,761

1,897

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Fairbanks

Job Number: 8141

Analyst: B. Lawson

Site Data Autos: 77.5% 12.9% 9.6% 9	Daily 7.42% 1.84% 0.74%
Near/Far Lane Distance	7.42% 1.84% 0.74%
Peak Hour Volume: Vehicle Speed: 60 mph Vehicle Mix Vehicle Type Day Evening Night Day Day Evening Night Day Day Evening Night Day	7.42% 1.84% 0.74%
Vehicle Speed: Near/Far Lane Distance: 76 feet Vehicle Mix Site Data Autos: 77.5% 12.9% 9.6% 9 Barrier Height: Barrier Height: Dist. to Barrier: 10.0 feet No.0 feet Medium Trucks: 84.8% 4.9% 10.3% Heavy Trucks: 86.5% 2.7% 10.8% Noise Source Elevations (in feet) Centerline Dist. to Observer: 100.0 feet Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Medium Trucks: 4.000 Medium Trucks: 8.006 Grade Adjustment: 0 Medium Trucks: 92.547 Lane Equivalent Distance (in feet) Lane Equivalent Distance (in feet) Medium Trucks: 92.504 Heavy Trucks: 92.504 Heavy Trucks: 92.504 Heavy Trucks: 92.547	7.42% 1.84% 0.74%
Near/Far Lane Distance: 76 feet Vehicle Type Day Evening Night Day Day Evening Night Day Day Evening Night Day	7.42% 1.84% 0.74%
Near/Far Lane Distance: 76 feet VehicleType Day Evening Night Day Evening Night Day Site Data Autos: 77.5% 12.9% 9.6% 9.	7.42% 1.84% 0.74%
Site Data Autos: 77.5% 12.9% 9.6% 9	7.42% 1.84% 0.74%
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Centerline Dist. to Observer: Observer Height (Above Pad): Autos: Content In Pad Elevation: Autos: Content In Pad Elevation: Autos: Content In Pad Elevations (in feet)	1.84% 0.74%
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Heavy Trucks: 86.5% 2.7% 10.8% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0 Lane Equivalent Distance (in feet) Medium Trucks: 92.547 Medium Trucks: 92.547	0.74%
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0 Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547	
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Noise Source Elevations (In feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0 Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547	.0
Barrier Distance to Observer: 0.0 feet	.0
Observer Height (Above Pad): 5.0 feet Heavy Trucks: 4.000 Pad Elevation: 0.0 feet Road Elevation: 0.0% Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 92.547 Left View: -90.0 degrees Heavy Trucks: 92.504 Right View: 90.0 degrees Heavy Trucks: 92.547	.0
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Lane Equivalent Distance (in feet) Autos: 92.547 Left View: -90.0 degrees Right View: 90.0 degrees Heavy Trucks: 8.006 Grade Adjustment: 0 Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547	.0
Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Road Elevation: 0.0 feet Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547	
Road Grade: 0.0% Autos: 92.547 Left View: -90.0 degrees Medium Trucks: 92.504 Right View: 90.0 degrees Heavy Trucks: 92.547	
Left View: -90.0 degrees Medium Trucks: 92.504 Right View: 90.0 degrees Heavy Trucks: 92.547	
Right View: 90.0 degrees Heavy Trucks: 92.547	
FHWA Noise Model Calculations	
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm	Atten
Autos: 73.22 3.20 -4.11 -1.20 -4.87 0.000	0.000
Medium Trucks: 83.68 -14.03 -4.11 -1.20 -4.97 0.000	0.000
Heavy Trucks: 87.33 -17.99 -4.11 -1.20 -5.16 0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)	
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNE	L
Autos: 71.1 69.2 67.4 61.4 70.0	70.6
Medium Trucks: 64.3 62.8 56.5 54.9 63.4	63.6
Heavy Trucks: 64.0 62.6 53.6 54.8 63.2	63.3
Vehicle Noise: 72.6 70.8 67.9 63.0 71.5	
Centerline Distance to Noise Contour (in feet)	72.0
70 dBA 65 dBA 60 dBA 55 dB	72.0

127

137

273

294

589

634

1,268

1,366

Ldn:

CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks

Road Segment: e/o Alton Pkwy.

Job Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	8,100 vehicles 10% 810 vehicles			dium Trucks (2 avy Trucks (3-	,	15 15 15		
Vehicle Speed: Near/Far Lane Distance:	40 mph 12 feet		Vehicle Veh	Mix icleType	Day	Evening	Night	Daily
Site Data				Autos:	77.5%	12.9%	9.6%	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			edium Trucks: Heavy Trucks:	84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Barrier: Centerline Dist. to Observer:	100.0 feet		Noise So	ource Elevatio	ns (in fe	eet)		
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet 0.0 feet			m Trucks:	2.000 4.000 8.006	Grade Adj	iustment:	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent Dista	nce (in f	feet)		
Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree			m Trucks: 9	9.865 9.825 9.865			
FHWA Noise Model Calculatio	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Att	en Ber	m Atten
Autos: 66.5	1 -2.35	-4.0	61	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 77.7	2 -19.59	-4.0	61	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 82.9	9 -23.55	-4.0	61	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	nuation)					
VehicleType Leq Peak Ho	our Leq Day	Leq E	Evening	Leq Night		Ldn	CI	VEL
Autos: 5	8.3	56.4	54.7	48	3.6	57.2	2	57.9
Medium Trucks: 5	_	50.8	44.4	42	2.9	51.4	1	51.6
Heavy Trucks: 5	53.6	52.2	43.2	44	1.4	52.8	3	52.9
Vehicle Noise:	60.4	58.6	55.3	50).8	59.3	3	59.8
Centerline Distance to Noise (Contour (in feet))						

70 dBA

19

21

Ldn:

CNEL:

65 dBA

42

45

60 dBA

90

97

55 dBA

194

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks

Job Number: 8141

Road Segment: w/o Alton Pkwy.

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NO	ISE MODI	EL INPUT	S	
Highway Data			,	Site Cor	nditions (H	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	5,800 vehicles	3			Autos	: 15		
,	Percentage:	10%		Me	edium Truci	ks (2 Axles)	: 15		
Peak H	Hour Volume:	580 vehicles	3	He	eavy Trucks	s (3+ Axles)	: 15		
Ve	ehicle Speed:	45 mph		Vehicle	Miv				
Near/Far La	ane Distance:	36 feet			nicleType	Day	Evening	Night	Daily
Site Data				VGI		tos: 77.5%		9.6%	
				Λ./	ledium Trud			10.3%	1.84%
	rrier Height:	0.0 feet			Heavy Truc			10.8%	0.74%
Barrier Type (0-V		0.0		,	rieavy rruc	,NS. 00.07	0 2.1/0	10.0 /	0.7470
	ist. to Barrier:	100.0 feet		Noise S	ource Elev	ations (in t	feet)		
Centerline Dist.		100.0 feet			Autos:	2.000	-		
Barrier Distance		0.0 feet		Mediu	ım Trucks:	4.000			
Observer Height	•	5.0 feet			vy Trucks:	8.006	Grade Ad	iustment:	0.0
	ad Elevation:	0.0 feet							
Ro	ad Elevation:	0.0 feet		Lane Eq	juivalent D	istance (in	feet)		
	Road Grade:	0.0%			Autos:	98.412			
	Left View:	-90.0 degree	es	Mediu	ım Trucks:	98.372			
	Right View:	90.0 degree	es	Hea	vy Trucks:	98.413			
FHWA Noise Mod	lel Calculation	S							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	68.46	-4.32	-4.5	1	-1.20	<i>-4.</i> 87	0.0	000	0.000
Medium Trucks:	79.45	-21.56	-4.5	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	84.25	-25.51	-4.5	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier atten	uation)					
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL
Autos:	58	3.4	56.5	54.8	}	48.7	57.3	3	57.9
Medium Trucks:	52	2.2	50.7	44.3	}	42.8	51.2	2	51.5
Heavy Trucks:	53	3.0	51.6	42.6	;	43.8	52.2	2	52.3
Vehicle Noise:	60	0.3	58.5	55.4		50.7	59.2	2	59.7
Vehicle Noise: Centerline Distan				55.4		50.7	59.2	2	59

70 dBA

19

21

65 dBA

41

44

60 dBA

89

95

55 dBA

192

206

Ldn:

CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks

Road Segment: s/o Astor St.

Job Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				NO	DISE M	ODE	L INPUT	S			
Highway Data				S	ite Con	ditions (Hard = 1	10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	4,100 vehicles	S				A	utos:	15				
•	Percentage:	10%			Me	dium Trud	cks (2 A	xles):	15				
Peak H	lour Volume:	410 vehicles	S		He	avy Truck	ks (3+ A	xles):	15				
Ve	ehicle Speed:	40 mph		V	ehicle l	Miv							
Near/Far La	ne Distance:	12 feet				icleType	1	Day	Evening	Night	Daily		
Site Data					70111			77.5%	J	9.6%			
		0.0.61			Me	edium Tru		34.8%		10.3%	1.84%		
	rrier Height:	0.0 feet				leavy Tru		36.5%		10.8%	0.74%		
Barrier Type (0-W	,	0.0			,	icavy III	icns. C	0.570	2.1 /0	10.076	0.7470		
Centerline Di		100.0 feet		N	oise Sc	urce Ele	vations	(in f	eet)				
Centerline Dist.	to Observer:	100.0 feet				Autos:							
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks:							
Observer Height	(Above Pad):	5.0 feet				y Trucks:	_		Grade Ad	iustment	0.0		
P	ad Elevation:	0.0 feet			Hoav	y Tracko.	0.0						
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent l	Distanc	e (in	feet)				
	Road Grade:	0.0%			Autos: 99.865								
	Left View:	-90.0 degree	es		Medium Trucks: 99.825								
	Right View:	90.0 degree	es		Heav	y Trucks:	99.8	65					
FHWA Noise Mod	lel Calculation	s											
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresne	əl	Barrier Att	en Ber	m Atten		
Autos:	66.51	-5.31		-4.61		-1.20	-	4.87	0.0	000	0.000		
Medium Trucks:	77.72	-22.55		-4.61		-1.20	-	4.97	0.0	000	0.000		
Heavy Trucks:	82.99	-26.51		-4.61		-1.20	-	5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ation)								
VehicleType	Leq Peak Hou	ır Leq Day	' L	eq Eve	ening	Leq N	light		Ldn	CI	VEL		
Autos:	55	.4	53.5		51.7		45.7		54.3	3	54.9		
Medium Trucks:	49	.4	47.8		41.5		39.9		48.4	1	48.6		
Heavy Trucks:	50	.7	49.3		40.2		41.5		49.8		50.0		
Vehicle Noise:	57	.4	55.7		52.4		47.8		56.4	1	56.8		
Contorlino Distan	co to Noiso Ca	ontour (in foot	1										

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn: ¯	12	27	57	123							
CNEL:	13	28	61	132							

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks

Job Number: 8141

Road Segment: n/o Irvine Bl.

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	100 vehicles 10% 10 vehicles		Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15								
Vehicle Speed: Near/Far Lane Distance:	45 mph 36 feet		Vehicle Mix VehicleType Day Evening Night Dai								
Site Data				Autos		_		97.42%			
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 feet 0.0 100.0 feet		I	edium Truck Heavy Truck Durce Eleva	s: 86.5%	6 2.7%	10.3% 10.8%	1.84% 0.74%			
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet 0.0 feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0								
Road Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)					
Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree			Autos: m Trucks: ry Trucks:	98.412 98.372 98.413						
FHWA Noise Model Calculation	าร										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten			
Autos: 68.46	-21.95	-4.5	51	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 79.45 Heavy Trucks: 84.25		-4.5 -4.5		-1.20 -1.20	-4.97 -5.16		000	0.000 0.000			
Unmitigated Noise Levels (with	hout Topo and	barrier atte	nuation)								
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nigh	nt	Ldn	CI	VEL			
Autos: 4	0.8	38.9	37.1		31.1	39.7	7	40.3			
		33.0	26.7	26.7 25.1		33.6		33.8 34.7			
Heavy Trucks: 3	5.4	34.0	24.9	24.9 26.2			34.5				
Vehicle Noise: 4	2.6	40.9	37.7		33.1	41.6	6	42.1			
Centerline Distance to Noise C	Contour (in feet))					,				

70 dBA

1

1

Ldn:

CNEL:

65 dBA

3

3

60 dBA

6

6

55 dBA 13

Scenario: Post 2030 - 2012 Modified Project (Option 1) Project Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks

Job Number: 8141

Road Segment: w/o Irvine Bl.

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOISE MODEL INPUTS							
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	21,800 vehicle	es					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tru	ucks (2	Axles):	15			
Peak F	lour Volume:	2,180 vehicle	es		He	avy Truc	cks (3+	Axles):	15			
Ve	ehicle Speed:	40 mph		V	ehicle l	Mix						
Near/Far La	ne Distance:	12 feet	12 feet		VehicleType Day Evening Night Day							
Site Data							Autos:	77.5%	•	9.6%	•	
Ra	rrier Height:	0.0 feet			Ме	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			F	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Di		100.0 feet		A	oico Sa	ource El	lovatio	ns (in fo	no+1			
Centerline Dist.	to Observer:	100.0 feet		/4	orse sc				et)			
Barrier Distance	to Observer:	0.0 feet		Autos: 2.000 Medium Trucks: 4.000								
Observer Height	(Above Pad):	5.0 feet							Orada Ad			
•	ad Elevation:	0.0 feet			Heavy Trucks: 8.006 Gr				Grade Ad	iustment.	0.0	
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	t Distai	nce (in f	feet)			
	Road Grade:	0.0%			Autos: 99.865							
	Left View:	-90.0 degre	es		Medium Trucks: 99.825							
	Right View:	90.0 degre			Heavy Trucks: 99.865							
FHWA Noise Mod			5.						5		• • •	
VehicleType	REMEL	Traffic Flow		tance	Finite		Fres		Barrier Att		m Atten	
Autos:				-4.61		-1.20		-4.87		000	0.000	
Medium Trucks:				-4.61		-1.20		-4.97		000	0.000	
Heavy Trucks:	82.99	-19.25		-4.61		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrie	r attenu	ation)							
VehicleType	Leq Peak Ho	our Leq Da	У	Leq Eve	ening	Leq	Night		Ldn	CI	VEL	
Autos:	6	2.6	60.7		59.0		52	.9	61.5	5	62.2	
Medium Trucks:	5	6.6	55.1		48.7		47	.2	55.7	7	55.9	
Heavy Trucks:	5	7.9	56.5		47.5		48	.7	57.1		57.2	
Vehicle Noise:	6	4.7	62.9		59.6		55	.1	63.6	3	64.1	

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	38	81	175	376							
CNEL:	40	87	187	403							

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Ada Number: 8141
Road Segment: s/o Barranca Pkwy. Analyst: B. Lawson

SITE S	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS								
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily 1 Peak Hour F	, ,	2,800 vehicles	3	Mo	dium Truc		utos:	15 15				
	our Volume:	280 vehicles				•	,					
	nicle Speed:	55 mph 52 feet	•	Vehicle Mix								
Site Data				ven	icleType Δι		Day 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%		
Barrier Type (0-Wa			Autos: Medium Trucks: Heavy Trucks:			4.9%	10.3% 10.8%	1.84% 0.74%				
Centerline Dis Centerline Dist. to	t. to Barrier:		Noise So	ource Ele		-	eet)					
Barrier Distance to Observer Height (A	o Observer:	100.0 feet 0.0 feet 5.0 feet		Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0								
Roa	d Elevation:	0.0 feet 0.0 feet		Lane Equivalent Distance (in feet) Autos: 96.607								
	Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree		Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608								
FHWA Noise Mode	l Calculation	s										
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresne	e/	Barrier Att	en Ber	m Atten		
Autos:	71.78	-8.35	-4.:	39	-1.20	-	4.87	0.0	000	0.000		
Medium Trucks:	82.40	-25.59	-4.3	39	-1.20	-	4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-29.55	-4.3	39	-1.20	-	5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	out Topo and I	barrier atte	nuation)								
VehicleType	Leq Peak Hou	ır Leq Day	Leq I	Evening	Leq N	light		Ldn	CI	VEL		
Autos:	57	.8 5	55.9	54.2		48.1		56.7	7	57.3		
Medium Trucks:	51	.2	19.7	43.4		41.8		50.3	3	50.5		
Heavy Trucks:	51	.3	19.8	40.8		42.0		50.4	1	50.5		
Vehicle Noise:	59	.4	57.7	54.7		49.8		58.4	1	58.9		

70 dBA

17

18

Ldn:

CNEL:

65 dBA

36

39

60 dBA

78

84

55 dBA

168

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy. Number: 8141 Road Segment: n/o Trabuco Rd. Analyst: B. Lawson

SITE	SPECIFIC II	VPUT DATA	1			1	NOISE	MODE	L INPUT	S		
Highway Data					Site Con	ditions	(Hard	= 10, So	ft = 15)			
Average Daily	Traffic (Adt):	38,800 vehic	les					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15			
Peak H	lour Volume:	3,880 vehic	les		He	avy Tru	icks (3+	Axles):	15			
Ve	ehicle Speed:	55 mph		,	Vehicle l	Miy						
Near/Far La	ne Distance:	88 feet				icleType	e	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		•	97.42%	
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%		10.3%	1.84%	
Barrier Type (0-W	_	0.0			ŀ	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
• • •	ist. to Barrier:	100.0 feet										
Centerline Dist.		100.0 feet		1	Noise So			•	eet)			
Barrier Distance	to Observer:	0.0 feet				Auto		2.000				
Observer Height	(Above Pad):	5.0 feet				m Truck	_	1.000	Crada Ad	iuotmont		
•	ad Elevation:	0.0 feet			неач	y Truck	(S: 8	3.006	Grade Adj	justinent.	0.0	
Ro	ad Elevation:	0.0 feet		1	Lane Eq	uivalen	t Dista	nce (in t	eet)			
	Road Grade:	0.0%				Auto	os: 89	9.850				
	Left View:	-90.0 deg	rees		Medium Trucks: 89.805							
	Right View:	90.0 deg	rees		Heav	y Truck	rs: 89	9.850				
FHWA Noise Mod	lel Calculation	18										
VehicleType	REMEL	Traffic Flow	/ Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	3.0	7	-3.92	2	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-14.1	7	-3.92	2	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-18.1	3	-3.9	2	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo an	d barr	ier atten	uation)							
VehicleType	Leq Peak Ho	ur Leq D	ay	Leq E	vening	Leq	Night		Ldn	CI	VEL	
Autos:	69	9.7	67.8		66.1		60	.0	68.6	3	69.2	
Medium Trucks:	63	3.1	61.6		55.2		53	.7	62.2	2	62.4	
Heavy Trucks:	63	3.1	61.7		52.7		53	.9	62.3	3	62.4	
Vehicle Noise:	7′	1.3	69.5		66.6		61	.7	70.3	3	70.7	
Centerline Distan	ce to Noise C	ontour (in fe	et)		1							
				70 d	dBA	65	dBA	6	0 dBA	55	dBA	

104

112

Ldn: CNEL: 224

241

483

520

1,042

1,121

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o Trabuco Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT [DATA				ı	NOISE	MODE	L INPUT	S	
Highway Data					,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	43,000	vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%	%			Me	dium Tr	ucks (2	Axles):	15		
Peak F	lour Volume:	4,300	vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55	mph			Vehicle i	Mix					
Near/Far La	ne Distance:	88	feet				icleType	9	Day	Evening	Night	Daily
Site Data								Autos:	77.5%	•	9.6%	-
Ra	rrier Height:	0.0	feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0				ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0				Noise So	ouroo E	lovotio	no (in fo	201		
Centerline Dist.	to Observer:	100.0	feet		-	Noise St	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0	feet			Madiu	Auto m Truck		2.000 1.000			
Observer Height	(Above Pad):	5.0	feet					_		Grada Ad	iustmont	
-	ad Elevation:	0.0	feet			Heav	y Truck	S: 8	3.006	Grade Adj	usimeni	. 0.0
Ro	ad Elevation:	0.0	feet			Lane Eq	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0	1%				Auto	s: 89	9.850			
	Left View:	-90.0	degree	es		Mediu	m Truck	s: 89	9.805			
	Right View:	90.0	degree	es		Heav	y Truck	rs: 89	9.850			
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic	Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos:	71.78		3.51		-3.9	2	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40		-13.73		-3.9	2	-1.20		<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks:	86.40		-17.68		-3.9	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	po and	barri	ier atten	uation)						
VehicleType	Leq Peak Ho	ur L	Leq Day	,	Leq E	vening	Leq	Night		Ldn	Ci	NEL
Autos:	70).2	(68.3		66.5		60	.5	69.1	I	69.7
Medium Trucks:	63	3.6		62.1		55.7		54	.1	62.6	6	62.8
Heavy Trucks:	63	3.6	(62.2		53.1		54	.4	62.7	7	62.9
Vehicle Noise:	71	.7		70.0		67.0		62	2	70.7	7	71.2
Centerline Distan	ce to Noise C	ontour	(in feet))								
					70 d	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

112

120

240

259

518

557

1,115

1,200

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o Jeronimo Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	d=10, So	oft = 15)		
Average Daily Traffic (Adt):	59,700 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks ((2 Axles):	15		
Peak Hour Volume:	5,970 vehicles	S	He	avy Trucks (3	3+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Mix				
Near/Far Lane Distance:	88 feet			icleType	Day	Evening	Night	Daily
Site Data			Veri	Autos	•		9.6%	97.42%
			Λ./.	Autos edium Trucks			10.3%	1.84%
Barrier Height:	0.0 feet			-dium Trucks Heavy Trucks			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm):			,	leavy Trucks	. 00.576	2.1 /0	10.076	0.7476
Centerline Dist. to Barrier:			Noise So	ource Elevati	ions (in fe	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:	0.0 feet		1	······································		£4\		
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist		reet)		
Road Grade:					89.850			
Left View:					89.805			
Right View:	90.0 degree	es	Heav	ry Trucks:	89.850			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 4.94	-3.	92	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -12.30	-3.	92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -16.26	-3.	92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Night	L	Ldn	CI	VEL
Autos:	71.6	69.7	67.9	6	31.9	70.5	5	71.1
Medium Trucks:	5.0	63.5	57.1	5	55.6	64.0)	64.3
Heavy Trucks:	5.0	63.6	54.6	5	55.8	64.2	2	64.3
Vehicle Noise:	73.2	71.4	68.5	6	3.6	72.′	1	72.6
Centerline Distance to Noise	Contour (in feet)						

70 dBA

139

149

Ldn:

CNEL:

65 dBA

299

322

60 dBA

644

693

55 dBA

1,388

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: n/o Muirlands Bl.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INP	UT DATA				ı	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt	: 60,	100 vehicles	3					Autos:	15		
Peak Hour Percentage) <i>:</i>	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume	e: 6,	010 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Vehicle Speed	l:	55 mph		-	Vehicle I	Wix					
Near/Far Lane Distance):	88 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	•	9.6%	-
Barrier Heigh	·-	0.0 feet			Me	edium T	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm		0.0 1661			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrie		100.0 feet						/: 6			
Centerline Dist. to Observe		100.0 feet		4	Noise So			•	eet)		
Barrier Distance to Observe		0.0 feet				Auto		2.000			
Observer Height (Above Pad		5.0 feet				m Truck	_	1.000	0 , 4 ,		0.0
Pad Elevation		0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	ustment	0.0
Road Elevation		0.0 feet			Lane Eq	uivalen	t Dista	nce (in t	feet)		
Road Grade		0.0%				Auto	s: 89	9.850			
Left Viev		-90.0 degree	es		Mediui	n Truck	s: 89	9.805			
Right Viev		90.0 degree			Heav	y Truck	s: 89	9.850			
FHWA Noise Model Calculat											
VehicleType REMEL		raffic Flow	Di	stance	Finite		Fres		Barrier Att		m Atten
Autos: 71.		4.97		-3.92		-1.20		-4.87		000	0.000
Medium Trucks: 82		-12.27		-3.9		-1.20		-4.97		000	0.000
Heavy Trucks: 86	40	-16.23		-3.9	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithou	t Topo and	barr	ier atten	uation)						
VehicleType Leq Peak		Leq Day		Leq E	vening	Leq	Night		Ldn		VEL
Autos:	71.6		69.7		68.0		61		70.5		71.1
Medium Trucks:	65.0		63.5		57.1		55		64.1		64.3
Heavy Trucks:	65.0		63.6		54.6		55		64.2		64.3
Vehicle Noise:	73.2	•	71.4		68.5		63	.6	72.2	2	72.6
Centerline Distance to Noise	Cont	tour (in feet))								
				70 d	dBA	65	dBA	6	60 dBA	55	dBA

139

150

Ldn: CNEL: 300

323

647

696

1,394

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: b/w I-5 NB Ramps and Muirlands Bl.

Number: 8141

Analyst: B. Lawson

SITE S	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS								
Highway Data				Site Con	ditions (H	ard = 10, S	oft = 15)						
Average Daily T	raffic (Adt): 6	66,000 vehicles	;			Autos	: 15						
Peak Hour F	Percentage:	10%		Me	dium Truci	ks (2 Axles)	: 15						
Peak Ho	our Volume:	6,600 vehicles	;	He	avy Trucks	(3+ <i>Axles</i>)	: 15						
Veh	icle Speed:	55 mph		Vehicle	Miy								
Near/Far Lan	e Distance:	88 feet			icleType	Day	Evening	Night	Daily				
Site Data				V 011	Aui	•	Ū	9.6%	_				
				1/1	edium Truc			10.3%	1.84%				
	rier Height:	0.0 feet			Heavy Truc			10.8%	0.74%				
Barrier Type (0-Wa	•	0.0		,	leavy IIuc	,ns. 00.5/	0 2.1/0	10.076	0.7476				
Centerline Dist		100.0 feet		Noise Source Elevations (in feet)									
Centerline Dist. to	o Observer:	100.0 feet			Autos:	2.000							
Barrier Distance to	o Observer:	0.0 feet		Mediu	m Trucks:	4.000							
Observer Height (A	lbove Pad):	5.0 feet			y Trucks:	8.006	Grade Ad	iustment.	: 0.0				
Pad	d Elevation:	0.0 feet		77041	y Traono.	0.000							
Road	d Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)						
R	oad Grade:	0.0%			Autos:	89.850							
	Left View:	-90.0 degree	s	Mediu	m Trucks:	89.805							
	Right View:	90.0 degree		Heav	y Trucks:	89.850							
FHWA Noise Model	l Calculation	S											
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten				
Autos:	71.78	5.37	-3.9	92	-1.20	-4.87	0.0	000	0.000				
Medium Trucks:	82.40	-11.87	-3.9	92	-1.20	-4.97	0.0	000	0.000				
Heavy Trucks:	86.40	-15.82	-3.9	92	-1.20	-5.16	0.0	000	0.000				
Unmitigated Noise	Levels (with	out Topo and k	barrier atter	nuation)									
VehicleType L	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	NEL				
Autos:	72	.0 7	70.1	68.4		62.3	70.9	9	71.5				
Medium Trucks:	65	.4 6	3.9	57.6 56.0 64.5					64.7				

Vehicle Noise:	73.6	71.8	68.9	64.0	72.6	73.0
Centerline Distance to	Noise Contour (in fee	et)				
			70 dBA	65 dBA	60 dBA	55 dBA
		Ldn:	148	320	689	1,484
	(CNEL:	160	344	741	1,597

55.0

56.2

64.6

64.7

64.0

Heavy Trucks:

65.5

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o I-5 SB Ramps

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data				3	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	53,300 vehicle	s					Autos:	15				
Peak Hou	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15				
Peak I	Hour Volume:	5,330 vehicles	S		He	avy Tru	cks (3+	Axles):	15				
Ve	ehicle Speed:	55 mph		,	Vehicle l	Wiv							
Near/Far La	ane Distance:	88 feet				icleType	2	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%		9.6%	,		
	rrier Height:	0.0 feet			Ме	edium T		84.8%		10.3%	1.84%		
Barrier Type (0-V		0.0 leet 0.0				leavy T		86.5%		10.8%	0.74%		
• • • •	ist. to Barrier:	100.0 feet		_									
Centerline Dist.		100.0 feet			Voise Sc			•	eet)				
Barrier Distance		0.0 feet				Auto		.000					
Observer Height	(Above Pad):	5.0 feet				n Truck	_	.000	0				
_	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	justment.	0.0		
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Distar	nce (in t	eet)				
	Road Grade:	0.0%				Auto	s: 89	.850					
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 89	.805					
	Right View:	90.0 degree	es		Heav	y Truck	s: 89	.850					
FHWA Noise Mod	lel Calculation	s											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	71.78	4.44		-3.92	2	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-12.79		-3.92	2	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-16.75		-3.92	2	-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)								
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL		
Autos:	71	.1	69.2		67.4		61.	.4	70.0)	70.6		
Medium Trucks:	64	.5	63.0		56.6		55.	.1	63.5	5	63.8		
Heavy Trucks:	64	.5	63.1		54.1		55.	.3	63.7	7	63.8		
Vehicle Noise:	72	7	70.9		68.0		63.	.1	71.6	6	72.1		
Centerline Distan	ce to Noise C	ontour (in feet)										
				70 a	IBA	65	dBA	6	60 dBA	55	dBA		

129

138

Ldn:

CNEL:

277

298

1,287

1,385

597

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o Paseo de Valencia

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				Si	ite Con	ditions (Hard =	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	45,800 vehicle	s					Autos:	15			
Peak Hour	Percentage:	10%			Med	dium Tru	cks (2	Axles):	15			
Peak H	lour Volume:	4,580 vehicle	es		Hea	avy Truc	ks (3+	Axles):	15			
Ve	ehicle Speed:	55 mph		V	ehicle I	Miv						
Near/Far La	ne Distance:	88 feet		-		cleType		Day	Evening	Night	Daily	
Site Data					VOIII		utos:	77.5%	_	9.6%	•	
		0.0 foot			Me	edium Tri		84.8%		10.3%	1.84%	
	rrier Height:	0.0 feet 0.0				leavy Tri		86.5%		10.8%	0.74%	
Barrier Type (0-W	ist. to Barrier:	0.0 100.0 feet									011 170	
Centerline Di		100.0 feet		N	oise So	urce Ele	evation	ıs (in fe	eet)			
Barrier Distance		0.0 feet				Autos	: 2	.000				
					Mediur	n Trucks	: 4	.000				
Observer Height		5.0 feet			Heav	y Trucks	: 8	.006	Grade Ad	justment.	0.0	
	ad Elevation:	0.0 feet		1 -	ano Fai	uivalent	Dietar	oco (in i	foot)			
	ad Elevation:	0.0 feet			ane Ly			•	ieei)			
	Road Grade:	0.0%			Madium	Autos		.850				
	Left View:	-90.0 degre				n Trucks		.805				
	Right View:	90.0 degre	es		Heav	y Trucks	. 89	.850				
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Distanc	ce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	3.79	-	3.92		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-13.45	-	3.92		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-17.41	-	3.92		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrier at	tenu	ation)							
VehicleType	Leq Peak Ho	our Leq Day	y Le	q Eve	ening	Leq N	Vight		Ldn	CI	VEL	
Autos:	70	0.4	68.5		66.8		60.	7	69.3	3	70.0	
Medium Trucks:	6	3.8	62.3		56.0		54.	4	62.9	9	63.1	
Heavy Trucks:	6	3.9	62.4		53.4		54.	7	63.0)	63.1	
Vehicle Noise:	7	2.0	70.3		67.3		62.	4	71.0	0	71.5	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	116	251	540	1,163
CNEL:	125	270	581	1,252

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alicia Pkwy.

Road Segment: s/o Moulton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)		
Average Daily Traffic (Adt):	44,500 vehicle	es			Autos:	15		
Peak Hour Percentage:	•		Me	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	4,450 vehicle	es	He	avy Trucks (3	3+ Axles).	15		
Vehicle Speed:	55 mph		Vehicle	Mix				
Near/Far Lane Distance:	88 feet				Dov	Evenina	Night	Doily
Site Date			ven	icleType	Day : 77.5%	Evening 12.9%	Night 9.6%	Daily
Site Data				Autos edium Trucks				
Barrier Height:							10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			, <i>'</i>	Heavy Trucks	: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier.			Noise So	ource Elevati	ions (in f	eet)		
Centerline Dist. to Observer.				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks:	4.000			
Observer Height (Above Pad):				y Trucks:	8.006	Grade Ad	iustment:	0.0
Pad Elevation:								
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist		feet)		
Road Grade:	0.0%				89.850			
Left View:	-90.0 degre	es	Mediu	m Trucks:	89.805			
Right View.	90.0 degre	es	Heav	y Trucks:	89.850			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	'8 3.66	-3.	92	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -13.58	-3.	92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	-17.53	-3.	92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	y Leq	Evening	Leq Night	<u> </u>	Ldn	CI	VEL
Autos:	70.3	68.4	66.7	6	60.6	69.2	2	69.8
Medium Trucks:	63.7	62.2	55.8	Ę	54.3	62.8	3	63.0
Heavy Trucks:	63.7	62.3	53.3	Ę	54.5	62.9	9	63.0
Vehicle Noise:	71.9	70.1	67.2		62.3	70.9	9	71.3
Centerline Distance to Noise	Contour (in feet	t)						

70 dBA

114

123

Ldn:

CNEL:

65 dBA

246

265

60 dBA

530

570

55 dBA 1,141

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Aliso Creek Rd. Number: 8141
Road Segment: e/o El Toro Rd. Analyst: B. Lawson

SITE SPECIFIC I		NOISE MODEL INPUTS								
Highway Data			S	ite Con	ditions (Hard :	= 10, So	ft = 15)		
Average Daily Traffic (Adt):	18,500 vehicle	S					Autos:	15		
Peak Hour Percentage:	10%			Med	dium Tru	cks (2	Axles):	15		
Peak Hour Volume:	1,850 vehicle	S		Hea	avy Truci	ks (3+	Axles):	15		
Vehicle Speed:	50 mph		V	ehicle I	Miv					
Near/Far Lane Distance:	70 feet		•		cleType		Day	Evening	Night	Daily
Site Data				V 0/11		utos:	77.5%	-	9.6%	•
	0.0 foot			Ме	edium Tru		84.8%		10.3%	1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0				leavy Tru	-	86.5%		10.8%	0.74%
Centerline Dist. to Barrier:	0.0 100.0 feet									
Centerline Dist. to Observer:	100.0 feet		N	oise So	urce Ele	evatio	ns (in fe	et)		
Barrier Distance to Observer:	0.0 feet				Autos		.000			
				Mediur	n Trucks	: 4	.000			
Observer Height (Above Pad): Pad Elevation:	5.0 feet 0.0 feet			Heav	y Trucks	: 8	.006	Grade Ad	iustment:	0.0
Road Elevation:	0.0 feet		,	ane Fai	uivalent	Dietai	nce (in t	Got)		
Road Elevation. Road Grade:	0.0 feet 0.0%			anc Equ	Autos		3.723			
Road Grade. Left View:				Modiur	n Trucks		3.680			
Right View:	-90.0 degree				y Trucks		3.723			
right view.	90.0 degree	35		Heav	y Trucks	. 30	0.725			
FHWA Noise Model Calculatio	ns									
VehicleType REMEL	Traffic Flow	Distar	псе	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos: 70.20	0.26		-4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 81.0	-16.98		-4.19		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 85.38	3 -20.93		-4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier a	attenu	ation)						
VehicleType Leq Peak Ho	our Leq Day	/ Le	eq Eve	ening	Leq N	light		Ldn	CI	VEL
Autos: 6	5.1	63.2		61.4		55	.4	64.0)	64.6
Medium Trucks: 5	8.6	57.1		50.8		49	.2	57.7	7	57.9
Heavy Trucks:5	9.1	57.6		48.6		49	.8	58.2	2	58.3
Vehicle Noise: 6	6.8	65.0		62.0		57	.2	65.7	7	66.2
Centerline Distance to Noise C	Contour (in feet)								

70 dBA

52

56

Ldn:

CNEL:

65 dBA

112

120

60 dBA

241

259

55 dBA

519

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: w/o Culver Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				ľ	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 2	27,200 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	Hour Volume:	2,720 vehicle	S		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		V	/ehicle l	Miy					
Near/Far La	ane Distance:	76 feet		_		icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
	nrrier Height:	0.0 feet			Me	edium 7		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0 feet				leavy 7		86.5%		10.8%	0.74%
	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		۸	loise So			ns (in fe	et)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	-	1.000	0 1- 4-1		0.0
ŭ	Pad Elevation:	0.0 feet			Heav	y Truck	rs: E	3.006	Grade Ad	iustment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	s: 92	2.547			
	Left View:	-90.0 degre	es		Mediu	m Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547			
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	1.15		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.09		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.05		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:			67.2		65.4		59		68.0		68.6
Medium Trucks:			60.8		54.4		52		61.3		61.6
Heavy Trucks:		.0	60.5		51.5		52	.8	61.1		61.2
Vehicle Noise:	70	.5	68.8		65.9		60	.9	69.5	5	70.0
Centerline Distan	ce to Noise Co	ontour (in feet)		,			1		1	
				70 d	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

92

100

199

215

429

462

925

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Culver Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA	1			ſ	NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	29,300 vehic	les					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,930 vehic	les		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		V	/ehicle l	Mix					
Near/Far La	ane Distance:	52 feet		<u> </u>		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	J	9.6%	•
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		^	Voise So			•	eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	_	.000	Crada Ad	li a 4 ma a . a 4	. 0 0
_	Pad Elevation:	0.0 feet			Heav	y Truck	(S: 8	.006	Grade Ad	jusimeni	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distaı	nce (in t	feet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 degr	ees		Mediui	m Truck	rs: 96	5.566			
	Right View:	90.0 degr	ees		Heav	y Truck	s: 96	8.608			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	D	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.8	5	-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.3	9	-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.3	5	-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo an	d barr	ier atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq D	ay	Leq Ev	rening	Leq	Night		Ldn	Ci	NEL
Autos:		3.0	66.1		64.4		58.	.3	66.9	9	67.5
Medium Trucks:	61	1.4	59.9		53.6		52.	.0	60.5	5	60.7
Heavy Trucks:	61	1.5	60.0		51.0		52.	.2	60.6	5	60.7
Vehicle Noise:	69	9.6	67.8		64.9		60	.0	68.6	6	69.0
Centerline Distan	ce to Noise C	ontour (in fe	et)		ı						
				70 d	IBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

80

86

173

186

373

401

803

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o W. Yale Loop

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	d=10, So	oft = 15)		
Average Daily Traffic (Adt):	28,200 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks ((2 Axles):	15		
Peak Hour Volume:	2,820 vehicle	S	He	avy Trucks (3	3+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Miv				
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data			VEII	Autos	•	J	9.6%	97.42%
			1.//	edium Trucks			10.3%	1.84%
Barrier Height:				leavy Trucks			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm):			,	leavy Trucks	. 00.570	2.1 /0	10.070	0.7470
Centerline Dist. to Barrier:			Noise So	ource Elevati	ons (in fe	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:			Mediui	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:			Lano Fa	uivalent Dist	anco (in	foot)		
Road Elevation:			Lane Eq		•	ieei)		
Road Grade:			Madium		96.607			
Left View:	3				96.566			
Right View:	90.0 degree	es	Heav	ry Trucks:	96.608			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 1.68	-4.	39	-1.20	<i>-4.</i> 87	0.0	000	0.000
Medium Trucks: 82.4	0 -15.56	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -19.51	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq I	Evening	Leq Night		Ldn	CI	VEL
Autos:	67.9	66.0	64.2	5	8.1	66.8	3	67.4
Medium Trucks:	31.3	59.7	53.4	5	51.8	60.3	3	60.5
Heavy Trucks:	61.3	59.9	50.8	5	52.1	60.4	4	60.6
Vehicle Noise:	69.4	67.7	64.7	5	9.9	68.4	4	68.9
Centerline Distance to Noise	Contour (in feet)						

70 dBA

78

84

Ldn:

CNEL:

65 dBA

169

182

60 dBA

363

391

55 dBA

783

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Lake Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INP	UT DATA			NOISE MODEL INPUTS							
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Ad Peak Hour Percentag	e:	10%				dium Tr	•		15			
Peak Hour Volum		,640 vehicles	3		Heavy Trucks (3+ Axles): 15							
Vehicle Spee		55 mph		ı	/ehicle l	Mix						
Near/Far Lane Distanc	ə <i>:</i>	52 feet			Veh	icleType	9	Day	Evening	Night	Daily	
Site Data						,	Autos:	77.5%	12.9%	9.6%	97.42%	
Barrier Heigh Barrier Type (0-Wall, 1-Bern) <i>:</i>	0.0 feet 0.0				edium T Heavy T		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%	
Centerline Dist. to Barrie Centerline Dist. to Observe		100.0 feet		1	Voise So	ource E	levatio	ns (in f	eet)			
Barrier Distance to Observe Observer Height (Above Pad Pad Elevatio	r: ():	100.0 feet 0.0 feet 5.0 feet 0.0 feet				Auto m Truck y Truck	s: 4	2.000 4.000 3.006	Grade Ad	justment	: 0.0	
Road Elevatio		0.0 feet		I	ane Eq	uivalen	t Dista	nce (in	feet)			
Road Grad		0.0%				Auto		 6.607				
Left Vie		-90.0 degree	es		Mediui	m Truck	s: 96	5.566				
Right Vie		90.0 degree			Heav	y Truck	rs: 96	6.608				
FHWA Noise Model Calcula	ions											
VehicleType REMEL	-	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos: 71	.78	1.39		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 82	.40	-15.84		-4.39)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 86	.40	-19.80		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (v	/ithou	ıt Topo and	barri	er atten	uation)							
VehicleType Leq Peak	Hour	Leq Day	,	Leq Ev	rening	Leq	Night		Ldn	C	NEL	
Autos:	67.6		65.7		63.9		57	.9	66.5		67.1	
Medium Trucks:	61.0		59.5		53.1 51.6 60.0						60.2	
Heavy Trucks:	61.0		59.6		50.5		51	.8	60.	1	60.3	
Vehicle Noise:	69.2		67.4		64.4		59	.6	68.	1	68.6	
Centerline Distance to Noise	Con	tour (in feet))									

70 dBA

75

81

Ldn:

CNEL:

65 dBA

161

174

60 dBA

348

374

55 dBA

749

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Creek Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT	T DATA				N	IOISE	MODE	L INPUT	S		
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt)	: 25,40	00 vehicles	S					Autos:	15			
Peak Hour Percentage		10%			Me	dium Tr	ucks (2	Axles):	15			
Peak Hour Volume	: 2,54	10 vehicles	;		Heavy Trucks (3+ Axles): 15							
Vehicle Speed	<i>!:</i> 5	55 mph			'ehicle l	Miss						
Near/Far Lane Distance		52 feet		V				Dov	Funning	Niaht	Doily	
Site Data					verii	cleType		Day 50/	Evening	Night	Daily	
Site Data					٨.4.		Autos:	77.5%		9.6%		
Barrier Height		0.0 feet				edium T		84.8%		10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm		0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrie		0.0 feet		٨	loise Sc	urce E	levatio	ns (in fe	eet)			
Centerline Dist. to Observe		0.0 feet				Auto	s: 2	2.000				
Barrier Distance to Observe	: (0.0 feet			Mediur	n Truck		.000				
Observer Height (Above Pad): 5	5.0 feet				y Truck		3.006	Grade Ad	iustment.	0.0	
Pad Elevation): (0.0 feet				-						
Road Elevation): (0.0 feet		L	ane Eq				feet)			
Road Grade): (0.0%				Auto		6.607				
Left View	<i>:</i> -90	0.0 degree	es.		Mediur	n Truck	s: 96	6.566				
Right View	<i>':</i> 90	0.0 degree	S		Heav	y Truck	s: 96	8.608				
FHWA Noise Model Calculate	ons											
VehicleType REMEL	Tra	ffic Flow	Distan	е	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
<i>Aut</i> os: 71.	78	1.23	-	4.39		-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 82.	40	-16.01	-	4.39		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 86.	40	-19.97	-	4.39		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (w	ithout 1	Topo and I	barrier a	tenu	ıation)							
VehicleType Leq Peak I	lour	Leq Day	Le	q Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	67.4	6	65.5		63.7		57	.7	66.3	3	66.9	
Medium Trucks:	60.8	Ę	59.3	52.9 51.4 59.8						60.1		
Heavy Trucks:	60.8	Ę	59.4		50.4		51	.6	60.0)	60.1	
Vehicle Noise:	69.0	(67.2		64.3		59	.4	68.0)	68.4	
Centerline Distance to Noise	Conto	ur (in feet)										

70 dBA

73

79

Ldn:

CNEL:

65 dBA

157

169

60 dBA

339

365

55 dBA

730

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: w/o Jeffrey Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOI	SE MODI	EL INPUT	S			
Highway Data			Site Cor	ditions (Ha	ard = 10, S	oft = 15)				
Average Daily Traffic (Adt):	30,300 vehicle	es			Autos	: 15				
Peak Hour Percentage:			Me	dium Truck	s (2 Axles)	: 15				
Peak Hour Volume:	3,030 vehicle	es	Heavy Trucks (3+ Axles): 15							
Vehicle Speed:	55 mph		Vehicle	Mix						
Near/Far Lane Distance:	52 feet				Dov	Evening	Night	Doily		
Site Date			ven	icleType	Day os: 77.5%	Evening 6 12.9%	Night 9.6%	Daily		
Site Data				Auto edium Truck						
Barrier Height:							10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm).			'	Heavy Truck	ks: 86.5%	% 2.7%	10.8%	0.74%		
Centerline Dist. to Barrier.			Noise S	ource Eleva	ations (in	feet)				
Centerline Dist. to Observer.				Autos:	2.000					
Barrier Distance to Observer.	0.0 feet		Mediu	m Trucks:	4.000					
Observer Height (Above Pad).				y Trucks:	8.006	Grade Ad	justment:	0.0		
Pad Elevation.										
Road Elevation.	0.0 feet		Lane Eq	uivalent Di		feet)				
Road Grade.	0.0%			Autos:	96.607					
Left View.	-90.0 degre	es	Mediu	m Trucks:	96.566					
Right View.	90.0 degre	es	Heav	y Trucks:	96.608					
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road I	Fresnel	Barrier Att	en Ber	m Atten		
Autos: 71.7	'8 1.99	-4	.39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	10 -15.25	-4	.39	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	-19.20	-4	.39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)							
VehicleType Leq Peak H	lour Leq Day	y Leq	Evening	Leq Nig	ht	Ldn	CI	VEL		
Autos:	68.2	66.3	64.5		58.5	67.	1	67.7		
Medium Trucks:	61.6	60.1	53.7 52.2 60.6							
Heavy Trucks:	61.6	60.2	51.1		52.4	60.7	7	60.9		
Vehicle Noise:	69.8	68.0	65.0		60.2	68.7	7	69.2		
Centerline Distance to Noise	Contour (in feet	t)								

70 dBA

82

88

Ldn:

CNEL:

65 dBA

177

190

60 dBA

381

410

55 dBA

822

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Jeffrey Rd. and Royal Oak

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Si	ite Con	ditions ((Hard =	: 10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	23,700 vehicle 10% 2,370 vehicle				dium Tru avy Truc	icks (2 i	,			
	ehicle Speed: ane Distance:	55 mph 52 feet		Ve	ehicle l Vehi	cleType	utos:	<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
Barrier Type (0-V	•	0.0 feet 0.0				edium Tr leavy Tr	ucks:	84.8% 86.5%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): lad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre 90.0 degre			Mediur Heav ane Eq u Mediur	Autos Trucks y Trucks uivalent Autos n Trucks	s: 2. s: 4. s: 8. Distan s: 96.	000 000 006	Grade Ad	justment	. 0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 71.78 82.40	Traffic Flow 0.92 -16.31	-4	4.39 4.39 4.39	Finite	Road -1.20 -1.20 -1.20	Fresi	-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Nois VehicleType	e Levels (with Leq Peak Ho				ation) ening	Leq I	Night		Ldn	C	VEL
Autos: Medium Trucks: Heavy Trucks:	60	0.5	65.2 59.0 59.1		63.4 52.6 50.1		57.4 51.5 51.5	1	66.0 59.5 59.7	5	66.6 59.8 59.8
Vehicle Noise:	68	3.7	66.9		64.0		59.	1	67.7	7	68.1

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	70	150	324	697
CNEL:	75	162	348	750

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Royal Oak and Valley Oak

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS						
Highway Data				Si	Site Conditions (Hard = 10, Soft = 15)					
Average Daily	Traffic (Adt): 2	1,100 vehicles	S				Autos:	15		
Peak Hour	Percentage:	10%			Medi	um Tru	icks (2 Axles):	15		
Peak H	lour Volume:	2,110 vehicles	S		Heav	vy Truc	ks (3+ Axles):	15		
Ve	hicle Speed:	55 mph		V	ehicle M	iv				
Near/Far La	ne Distance:	52 feet				leType	Day	Evening	Night	Daily
Site Data							Autos: 77.5%	_		97.42%
Ra	rrier Height:	0.0 feet			Med	lium Tr	rucks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			Не	eavy Tr	rucks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet								
Centerline Dist.		100.0 feet		No	oise Sou		evations (in f	eet)		
Barrier Distance		0.0 feet				Autos				
Observer Height (5.0 feet			Medium					
• .	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustm						: 0.0
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)						
	Road Grade:	0.0%				Autos	•			
,	Left View:	-90.0 degree	20		Medium					
	Right View:	90.0 degree			Heavy					
	ragin view.	30.0 degree			Hoavy	rraone	. 00.000			
FHWA Noise Mod	el Calculations								.	
VehicleType	REMEL	Traffic Flow	Distant	ce	Finite R	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.42	-	4.39		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.82	-	4.39		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.77	-	4.39		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (witho	out Topo and	barrier at	ttenua	ation)					
VehicleType	Leq Peak Hou	r Leq Day	' Le	q Eve	ening	Leq I	Night	Ldn	CI	NEL
Autos:	66.	6	64.7		62.9		56.9	65.5	5	66.1
Medium Trucks:	60.	0	58.5		52.1		50.6	59.0)	59.3
Heavy Trucks:	60.	0	58.6		49.6		50.8	59.2	2	59.3

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	65	139	300	645
CNEL:	69	150	322	694

63.5

66.4

67.1

58.6

67.6

Vehicle Noise:

68.2

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: w/o Sand Canyon Av.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS							
Highway Data			Site Cond	litions (Haro	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	21,000 vehicles	3			Autos:	15				
Peak Hour Percentage:	10%		Medium Trucks (2 Axles): 15							
Peak Hour Volume:	2,100 vehicles	3	Hea	vy Trucks (3	+ Axles):	15				
Vehicle Speed:	60 mph		Vehicle M	lix						
Near/Far Lane Distance:	76 feet			leType	Day	Evening	Night	Daily		
Site Data				Autos:			9.6%	97.42%		
Barrier Height:	0.0 feet		Me	dium Trucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		Н	eavy Trucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet				(* *	4)				
Centerline Dist. to Observer:	100.0 feet		Noise Soi	urce Elevatio		eet)				
Barrier Distance to Observer:	0.0 feet				2.000 4.000					
Observer Height (Above Pad):	5.0 feet				0 , 4 ,					
Pad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.							
Road Elevation:	0.0 feet		Lane Equ	ivalent Dista	ance (in	feet)				
Road Grade:	0.0%		Autos: 92.547							
Left View:	-90.0 degree	es	Medium	Trucks: 9	2.504					
Right View:	90.0 degree		Heavy	Trucks: 9	2.547					
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite F	Road Fre	snel	Barrier Att	en Ber	m Atten		
Autos: 73.2	2 0.02	-4.1	1	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 83.6	8 -17.22	-4.1	1	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 87.3	3 -21.17	-4.1	1	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)							
VehicleType Leq Peak He	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL		
Autos: 6	67.9	66.0	64.3	5	8.2	66.8	3	67.4		
Medium Trucks:	31.2	59.6	9.6 53.3 51.7 60.2							
Heavy Trucks:	8.08	59.4	50.4 51.6 60.0							
Vehicle Noise:	69.4	67.6	64.8	5	9.8	68.4	4	68.8		

70 dBA

78

84

Ldn:

CNEL:

65 dBA

168

181

60 dBA

361

389

55 dBA

778

838

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Sand Canyon. Av.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DAT	Α		NOISE MODEL INPUTS					
Highway Data			-		Site Con	ditions (F	lard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	32,000 vehi	cles				Autos	: 15		
	Percentage:	10%			Med	dium Truc	ks (2 Axles).	: 15		
Peak H	lour Volume:	3,200 vehi	cles		Hea	avy Truck	s (3+ Axles)	: 15		
Ve	ehicle Speed:	60 mph	l	,	Vehicle II	Nix				
Near/Far La	ne Distance:	76 feet				cleType	Day	Evening	Night	Daily
Site Data						Au	itos: 77.5%	_	9.6%	97.42%
Ba	rrier Height:	0.0 fee	t		Мє	edium Tru	cks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0	•		H	leavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%
• • •	st. to Barrier:	100.0 fee	t		Noise Co	uras Ela	vations (in t	in n 4)		
Centerline Dist.	to Observer:	100.0 fee	t		voise so			eet)		
Barrier Distance	to Observer:	0.0 fee	t		Madium	Autos:	2.000			
Observer Height	(Above Pad):	5.0 fee	t			n Trucks:	4.000	Crada Ad		
•	ad Elevation:	0.0 fee			Heavy Trucks: 8.006 Grade Adjustme					
Ro	ad Elevation:	0.0 fee		1	Lane Equivalent Distance (in feet)					
	Road Grade:	0.0%			Autos: 92.547					
	Left View:	-90.0 deg	rees		Mediun	n Trucks:	92.504			
	Right View:	90.0 deg			Heav	y Trucks:	92.547			
FHWA Noise Mod	lel Calculatio	ns								
VehicleType	REMEL	Traffic Flo	w D	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	73.22	2 1.	85	-4.1	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	3 -15.	39	-4.11	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3 -19.	34	-4.11	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo a	nd barr	ier atten	uation)					
VehicleType	Leq Peak Ho	our Leq I	Day	Leq E	/ening	Leq N	ight	Ldn	CI	VEL
Autos:	6	9.8	67.9		66.1		60.0	68.7	7	69.3
Medium Trucks:	6	3.0	61.5		55.1		53.6	62.0)	62.3
Heavy Trucks:	6	2.7	61.2		52.2		53.5	61.8	3	61.9
Vehicle Noise:	7	1.2	69.5		66.6		61.6	70.2	2	70.7

70 dBA

103

111

Ldn:

CNEL:

65 dBA

222

239

60 dBA

478

515

55 dBA

1,031

1,110

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Laguna Canyon Rd.

Number: 8141

Analyst: B. Lawson

SITE SPEC	IFIC INF	PUT DATA		NOISE MODEL INPUTS								
Highway Data				Site Co	nditions	(Hard :	= 10, Sc	oft = 15)				
Average Daily Traffic Peak Hour Perce Peak Hour V	entage:	9,300 vehicles 10% 1,930 vehicles			edium Tru	•	•					
Vehicle S Near/Far Lane Dis	Speed:	55 mph 52 feet		Heavy Trucks (3+ Axles): 15 Vehicle Mix VehicleType Day Evening Night Daily								
Site Data						lutos:	77.5%	_	9.6%			
Lef	Berm): Barrier: server: server: Pad): vation:	0.0 feet 0.0 100.0 feet 100.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Medium Trucks: 84.8% 4.9% Heavy Trucks: 86.5% 2.7% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjust Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608						1.84% 0.74%		
FHWA Noise Model Cal	culations											
VehicleType RE	MEL	Traffic Flow	Distance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos: Medium Trucks: Heavy Trucks:	71.78 82.40 86.40	0.03 -17.21 -21.16	-4	.39 .39 .39	-1.20 -1.20 -1.20		-4.87 -4.97 -5.16	0.0	000 000 000	0.000 0.000 0.000		
Unmitigated Noise Leve	els (witho	ut Topo and b	parrier atte	enuation)								
VehicleType Leq F	Peak Hour	Leq Day	Leq	Evening	Leq	Night		Ldn	CI	VEL		
Autos: Medium Trucks: Heavy Trucks:	66.2 59.6 59.6	5 5	64.3 68.1 68.2	62.6 51.7 49.2	7	56. 50.	2	65.7 58.7 58.8	7	65.7 58.9 58.9		
Vehicle Noise: Centerline Distance to I	67.8	3 6	66.0	49.2 50.4 58.8 63.1 58.2 66.8						67.2		

70 dBA

61

65

Ldn:

CNEL:

65 dBA

131

141

60 dBA

282

304

55 dBA

608

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Pacifica and Banting

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DA	ATA			ſ	NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	20,400 v	ehicles					Autos:	15		
	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	2,040 v	ehicles		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 m	nph		Vehicle I	Miv					
Near/Far La	ane Distance:	52 fe	eet			icleType	2	Day	Evening	Night	Daily
Site Data					VOII		Autos:	77.5%	Ū	9.6%	-
		0.0	e 1		M	edium T		84.8%		10.3%	
	rrier Height:	0.0	reet			leavy T		86.5%		10.8%	0.74%
Barrier Type (0-V		0.0	.		,	louvy i	raono.	00.070	2.1 70	10.070	0.7 170
Centerline Dist.	ist. to Barrier:	100.0 f			Noise So	ource E	levatio	ns (in fe	eet)		
		0.0 1				Auto		2.000			
Barrier Distance					Mediui	n Truck	rs: 4	.000			
Observer Height	(Above Pau). Pad Elevation:	5.0 1			Heav	y Truck	(s: 8	3.006	Grade Ad	justment	: 0.0
-	ad Elevation: ad Elevation:	0.0 f 0.0 f			Lane Eq	uivalen	t Dista	nce (in t	feet)		
	Road Grade:	0.0%			Lano Lq	Auto		6.607	001)		
	Left View:				Modiu	n Truck		6.566			
	Right View:		degrees degrees			ry Truck		6.608			
	Right view.	90.0	uegrees		ricav	y ITUCK	.s. 30	.000			
FHWA Noise Mod	lel Calculation	ıs			I						
VehicleType	REMEL	Traffic I	Flow	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78		0.27	-4.	39	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40		16.96	-4.	39	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-2	20.92	-4.	39	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo	and ba	rrier atte	nuation)						
VehicleType	Leq Peak Ho		eq Day		Evening	Leq	Night		Ldn	C	NEL
Autos:	66	6.5	64.	6	62.8		56	.7	65.4	4	66.0
Medium Trucks:	59	9.8	58.	.3	52.0		50	.4	58.9	9	59.1
Heavy Trucks:	59	9.9	58.	5	49.4		50	.7	59.0)	59.2
Vehicle Noise:	68	3.0	66.	.3	63.3		58	.4	67.0)	67.5
Centerline Distan	ce to Noise C	ontour (ii	n feet)								
		<u> </u>	<u> </u>	70) dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

63

68

136

146

293

315

631

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: w/o Meridian

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
Highway Data			S	ite Con	ditions	(Hard =	10, Sc	oft = 15)				
Average Daily Traffic (Adt):	17,800 vehicle	S				,	Autos:	15				
Peak Hour Percentage:	10%			Me	dium Tri	ıcks (2 A	xles):	15				
Peak Hour Volume:	1,780 vehicle	S		He	avy Trud	cks (3+ A	xles):	15				
Vehicle Speed:	55 mph		V	ehicle l	Wiy							
Near/Far Lane Distance:	52 feet				icleType		Day	Evening	Night	Daily		
Site Data				* 0111			77.5%		9.6%	-		
	0.0 foot			Ме	edium Tı		84.8%		10.3%	1.84%		
Barrier Height:	0.0 feet 0.0				leavy Ti		86.5%		10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 100.0 feet											
Centerline Dist. to Observer:	100.0 feet		N	loise Sc		evations		eet)				
Barrier Distance to Observer:	0.0 feet				Auto		000					
Observer Height (Above Pad):	5.0 feet				n Truck		000					
Pad Elevation:	0.0 feet			Heav	y Truck	s <i>:</i> 8.0	006	Grade Adj	iustment:	0.0		
Road Elevation:	0.0 feet		L	ane Eg	uivalent	Distanc	e (in t	feet)				
Road Grade:	0.0%				Auto							
Left View:	-90.0 degre	es		Mediur	n Truck							
Right View:	90.0 degre			Heav	y Truck	s: 96.6	808					
FHWA Noise Model Calculation												
VehicleType REMEL	Traffic Flow	Dist	tance	Finite		Fresn		Barrier Atte		m Atten		
Autos: 71.78			-4.39		-1.20		-4.87	0.0		0.000		
Medium Trucks: 82.40			-4.39		-1.20		-4.97	0.0		0.000		
Heavy Trucks: 86.40	-21.51		-4.39		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	hout Topo and	barrie	r attenu	ation)								
VehicleType Leq Peak Ho	ur Leq Day	/	Leq Eve	ening	Leq	Night		Ldn	CI	VEL		
Autos: 6	5.9	64.0		62.2		56.1		64.8	3	65.4		
Medium Trucks: 5	9.3	57.7		51.4		49.8		58.3	3	58.5		
Heavy Trucks: 5	9.3	57.9		48.8		50.1		58.4	ļ	58.6		
\/ \/ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7.4	65.7		62.7		57.9		66.4	1	66.9		
Vehicle Noise: 6									•			
Centerline Distance to Noise C)							•			

Ldn:

CNEL:

58

62

124

134

267

288

576

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Meridian and ICD

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NO	ISE MOD	EL INPUT	S	
Highway Data				Site Cor	nditions (F	Hard = 10,	Soft = 15)		
Average Daily	Traffic (Adt): 1	7,900 vehicles	S			Auto	s: 15		
Peak Hour	Percentage:	10%		Me	edium Truc	ks (2 Axles	s): 15		
Peak H	lour Volume:	1,790 vehicles	S	He	avy Truck	s (3+ Axles	s): 15		
Ve	hicle Speed:	60 mph		Vehicle	Miv				
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data					Au	itos: 77.5	5% 12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet		M	edium Trud	cks: 84.8	3% 4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			Heavy True	cks: 86.5	5% 2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet		Noise S	ource Elev	vations (in	foot)		
Centerline Dist.	to Observer:	100.0 feet		140/36 3	Autos:	2.000	1001)		
Barrier Distance	to Observer:	0.0 feet		Modiu	m Trucks:	4.000			
Observer Height	(Above Pad):	5.0 feet					Grade Ad	iustmont	
P	ad Elevation:	0.0 feet		пеа	vy Trucks:	8.006	Grade Auj	iusiiri c iii.	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent D	Distance (i	n feet)		
	Road Grade:	0.0%			Autos:	92.547			
	Left View:	-90.0 degree	es	Mediu	m Trucks:	92.504			
	Right View:	90.0 degree	es	Hea	vy Trucks:	92.547			
FHWA Noise Mod	el Calculations	s							
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	73.22	-0.67	-4	.11	-1.20	-4.8	7 0.0	000	0.000
Medium Trucks:	83.68	-17.91	-4	.11	-1.20	-4.9	7 0.0	000	0.000
Heavy Trucks:	87.33	-21.87	-4	.11	-1.20	-5.1	6 0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier att	enuation)					
VehicleType	Leq Peak Hou	ır Leq Day	Leq	Evening	Leq Ni	ight	Ldn	CI	VEL
Autos:	67	2	65.3	63.6		57.5	66 1	1	66.7

Unmitigated Nois	e Leveis (withou	it Topo and barr	er attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	67.2	65.3	63.6	57.5	66.1	66.7
Medium Trucks:	60.5	59.0	52.6	51.0	59.5	59.7
Heavy Trucks:	60.1	58.7	49.7	50.9	59.3	59.4
Vehicle Noise:	68.7	66.9	64.1	59.1	67.7	68.2

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	70	151	325	700
CNFI ·	75	162	350	754

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Enterprise and Gateway Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Ha	rd = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	37,400 vehicles	3			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles).	15				
Peak F	lour Volume:	3,740 vehicles	3	He	avy Trucks (3+ <i>Axles</i>).	15				
Ve	ehicle Speed:	60 mph		Vehicle I	Mix						
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily		
Site Data					Auto		_	9.6%	-		
Ra	rrier Height:	0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0		ŀ	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%		
, ,	ist. to Barrier:	100.0 feet	·								
Centerline Dist.		100.0 feet		Noise Sc	ource Eleva	•	eet)				
Barrier Distance		0.0 feet			Autos:	2.000					
Observer Height		5.0 feet			n Trucks:	4.000					
	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)				
	Road Grade:	0.0%			Autos:	92.547	-				
	Left View:	-90.0 degree	es	Mediui	m Trucks:	92.504					
	Right View:	90.0 degree		Heav	y Trucks:	92.547					
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos:	73.22	2.53	-4.′	11	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-14.71	-4.′	11	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-18.67	-4.′	11	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (witl	hout Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nigh	nt	Ldn	CI	VEL		
Autos:	70	0.4	68.5	66.8		60.7	69.3	3	69.9		
Medium Trucks:	6	3.7	62.2	55.8		54.2	62.7	7	62.9		
Heavy Trucks:	6	3.3	61.9	52.9		54.1	62.5	5	62.6		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	114	246	531	1,143
CNEL:	123	265	572	1,231

67.3

70.9

62.3

71.4

70.1

Vehicle Noise:

71.9

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Enterprise and I-5 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
Highway Data						ditions (F	lard = 10, S	oft = 15)					
Average Daily	Traffic (Adt):	52,000 v	ehicles				Autos:	15					
	Percentage:	10%			Medium Trucks (2 Axles): 15								
Peak H	Hour Volume:	5,200 v	ehicles		Heavy Trucks (3+ Axles): 15								
Ve	ehicle Speed:	60 n	nph	-	Vehicle I	Viy							
Near/Far La	ne Distance:	76 f	eet	-		icleType	Day	Evening	Night	Daily			
Site Data							tos: 77.5%	_	9.6%	,			
Ra	rrier Height:	0.0	foot		Ме	edium Tru	cks: 84.8%	6 4.9%	10.3%	1.84%			
Barrier Type (0-W	_	0.0	1661		F	leavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%			
• • •	ist. to Barrier:	100.0	feet	-									
Centerline Dist.		100.0		-	Noise Sc		vations (in f	eet)					
Barrier Distance		0.0				Autos:	2.000						
Observer Height		5.0				n Trucks:	4.000						
•	ad Elevation:	0.0			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0			
-	ad Elevation:	0.0		-	Lane Eq	uivalent [Distance (in	feet)					
	Road Grade:	0.09				Autos:	92.547	,					
	Left View:		degrees	_	Mediur	n Trucks:	92.504						
	Right View:		degrees			y Trucks:	92.547						
	right view.	90.0	uegrees	•	Heav	y Trucks.	32.541						
FHWA Noise Mod	lel Calculatio	ns											
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	73.22	2	3.96	-4.1	11	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	83.68	3 -	13.28	-4.1	11	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	87.33	3 -	17.23	-4.1	11	-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (wit	hout Top	o and b	arrier atte	nuation)								
VehicleType	Leq Peak Ho	our Le	eq Day	Leq E	vening	Leq N	ight	Ldn	CI	VEL			
Autos:	7	1.9	7	0.0	68.2		62.1	70.8	3	71.4			
Medium Trucks:	6	5.1	6	3.6	57.2		55.7	64.1	1	64.4			
Heavy Trucks:	6	4.8	6	3.4	54.3		55.6		9	64.1			
Vehicle Noise:	7	3.3	7	1.6	68.7		63.7	72.3	3	72.8			

70 dBA

142

153

Ldn:

CNEL:

65 dBA

307

331

60 dBA

661

712

55 dBA

1,424

1,534

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w I-5 NB Ramps and Technology Dr. W

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DAT	Ά		NOISE MODEL INPUTS								
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	53,900 veh	icles				Autos:	15					
Peak Hour	Percentage:	10%			Medium T	rucks (2	Axles):	15					
Peak H	lour Volume:	5,390 veh	icles		Heavy Tr	ucks (3+	- Axles):	15					
Ve	hicle Speed:	60 mpł	า	V	ehicle Mix								
Near/Far La	ne Distance:	76 feet			VehicleTyp	e	Day	Evening	Night	Daily			
Site Data						Autos:	77.5%		9.6%	-			
	rrier Height:	0.0 fee	.		Medium	Trucks:	84.8%		10.3%	1.84%			
Barrier Type (0-W	•	0.0	FL		Heavy	Trucks:	86.5%	2.7%	10.8%	0.74%			
Centerline Di		100.0 fee	et .										
Centerline Dist.		100.0 fee		N	loise Source I			eet)					
Barrier Distance		0.0 fee			Aut		2.000						
Observer Height		5.0 fee			Medium Truc		4.000						
•	ad Elevation:	0.0 fee			Heavy Truc	ks: 8	3.006	Grade Ad	justment.	: 0.0			
	ad Elevation:	0.0 fee		L	ane Equivale	nt Dista	nce (in	feet)					
	Road Grade:	0.0%	; L	_	Aut		2.547						
	Left View:	-90.0 de	arooc		Medium Truc		2.504						
	Right View:	90.0 de	-		Heavy Truc		2.547						
	rigiti view.	90.0 de	grees		rieavy riuc	NG. 32	2.547						
FHWA Noise Mod	el Calculation	าร											
VehicleType	REMEL	Traffic Flo	w Di	istance	Finite Road	Fres	snel	Barrier Att	en Ber	m Atten			
Autos:	73.22	2 4	.12	-4.11	-1.20)	-4.87	0.0	000	0.000			
Medium Trucks:	83.68	-13	.12	-4.11	-1.20)	-4.97	0.0	000	0.000			
Heavy Trucks:	87.33	3 -17	.08	-4.11	-1.20)	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	hout Topo a	nd barr	ier attenu	ation)								
VehicleType	Leq Peak Ho	our Leq	Day	Leq Eve	ening Led	q Night		Ldn	CI	NEL			
Autos:	7:	2.0	70.1		68.4	62	3	70.9	9	71.5			
Medium Trucks:	6	5.3	63.7		57.4	55	5.8	64.3	3	64.5			
Heavy Trucks:	6	4.9	63.5		54.5	55	5.7	64.1	1	64.2			
Vehicle Noise:	7	3.5	71.7		68.9	63	3.9	72.5	5	72.9			
Contouling Distan	aa ta Naisa C	Contour /in f	'a-4\										

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	146	314	677	1,459
CNEL:	157	339	729	1,571

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: b/w Techonology Dr. W and Ada

Number: 8141

Analyst: B. Lawson

	<i>Daily</i> 97.42% 1.84% 0.74%
Peak Hour Percentage: 4,070 vehicles Peak Hour Volume: 4,070 vehicles Vehicle Speed: 60 mph Near/Far Lane Distance: 76 feet Site Data Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Observer: Barrier Distance to Observer: 0.00 feet Pad Elevation: Road Elevation: Road Grade: Left View: -90.0 degrees Right View: 90.0 degrees Vehicle Mix Vehicle Mix Vehicle Mix Vehicle Type Day Evening Night Medium Trucks: 84.8% 4.9% 10.3% 4	97.42% 1.84%
Peak Hour Volume: 4,070 vehicles Vehicle Speed: 60 mph Near/Far Lane Distance: 76 feet Vehicle Mix Vehicle Type Day Evening Night	97.42% 1.84%
Vehicle Speed: Near/Far Lane Distance:60 mph 76 feetVehicle MixSite DataAutos: 77.5% 12.9% 9.6%Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Grade: Left View: Right View:100.0 feet 100.0 feet 100.0 feetNoise Source Elevations (in feet)Noise Source Elevations (in feet)Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006Autos: 2.000 	97.42% 1.84%
Near/Far Lane Distance: 76 feet Vehicle Type Day Evening Night	97.42% 1.84%
Near/Far Lane Distance: 76 feet VehicleType Day Evening Night	97.42% 1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Road Grade: Ceft View: Pagh Left View: Pagh View: Pon. 0 degrees Vehicle Type REMEL Traffic Flow Distance Autos: 77.5% 12.9% 9.6% Medium Trucks: 84.8% 4.9% 10.3% Heavy Trucks: 86.5% 2.7% 10.8% Moise Source Elevations (in feet) Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Medium Trucks: 92.547 Medium Trucks: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547 Medium Trucks: 92.547	1.84%
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Vehicle Type REMEL Traffic Flow Distance Heavy Trucks: 86.5% 2.7% 10.8% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Medium Trucks: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547 Medium Trucks: 92.547 Finite Road Fresnel Barrier Atten Bent	
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berner Atten Ber	0.74%
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Vehicle Type REMEL Traffic Flow Distance Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547	
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees VehicleType REMEL Traffic Flow Distance Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Medium Trucks: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547 Fhwa Noise Model Calculations	
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Left View: Pad View: Pol. 0 feet Right View: Pol. 0 degrees Vehicle Type REMEL Traffic Flow Distance O.0 feet Medium Trucks: Heavy Trucks: A.000 Heavy Trucks: Autos: Lane Equivalent Distance (in feet) Medium Trucks: Pol. 0 degrees Medium Trucks: Pol. 0 degre	
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Autos: 92.547 Left View: -90.0 degrees Heavy Trucks: 92.504 Right View: 90.0 degrees Heavy Trucks: 92.547 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Bern	
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Road Grade: -90.0 degrees Right View: 90.0 degrees VehicleType REMEL Road Elevation: 0.0 feet Lane Equivalent Distance (in feet) Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547 FHWA Noise Model Calculations Finite Road Fresnel Barrier Atten Ben	0.0
Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees VehicleType Remetal Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547 Finite Road Fresnel Barrier Atten Bernel	0.0
Road Grade: 0.0% Autos: 92.547 Left View: -90.0 degrees Medium Trucks: 92.504 Right View: 90.0 degrees Heavy Trucks: 92.547 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Beneral	
Left View: -90.0 degrees Medium Trucks: 92.504 Right View: 90.0 degrees Heavy Trucks: 92.547 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Bern	
Right View: 90.0 degrees Heavy Trucks: 92.547 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berr	
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berner	
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Bernel	
	n Atten
Autos: 73.22 2.90 -4.11 -1.20 -4.87 0.000	0.000
Medium Trucks: 83.68 -14.34 -4.11 -1.20 -4.97 0.000	0.000
Heavy Trucks: 87.33 -18.30 -4.11 -1.20 -5.16 0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)	
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CN	IFI
Autos: 70.8 68.9 67.1 61.1 69.7	
Medium Trucks: 64.0 62.5 56.2 54.6 63.1	70.3
Heavy Trucks: 63.7 62.3 53.3 54.5 62.9	
Vehicle Noise: 72.3 70.5 67.6 62.7 71.2	70.3

70 dBA

121

130

Ldn:

CNEL:

65 dBA

261

281

60 dBA

561

605

55 dBA 1,210

1,303

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Ada

Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
Highway Data				S	ite Con	ditions	(Hard	= 10, So	ft = 15)			
Average Daily	Traffic (Adt): 3	35,500 vehicles	S					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15			
Peak H	lour Volume:	3,550 vehicles	S		He	avy Tru	cks (3+	Axles):	15			
Ve	ehicle Speed:	60 mph		V	ehicle l	Mix						
Near/Far La	ne Distance:	76 feet				icleType	Э	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	-	9.6%	-	
Ba	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Di	•	100.0 feet			loise Sa	ouroo E	lovotio	ns (in fe	no+1			
Centerline Dist.	to Observer:	100.0 feet			ioise sc			2.000	et)			
Barrier Distance	to Observer:	0.0 feet			Modiuu	Auto m Truck		1.000				
Observer Height	(Above Pad):	5.0 feet				ry Truck	_	3.006	Grade Ad	iustment		
P	ad Elevation:	0.0 feet			пеач	y Truck	.S. C	5.000	Orace Au	justinent.	0.0	
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)			
	Road Grade:	0.0%				Auto	s: 92	2.547				
	Left View:	-90.0 degree	es		Mediui	m Truck	s: 92	2.504				
	Right View:	90.0 degree	es		Heav	y Truck	rs: 92	2.547				
FHWA Noise Mod	el Calculations	S										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	73.22	2.30		-4.11		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-14.94		-4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-18.89		-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	70	.2	68.3		66.5		60	.5	69.1	1	69.7	
Medium Trucks:	63	.4	61.9		55.6		54	.0	62.5	5	62.7	
Heavy Trucks:	63	.1	61.7		52.7		53	.9	62.3	3	62.4	
Vehicle Noise:	71	.7	69.9		67.0		62	.1	70.6	6	71.1	
Centerline Distan	ce to Noise Co	ontour (in feet,)									
				70 d	BA	65	dBA	6	0 dBA	55	dBA	

Ldn:

CNEL:

110

119

238

256

513

552

1,104

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: w/o Marine Wy.

Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
Highway Data				9	Site Con	ditions	(Hard	= 10, So	ft = 15)				
Average Daily	Traffic (Adt):	37,400 vehicle	S					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15				
Peak H	lour Volume:	3,740 vehicle	s		He	avy Tru	icks (3+	Axles):	15				
Ve	ehicle Speed:	60 mph		1	/ehicle l	Mix							
Near/Far La	ne Distance:	76 feet		-		icleTyp	е	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%		•	97.42%		
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Di		100.0 feet		_					- 41				
Centerline Dist.		100.0 feet		<u> </u>	Voise So			•	et)				
Barrier Distance	to Observer:	0.0 feet			N 4 = -1:	Auto		2.000					
Observer Height	(Above Pad):	5.0 feet				n Truck	_	1.000	Grade Ad	iuotmont			
P	ad Elevation:	0.0 feet			неач	y Truck	(S. C	3.006	Grade Auj	justinent.	0.0		
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Dista	nce (in f	eet)				
	Road Grade:	0.0%				Auto	os: 92	2.547					
	Left View:	-90.0 degre	es		Mediui	n Truck	ks: 92	2.504					
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547					
FHWA Noise Mod	lel Calculation	IS											
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	73.22	2.53		-4.11	l	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-14.71		-4.11		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-18.67		-4.11		-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)								
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL		
Autos:	70).4	68.5		66.8		60	.7	69.3	3	69.9		
Medium Trucks:	63	3.7	62.2		55.8		54	.2	62.7	7	62.9		
Heavy Trucks:	63	3.3	61.9		52.9		54	.1	62.5	5	62.6		
Vehicle Noise:	71	1.9	70.1		67.3		62	.3	70.9	9	71.4		
Centerline Distan	ce to Noise C	ontour (in feet)		,								
				70 a	<i>IBA</i>	65	dBA	6	0 dBA	55	dBA		

Ldn:

CNEL:

114

123

246

265

531

572

1,143

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: e/o Technology

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS								
Highway Data			5	Site Con	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	37,400 vehicles	8					Autos:	15				
Peak Hour Percentage:	10%			Me	dium Tru	ucks (2	Axles):	15				
Peak Hour Volume:	3,740 vehicles	3		He	avy Truc	cks (3+	Axles):	15				
Vehicle Speed:	60 mph		_	/ehicle	Miv							
Near/Far Lane Distance:	76 feet				icleType	1	Day	Evening	Night	Daily		
Site Data				V 011		Autos:	77.5%		9.6%			
	0.0 feet			М	edium Tı		84.8%		10.3%			
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 reet 0.0				Heavy Ti		86.5%		10.8%	0.74%		
Centerline Dist. to Barrier:	0.0 100.0 feet											
Centerline Dist. to Observer:	100.0 feet		^	loise So	ource El			eet)				
Barrier Distance to Observer:	0.0 feet				Auto		2.000					
Observer Height (Above Pad):	5.0 feet			Mediu	m Truck	s: 4	1.000					
Pad Elevation:	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	. 0.0		
Road Elevation:	0.0 feet		1	ane Eq	uivalent	t Dista	nce (in	feet)				
Road Grade:	0.0%				Auto		2.547	,				
Left View:	-90.0 degree	00		Mediu	m Truck:		2.504					
Right View:	90.0 degree				y Truck		2.547					
ragite view.	30.0 degree	<i>-</i> 3		77041	y maon	J. 02						
FHWA Noise Model Calculation	ıs		1									
VehicleType REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 73.22	2.53		-4.11		-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 83.68	-14.71		-4.11		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 87.33	-18.67		-4.11		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	out Topo and	barrier	atteni	uation)								
VehicleType Leq Peak Hou	ur Leq Day	L	.eq Ev	ening	Leq	Night		Ldn	C	NEL		
Autos: 70).4	68.5		66.8		60	.7	69.3	3	69.9		
Medium Trucks: 63	3.7	62.2		55.8		54	.2	62.7	7	62.9		
Heavy Trucks: 63	3.3	61.9		52.9		54	.1	62.5	5	62.6		
Vehicle Noise: 71	.9	70.1		67.3		62	.3	70.9	9	71.4		
Centerline Distance to Noise Co	ontour (in feet))										
			70 a	BA	65	dBA	6	60 dBA	55	dBA		
		Ldn:	11	4	2	46		531	1,	143		

CNEL:

123

265

1,231

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: s/o Barranca Pkwy./Muirlands Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA					NOISE	MODE	L INPUT	S	
Highway Data				3	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	37,300 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	3,730 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		,	Vehicle I	Mix					
Near/Far La	ne Distance:	76 feet				icleTyp	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet			Voice Co	aa E	lovotio	no (in fo			
Centerline Dist.	to Observer:	100.0 feet			Voise So			•	et)		
Barrier Distance	to Observer:	0.0 feet			Madiu	Auto n Truck		2.000			
Observer Height	(Above Pad):	5.0 feet					_	1.000	Grade Ad	iuotmont	
•	ad Elevation:	0.0 feet			неач	y Truck	(S. E	3.006	Grade Auj	justinent.	0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediui	n Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.52		-4.11	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.72		-4.11	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.68		-4.11	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier atten	uation)						
VehicleType	Leq Peak Hou	ur Leq Day	/	Leq Ev	ening/	Leq	Night		Ldn	CI	VEL
Autos:	70).4	68.5		66.8		60	.7	69.3	3	69.9
Medium Trucks:	63	3.7	62.1		55.8		54	.2	62.7	7	62.9
Heavy Trucks:	63	3.3	61.9		52.9		54	.1	62.5	5	62.6
Vehicle Noise:	71	1.9	70.1		67.3		62	.3	70.9	9	71.3
Centerline Distan	ce to Noise C	ontour (in feet)		,						
				70 a	<i>IBA</i>	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

114

123

246

265

1,141

1,229

530

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o Barranca Pkwy./Muirlands Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)			
Peak Hou	Traffic (Adt): Percentage: Hour Volume:	42,000 vehicle 10% 4,200 vehicle				dium Tr avy Trud	•	,				
Near/Far La	ehicle Speed: ane Distance:	60 mph 76 feet		V	ehicle I Vehi	icleType	_	Day	Evening	Night	Daily	
Site Data						-	Autos:	77.5%		9.6%		
Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium T Heavy T		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%	
Centerline D	ist. to Barrier:	100.0 feet		N	oise Sc	ource E	levatio	ns (in fe	eet)			
Ro	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degre		L	Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547							
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	73.22	3.03	3	-4.11		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-14.2		-4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-18.16	6	-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	l barrier	r attenu	ation)							
VehicleType	Leq Peak Ho	our Leq Da	y	Leq Eve	ening	Leq	Night		Ldn	Ci	VEL	
Autos:		0.9	69.0		67.3		61.		69.8	_	70.4	
Medium Trucks:		4.2	62.7		56.3		54.	8	63.2		63.4	
Heavy Trucks:	6:	3.8	62.4		53.4		54.	6	63.0)	63.1	
Vehicle Noise:	72	2.4	70.6		67.8		62	8	71.4	4	71.9	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	124	266	573	1,235
CNEL:	133	287	618	1,331

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy. Number: 8141 Road Segment: s/o Jeronimo Rd. Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA					NOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	42,000 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	4,200 vehicle	es		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		1	/ehicle l	Wix					
Near/Far La	ne Distance:	76 feet				icleTyp	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet			Voice Se	aa E	lovotio	no (in fo			
Centerline Dist.	to Observer:	100.0 feet		<i>'</i>	Voise So			•	et)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auto n Truck		2.000 1.000			
Observer Height	(Above Pad):	5.0 feet					_		Grade Ad	iustmant	0.0
P	ad Elevation:	0.0 feet			пеач	y Truck	(S. C	3.006	Grade Auj	justin o nt.	0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediui	n Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547			
FHWA Noise Mod	lel Calculation	1S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	3.03	}	-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.21		-4.11	ļ	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.16	;	-4.11	l	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout Topo and	barri	ier atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	ening/	Leq	Night		Ldn	CI	VEL
Autos:	70	0.9	69.0		67.3		61	.2	69.8	3	70.4
Medium Trucks:	64	4.2	62.7		56.3		54	.8	63.2	2	63.4
Heavy Trucks:	63	3.8	62.4		53.4		54	.6	63.0)	63.1
Vehicle Noise:	72	2.4	70.6		67.8		62	.8	71.4	4	71.9
Centerline Distan	ce to Noise C	ontour (in fee	t)		1						
				70 a	<i>IBA</i>	65	dBA	6	0 dBA	55	dBA

124

133

Ldn:

CNEL:

266

287

573

618

1,235

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o Jeronimo Rd.

Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC IN	IPUT DATA				ľ	NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily 1	raffic (Adt):	38,200 vehicle	S					Autos:	15		
Peak Hour I	Percentage:	10%			Me	dium Tr	ucks (2	? Axles):	15		
Peak Ho	our Volume:	3,820 vehicle	S		He	avy Tru	cks (3+	- Axles):	15		
Veh	nicle Speed:	60 mph		-	/ehicle	Miv					
Near/Far Lar	ne Distance:	76 feet				icleType	2	Day	Evening	Night	Daily
Site Data					VGH		Autos:	77.5%	_	9.6%	-
					1/1	edium T		84.8%		10.3%	1.84%
	rier Height:	0.0 feet				Heavy T		86.5%		10.8%	0.74%
Barrier Type (0-Wa	•	0.0				roavy r	raono.		2.170	10.070	0.7 170
Centerline Dis Centerline Dist. t		100.0 feet		1	Voise So	ource E	levatio	ns (in f	eet)		
Barrier Distance t		100.0 feet 0.0 feet				Auto	s: 2	2.000			
		5.0 feet			Mediu	m Truck	is: 4	4.000			
Observer Height (A	d Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment	: 0.0
	d Elevation: d Elevation:	0.0 feet		1	Lane Eq	uivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%		-		Auto		2.547	,		
,	Left View:	-90.0 degree	26		Mediu	n Truck		2.504			
	Right View:	90.0 degree				ry Truck		2.547			
	ragne view.	50.0 degree			7.000	<i>y</i> 17401	.0.				
FHWA Noise Mode	l Calculation	s		"							
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.62		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.62		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.57		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)						
	Leq Peak Hou	-		Leg E		Leg	Night		Ldn	C	NEL
Autos:	70	.5	68.6		66.9		60).8	69.4	4	70.0
Medium Trucks:	63	.8	62.2		55.9		54	1.3	62.8	3	63.0
Heavy Trucks:	63	.4	62.0		53.0		54	1.2	62.6	6	62.7
Vehicle Noise:	72	.0	70.2		67.4		62	2.4	71.0)	71.4
Centerline Distanc	e to Noise Co	ontour (in feet)								
				70 c			dBA	6	60 dBA		dBA
			Ldn:	11	6	2	250		538	1,	160

CNEL:

125

269

580

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: s/o Toledo Wy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Cor	ditions (Hard	I=10, So	oft = 15)					
Average Daily Traffic (Adt):	30,800 vehicles	S			Autos:	15					
Peak Hour Percentage:	10%		Me	dium Trucks (2 Axles):	15					
Peak Hour Volume:	3,080 vehicles	S	He	avy Trucks (3	+ Axles):	15					
Vehicle Speed:	60 mph		Vehicle	Mix							
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily			
Site Data				Autos:	_	J	9.6%	•			
Barrier Height:	0.0 feet		М	edium Trucks:			10.3%	1.84%			
Barrier Type (0-Wall, 1-Berm):				Heavy Trucks:	86.5%		10.8%	0.74%			
Centerline Dist. to Barrier:											
Centerline Dist. to Observer:			Noise S	ource Elevation		eet)					
Barrier Distance to Observer:				Autos:	2.000						
Observer Height (Above Pad):				m Trucks:	4.000						
Pad Elevation:			Heav	y Trucks:	8.006	Grade Adj	ustment:	0.0			
Road Elevation:			Lane Eq	uivalent Dista	ance (in	feet)					
Road Grade:				Autos: 9	2.547						
Left View:	-90.0 degree	es	Mediu	m Trucks: 9	2.504						
Right View:	_		Heav	y Trucks: 9	2.547						
FHWA Noise Model Calculation	ons										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Atte	en Ber	m Atten			
Autos: 73.2	2 1.69	-4	.11	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 83.6	8 -15.55	-4	.11	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 87.3	3 -19.51	-4	.11	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)								
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Night		Ldn	CI	VEL			
Autos:	69.6	67.7	65.9	5	9.9	68.5	5	69.1			
		61.3	55.0		3.4	61.9)	62.1			
Heavy Trucks:	62.5	61.1	52.0 53.3 61.6								
Vehicle Noise:	71.1	69.3	66.4	6	1.5	70.0)	70.5			
Centerline Distance to Noise	Contour (in feet)									

70 dBA

100

108

Ldn:

CNEL:

65 dBA

216

233

60 dBA

466

502

55 dBA 1,005

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o Toledo Wy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA				ı	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt): 3	30,100 vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	3,010 vehicles	3		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		V	/ehicle l	Mix					
Near/Far La	ne Distance:	76 feet				icleType	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.6%	-
Ba	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			F	Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet			loico Sa	ouroo E	lovotio	ns (in fe	no+1		
Centerline Dist.	to Observer:	100.0 feet			voise sc			2.000	et)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auto m Truck		1.000			
Observer Height	(Above Pad):	5.0 feet				n Truck ry Truck	_	3.006	Grade Ad	iustment	
P	ad Elevation:	0.0 feet			пеач	y Truck	15.	5.000	Orace Au	justinent.	0.0
Ro	ad Elevation:	0.0 feet		L	.ane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degree	es		Mediui	m Truck	(s: 92	2.504			
	Right View:	90.0 degree	es		Heav	y Truck	rs: 92	2.547			
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	1.59		-4.11	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-15.65		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-19.61		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	69	.5	67.6		65.8		59	.8	68.4	4	69.0
Medium Trucks:	62	.7	61.2		54.9		53	.3	61.8	3	62.0
Heavy Trucks:	62	.4	61.0		51.9		53	.2	61.5	5	61.7
Vehicle Noise:	71	.0	69.2		66.3		61	.4	69.9	9	70.4
Centerline Distan	ce to Noise Co	ontour (in feet))		,						
				70 d	<i>BA</i>	65	dBA	6	0 dBA	55	dBA

99

107

213

230

Ldn:

CNEL:

989

1,066

459

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: s/o Irvine Bl. / Trabuco Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions	(Hard	= 10, So	oft = 15)	-			
Average Daily	Traffic (Adt):	33,400 vehicle	s					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tri	ucks (2	Axles):	15				
Peak F	lour Volume:	3,340 vehicle	es		He	avy Trud	cks (3+	Axles):	15				
Ve	hicle Speed:	60 mph		V	ehicle l	Viy							
Near/Far La	ne Distance:	76 feet				icleType)	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%		9.6%	•		
	rrier Height:	0.0 feet			Ме	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0 leet 0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Di	•	100.0 feet											
Centerline Dist.		100.0 feet		N	Noise Source Elevations (in feet)								
Barrier Distance		0.0 feet				Auto		2.000					
Observer Height		5.0 feet				n Truck		.000					
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	iustment.	nent: 0.0		
Ro	L	ane Equ	uivalent	t Distai	nce (in t	eet)							
	Road Grade:	0.0 feet 0.0%				Auto	s: 92	2.547					
	Left View:	-90.0 degre	es		Mediur	n Truck	s: 92	2.504					
	Right View:	90.0 degre			Heav	y Truck	s: 92	2.547					
FHWA Noise Mod			T										
VehicleType	REMEL	Traffic Flow	Distar		Finite		Fres		Barrier Att		m Atten		
Autos:				-4.11		-1.20		-4.87		000	0.000		
Medium Trucks:				-4.11		-1.20		-4.97		000	0.000		
Heavy Trucks:	87.33	3 -19.16		-4.11		-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (witl	hout Topo and	barrier a	attenu	ation)								
VehicleType	Leq Peak Ho	our Leq Day	y Le	eq Eve	ening	Leq	Night		Ldn	CI	VEL		
Autos:	69	9.9	68.0		66.3		60	.2	68.8	3	69.5		
Medium Trucks:	6	3.2	61.7		55.3		53	.8	62.2	2	62.5		
Heavy Trucks:	62	2.9	61.4		52.4		53	.6	62.0)	62.1		
Vehicle Noise:	7	1.4	69.7		66.8		61	.8	70.4	1	70.9		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	106	228	492	1,060
CNEL:	114	246	530	1,142

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o Irvine Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	DATA				ı	IOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	40,900	vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%	6			Me	dium Tr	ucks (2	Axles):	15		
Peak F	lour Volume:	4,090	vehicles	3		He	avy Tru	cks (3+	- Axles):	15		
Ve	ehicle Speed:	60	mph			Vehicle l	Wix					
Near/Far La	ne Distance:	76	feet				icleType	9	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	-
Ba	rrier Height:	0.0	feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0	1001			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0	feet			Noise So	urco E	lovatio	ns (in fo	201		
Centerline Dist.	to Observer:	100.0	feet		-	NOISE SC	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0	feet			Modiu	Auto n Truck		4.000 4.000			
Observer Height	(Above Pad):	5.0	feet					_		Grade Ad	liustmont	
P	ad Elevation:	0.0	feet			пеач	y Truck	S. (3.006	Grade Auj	justin o nt	. 0.0
Ro	ad Elevation:	0.0	feet			Lane Eq	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0	%				Auto	s: 92	2.547			
	Left View:	-90.0	degree	es		Mediui	n Truck	s: 92	2.504			
	Right View:	90.0	degree	es		Heav	y Truck	s: 92	2.547			
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic	Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	m Atten
Autos:	73.22		2.92		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		-14.32		-4.1	1	-1.20		<i>-4</i> .97	0.0	000	0.000
Heavy Trucks:	87.33		-18.28		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	o and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	ur L	.eq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	70	8.0	(68.9		67.2		61	.1	69.7	7	70.3
Medium Trucks:	64	l.1	(62.5		56.2		54	.6	63.1	1	63.3
Heavy Trucks:	63	3.7	(62.3		53.3		54	.5	62.9	9	63.0
Vehicle Noise:	72	2.3	-	70.5		67.7		62	2.7	71.3	3	71.7
Centerline Distan	ce to Noise C	ontour ((in feet))								
					70 (dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

121

131

261

282

1,214

1,307

563

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o Commercentre

Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS									
Highway Data				9	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	53,200 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	5,320 vehicle	es		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		1	/ehicle l	Miy					
Near/Far La	ne Distance:	88 feet		-		icleTyp	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0 leet 0.0			F	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet		_							
Centerline Dist.		100.0 feet		<i>r</i>	Voise So			•	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	_	1.000	0 1- 4-1		0.0
-	ad Elevation:	0.0 feet			Heav	y Truck	rs: E	3.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	os: 89	9.850			
	Left View:	-90.0 degre	es		Mediui	n Truck	ks: 89	9.805			
	Right View:	90.0 degre			Heav	y Truck	ks: 89	9.850			
FHWA Noise Mod	lal Calculation	10									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:				-3.92	1	-1.20	7700	-4.87		000	0.000
Medium Trucks:	_)	-3.92		-1.20		-4.97		000	0.000
Heavy Trucks:	86.40	-16.76	;	-3.92	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier atteni	uation)						
VehicleType	Leg Peak Ho			Leg Ev		Leg	Night		Ldn	CI	VEL
Autos:	71	1.1	69.2	-	67.4	<u> </u>	61	.4	70.0)	70.6
Medium Trucks:	64	4.5	63.0		56.6		55	.1	63.5	5	63.8
Heavy Trucks:	64	4.5	63.1		54.1		55	.3	63.7	7	63.8
Vehicle Noise:	72	2.7	70.9		68.0		63	.1	71.6	6	72.1
Centerline Distan	ce to Noise C	ontour (in fee	t)								
				70 a	IBA	65	dBA	6	0 dBA	55	dBA

129

138

Ldn: CNEL: 277

298

597

642

1,286

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: s/o SR-241 Ramps

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Hard	l = 10, Sc	oft = 15)			
Average Daily Traffic (Adt):	30,900 vehicle	S			Autos:	15			
Peak Hour Percentage:	10%		Me	dium Trucks (2 Axles):	15			
Peak Hour Volume:	3,090 vehicle	S	He	avy Trucks (3	+ Axles):	15			
Vehicle Speed:	50 mph		Vehicle	N <i>l</i> iv					
Near/Far Lane Distance:	70 feet			icleType	Day	Evening	Night	Daily	
Site Data			VEII	Autos:	•	J	9.6%	97.42%	
			Λ.4.	.Autos edium Trucks			10.3%	1.84%	
Barrier Height:				J aium Trucks. J eavy Trucks:			10.8%	0.74%	
Barrier Type (0-Wall, 1-Berm).			'	leavy Trucks.	00.57	2.1 /0	10.0 /0	0.7470	
Centerline Dist. to Barrier.			Noise So	ource Elevati	ons (in f	eet)			
Centerline Dist. to Observer.				Autos:	2.000				
Barrier Distance to Observer.			Mediu	m Trucks:	4.000				
Observer Height (Above Pad).			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0	
Pad Elevation.									
Road Elevation.			Lane Eq	uivalent Dist		feet)			
Road Grade.	0.0%				3.723				
Left View.	-90.0 degre	es	Mediu	m Trucks: 9	3.680				
Right View.	90.0 degre	es	Heav	y Trucks: 9	3.723				
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten	
Autos: 70.2	2.49	-4	.20	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 81.0	00 -14.75	-4	.19	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 85.3	-18.70	-4	.20	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)						
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL	
Autos:	67.3	65.4	63.6	5	7.6	66.2	2	66.8	
Medium Trucks:	60.9	59.4	53.0	5	1.4	59.9	9	60.1	
Heavy Trucks:	61.3	59.9	50.8	5	2.1	60.4	1	60.6	
Vehicle Noise:	69.0	67.2	64.2	5	9.4	68.0)	68.4	
Centerline Distance to Noise	Contour (in feet)							

70 dBA

73

79

Ldn:

CNEL:

65 dBA

158

169

60 dBA

339

365

55 dBA

731

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Alton Pkwy.

Road Segment: n/o SR-241 Ramps

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS							
Highway Data			Site Cor	ditions (Hard	d = 10, Sc	oft = 15)			
Average Daily Traffic (Adt).	28,000 vehicle	es .			Autos:	15			
Peak Hour Percentage.			Ме	dium Trucks (2 Axles):	15			
Peak Hour Volume:	2,800 vehicle	es	He	avy Trucks (3	+ Axles):	15			
Vehicle Speed:	55 mph		Vehicle	Mix					
Near/Far Lane Distance.	88 feet				Day	Evening	Night	Doily	
Site Data			ven	icleType		Evening 12.9%	9.6%	<i>Daily</i> 97.42%	
				Autos. edium Trucks.					
Barrier Height.							10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm).			'	Heavy Trucks.	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier			Noise So	ource Elevati	ons (in f	eet)			
Centerline Dist. to Observer				Autos:	2.000				
Barrier Distance to Observer	0.0 feet		Mediu	m Trucks:	4.000				
Observer Height (Above Pad)				y Trucks:	8.006	Grade Ad	iustment:	0.0	
Pad Elevation									
Road Elevation.	0.0 feet		Lane Eq	uivalent Dist		feet)			
Road Grade.	0.0%				39.850				
Left View	-90.0 degre	es	Mediu	m Trucks: 8	39.805				
Right View	90.0 degre	es	Heav	y Trucks: 8	39.850				
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten	
Autos: 71.7	78 1.65	-3	.92	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 82.4	10 -15.59	-3	.92	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 86.4	10 -19.55	-3	.92	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)						
VehicleType Leq Peak H	lour Leq Day	y Leq	Evening	Leq Night		Ldn	CI	VEL	
Autos:	68.3	66.4	64.6	5	8.6	67.2	2	67.8	
Medium Trucks:	61.7	60.2	53.8	5	2.3	60.7	7	61.0	
Heavy Trucks:	61.7	60.3	51.3	5	2.5	60.9	9	61.0	
Vehicle Noise:	69.9	68.1	65.2	6	0.3	68.8	3	69.3	
Centerline Distance to Noise	Contour (in feet	t)							

70 dBA

84

90

Ldn:

CNEL:

65 dBA

181

194

60 dBA

389

418

55 dBA

838

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Avenida Carlota

Road Segment: w/o Ridge Route Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS							
Highway Data			Site Cor	ditions (Ha	rd = 10, S	oft = 15)			
Average Daily Traffic (Adt).	10,100 vehicle	es			Autos	: 15			
Peak Hour Percentage.	10%		Ме	dium Trucks	(2 Axles)	: 15			
Peak Hour Volume:	1,010 vehicle	es	He	avy Trucks (3+ Axles)	: 15			
Vehicle Speed:	50 mph		Vehicle	Miv					
Near/Far Lane Distance.	70 feet			icleType	Day	Evening	Night	Daily	
Site Data			Veri	Auto		_	9.6%	_	
			1/1	edium Truck			10.3%	1.84%	
Barrier Height				Heavy Truck			10.3%	0.74%	
Barrier Type (0-Wall, 1-Berm).			,	icavy Truck	3. 00.07	0 2.170	10.070	0.7 4 70	
Centerline Dist. to Barrier			Noise So	ource Eleva	tions (in t	feet)			
Centerline Dist. to Observer				Autos:	2.000				
Barrier Distance to Observer			Mediu	m Trucks:	4.000				
Observer Height (Above Pad).			Heav	y Trucks:	8.006	Grade Ad	ljustment.	0.0	
	Pad Elevation: 0.0 feet					footl			
Road Elevation.			Lane Eq	uivalent Dis		reet)			
Road Grade				Autos:	93.723				
Left View	3 -			m Trucks:	93.680				
Right View	90.0 degre	ees	Heav	y Trucks:	93.723				
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten	
Autos: 70.2	20 -2.37	-4	.20	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 81.0	00 -19.60	-4	.19	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 85.3	-23.56	-4	.20	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)						
VehicleType Leq Peak H	lour Leq Daj	y Leq	Evening	Leq Nigh	nt	Ldn	CI	VEL	
Autos:	62.4	60.5	58.8		52.7	61.3	3	62.0	
Medium Trucks:	56.0	54.5	48.1		46.6	55.0	0	55.3	
Heavy Trucks:	56.4	55.0	46.0		47.2	55.6	6	55.7	
Vehicle Noise:	64.1	62.4	59.3		54.6	63.	1	63.6	
Centerline Distance to Noise	Contour (in feet	t)					,		

70 dBA

35

37

Ldn:

CNEL:

65 dBA

75

80

60 dBA

161

173

55 dBA

347

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Avenida Carlota

Road Segment: w/o Paseo de Valencia

Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS								
Highway Data					Site Con	ditions (H	lard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	17,300 ve	ehicles				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Axles):	15		
Peak H	lour Volume:	1,730 ve	ehicles		He	avy Truck	s (3+ Axles):	15		
	ehicle Speed:	50 m	•	1	Vehicle I	Vix				
Near/Far La	ane Distance:	70 fe	et		Vehi	icleType	Day	Evening	Night	Daily
Site Data						Au	tos: 77.5%	12.9%	9.6%	97.42%
Ва	rrier Height:	0.0 f	eet		Me	edium Trud	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			F	leavy Trud	cks: 86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 f	eet	,	Voise Sc	ource Flev	vations (in fe	pet)		
Centerline Dist.	to Observer:	100.0 f	eet	-	10,00 00	Autos:	2.000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Barrier Distance	to Observer:	0.0 f	eet		Modiur	n Trucks:	4.000			
Observer Height	(Above Pad):	5.0 f	eet				8.006	Grade Ad	iustmont:	
P	ad Elevation:	0.0 f	eet		пеач	y Trucks:	6.006	Grade Au	usimeni.	0.0
Ro	ad Elevation:	0.0 f	eet	I	Lane Eq	uivalent D	istance (in	feet)		
	Road Grade:	0.0%				Autos:	93.723			
	Left View:	-90.0 c	degrees		Mediur	n Trucks:	93.680			
	Right View:		degrees		Heav	y Trucks:	93.723			
FHWA Noise Mod	lel Calculation	ıs								
VehicleType	REMEL	Traffic F	low	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20		-0.03	-4.20)	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-1	17.27	-4.19	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-2	21.22	-4.20)	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo	and ba	arrier atten	uation)					
VehicleType	Leq Peak Hou	ur Le	q Day	Leq E	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	64	1.8	62	2.9	61.1		55.1	63.7	7	64.3
Medium Trucks:	58	3.3	56	5.8	50.5		48.9	57.4	1	57.6
Heavy Trucks:	58	3.8	57	' .3	48.3		49.6	57.9)	58.0
Vehicle Noise:	66	6.5	64	.7	61.7		56.9	65.4	1	65.9

70 dBA

50

53

Ldn:

CNEL:

65 dBA

107

115

60 dBA

231

248

55 dBA

497

534

Centerline Distance to Noise Contour (in feet)

ect Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 2)

Number: 8141 Road Name: Avenida Carlota Road Segment: b/w Paseo de Valencia and El Toro Rd. Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS							
Highway Data			Si	ite Conditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt	: 36,400 vehic	les				Autos:	15		
Peak Hour Percentage	: 10%			Medium Tr	ucks (2	Axles):	15		
Peak Hour Volume	: 3,640 vehic	eles		Heavy Tru	cks (3+	Axles):	15		
Vehicle Speed	: 50 mph		V	ehicle Mix					
Near/Far Lane Distance	70 feet		•	VehicleType	Э	Day	Evening	Night	Daily
Site Data					Autos:	77.5%	_	9.6%	•
Barrier Heigh	:: 0.0 feet			Medium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrie			A.	oioo Source F	'lava4!a	/: f-	41		
Centerline Dist. to Observe	: 100.0 feet		N	oise Source E		•	et)		
Barrier Distance to Observe	0.0 feet			Auto		2.000			
Observer Height (Above Pad): 5.0 feet			Medium Truck		.000	Crada Ad	iuotmont	
Pad Elevation	o: 0.0 feet			Heavy Truck	S: E	3.006	Grade Adj	usimeni.	0.0
Road Elevation	o: 0.0 feet		La	ane Equivalen	t Dista	nce (in f	feet)		
Road Grade	e: 0.0%			Auto	s: 93	3.723			
Left Viev	/: -90.0 deg	rees		Medium Truck	s: 93	3.680			
Right Viev	/: 90.0 deg	rees		Heavy Truck	rs: 93	3.723			
FHWA Noise Model Calculate	ons								
VehicleType REMEL	Traffic Flow	/ Distai	nce	Finite Road	Fres	snel	Barrier Att	en Ber	m Atten
<i>Aut</i> os: 70.	20 3.2	20	-4.20	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 81.	00 -14.0)4	-4.19	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 85.	38 -17.9	9	-4.20	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	attenu	ation)							
VehicleType Leq Peak I	Leq Evening Leq Night Ldn CNI			VEL					
Autos: 68.0 66.1				64.3 58.3 66.9				67.5	

Vehicle Noise:	69.7	8.0	64.9	60.1	68.7	7 69.1
Centerline Distance to	Noise Contour (in feet)					
			70 dBA	65 dBA	60 dBA	55 dBA
	L	dn:	82	176	379	815
	CNI	EL:	88	189	407	876

53.7

51.5

52.2

52.8

60.6

61.1

60.9

61.3

60.1

60.6

Medium Trucks:

Heavy Trucks:

61.6

62.0

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Avenida Carlota

Road Segment: e/o El Toro Rd.

Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					ſ	NOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard :	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	23,500 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	2,350 vehicle	es		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		V	/ehicle l	Mix					
Near/Far La	ane Distance:	70 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	J	9.6%	•
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet						<i>(</i> ; <i>c</i>			
Centerline Dist.		100.0 feet			loise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	_	.000	Crada Ad	iatmant	
_	Pad Elevation:	0.0 feet			Heav	y Truck	(S: 8	.006	Grade Ad	justrnent	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distaı	nce (in f	eet)		
	Road Grade:	0.0%				Auto	s: 93	3.723			
	Left View:	-90.0 degre	es		Mediui	m Truck	s: 93	3.680			
	Right View:	90.0 degre	es		Heav	y Truck	rs: 93	3.723			
FHWA Noise Mod	lel Calculation	IS									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	1.30)	-4.20)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-15.94		-4.19)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-19.89)	-4.20)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barr	ier attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	•	Leq Ev	rening	Leq	Night		Ldn	C	NEL
Autos:		5.1	64.2		62.4		56	.4	65.0)	65.6
Medium Trucks:		9.7	58.2		51.8		50.		58.7		58.9
Heavy Trucks:).1	58.7		49.6		50.	.9	59.2		59.4
Vehicle Noise:	67	7.8	66.1		63.0		58	.2	66.8	3	67.2
Centerline Distan	ce to Noise C	ontour (in fee	t)								
				70 d	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

61

65

131

141

283

304

609

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/o Portola Pkwy.

Number: 8141

Analyst: B. Lawson

SITE S		NOISE MODEL INPUTS												
Highway Data					S	ite Con	ditions ((Hard	= 10, Sc	oft = 15)				
		10 ⁹ 2,000			V		dium Tru avy Truc	•	,					
Near/Far Lan	ne Distance:	70	feet				icleType		Day	Evening	Night	Daily		
Site Data								utos:	77.5%		9.6%	_		
Barrier Type (0-Wa Centerline Dist. to Centerline Dist. to Barrier Distance to Observer Height (A Pa Roa	t. to Barrier: to Observer: to Observer:	0.0 100.0 100.0 0.0 5.0 0.0 0.0 0.0	0.0 feet 0.0 100.0 feet 100.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0 feet 0.0 degrees 90.0 degrees				Medium Trucks: 84.8% 4.9% 10.3% 1.8 Heavy Trucks: 86.5% 2.7% 10.8% 0.7 Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723							
FHWA Noise Mode	el Calculation	15												
VehicleType	REMEL		c Flow	Distand	се	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	70.20)	0.60	-	4.20		-1.20		-4.87	0.0	000	0.000		
Medium Trucks: Heavy Trucks:	81.00 85.38		-16.64 -20.59		4.19 4.20		-1.20 -1.20		-4.97 -5.16		000 000	0.000 0.000		
Unmitigated Noise	Levels (with	hout To	po and b	arrier at	tenu	ation)								
VehicleType	Leq Peak Ho	ur	Leq Day	Le	q Eve	ening	Leq l	Vight		Ldn	CI	VEL		
Autos:	6	5.4	6	3.5		61.7		55	.7	64.3	3	64.9		
Medium Trucks:	_	9.0		7.5		51.1		49	_	58.0	-	58.2		
Heavy Trucks:	5	9.4	5	8.0		48.9		50	.2	58.5	5	58.7		
Vehicle Noise:		7.1		5.4		62.3		57	.5	66.′	1	66.5		
Centerline Distance	e to Noise C	ontour	(in feet)											

70 dBA

55

59

Ldn: CNEL: 65 dBA

118

127

60 dBA

254

273

55 dBA

547

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: n/o Commercentre Dr.

Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Ha	rd = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	33,100 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak H	lour Volume:	3,310 vehicles	3	He	avy Trucks (3+ Axles):	15		
Ve	ehicle Speed:	50 mph		Vehicle I	Miy				
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data					Auto	-	J	9.6%	-
Ra	rrier Height:	0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0		ŀ	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet		Noise Se	vuroo Elovo	tions (in f	204)		
Centerline Dist.	to Observer:	100.0 feet		Noise St	Autos:	2.000	eer)		
Barrier Distance	to Observer:	0.0 feet		Madiu	n Trucks:	4.000			
Observer Height (Above Pad): 5.0 feet					ry Trucks:	8.006	Grade Ad	iustmant	
P	ad Elevation:	0.0 feet		rieav	y Trucks.	0.000	Grade Adj	ustinont.	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)		
	Road Grade:	0.0%			Autos:	93.723			
	Left View:	-90.0 degree	es	Mediui	m Trucks:	93.680			
	Right View:	90.0 degree	es	Heav	ry Trucks:	93.723			
FHWA Noise Mod	lel Calculation	าร							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	70.20	2.79	-4.2	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-14.45	-4.	19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-18.40	-4.2	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Nigh	nt	Ldn	CI	VEL
Autos:	6	7.6	65.7	63.9		57.9	66.5		67.1
Medium Trucks:		1.2	59.7	53.3 51.7			60.2		60.4
Heavy Trucks:	6	1.6	60.2	51.1 52.4 60.7					60.9

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	77	165	355	765

82

64.5

59.7

177

68.3

382

68.7

822

67.5

CNEL:

Vehicle Noise:

69.3

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: n/o Irvine Bl.

Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)					
Average Daily	Traffic (Adt):	37,900 vehicle:	S					Autos:	15					
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15					
Peak H	lour Volume:	3,790 vehicles	S		He	avy Truc	ks (3+	Axles):	15					
Ve	hicle Speed:	50 mph		V	ehicle l	Viy								
Near/Far La	ne Distance:	70 feet				icleType		Day	Evening	Night	Daily			
Site Data							lutos:	77.5%	Ū	9.6%	-			
Ba	rrier Height:	0.0 feet			Ме	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	_	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%			
Centerline Di	st. to Barrier:	100.0 feet		N	oise Sc	urce Ele	evatio	ns (in fe	eet)					
Centerline Dist.	to Observer:	100.0 feet			0.00 00	Autos		.000						
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks		.000						
Observer Height ((Above Pad):	5.0 feet				y Trucks		.006	Grade Ad	iustment	. 0.0			
Pa	ad Elevation:	0.0 feet												
Roa	ad Elevation:	0.0 feet		L	ane Equ	uivalent	Distar	ice (in i	feet)					
	Road Grade:	0.0%				Autos		.723						
	Left View:	-90.0 degree	es		Mediur	n Trucks	s: 93	.680						
	Right View:	90.0 degree	es		Heav	y Trucks	s: 93	.723						
FHWA Noise Mod	el Calculation	s												
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten			
Autos:	70.20	3.38		-4.20		-1.20		-4.87	0.0	000	0.000			
Medium Trucks:	81.00	-13.86		-4.19		-1.20		-4.97	0.0	000	0.000			
Heavy Trucks:	85.38	-17.82		-4.20		-1.20		-5.16	0.0	000	0.000			
Unmitigated Noise	e Levels (with	out Topo and	barrie	er attenu	ation)									
VehicleType	Leq Peak Hou	ır Leq Day	′	Leq Eve	ening	Leq I	Night		Ldn	C	NEL			
Autos:	68	3.2	66.3		64.5		58.	5	67.1	1	67.7			
Medium Trucks:	61	.7	60.2		53.9		52.	3	60.8	3	61.0			
Heavy Trucks:	62	2.2	60.7		51.7		53.	0	61.3	3	61.4			
Vehicle Noise:	69	0.9	68.1		65.1		60.	3	68.8	3	69.3			

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	84	180	389	838						

90

194

900

418

CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/o Irvine Bl.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISI	MODE	L INPUT	s	
Highway Data			Site Con	ditions (Hard	I=10, So	oft = 15)		
Average Daily Traffic (Adt):	48,400 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks (2 Axles):	15		
Peak Hour Volume:	4,840 vehicles	S	He	avy Trucks (3	+ Axles):	15		
Vehicle Speed:	60 mph		Vehicle	Mix				
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data				Autos		J	9.6%	•
Barrier Height:	0.0 feet		M	edium Trucks:	84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			/	Heavy Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:								
Centerline Dist. to Observer:			Noise So	ource Elevati	•	eet)		
Barrier Distance to Observer:				Autos:	2.000			
Observer Height (Above Pad):				m Trucks:	4.000	0 1 4 1		0.0
Pad Elevation:			Heav	y Trucks:	8.006	Grade Adj	ustment:	0.0
Road Elevation:			Lane Eq	uivalent Dist	ance (in	feet)		
Road Grade:	0.0%			Autos: 9	92.547			
Left View:	-90.0 degree	es	Mediu	m Trucks:	92.504			
Right View:	•		Heav	y Trucks:	92.547			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Atte	en Ber	m Atten
Autos: 73.2	2 3.65	-4	.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	8 -13.59	-4	.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.3	3 -17.55	-4	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	71.6	69.7	67.9	6	1.8	70.5	5	71.1
Medium Trucks:	64.8	63.3	56.9	5	5.4	63.8	3	64.1
Heavy Trucks:	64.5	63.0	54.0	5	5.3	63.6	5	63.7
Vehicle Noise:	73.0	71.3	68.4	6	3.4	72.0)	72.5
Centerline Distance to Noise	Contour (in feet,)						

70 dBA

136

146

Ldn:

CNEL:

65 dBA

293

315

60 dBA

630

679

55 dBA 1,358

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: b/w Toledo Wy. and Jeronimo Rd.

Number: 8141

Analyst: B. Lawson

SITE S Highway Data	SPECIFIC IN	IPUT DATA		S	NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)							
	Traffia (Adt), I	EC 400 vehicle			ite oon	iditions	(mara	Autos:	15			
Average Daily T	. ,		:5		1.40	dium Tr	uoko (2 Axles):				
Peak Hour I	•	10%	_				,	,				
	our Volume:	5,640 vehicle	!S		не	avy iru	CKS (3	+ Axles):	15			
	nicle Speed:	60 mph		V	ehicle	Mix						
Near/Far Lan	ne Distance:	76 feet			Veh	icleType	9	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%	
Barr	rier Height:	0.0 feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wa	•	0.0			ı	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dis	•	100.0 feet		N	nisa Si	ource F	lovatio	ons (in f	20 <i>t</i>)			
Centerline Dist. t	o Observer:	100.0 feet			0/30 0	Auto		2.000				
Barrier Distance t	o Observer:	0.0 feet			Modiu	Auto m Truck		4.000				
Observer Height (A	Above Pad):	5.0 feet					_	8.006	Grade Ad	iustmant	. 0 0	
Pa	d Elevation:	0.0 feet			пеач	y Truck	S.	0.000	Grade Auj	usimem	. 0.0	
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	ance (in	feet)			
F	Road Grade:	0.0%				Auto	s: 9	2.547				
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 9	2.504				
	Right View:	90.0 degre			Heav	y Truck	rs: 9	2.547				
FHWA Noise Mode	el Calculation	S										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fre	esnel	Barrier Att	en Bei	m Atten	
Autos:	73.22	4.31		-4.11		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-12.93		-4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-16.88		-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (with	out Topo and	barrie	er attenu	ation)							
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Eve	ening	Leq	Night		Ldn	C	NEL	
Autos:	72	.2	70.3		68.6		6	2.5	71.1		71.7	
Medium Trucks:	65	.4	63.9		57.6		5	6.0	64.5	5	64.7	

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	150	324	698	1,504						
CNEL:	162	349	752	1,619						

54.7

69.0

64.3

72.7

55.9

64.1

64.4

73.1

63.7

71.9

65.1

73.7

Heavy Trucks:

Vehicle Noise:

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: n/o Muirlands Bl.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	62,500 vehicles 10% 6,250 vehicles			dium Trucks (2 avy Trucks (3	,			
Vehicle Speed: Near/Far Lane Distance:	60 mph 76 feet		Vehicle Veh	Mix icleType	Day	Evening	Night	Daily
Site Data				Autos:	77.5%	12.9%	9.6%	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 feet 0.0 100.0 feet		I	edium Trucks: Heavy Trucks:	84.8% 86.5%	2.7%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Barrier Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet		Mediu	m Trucks:	ons (in fe 2.000 4.000 8.006	eet) Grade Adj	iustment:	0.0
Road Elevation: Road Grade: Left View: Right View:	0.0 feet 0.0% -90.0 degree 90.0 degree		Mediu	m Trucks: 9	nce (in 1 2.547 2.504 2.547	feet)		
FHWA Noise Model Calculatio	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Att	en Ber	m Atten
Autos: 73.2 Medium Trucks: 83.6 Heavy Trucks: 87.3	8 -12.48	-4.´ -4.´ -4.´	11	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0)00)00)00	0.000 0.000 0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	nuation)					
VehicleType Leq Peak He	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL
Medium Trucks: 6	65.9	70.8 64.4 64.2	69.0 58.0 55.1	56	2.9 6.5 6.4	71.6 64.9 64.7)	72.2 65.2 64.8
	' 4.1	72.4	69.5		1.5	73.1		73.6

70 dBA

161

173

Ldn:

CNEL:

65 dBA

347

374

60 dBA

747

805

55 dBA

1,610

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/o Muirlands Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				NC	DISE N	IODE	L INPUT	S	
Highway Data				;	Site Con	ditions (l	Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	62,000 vehicle	s				A	lutos:	15		
	Percentage:	10%			Me	dium Truc	ks (2 A	xles):	15		
	lour Volume:	6,200 vehicle	s		He	avy Truck	s (3+ A	xles):	15		
Ve	hicle Speed:	65 mph			Vehicle i	1//:	-				
Near/Far La	ne Distance:	175 feet						Day	Fuening	Niaht	Doily
Cita Data					veri	icleType		Day 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
Site Data					A 4						
	rrier Height:	0.0 feet				edium Tru		34.8%		10.3%	1.84%
Barrier Type (0-W		0.0			ľ	leavy Tru	CKS: 8	36.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet			Noise So	ource Ele	vations	(in fe	eet)		
Centerline Dist.	to Observer:	100.0 feet				Autos:	2.0	00			
Barrier Distance		0.0 feet			Mediu	n Trucks:	4.0	00			
Observer Height		5.0 feet				y Trucks:		06	Grade Adj	iustment.	0.0
P	ad Elevation:	0.0 feet									
	ad Elevation:	0.0 feet			Lane Eq	uivalent l		•	feet)		
	Road Grade:	0.0%				Autos:					
	Left View:	-90.0 degre	es			n Trucks:					
	Right View:	90.0 degre	es		Heav	y Trucks:	48.5	606			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresn	e/	Barrier Atte	en Ber	m Atten
Autos:	74.55	4.38		0.09	9	-1.20		4.87	0.0	000	0.000
Medium Trucks:	84.86	-12.86		0.1	1	-1.20	-	4.97	0.0	000	0.000
Heavy Trucks:	88.18	-16.82		0.09	9	-1.20		5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq E	vening	Leq N	light		Ldn	CI	VEL
Autos:	77	7.8	75.9		74.2		68.1		76.7	7	77.3
Medium Trucks:	70).9	69.4		63.0		61.5		70.0)	70.2
Heavy Trucks:	70).3	68.8		59.8		61.0		69.4	1	69.5
Vehicle Noise:	79).2	77.4		74.6		69.6		78.2	2	78.7
Centerline Distan	ce to Noise C	ontour (in feet)								
				70 c	dBA	65 di	BA	6	0 dBA	55	dBA

Ldn:

CNEL:

350

378

755

814

1,626

1,753

3,503

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy. Number: 8141 Road Segment: s/o Rockfield Bl. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				1	NOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	79,300 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	7,930 vehicle	es		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		1	/ehicle l	Mix					
Near/Far La	ne Distance:	76 feet				icleType	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		_		· · · · · · · · · · · · · · · · · · ·			- 41		
Centerline Dist.		100.0 feet		<u> </u>	Voise So			•	et)		
Barrier Distance	to Observer:	0.0 feet			N 4 = -1:	Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	_	1.000	Grade Ad	iuotmont	0.0
P	ad Elevation:	0.0 feet			неач	y Truck	(S. C	3.006	Grade Auj	justinent.	0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediui	m Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547			
FHWA Noise Mod	lel Calculation	18									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	5.79		-4.11	l	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-11.45		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-15.40		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	vening	Leq	Night		Ldn	CI	VEL
Autos:	73	3.7	71.8		70.0		64	.0	72.6	6	73.2
Medium Trucks:	66	6.9	65.4		59.1		57	.5	66.0)	66.2
Heavy Trucks:	66	6.6	65.2		56.2		57	.4	65.8	3	65.9
Vehicle Noise:	75	5.2	73.4		70.5		65	.6	74.1	1	74.6
Centerline Distan	ce to Noise C	ontour (in fee	t)		-1			1			
				70 a	IBA -	65	dBA	6	0 dBA	55	dBA

189

203

Ldn: CNEL: 407

438

876

943

1,887

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: n/o I-5 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC IN	IPUT DATA				r	NOISE	MODE	L INPUT	S	
Highway Data					Site Cor	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 8	83,100 vehicles	3					Autos:	15		
	Percentage:	10%			Me	dium Tr	ucks (2	2 Axles):	15		
Peak H	our Volume:	8,310 vehicles	3		He	avy Tru	cks (3+	- Axles):	15		
Vel	nicle Speed:	60 mph			Vehicle	N/iv					
Near/Far Lar	ne Distance:	76 feet					_	Dov	Evening	Night	Doily
Site Data					ven	icleType		<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
					Λ.4	edium T	Autos:	84.8%		10.3%	
	rier Height:	0.0 feet									
Barrier Type (0-Wa	,	0.0			,	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis		100.0 feet			Noise S	ource E	levatio	ns (in f	eet)		
Centerline Dist. t		100.0 feet				Auto	s: :	2.000			
Barrier Distance t		0.0 feet			Mediu	m Truck	is:	4.000			
Observer Height (/	,	5.0 feet			Heav	y Truck	s:	8.006	Grade Ad	justment	: 0.0
	d Elevation:	0.0 feet				-					
Roa	d Elevation:	0.0 feet			Lane Eq			•	feet)		
F	Road Grade:	0.0%				Auto		2.547			
	Left View:	-90.0 degree				m Truck		2.504			
	Right View:	90.0 degree	es		Heav	y Truck	(s: 9	2.547			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fre	snel	Barrier Att	en Bei	rm Atten
Autos:	73.22	6.00		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-11.24		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-15.20		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atter	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq E	vening	Leq	Night		Ldn		NEL
Autos:	73	.9	72.0		70.2		64	1.2	72.8	3	73.4
Medium Trucks:	67	.1	65.6		59.3		57	7.7	66.2	2	66.4
Heavy Trucks:	66	.8	65.4		56.4		57	7.6	66.0)	66.1
Vehicle Noise:	75	.4	73.6		70.7		65	5.8	74.3	3	74.8
Centerline Distance	e to Noise Co	ontour (in feet,)								
					dBA		dBA	6	60 dBA		dBA
			Ldn:	1	95	4	19		904	1,	947

CNEL:

210

452

973

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: b/w I-5 SB Ramps and Research Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data				Site Con	ditions (Har	d = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	35,800 vehicles				Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak F	lour Volume:	3,580 vehicles		He	avy Trucks (3	3+ Axles):	15		
Ve	ehicle Speed:	60 mph		Vehicle	Mix				
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data					Autos	•	-	9.6%	-
	rrier Height:	0.0 feet		M	edium Trucks			10.3%	1.84%
Barrier Type (0-W		0.0 feet 0.0		I	Heavy Trucks	: 86.5%		10.8%	0.74%
Centerline Di	•	100.0 feet							
Centerline Dist.		100.0 feet		Noise So	ource Elevat		eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height		5.0 feet			m Trucks:	4.000			
	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)		
	Road Grade:	0.0%		<u> </u>	Autos:	92.547			
	Left View:	-90.0 degree	S	Mediu	m Trucks:	92.504			
	Right View:	90.0 degree		Heav	y Trucks:	92.547			
FHWA Noise Mod									•
VehicleType	REMEL	Traffic Flow	Distance			resnel	Barrier Att		m Atten
Autos:			-4.		-1.20	-4.87		000	0.000
Medium Trucks:			-4.		-1.20	-4.97		000	0.000
Heavy Trucks:	87.33	-18.86	-4.	11	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and b	oarrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos:	70	0.2 6	8.3	66.6	(60.5	69.	1	69.8
Medium Trucks:	6	3.5 6	2.0	55.6	į.	54.1	62.	5	62.8
Heavy Trucks:	6	3.2 6	51.7	52.7	Ų	53.9	62.3	3	62.4

Sunday, May 20, 2012	
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Vehicle Noise:

71.7

Centerline Distance to Noise Contour (in feet)

70.0

Ldn:

CNEL:

67.1

70 dBA

111

120

62.1

65 dBA

239

258

70.7

60 dBA

515

555

71.2

55 dBA

1,111

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: b/w Research Dr. and ICD

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 17,400 vehicle	es			Autos:	15		
Peak Hour Percentage			Me	dium Trucks (2	2 Axles):	15		
Peak Hour Volume	: 1,740 vehicle	es	He	avy Trucks (3-	+ Axles):	15		
Vehicle Speed	: 60 mph		Vehicle	Miv				
Near/Far Lane Distance	76 feet			icleType	Day	Evening	Night	Daily
Site Data			VOII	Autos:	77.5%	J	9.6%	97.42%
			M	edium Trucks:	84.8%		10.3%	1.84%
Barrier Height				Heavy Trucks:	86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm)				reavy Tracks.	00.07	2.1 /0	10.070	0.7 4 70
Centerline Dist. to Barrier			Noise So	ource Elevatio	ons (in f	eet)		
Centerline Dist. to Observer				Autos:	2.000			
Barrier Distance to Observer			Mediu	m Trucks:	4.000			
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0
Pad Elevation						•		
Road Elevation			Lane Eq	uivalent Dista		teet)		
Road Grade					2.547			
Left View	: -90.0 degre	es			2.504			
Right View	: 90.0 degre	es	Heav	y Trucks: 9	2.547			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fre	snel	Barrier Att	en Ber	m Atten
Autos: 73.2	22 -0.79	-4	.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	68 -18.03	-4	.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.5	33 -21.99	-4	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout Topo and	l barrier atte	enuation)					
VehicleType Leq Peak F	lour Leq Da	y Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	67.1	65.2	63.4	57	7.4	66.0)	66.6
Medium Trucks:	60.3	58.8	52.5	50	0.9	59.4	1	59.6
Heavy Trucks:	60.0	58.6	49.6	50	0.8	59.2	2	59.3
Vehicle Noise:	68.6	66.8	63.9	59	9.0	67.5	5	68.0
Centerline Distance to Noise	Contour (in fee	t)						

70 dBA

69

74

Ldn:

CNEL:

65 dBA

148

159

60 dBA

319

343

55 dBA

687

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: s/ICD

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA				ſ	NOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	16,300 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	1,630 vehicle	es		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		1	/ehicle l	Wiy					
Near/Far La	ane Distance:	76 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	J	9.6%	•
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • • • • • • • • • • • • • • • • • • •	ist. to Barrier:	100.0 feet						<i>(</i> * *			
Centerline Dist.		100.0 feet			Voise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet			N 4 1'	Auto		.000			
Observer Height	(Above Pad):	5.0 feet				n Truck	_	.000	Crada Ad	li rotmont	
_	ad Elevation:	0.0 feet			неач	y Truck	(S: 8	.006	Grade Ad	justrient	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distaı	nce (in f	feet)		
	Road Grade:	0.0%				Auto	s: 92	2.547			
	Left View:	-90.0 degre	es		Mediui	n Truck	s: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	(s: 92	2.547			
FHWA Noise Mod	lel Calculation	IS									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	-1.08	3	-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-18.32	2	-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-22.27	•	-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	l barr	ier attent	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	rening	Leq	Night		Ldn	Ci	NEL
Autos:		8.8	64.9		63.2		57	.1	65.7	7	66.3
Medium Trucks:).1	58.5		52.2		50		59.1		59.3
Heavy Trucks:		9.7	58.3		49.3		50	.5	58.9	9	59.0
Vehicle Noise:	68	3.3	66.5		63.7		58	.7	67.3	3	67.7
Centerline Distan	ce to Noise C	ontour (in fee	t)		ı						
				70 d	IBA .	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

66

71

142

153

305

329

657

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: b/w Lake Forest Dr. and Ridge Route Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NO	ISE MODE	L INPUTS	S	
Highway Data				Site Cor	nditions (H	ard = 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	3,400 vehicles 10% 340 vehicles				Autos: (s (2 Axles): (3+ Axles):	15 15 15		
Near/Far La	ehicle Speed: ane Distance:	60 mph 76 feet		Vehicle Veh	nicleType	Day	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
Barrier Type (0-V	nrrier Height: Vall, 1-Berm): ist. to Barrier:	0.0 feet 0.0 100.0 feet			Aut ledium Truc Heavy Truc	eks: 84.8% eks: 86.5%	4.9% 2.7%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height F	to Observer: to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 feet		Mediu Hea	Autos: m Trucks: vy Trucks:	2.000 4.000 8.006 istance (in a	Grade Adj	iustment:	0.0
	Left View: Right View:	-90.0 degree			m Trucks: vy Trucks:	92.504 92.547			
FHWA Noise Mod			Distance	Finite	Dand	F	Damian Au	D	A ((
VehicleType Autos: Medium Trucks: Heavy Trucks:	83.68	-7.89 -25.12 -29.08	-4	.11 .11 .11	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0 0.0 0.0 0.0	000	0.000 0.000 0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)					
VehicleType Autos: Medium Trucks:		0.0	Leq 58.1 51.7	Evening 56.4 45.4		9ht 50.3 43.8	<i>Ldn</i> 58.9 52.3)	VEL 59.5 52.5
Heavy Trucks: Vehicle Noise:	52	2.9	51.7 51.5 59.7	42.5 56.9		43.7 51.9	52.1 60.5		52.2 60.9

70 dBA

23

25

Ldn: CNEL: 65 dBA

50

54

60 dBA

107

116

55 dBA

231

249

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bake Pkwy.

Road Segment: b/w Ridge Route Dr. and Laguna Canyon

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPL	JT DATA				1	NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 10,8	800 vehicles	3					Autos:	15		
Peak Hour Percentage	:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak Hour Volume	: 1,0	080 vehicles	3		He	avy Tru	icks (3+	Axles):	15		
Vehicle Speed	:	60 mph		,	Vehicle l	Miv					
Near/Far Lane Distance	:	76 feet				icleType	e	Day	Evening	Night	Daily
Site Data					V 011		Autos:	77.5%	•	•	97.42%
		0.0 foot			Me	edium T		84.8%		10.3%	1.84%
Barrier Height		0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm, Centerline Dist. to Barrie		0.0 00.0 feet									011 170
Centerline Dist. to Observe		00.0 feet		I	Noise So	ource E	levatio	ns (in fe	eet)		
Barrier Distance to Observe		0.0 feet				Auto	os: 2	2.000			
Observer Height (Above Pad	-	5.0 feet			Mediui	m Truck	ks: 4	1.000			
Pad Elevation		0.0 feet			Heav	y Truck	ks: 8	3.006	Grade Adj	iustment:	0.0
Road Elevation		0.0 feet			Lane Eq	uivalen	nt Dista	nce (in t	feet)		
Road Grade	-	0.0 feet 0.0%		-	zano zy	Auto		2.547	001)		
Left View		90.0 degree			Mediu	m Truck		2.504			
Right View		90.0 degree				ry Truck		2.547			
Night view		90.0 degree	;5		ricav	y ITUON	10. 02	2.047			
FHWA Noise Model Calculati	ons										
VehicleType REMEL	Tr	raffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 73.	22	-2.87		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 83.	86	-20.10		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87.	33	-24.06		-4.11	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout	t Topo and I	barri	er atten	uation)						
VehicleType Leq Peak I		Leq Day		Leg E		Leq	Night		Ldn	CI	VEL
Autos:	65.0	(3.1		61.4	•	55	.3	63.9)	64.5
Medium Trucks:	58.3	į	56.8		50.4		48	.9	57.3	3	57.5
Heavy Trucks:	58.0	Ę	56.5		47.5		48	.7	57.1	I	57.2
Vehicle Noise:	66.5	(64.8		61.9		56	.9	65.5	5	66.0
Centerline Distance to Noise	Conte	our (in feet))								
		-		70 c	dBA	65	dBA	6	i0 dBA	55	dBA

Ldn:

CNEL:

50

54

108

116

232

250

500

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o Culver Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				ľ	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 2	27,200 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	Hour Volume:	2,720 vehicle	S		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		V	/ehicle l	Miy					
Near/Far La	ane Distance:	76 feet		_		icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
	nrrier Height:	0.0 feet			Me	edium 7		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0 feet				leavy 7		86.5%		10.8%	0.74%
	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		۸	loise So			ns (in fe	et)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	-	1.000	0 1- 4-1		0.0
ŭ	Pad Elevation:	0.0 feet			Heav	y Truck	rs: E	3.006	Grade Ad	iustment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	s: 92	2.547			
	Left View:	-90.0 degre	es		Mediu	m Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547			
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	1.15		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.09		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.05		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:			67.2		65.4		59		68.0		68.6
Medium Trucks:			60.8		54.4		52		61.3		61.6
Heavy Trucks:		.0	60.5		51.5		52	.8	61.1		61.2
Vehicle Noise:	70	.5	68.8		65.9		60	.9	69.5	5	70.0
Centerline Distan	ce to Noise Co	ontour (in feet)		,			1		1	
				70 d	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

92

100

199

215

429

462

925

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Culver Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT I	DATA				N	OISE	MODE	L INPUT	S	
Highway Data					S	ite Con	ditions ((Hard	= 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	109					dium Tru avy Truc	•	,			
	ehicle Speed: nne Distance:		mph feet		V	ehicle l Vehi	Vlix icleType		Day	Evening	Night	Daily
Site Data							Α	utos:	77.5%	12.9%	9.6%	97.42%
Barrier Type (0-W		0.0					edium Tr Heavy Tr		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline Di Centerline Dist.	st. to Barrier:	100.0) feet		N	oise Sc	ource Ele	evatio	ns (in fe	eet)		
Barrier Distance Observer Height	to Observer:	0.0 5.0	feet feet feet feet				Autos n Trucks y Trucks	s: 4	2.000 4.000 3.006	Grade Ad	justment	: 0.0
	ad Elevation:) feet		L	ane Eq	uivalent	Dista	nce (in i	feet)		
	Road Grade: Left View: Right View:)% degrees degrees				Autos m Trucks ry Trucks	s: 96	6.607 6.566 6.608			
FHWA Noise Mod	lel Calculatio	ns										
VehicleType	REMEL		Flow	Distan	се	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3	2.23		-4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks: Heavy Trucks:			-15.01 -18.97		-4.39 -4.39		-1.20 -1.20		-4.97 -5.16		000	0.000 0.000
Unmitigated Nois	e Levels (wit	hout To	po and b	arrier a	ttenu	ation)						
VehicleType	Leq Peak Ho	our I	Leq Day	Le	eq Eve	ening	Leq I	Vight		Ldn	C	NEL
Autos:	6	8.4	6	6.5		64.8		58	.7	67.3	3	67.9
Medium Trucks:	_	1.8	_	0.3		53.9		52		60.8	_	61.1
Heavy Trucks:	6	1.8	6	0.4		51.4		52	.6	61.0)	61.1
Vehicle Noise:		0.0		8.2		65.3		60	.4	69.0)	69.4
Centerline Distan	ce to Noise C	ontour	(in feet)									

70 dBA

85

92

Ldn:

CNEL:

65 dBA

184

197

60 dBA

395

425

55 dBA

852

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o W. Yale Lp.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	ГА			7	NOISE	MODE	L INPUT	S	
Highway Data				3	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	29,200 veh	nicles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,920 veh	nicles		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mp	h	_	Vehicle I	Miy					
Near/Far La	ne Distance:	52 fee	ŧt	_		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 fe	ot		Ме	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0	Ci		F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 fe	et								
Centerline Dist.		100.0 fe			Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 fe				Auto		2.000			
Observer Height	(Above Pad):	5.0 fe	et			n Truck	_	.000	Crada Ad	iatmanti	
_	ad Elevation:	0.0 fe	et		Heav	y Truck	is: E	3.006	Grade Adj	justinent.	0.0
Ro	ad Elevation:	0.0 fe	et	L	Lane Eq	uivalen	t Distai	nce (in f	eet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 de	egrees		Mediui	n Truck	rs: 96	6.566			
	Right View:	90.0 de	egrees		Heav	y Truck	rs: 96	8.608			
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flo	ow Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3 1	1.83	-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40) -15	5.41	-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40) -19	9.36	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo a	and barr	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq	Day	Leq Ev	/ening	Leq	Night		Ldn	CI	VEL
Autos:	68	8.0	66.1		64.4		58	.3	66.9	9	67.5
Medium Trucks:	6	1.4	59.9		53.5		52		60.5	5	60.7
Heavy Trucks:		1.4	60.0		51.0		52	.2	60.6		60.7
Vehicle Noise:	69	9.6	67.8		64.9		60	.0	68.6	6	69.0
Centerline Distan	ce to Noise C	ontour (in	feet)		ı						
				70 a	iBA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

80

86

173

186

372

400

802

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Lake Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISI	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	l = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	26,100 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Ме	dium Trucks (2 Axles):	15		
Peak Hour Volume:	2,610 vehicle	S	He	avy Trucks (3	+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Miss				
Near/Far Lane Distance:	52 feet				Dov	Funning	Niaht	Doily
Cita Data			veni	icleType	Day	Evening	Night	Daily
Site Data			A 4.	Autos:			9.6%	97.42%
Barrier Height:				edium Trucks.			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			F	leavy Trucks.	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:			Noise So	ource Elevati	ons (in fe	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0
Pad Elevation:								
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist		feet)		
Road Grade:	0.0%				96.607			
Left View:	-90.0 degre	es	Mediui	m Trucks:	96.566			
Right View:	90.0 degre	es	Heav	ry Trucks: 9	96.608			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite		esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 1.34	-4.	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -15.89	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -19.85	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	67.5	65.6	63.9	5	7.8	66.4	4	67.0
Medium Trucks:	60.9	59.4	53.0	5	1.5	60.0)	60.2
Heavy Trucks:	31.0	59.5	50.5	5	1.7	60.1	1	60.2
Vehicle Noise:	69.1	67.3	64.4	5	9.5	68.	1	68.5
Centerline Distance to Noise	Contour (in feet)	,		1			

70 dBA

74

80

Ldn:

CNEL:

65 dBA

160

172

60 dBA

345

371

55 dBA

744

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: b/w Creek Rd. and Lyon

Number: 8141

Analyst: B. Lawson

SITE S	PECIFIC II	NPUT I	DATA				NC	ISE MODE	L INPUT	S	
Highway Data					S	ite Con	ditions (F	lard = 10, S	oft = 15)		
Average Daily T	raffic (Adt):	24,900	vehicles	3				Autos	15		
Peak Hour P	Percentage:	109	%			Med	dium Truc	ks (2 Axles).	15		
Peak Ho	ur Volume:	2,490	vehicles	3		Hea	avy Truck	s (3+ Axles).	15		
	icle Speed:		mph		V	ehicle N	/lix				
Near/Far Lane	e Distance:	52	feet			Vehi	cleType	Day	Evening	Night	Daily
Site Data							Au	tos: 77.5%	6 12.9%	9.6%	97.42%
Barr	ier Height:	0.0	feet			Me	edium Tru	cks: 84.8%	6 4.9%	10.3%	1.84%
Barrier Type (0-Wa	•	0.0				H	łeavy Tru	cks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Dist.	. to Barrier:	100.0	feet		N	nisa Sn	urce Fle	vations (in f	ioot)		
Centerline Dist. to	Observer:	100.0) feet		/*	0/30 00	Autos:	2.000	ccij		
Barrier Distance to	Observer:	0.0) feet			Modium	n Trucks:	4.000			
Observer Height (A	bove Pad):	5.0) feet					8.006	Grade Ad	liustmant	. 0 0
Pac	d Elevation:	0.0) feet			neav _.	y Trucks:	0.000	Grade Ad	justin e nt.	. 0.0
Road	d Elevation:	0.0) feet		La	ane Equ	uivalent E	Distance (in	feet)		
Re	oad Grade:	0.0)%				Autos:	96.607			
	Left View:	-90.0	degree	es		Mediun	n Trucks:	96.566			
ı	Right View:		degree			Heav	y Trucks:	96.608			
FHWA Noise Model	Calculation	15									
VehicleType	REMEL	Traffic	Flow	Distanc	е	Finite	Road	Fresnel	Barrier Att	ten Ber	m Atten
Autos:	71.78	}	1.14	-4	4.39		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40)	-16.10	-4	4.39		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40)	-20.05	-2	4.39		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out To	po and l	barrier at	tenu	ation)					
VehicleType L	.eq Peak Ho	ur I	Leq Day	Led	γ Ενέ	ening	Leq N	ight	Ldn	CI	NEL
Autos:	67	7.3	(65.4		63.7		57.6	66.2	2	66.8
Medium Trucks:	60	0.7	į	59.2		52.8		51.3	59.8	8	60.0
Heavy Trucks:	60	0.7	į	59.3		50.3		51.5	59.9	9	60.0
Vehicle Noise:	68	3.9	(67.1		64.2		59.3	67.9	9	68.3

70 dBA

72

78

Ldn:

CNEL:

65 dBA

155

167

60 dBA

335

360

55 dBA

721

775

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o E. Yale Lp.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA				ı	NOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	24,900	vehicles	3					Autos:	15		
Peak Hour	Percentage:	10	%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,490	vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55	mph			Vehicle i	Mix					
Near/Far La	ne Distance:	52	feet				icleType	9	Day	Evening	Night	Daily
Site Data								Autos:	77.5%	_	9.6%	-
	rrier Height:	0.0	0 feet			М	edium T	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0				ŀ	leavy T	rucks:	86.5%		10.8%	0.74%
	ist. to Barrier:		o O feet									
Centerline Dist.			0 feet			Noise So			•	eet)		
Barrier Distance			0 feet				Auto		2.000			
Observer Height			0 feet				m Truck		1.000	0 , 4 ,		0.0
J	ad Elevation:	_	0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment.	: 0.0
	ad Elevation:		0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:		0%				Auto	s: 96	6.607	-		
	Left View:		0 degree	es		Mediu	m Truck	rs: 96	6.566			
	Right View:		0 degree			Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod												_
VehicleType	REMEL		c Flow	Di	stance	Finite		Fres		Barrier Att		m Atten
Autos:			1.14		-4.3		-1.20		-4.87		000	0.000
Medium Trucks:			-16.10		-4.3	-	-1.20		-4.97		000	0.000
Heavy Trucks:	86.40)	-20.05		-4.3	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout To	po and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	our	Leq Day	,	Leq E	vening	Leq	Night		Ldn	CI	NEL
Autos:	6	7.3		65.4		63.7		57	.6	66.2	2	66.8
Medium Trucks:	6	0.7	;	59.2		52.8		51	.3	59.8	3	60.0
Heavy Trucks:	6	0.7	ţ	59.3		50.3		51	.5	59.9	9	60.0
Vehicle Noise:	6	8.9		67.1		64.2		59	.3	67.9	9	68.3
Centerline Distan	ce to Noise C	ontour	(in feet)								
			. ,		70 (dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

72

78

155

167

335

360

721

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o Jeffrey Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA	1		NOISI	MODE	L INPUT	S	
Highway Data			Site Cor	nditions (Hard	I = 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 27,700 vehic	les			Autos:	15		
Peak Hour Percentage			Me	edium Trucks (2 Axles):	15		
Peak Hour Volume	: 2,770 vehic	les	He	eavy Trucks (3	+ Axles):	15		
Vehicle Speed	: 55 mph		Vehicle	Miss				
Near/Far Lane Distance	•				Dov	Lunning	Niaht	Doilu
Site Date			ver	nicleType	Day	Evening	Night	Daily
Site Data				Autos.			9.6%	
Barrier Height				ledium Trucks.			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)				Heavy Trucks.	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier			Noise S	ource Elevati	ons (in f	eet)		
Centerline Dist. to Observer				Autos:	2.000			
Barrier Distance to Observer	: 0.0 feet		Mediu	ım Trucks:	4.000			
Observer Height (Above Pad)	: 5.0 feet			vy Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation	: 0.0 feet							
Road Elevation	: 0.0 feet		Lane Eq	uivalent Dist		feet)		
Road Grade	: 0.0%				96.607			
Left View	: -90.0 degi	rees	Mediu		96.566			
Right View	: 90.0 degi	rees	Hea	vy Trucks: 9	96.608			
FHWA Noise Model Calculati	ons							
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 71.	78 1.6		4.39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.	40 -15.6	54 -	4.39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.	40 -19.5	i9 -	4.39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w.	ithout Topo an	d barrier at	tenuation)					
VehicleType Leq Peak F	Hour Leq D	ay Led	q Evening	Leq Night		Ldn	CI	VEL
Autos:	67.8	65.9	64.1	5	8.1	66.7	7	67.3
Medium Trucks:	61.2	59.7	53.3	5	1.8	60.2	2	60.5
Heavy Trucks:	61.2	59.8	50.8	5	2.0	60.4	1	60.5
Vehicle Noise:	69.4	67.6	64.7	5	9.8	68.3	3	68.8
Centerline Distance to Noise	Contour (in fe	et)		T.				

70 dBA

77

83

Ldn:

CNEL:

65 dBA

167

179

60 dBA

359

386

55 dBA

774

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Jeffrey Rd.

Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC IN	PUT DATA				7	NOISE	MODE	L INPUT	S	
Highway Data					Site Cor	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 1	8,000 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	2 Axles):	15		
Peak He	our Volume:	1,800 vehicles	S		He	avy Tru	cks (3+	- Axles):	15		
Vel	hicle Speed:	55 mph			Vehicle	Miy					
Near/Far Lar	ne Distance:	52 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
	rior Hoiabti	0.0 feet			M	edium T		84.8%		10.3%	
Barrier Type (0-Wa	rier Height:	0.0 reet 0.0				Heavy T		86.5%		10.8%	
Centerline Dis	,	100.0 feet									
Centerline Dist. t		100.0 feet			Noise S	ource E			eet)		
Barrier Distance t		0.0 feet				Auto		2.000			
Observer Height (5.0 feet				m Truck		4.000			
• .	nd Elevation:	0.0 feet			Heav	y Truck	s:	8.006	Grade Ad	justment	± 0.0
	nd Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%			•	Auto		6.607			
	Left View:	-90.0 degree	es		Mediu	m Truck		6.566			
	Right View:	90.0 degree			Heav	y Truck	s: 9	6.608			
FHWA Noise Mode	el Calculations	S									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Be	rm Atten
Autos:	71.78	-0.27		-4.3	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-17.51		-4.3	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21.46		-4.3	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)						
VehicleType	Leq Peak Hou	r Leq Day	,	Leq E	vening	Leq	Night		Ldn	С	NEL
Autos:	65.	.9	64.0		62.3		56	5.2	64.8	3	65.4
Medium Trucks:	59.	.3	57.8		51.4		49	9.9	58.4	4	58.6
Heavy Trucks:	59.	.3	57.9		48.9		50).1	58.5	5	58.6
Vehicle Noise:	67.	.5	65.7		62.8		57	7.9	66.	5	66.9
Centerline Distance	e to Noise Co	ntour (in feet)			-					-
					dBA		dBA	6	60 dBA		dBA
			Ldn:	5	8	1	25		269	5	581

CNEL:

62

290

135

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o Sand Canyon. Av.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	d=10, So	oft = 15)		
Average Daily Traffic (Adt):	18,100 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Ме	dium Trucks ((2 Axles):	15		
Peak Hour Volume:	1,810 vehicles	S	He	avy Trucks (3	3+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Miv				
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data			Ven	Autos		J	9.6%	97.42%
			Λ./.	Autos. edium Trucks			10.3%	1.84%
Barrier Height:				Heavy Trucks.			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm):				neavy Trucks	. 00.5%	2.170	10.0%	0.74%
Centerline Dist. to Barrier:			Noise So	ource Elevati	ons (in f	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:			Mediui	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:						C 4)		
Road Elevation:			Lane Eq	uivalent Dist	•	reet)		
Road Grade:					96.607			
Left View:					96.566			
Right View:	90.0 degree	es	Heav	y Trucks:	96.608			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fro	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 -0.25	-4.	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -17.48	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -21.44	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	nuation)					
VehicleType Leq Peak H		/ Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	85.9	64.0	62.3	5	6.2	64.8	3	65.4
		57.8	51.5		9.9	58.4		58.6
Heavy Trucks:	59.4	57.9	48.9	5	0.2	58.5	5	58.6
Vehicle Noise:	67.5	65.8	62.8	5	7.9	66.5	5	67.0
Centerline Distance to Noise	Contour (in feet)						

70 dBA

58

63

Ldn:

CNEL:

65 dBA

126

135

60 dBA

270

291

55 dBA

583

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Sand Canyon. Av.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA			NOISE MODEL INPUTS							
Highway Data			Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt):	15,600 vehicle	es .				Autos:	15			
Peak Hour Percentage:	•		Medium Trucks (2 Axles): 15							
Peak Hour Volume:	1,560 vehicle	1,560 vehicles			ks (3+	Axles):	15			
Vehicle Speed:	55 mph		Vehicle	Mix						
Near/Far Lane Distance:	52 feet					Day	Evening	Night	Doily	
Site Data			ven	nicleType	utos:	77.5%	Evening 12.9%	9.6%	<i>Daily</i> 97.42%	
				A edium Tri		84.8%		10.3%	1.84%	
Barrier Height:								10.8%	0.74%	
Barrier Type (0-Wall, 1-Berm).			'	Heavy Tr	ucks.	86.5%	2.1%	10.6%	0.74%	
Centerline Dist. to Barrier.		Noise S	ource Ele	evation	ıs (in fe	eet)				
Centerline Dist. to Observer.				Autos	s: 2.	.000	<u> </u>			
Barrier Distance to Observer.			Mediu	m Trucks	s: 4.	.000				
Observer Height (Above Pad).			Heav	vy Trucks		.006	Grade Ad	justment:	0.0	
	Pad Elevation: 0.0 feet			Lane Equivalent Distance (in feet)						
Road Elevation.			Lane Eq	'			feet)			
Road Grade.			Autos: 96.607							
Left View.	-90.0 degre	es		Medium Trucks: 96.566						
Right View.	90.0 degre	es	Heav	Heavy Trucks: 96.608						
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos: 71.7	78 -0.89	-4	1.39	-1.20		<i>-4.</i> 87	0.0	000	0.000	
Medium Trucks: 82.4	10 -18.13	-4	4.39	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 86.4	-22.09	-2	1.39	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier at	tenuation)							
VehicleType Leq Peak H	lour Leq Da	y Leq	g Evening	Leq I	Vight		Ldn	CI	VEL	
Autos:	65.3	63.4	61.6	i	55.	6	64.2	2	64.8	
Medium Trucks:	58.7	57.2	50.8		49.	3	57.7	7	58.0	
Heavy Trucks:	58.7	57.3	48.3		49.	5	57.9	9	58.0	
Vehicle Noise:	66.9	65.1	62.2		57.	3	65.8	3	66.3	
Centerline Distance to Noise	Contour (in fee	t)								

70 dBA

53

57

Ldn:

CNEL:

65 dBA

114

122

60 dBA

245

264

55 dBA

528

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Laguna Canyon Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA			NOISE MODEL INPUTS						
Highway Data			Site Conditions (Hard = 10, Soft = 15)						
Average Daily Traffic (Adt):	14,900 vehicle	s	Autos: 15						
Peak Hour Percentage:	10%		Medium Trucks (2 Axles): 15						
Peak Hour Volume:	1,490 vehicle	s	He	avy Trucks	(3+ Axles)	: 15			
Vehicle Speed:	55 mph		Vehicle	Miv					
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily	
Site Data	Sito Data		V 011	Auto			9.6%	,	
	0.0 foot		M	edium Truci			10.3%	1.84%	
Barrier Height:	0.0 feet 0.0			Heavy Truck			10.8%	0.74%	
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:							. 0.0,0	• , •	
Centerline Dist. to Observer:	100.0 feet		Noise So	ource Eleva	ations (in	feet)			
	100.0 feet 0.0 feet			Autos:	2.000				
			Medium Trucks: 4.000						
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	ljustment.	0.0	
Pad Elevation:				uivalent Di	stanco (in	foot)			
	0.0 feet		Lanc Lq	Autos:	96.607	iccij			
Road Grade: Left View:	0.0%		Medium Trucks: 96.566 Heavy Trucks: 96.608						
	-90.0 degre								
Right View:	90.0 degre	es	rieav	y Hucks.	90.000				
FHWA Noise Model Calculatio	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road I	Fresnel	Barrier Att	ten Ber	m Atten	
Autos: 71.7	8 -1.09	-4	.39	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 82.4	0 -18.33	-4	.39	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 86.4	0 -22.28	-4	.39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	enuation)						
VehicleType Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq Nig	ht	Ldn	CI	VEL	
Autos: 6	5.1	63.2	61.4		55.4	64.0	0	64.6	
Medium Trucks: 5	8.5	57.0	50.6		49.1	57.	5	57.8	
Heavy Trucks:5	8.5	57.1	48.1		49.3	57.	7	57.8	
Vehicle Noise:	66.7	64.9	62.0		57.1	65.0	6	66.1	
Centerline Distance to Noise (Contour (in feet	·)							

70 dBA

51

55

Ldn:

CNEL:

65 dBA

110

119

60 dBA

238

256

55 dBA

512

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: b/w Discovery and Banting

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)					
Average Daily	Traffic (Adt): 1	3,300 vehicle	s				Autos	s: 15		
Peak Hour	Percentage:	10%			Me	dium Tri	ucks (2 Axles) <i>:</i> 15		
Peak H	lour Volume:	1,330 vehicle	s		He	avy Trud	cks (3+ Axles) <i>:</i> 15		
Ve	hicle Speed:	55 mph		V	ehicle l	Wiy				
Near/Far La	ne Distance:	52 feet		_		icleType	e Day	Evening	Night	Daily
Site Data						Autos: 77.5	_		97.42%	
Ra	rrier Height:	0.0 feet			Мє	edium Ti	rucks: 84.8	% 4.9%	10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy T	rucks: 86.5	% 2.7%	10.8%	0.74%
Centerline Di		100.0 feet		_						
Centerline Dist.		100.0 feet		۸	loise Sc		levations (in	feet)		
Barrier Distance		0.0 feet				Auto				
Observer Height		5.0 feet				n Truck				
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.006	Grade Ao	justment	: 0.0
Road Elevation: 0.0 feet		L	ane Egi	uivalen	t Distance (ir	feet)				
	Road Grade:	0.0%				Auto	•	,		
	Left View:	-90.0 degre	00		Mediur	n Truck				
	Right View:	90.0 degre				y Truck				
	ragin view.	30.0 degre	63		riouv	y Truon	0. 00.000			
FHWA Noise Mod	el Calculations	S								
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresnel	Barrier Att	en Bei	m Atten
Autos:	71.78	-1.58		-4.39		-1.20	-4.87	7 0.0	000	0.000
Medium Trucks:	82.40	-18.82		-4.39		-1.20	-4.97	7 0.0	000	0.000
Heavy Trucks:	86.40	-22.78		-4.39		-1.20	-5.16	6 0.0	000	0.000
Unmitigated Nois	e Levels (witho	out Topo and	barri	er attenu	ation)					
VehicleType	Leq Peak Hou	r Leq Day	y	Leq Ev	ening	Leq	Night	Ldn	C	NEL
Autos:	64.	.6	62.7		60.9		54.9	63.	5	64.1
Medium Trucks:	58.	.0	56.5		50.1		48.6	57.0	0	57.3
Heavy Trucks:	58.	.0	56.6		47.6		48.8	57.	2	57.3

Centerline Distance to Noise Contour (in feet)									
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	47	102	220	474					
CNEL:	51	110	237	510					

61.5

64.4

65.1

56.6

65.6

Vehicle Noise:

66.2

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: s/o ICD

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				;	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	18,400 vehicl	es					Autos:	15		
Peak Hou	r Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	1,840 vehicl	es		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		,	Vehicle I	Miy					
Near/Far La	ane Distance:	52 feet				icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
Ra	arrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • • • • • • • • • • • • • • • • • • •	ist. to Barrier:	100.0 feet			Naiss Ca		lavatia	/: f-	-41		
Centerline Dist.		100.0 feet		<u> </u>	Noise Sc				et)		
Barrier Distance	to Observer:	0.0 feet			Madium	Auto n Truck		2.000			
Observer Height	(Above Pad):	5.0 feet					_	1.000	Grade Ad	iustmont	
F	Pad Elevation:	0.0 feet			пеач	y Truck	S. C	3.006	Grade Au	justinent.	0.0
Ro	oad Elevation:	0.0 feet		1	Lane Equ	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 degr	ees		Mediur	n Truck	s: 96	6.566			
	Right View:	90.0 degr	ees		Heav	y Truck	s: 96	6.608			
FHWA Noise Mod	lel Calculation	18									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos.	71.78	-0.1	7	-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks.	82.40	-17.4	1	-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks.	86.40	-21.3	7	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	d barr	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	ay	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos.	66	6.0	64.1		62.3		56	.3	64.9	9	65.5
Medium Trucks.	59	9.4	57.9		51.5		50	.0	58.4	4	58.7
Heavy Trucks.	59	9.4	58.0		49.0		50	.2	58.6	6	58.7
Vehicle Noise	67	7.6	65.8		62.9		58	.0	66.6	3	67.0
Centerline Distan	ice to Noise C	ontour (in fee	et)								
				70 c	dBA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

59

63

127

137

273

294

589

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: b/w I-5 HOV Ramp and ICD

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)					
Average Daily	Traffic (Adt): 2	21,000 vehicle	S				Autos	15		
Peak Hour	Percentage:	10%			Med	dium Tru	ucks (2 Axles).	15		
Peak H	lour Volume:	2,100 vehicle	S		Hea	avy Truc	cks (3+ Axles).	15		
Ve	hicle Speed:	55 mph		V	'ehicle N	/liv				
Near/Far La	ar Lane Distance: 52 feet		_		cleType	Day	Evening	Night	Daily	
Site Data				7 0777		Autos: 77.5%	_		97.42%	
	rrier Height:	0.0 feet			Me	edium Ti	rucks: 84.8%	4.9%	10.3%	
Barrier Type (0-W		0.0			H	leavy Ti	rucks: 86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet		_						
Centerline Dist.		100.0 feet		٨	loise So		evations (in f	eet)		
Barrier Distance		0.0 feet				Auto				
Observer Height (5.0 feet				n Truck				
•	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.006	Grade Ad	iustment	: 0.0
Road Elevation: 0.0 feet		L	ane Eau	uivalent	Distance (in	feet)				
	Road Grade:	0.0%				Autos	•	,		
	Left View:	-90.0 degree	29		Mediun	n Trucks				
	Right View:	90.0 degree				y Trucks				
	g	00.0 409.0				,				
FHWA Noise Mod	el Calculations	S								
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.40		-4.39		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.84		-4.39		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.79		-4.39		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (witho	out Topo and	barrier	r attenu	ıation)					
VehicleType	Leq Peak Hou	r Leq Day	/	Leq Ev	ening	Leq	Night	Ldn	C	NEL
Autos:	66.	.6	64.7		62.9		56.9	65.5	5	66.1
Medium Trucks:	60.	.0	58.5		52.1		50.6	59.0)	59.3
Heavy Trucks:	60.	.0	58.6		49.6		50.8	59.2	2	59.3

	70 aBA	65 aBA	60 aBA	55 aBA
Ldn:	64	139	299	643
CNEL:	69	149	321	692

63.4

58.6

67.1

67.6

66.4

Vehicle Noise:

68.2

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: s/o Technology

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA			NOISE MODEL INPUTS							
Highway Data			Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt).	22,400 vehicle	S			Autos:	15				
Peak Hour Percentage.			Medium Trucks (2 Axles): 15							
Peak Hour Volume:	2,240 vehicle	es	He	avy Trucks (3	+ Axles):	15				
Vehicle Speed:	55 mph		Vehicle I	Miv						
Near/Far Lane Distance.	52 feet			icleType	Day	Evening	Night	Daily		
Site Data			Vern	Autos:	77.5%		9.6%	97.42%		
			1.//4	edium Trucks:	84.8%		10.3%	1.84%		
Barrier Height: 0.0 feet				leavy Trucks:	86.5%		10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm).			,	leavy Trucks.	00.570	2.1 /0	10.070	0.7470		
Centerline Dist. to Barrier			Noise So	ource Elevation	ons (in fe	eet)				
Centerline Dist. to Observer				Autos:	2.000					
Barrier Distance to Observer: 0.0 feet			Mediui	Medium Trucks: 4.000						
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0		
Pad Elevation						C 4)				
Road Elevation.			Lane Eq	uivalent Dista	•	reet)				
Road Grade			Autos: 96.607							
Left View	3 -		Medium Trucks: 96.566							
Right View	90.0 degre	es	Heav	ry Trucks: 9	6.608					
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Att	en Ber	m Atten		
Autos: 71.7	78 0.68	-4.	39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	10 -16.56	-4.	39	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	-20.51	-4.	39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)							
VehicleType Leq Peak H	lour Leq Day	y Leq	Evening	Leq Night		Ldn	CI	VEL		
Autos:	66.9	65.0	63.2	5	7.1	65.8	3	66.4		
Medium Trucks:	60.3	58.7	52.4	50	0.8	59.3	3	59.5		
Heavy Trucks:	60.3	58.9	49.8	5	1.1	59.4	1	59.6		
Vehicle Noise:	68.4	66.7	63.7	55	3.9	67.4	1	67.9		
Centerline Distance to Noise	Contour (in feet	t)								

ı	Centerinie Distance to Noise Contour (in 1661)										
		70 dBA	65 dBA	60 dBA	55 dBA						
	Ldn:	67	145	312	672	_					
	CNEL:	72	156	335	723						

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: n/o Technology

Number: 8141

Analyst: B. Lawson

SITE SPECIFI	CINP	UT DATA							L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Ad	lt): 24	,100 vehicles	S					Autos:	15		
Peak Hour Percentag	je:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volun	ne: 2	,410 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Vehicle Spee	ed:	55 mph		V	/ehicle	Miy					
Near/Far Lane Distan	e:	52 feet		_		icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	Ū	9.6%	-
Barrier Heig	ht.	0.0 feet			М	edium T	rucks:	84.8%		10.3%	
Barrier Type (0-Wall, 1-Berl		0.0			I	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barri	,	100.0 feet			1-1 0			(* f -	- 41		
Centerline Dist. to Observ		100.0 feet		^	ioise So			ns (in fe	eet)		
Barrier Distance to Observ		0.0 feet				Auto		2.000			
Observer Height (Above Pa		5.0 feet				m Truck		1.000	0 - 4 - 4 - 4		0.0
Pad Elevati		0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0
Road Elevati		0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	feet)		
Road Grad		0.0%				Auto	s: 96	6.607			
Left Vie	w:	-90.0 degree	es		Mediu	m Truck	s: 96	6.566			
Right Vie	W:	90.0 degree			Heav	y Truck	s: 96	6.608			
FHWA Noise Model Calcula	tions										
VehicleType REME	_	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Att	en Bei	m Atten
Autos: 7	1.78	1.00		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 8	2.40	-16.24		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 8	5.40	-20.20		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (withou	ıt Topo and	barrie	er attenu	uation)						
VehicleType Leq Peal	Hour	Leq Day	′	Leq Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	67.2	(65.3		63.5		57	.5	66.	1	66.7
Medium Trucks:	60.6	;	59.1		52.7		51	.2	59.6	6	59.9
Heavy Trucks:	60.6		59.2		50.1		51	.4	59.8	3	59.9
Vehicle Noise:	68.8		67.0		64.0		59	.2	67.7	7	68.2
Centerline Distance to Nois	e Con	tour (in feet,)								

70 dBA

71

76

Ldn: CNEL: 65 dBA

152

163

60 dBA

327

352

55 dBA

705

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: e/o Ada

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DAT	ΓΑ			N	OISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard :	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	21,800 veh	icles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak H	lour Volume:	2,180 veh	icles		He	avy Trud	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mp	h	,	Vehicle I	Wix					
Near/Far La	ne Distance:	52 fee	t			icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
	rrier Height:	0.0 fe	ot		Me	edium Ti	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W		0.0	GL		ŀ	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	,	100.0 fe	et					<i>(</i> ; •			
Centerline Dist.		100.0 fee		1	Noise So			•	eet)		
Barrier Distance		0.0 fe				Auto		.000			
Observer Height (5.0 fe				n Truck		.000	O I		
• ,	ad Elevation:	0.0 fe			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	0.0
Roa	ad Elevation:	0.0 fe		I	Lane Eq	uivalent	Dista	nce (in f	eet)		
	Road Grade:	0.0%				Autos	s: 96	6.607			
	Left View:	-90.0 de	grees		Mediui	n Trucks	s: 96	5.566			
	Right View:	90.0 de	grees		Heav	y Truck	s: 96	8.608			
FHWA Noise Mode	el Calculation	e									
VehicleType	REMEL	Traffic Flo	ow Di	istance	Finite	Road	Fres	nel	Barrier Atte	en Ber	m Atten
Autos:	71.78		.56	-4.39		-1.20		-4.87		000	0.000
Medium Trucks:	82.40	-16	5.68	-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20	.63	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo á	and barr	ier atten	uation)						
VehicleType	Leq Peak Hou	ır Leq	Day	Leq Ev	ening /	Leq	Night		Ldn	CI	VEL
Autos:	66	5.7	64.9		63.1		57	.0	65.7	7	66.3
Medium Trucks:	60	.1	58.6		52.3		50	.7	59.2	2	59.4
Heavy Trucks:	60	.2	58.7		49.7		51	.0	59.3	3	59.4
Vehicle Noise:	68	3.3	66.6		63.6		58	.7	67.3	3	67.8
Centerline Distance	ce to Noise Co	ontour (in	feet)								
				70 c	dBA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

66

71

142

153

306

329

660

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy.

Road Segment: w/o Marine Wy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPL	JT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt): 25,7	700 vehicles	3					Autos:	15		
Peak Hour Percentage		10%			Me	dium Tri	ucks (2	Axles):	15		
Peak Hour Volume	e: 2,5	570 vehicles	3		He	avy Trud	cks (3+	Axles):	15		
Vehicle Speed	<i>1:</i>	55 mph		,	/ehicle l	Miss					
Near/Far Lane Distance) <i>:</i>	52 feet		·				Dov	Funning	Niaht	Doilu
Site Data					ven	icleType		Day 50/	Evening	Night	Daily
Site Data					Λ./.		Autos:	77.5%		9.6%	
Barrier Heigh		0.0 feet				edium Ti		84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm		0.0			r	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrie		00.0 feet		٨	loise Sc	ource El	levatio	ns (in fe	eet)		
Centerline Dist. to Observe		00.0 feet				Auto	s: 2	2.000			
Barrier Distance to Observe	r:	0.0 feet			Mediui	n Truck		.000			
Observer Height (Above Pad):	5.0 feet				y Truck		3.006	Grade Ad	iustment	: 0.0
Pad Elevation	n:	0.0 feet				-					
Road Elevation	n:	0.0 feet		L	ane Eq				feet)		
Road Grade	e <i>:</i>	0.0%				Auto		6.607			
Left Viev	v: - <u>(</u>	90.0 degree	es		Mediui	n Truck	-	6.566			
Right Viev	v:	90.0 degree	es		Heav	y Truck	s: 96	6.608			
FHWA Noise Model Calculat	ions										
VehicleType REMEL	Tr	raffic Flow	Dista	ance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 71	78	1.28		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82	40	-15.96		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86	40	-19.92		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout	Topo and	barrier	r attent	uation)						
VehicleType Leq Peak	Hour	Leq Day	,	Leq Ev	rening	Leq	Night		Ldn	C	NEL
Autos:	67.5	(65.6		63.8		57	.7	66.4	4	67.0
Medium Trucks:	60.9	!	59.3		53.0		51	.4	59.9	9	60.1
Heavy Trucks:	60.9	!	59.5		50.4		51	.7	60.0)	60.2
Vehicle Noise:	69.0		67.3		64.3		59	.5	68.0)	68.5
Centerline Distance to Noise	Conto	our (in feet))								

70 dBA

74

79

Ldn:

CNEL:

65 dBA

159

171

60 dBA

342

368

55 dBA

736

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy./Muirlands Bl.

Road Segment: w/o Alton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				Γ	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, So	oft = 15)		
Average Daily	Traffic (Adt): 2	20,700 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	rucks (2	Axles):	15		
Peak I	lour Volume:	2,070 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		V	/ehicle l	Miy					
Near/Far La	ane Distance:	52 feet		_		icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
	rrier Height:	0.0 feet			Me	edium T		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0 feet				leavy T		86.5%		10.8%	0.74%
- ' '	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		۸	loise So			ns (in fe	et)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	-	.000	0 1- 4-1		0.0
•	ad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	os: 96	6.607			
	Left View:	-90.0 degre	es		Mediu	m Truck	rs: 96	6.566			
	Right View:	90.0 degre	es		Heav	y Truck	rs: 96	8.608			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.34		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.90		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.86		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:			64.6		62.9		56		65.4	1	66.0
Medium Trucks:			58.4		52.0		50		59.0		59.2
Heavy Trucks:			58.5		49.5		50	.7	59.1	1	59.2
Vehicle Noise:	68	.1	66.3		63.4		58	.5	67.1	1	67.5
Centerline Distant	ce to Noise Co	ontour (in feet)								
				70 d	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

64

69

137

148

296

318

637

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy
Road Segment: e/o Alton Pkwy.
Number: 8141
Analyst: B. Lawson

SITE SPECIFIC	INPUT DAT	Ā			N	OISE	MODE	L INPUT	S	
Highway Data			5	Site Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 20,400 veh	icles					Autos:	15		
Peak Hour Percentage	•			Me	dium Tru	ıcks (2	Axles):	15		
Peak Hour Volume	: 2,040 veh	icles		He	avy Truc	ks (3+	Axles):	15		
Vehicle Speed	: 55 mpl	h	,	/ehicle l	Miv					
Near/Far Lane Distance	: 52 feet	t					Day	Evening	Night	Doily
Site Data				ven	icleType	Autos:	77.5%	Evening 12.9%	9.6%	<i>Daily</i> 97.42%
				Λ //	ء edium Tr		84.8%		10.3%	1.84%
Barrier Height		et							10.8%	0.74%
Barrier Type (0-Wall, 1-Berm)				,	leavy Tr	ucks.	86.5%	2.1%	10.6%	0.74%
Centerline Dist. to Barrier			^	loise Sc	ource El	evatio	ns (in fe	eet)		
Centerline Dist. to Observer					Autos	s: 2	.000	-		
Barrier Distance to Observer				Mediui	n Trucks	s: 4	.000			
Observer Height (Above Pad)				Heav	y Trucks		.006	Grade Ad	iustment:	0.0
Pad Elevation					-					
Road Elevation		et	L	ane Eq	uivalent			feet)		
Road Grade	: 0.0%				Autos		5.607			
Left View	: -90.0 de	grees		Mediui	n Trucks	s: 96	5.566			
Right View	: 90.0 de	grees		Heav	y Trucks	s: 96	5.608			
FHWA Noise Model Calculati	ons									
VehicleType REMEL	Traffic Flo	ow Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
<i>Autos:</i> 71.	78 0	.27	-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.	40 -16	.96	-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.	40 -20	.92	-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout Topo a	nd barri	er atteni	uation)						
VehicleType Leq Peak F	Hour Leq	Day	Leq Ev	rening	Leq i	Night		Ldn	CI	VEL
Autos:	66.5	64.6		62.8		56.	.7	65.4	1	66.0
Medium Trucks:	59.8	58.3		52.0		50.	.4	58.9)	59.1
Heavy Trucks:	59.9	58.5		49.4		50.	.7	59.0)	59.2
Vehicle Noise:	68.0	66.3		63.3		58.	.4	67.0)	67.5
Centerline Distance to Noise	Contour (in t	feet)								

70 dBA

63

68

Ldn: CNEL: 65 dBA

136

146

60 dBA

293

315

55 dBA

631

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Barranca Pkwy
Road Segment: e/o Sterling
Number: 8141
Analyst: B. Lawson

SITE SPECIFIC	INPUT DA	TA			1	NOISE	MODE	L INPUT	S	
Highway Data			,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 16,100 ve	hicles					Autos:	15		
Peak Hour Percentage	: 10%			Me	dium Tr	ucks (2	2 Axles):	15		
Peak Hour Volume	: 1,610 ve	hicles		He	avy Tru	cks (3+	- Axles):	15		
Vehicle Speed	: 55 m _l	ph		Vehicle I	Miv					
Near/Far Lane Distance	: 52 fe	et			icleType	2	Day	Evening	Night	Daily
Site Data				V C//		Autos:	77.5%	_	9.6%	
	001			M	edium T		84.8%		10.3%	
Barrier Height		eet			Heavy T		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm)		4							10.070	0.7 170
Centerline Dist. to Barrier Centerline Dist. to Observer			1	Noise So	ource E	levatio	ns (in fe	eet)		
					Auto	s: :	2.000			
Barrier Distance to Observer				Mediu	m Truck	is:	4.000			
Observer Height (Above Pad)				Heav	y Truck	s:	8.006	Grade Ad	justment	: 0.0
Pad Elevation Road Elevation				Lane Eq	uivalen	t Dista	nce (in	feet)		
Road Elevalion		eet		Laric Lq	Auto		6.607	1001)		
Left View		00000		Modiu	n Truck		6.566			
Right View		•			ry Truck		6.608			
Right view	. 90.0 d	egrees		Heav	y IIuch	.s. 3	0.000			
FHWA Noise Model Calculati	ons									
VehicleType REMEL	Traffic F	low Di	stance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos: 71.	78 -	0.75	-4.3	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.	40 -1	7.99	-4.3	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.	40 -2	1.95	-4.3	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout Topo	and barri	ier atten	uation)						
VehicleType Leq Peak H		g Day		/ening	Leq	Night		Ldn	C	NEL
Autos:	65.4	63.5		61.8		55	5.7	64.3	3	64.9
Medium Trucks:	58.8	57.3		51.0		49	9.4	57.9	9	58.1
Heavy Trucks:	58.9	57.4		48.4		49	9.6	58.0)	58.1
Vehicle Noise:	67.0	65.2		62.3		57	7.4	66.0)	66.4
Centerline Distance to Noise	Contour (in	feet)								
			70 d	dBA	65	dBA	6	60 dBA	55	dBA
		Ldn:	5	4	1	16	•	250	5	39

CNEL:

58

269

125

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Number: 8141
Road Segment: w/o Jamboree Rd. Analyst: B. Lawson

SITE SPECI	FIC INP	UT DATA				SE MODE		S	
Highway Data				Site Con	ditions (Ha	$rd = 10, \overline{Sc}$	oft = 15)		
Average Daily Traffic ((Adt): 25	,300 vehicles	3			Autos:	15		
Peak Hour Percen	tage:	10%		Med	dium Trucks	s (2 Axles):	15		
Peak Hour Vol	ume: 2	,530 vehicles	3	Hea	avy Trucks	(3+ Axles):	15		
Vehicle Sp	peed:	50 mph		Vehicle I	Лix				
Near/Far Lane Dista	ance:	70 feet			cleType	Day	Evening	Night	Daily
Site Data					Auto			9.6%	97.42%
Barrier He	iaht:	0.0 feet		Me	edium Truck	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Be	•	0.0		F	łeavy Truck	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Ba	,	100.0 feet		Noise So	urce Eleva	tions (in f	not)		
Centerline Dist. to Obse	erver:	100.0 feet		140/36 30	Autos:	2.000			
Barrier Distance to Obse	erver:	0.0 feet		Ma ali					
Observer Height (Above I	Pad):	5.0 feet			n Trucks:	4.000	0 , 4 ,		0.0
Pad Eleva	•	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Road Eleva		0.0 feet		Lane Equ	uivalent Di	stance (in	feet)		
Road G		0.0%			Autos:	93.723	-		
	View:	-90.0 degree	es	Mediur	n Trucks:	93.680			
Right '	View:	90.0 degree		Heav	y Trucks:	93.723			
FHWA Noise Model Calcu	ulations								
VehicleType REM		Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	70.20	1.62	-4.2	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-15.62	-4.1	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-19.57	-4.2	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels	s (withou	ut Topo and I	barrier atter	nuation)					
VehicleType Leq Pe	ak Hour	Leq Day	Leq E	vening	Leq Nig	ht	Ldn	CI	VEL
Autos:	66.4	•	64.5	62.8		56.7	65.3	3	65.9
Medium Trucks:	60.0	5	58.5	52.1		50.6	59.0)	59.3
Heavy Trucks:	60.4	Ę	59.0	50.0		51.2	59.6	6	59.7
Vehicle Noise:	68.1	6	66.4	63.3		58.5	67.	1	67.6

70 dBA

64

69

Ldn:

CNEL:

65 dBA

138

148

60 dBA

297

319

55 dBA

640

687

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Number: 8141
Road Segment: e/o Jamboree Rd. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				-	VOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	19,900 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	rucks (2	Axles):	15		
Peak H	Hour Volume:	1,990 vehicles	S		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		-	Vehicle i	Miv					
Near/Far La	ne Distance:	52 feet		-		icleType	Δ	Day	Evening	Night	Daily
Site Data					VCII		Autos:	77.5%	J	9.6%	_
	wwiaw Haindat	0.0 foot			M	edium T		84.8%		10.3%	
	rrier Height:	0.0 feet 0.0				Heavy T		86.5%		10.8%	
Barrier Type (0-W	ist. to Barrier:	0.0 100.0 feet									
Centerline Dist.		100.0 feet			Noise So	ource E	levatio	ns (in f	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck		1.000			
•	ad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Adj	iustment	: 0.0
	ad Elevation: ad Elevation:	0.0 feet		-	Lane Eq	uivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto		 6.607			
	Left View:	-90.0 degree	es		Mediu	m Truck		5.566			
	Right View:	90.0 degree			Heav	y Truck	ks: 90	6.608			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Atte	en Bei	rm Atten
Autos:	71.78	0.17		-4.3	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-17.07		-4.3	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21.03		-4.3	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier atter	nuation)						
VehicleType	Leq Peak Hou			Leq E	vening	Leq	Night		Ldn		NEL
Autos:			64.5		62.7		56		65.3	3	65.9
Medium Trucks:			58.2		51.9		50		58.8		59.0
Heavy Trucks:	59	.8	58.4		49.3		50	.6	58.9)	59.0
Vehicle Noise:	67	. .9	66.2		63.2		58	.3	66.9)	67.4
Centerline Distan	ce to Noise Co	ontour (in feet,)	70	dBA	6E	dBA		60 dBA	55	dBA
			Ldn:		и <i>в</i> А 52		34		288		321
			LUII.	C	12	ļ	J 4		200	() <u>_</u>

CNEL:

67

310

144

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Number: 8141
Road Segment: w/o Culver Dr. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				N	OISE	MODE	L INPUT	s	
Highway Data				S	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	26,800 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak H	lour Volume:	2,680 vehicle	es		He	avy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		ν	'ehicle l	Mix					
Near/Far La	ane Distance:	52 feet				icleType		Day	Evening	Night	Daily
Site Data						A	Autos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet			Me	edium Tr	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			F	leavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline D	ist. to Barrier:	100.0 feet		^	loise Sc	ource El	evatio	ns (in fe	eet)		
Centerline Dist.	to Observer:	100.0 feet				Autos		.000			
Barrier Distance	to Observer:	0.0 feet		Medium Trucks: 4.000							
Observer Height	(Above Pad):	5.0 feet				y Trucks		.006	Grade Ad	liustment	. 0 0
P	ad Elevation:	0.0 feet			ricav	y Trucke	<i>.</i>	.000		, 40111101111	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent	Distar	ice (in i	feet)		
	Road Grade:	0.0%				Autos	s: 96	.607			
	Left View:	-90.0 degre	es		Mediui	n Trucks	s: 96	.566			
	Right View:	90.0 degre			Heav	y Trucks	s: 96	.608			
FHWA Noise Moo	lel Calculatio	ns									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	3 1.46		-4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.78	3	-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.74		-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrie	r attenu	ıation)						
VehicleType	Leq Peak Ho	our Leq Da	у	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	6	7.6	65.7		64.0		57.	9	66.5	5	67.2
Medium Trucks:	6	1.0	59.5		53.2		51.	6	60.1	1	60.3
Heavy Trucks:	6	1.1	59.6		50.6		51.	9	60.2	2	60.3
Vehicle Noise:	6	9.2	67.5		64.5		59.	6	68.2	2	68.7

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	76	163	351	757
CNEL:	81	175	378	814

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Number: 8141
Road Segment: e/o Culver Dr. Analyst: B. Lawson

SITE S	PECIFIC INI	PUT DATA				1	VOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily Ti	raffic (Adt): 1	9,700 vehicles	3					Autos:	15		
Peak Hour P	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak Ho	ur Volume:	1,970 vehicles	3		He	avy Tru	icks (3+	Axles):	15		
Vehi	icle Speed:	55 mph		V	'ehicle l	Miv					
Near/Far Lane	e Distance:	52 feet				icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
	ia v Haimbt.	0.0 foot			Me	edium T		84.8%		10.3%	1.84%
	ier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-Wa Centerline Dist.	,	100.0 feet									011 170
Centerline Dist. to		100.0 feet		٨	loise Sc	ource E	levatio	ns (in fe	eet)		
Barrier Distance to		0.0 feet				Auto	os: 2	2.000			
Observer Height (A		5.0 feet			Mediur	n Truck	rs: 4	1.000			
• ,	d Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Adj	justment:	0.0
	d Elevation:	0.0 feet		1	ane Fo	uivalen	t Dista	nce (in f	eet)		
	oad Grade:	0.0 Teet 0.0%		_	.ano 24	Auto		6.607	000		
N	Left View:	-90.0 degree	20		Mediur	n Truck		6.566			
ı	Right View:	90.0 degree				y Truck		6.608			
ı	ragiti view.	90.0 degree	73		77007	y Traon	.0. 00	5.000			
FHWA Noise Model	Calculations			1							
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.12		-4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-17.12		-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21.07		-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (witho	ut Topo and	barrie	er attenu	ıation)						
	.eq Peak Hour	<u> </u>		Leq Ev		Leq	Night		Ldn	CI	VEL
Autos:	66.3	3 (64.4	-	62.6	<u>-</u>	56	.6	65.2	2	65.8
Medium Trucks:	59.7	7	58.2		51.8		50	.3	58.7	7	59.0
Heavy Trucks:	59.7	7	58.3		49.3		50	.5	58.9	Э	59.0
Vehicle Noise:	67.9	9	66.1		63.2		58	.3	66.8	3	67.3
Centerline Distance	e to Noise Co	ntour (in feet))								
				70 d	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

62

66

133

143

286

308

617

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Bryan Av. Number: 8141
Road Segment: e/o Eastwood Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				ſ	NOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	14,200 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	1,420 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		V	/ehicle l	Mix					
Near/Far La	ane Distance:	52 feet		•		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	J	9.6%	•
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		٨	loise So			•	eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	_	.000	Crada Ad	li a 4 ma a . a 4	
_	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	justment	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distaı	nce (in f	feet)		
	Road Grade:	0.0%				Auto	s: 96	.607			
	Left View:	-90.0 degre	es		Mediui	m Truck	rs: 96	.566			
	Right View:	90.0 degre	es		Heav	y Truck	s: 96	.608			
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	-1.30	•	-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-18.54		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-22.49		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barr	ier attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	V	Leq Ev	rening	Leq	Night		Ldn	Ci	NEL
Autos:		.9	63.0		61.2		55.	2	63.8	3	64.4
Medium Trucks:	58	3.3	56.8		50.4		48.	9	57.3	3	57.6
Heavy Trucks:		.3	56.9		47.9		49	1	57.5	5	57.6
Vehicle Noise:	66	5.5	64.7		61.7		56	9	65.4	4	65.9
Centerline Distan	ce to Noise Co	ontour (in feet	t)								
				70 d	BA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

50

53

107

115

230

248

496

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Canyon View Av. Number: 8141
Road Segment: w/o Jamboree Rd. Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			S	Site Condition	ons (Hard	= 10, Sc	oft = 15)		
	Percentage:	7,200 vehicles 10%			n Trucks (2	,			
Ve	lour Volume: hicle Speed: ne Distance:	720 vehicles 50 mph 70 feet		Heavy /ehicle Mix Vehicle1	Trucks (3+	Axles): Day	15 Evening	Night	Daily
Site Data				v erricie r	Autos:	77.5%	•	9.6%	97.42%
	rrier Height: /all, 1-Berm):	0.0 feet 0.0			m Trucks: y Trucks:	84.8% 86.5%	4.9%	10.3% 10.8%	1.84% 0.74%
Roa	to Observer: to Observer: (Above Pad): ad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree 90.0 degree	L L	Medium Tr Heavy Tr .ane Equiva	Autos: 2 rucks: 4 rucks: 8 rucks: 93 Autos: 93 rucks: 93	2.000 1.000 3.006	Grade Adj	iustment:	0.0
FHWA Noise Mode VehicleType	el Calculations REMEL	Traffic Flow	Distance	Finite Roa	nd Fres	snel	Barrier Atte	en Beri	m Atten
Autos: Medium Trucks:	70.20 81.00	-3.84 -21.07	-4.20 -4.19		.20 .20	-4.87 -4.97	0.0 0.0	000	0.000
Heavy Trucks:	85.38	-25.03	-4.19 -4.20		.20	-4.97 -5.16	0.0		0.000
Unmitigated Noise	e Levels (with	out Topo and I	barrier attenu	uation)					
VehicleType	Leq Peak Hou		•	•	Leq Night		Ldn		VEL
Autos:	61.		59.1	57.3	51		59.9		60.5
Medium Trucks:	54.		53.0	46.7	45		53.6		53.8
Heavy Trucks:	55.		53.5	44.5	45		54.1		54.2
Vehicle Noise:	62	.7 6	60.9	57.9	53	.1	61.6	6	62.1

70 dBA

28

30

Ldn:

CNEL:

65 dBA

60

64

60 dBA

128

138

55 dBA

277

297

Centerline Distance to Noise Contour (in feet)

ect Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 2)

Road Name: Chapman Ave./Santiago Cyn. Number: 8141 Road Segment: w/o Jamboree Rd. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				3	Site Cond	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 2	28,200 vehicle	S					Autos:	15		
	Percentage:	10%			Med	lium Tri	ucks (2	Axles):	15		
	lour Volume:	2,820 vehicle	S		Hea	vy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		,	/ehicle N	liv					
Near/Far La	ne Distance:	88 feet		,		iix cleType		Day	Evening	Night	Daily
Site Data					Verne		Autos:	77.5%		9.6%	-
					Ma	r dium Ti		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet				eavy Ti		86.5%		10.8%	0.74%
Barrier Type (0-W	•	0.0			,,	cavy II	rucks.	00.570	2.1 /0	10.070	0.7 4 70
Centerline Di		100.0 feet		^	Voise So	urce El	levatio	ns (in f	eet)		
Centerline Dist.		100.0 feet				Auto	s: 2	2.000			
Barrier Distance		0.0 feet			Mediun	n Truck	s: 4	.000			
Observer Height	. ,	5.0 feet			Heavy	/ Truck	s: 8	3.006	Grade Ad	justment.	0.0
	ad Elevation:	0.0 feet		_					• 4		
	ad Elevation:	0.0 feet		L	.ane Equ			•	teet)		
	Road Grade:	0.0%				Auto		9.850			
	Left View:	-90.0 degre			Mediun			9.805			
	Right View:	90.0 degree	es		Heavy	/ Truck	s: 89	9.850			
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite I	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.68		-3.92	2	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.56		-3.92	2	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.51		-3.92	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r atteni	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	68	.3	66.4		64.7		58	.6	67.2	2	67.8
Medium Trucks:	61	.7	60.2		53.9		52	.3	60.8	3	61.0
Heavy Trucks:	61	.8	60.3		51.3		52	.6	60.9	9	61.0
Vehicle Noise:	69	.9	68.2		65.2		60	.3	68.9	9	69.4

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	84	181	391	842
CNEL:	91	195	420	906

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Chapman Ave./Santiago Cyn.

Road Segment: e/o Jamboree Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT D	ATA			r	IOISE	MODE	L INPUT	S	
Highway Data					Site C	onditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	41,100 v	ehicles					Autos:	15		
Peak Hour	Percentage:	10%				Medium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	4,110 v	ehicles			Heavy Tru	cks (3+	Axles):	15		
	ehicle Speed:	55 n	•		Vehic	le Mix					
Near/Far La	ane Distance:	88 f	eet		V	ehicleType	9	Day	Evening	Night	Daily
Site Data						,	Autos:	77.5%	12.9%	9.6%	97.42%
Ва	rrier Height:	0.0	feet			Medium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0				Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0	feet		Noise	Source E	levatio	ns (in fa	eet)		
Centerline Dist.	to Observer:	100.0	feet		710100	Auto		2.000	,,,		
Barrier Distance	to Observer:	0.0	feet		Ma	dium Truck		1.000			
Observer Height	(Above Pad):	5.0	feet			eavy Truck		3.006	Grade Ad	liustment	. 0.0
F	ad Elevation:	0.0	feet		110	avy IIuck	ა. (5.000	Orade Adj	justinent.	0.0
Ro	ad Elevation:	0.0	feet		Lane	Equivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0%	6			Auto	s: 89	9.850			
	Left View:	-90.0	degrees	S	Med	dium Truck	s: 89	9.805			
	Right View:		degrees		He	eavy Truck	s: 89	9.850			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic	Flow	Distance	Fin	ite Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	I	3.32	-3.	92	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-	13.92	-3.	92	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-	17.88	-3.	92	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	o and b	arrier atte	nuatio	n)					
VehicleType	Leq Peak Hou	ur Le	eq Day	Leq	Evening	g Leq	Night		Ldn	CI	VEL
Autos:	70	0.0	6	8.1	66	6.3	60	.3	68.9	9	69.5
Medium Trucks:	63	3.4	6	1.9	55	5.5	53	.9	62.4	4	62.6
Heavy Trucks:	63	3.4	6	2.0	52	2.9	54	.2	62.5	5	62.7
Vehicle Noise:	71	.6	6	9.8	66	6.8	62	.0	70.	5	71.0

70 dBA

108

116

Ldn:

CNEL:

65 dBA

233

251

60 dBA

502

540

55 dBA

1,082

1,164

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Creek Rd. Number: 8141
Road Segment: n/o Alton Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA				ľ	VOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, So	oft = 15)		
Average Daily	Traffic (Adt):	4,400 vehicles	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak F	lour Volume:	440 vehicles	s		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	35 mph		V	ehicle l	Mix					
Near/Far La	ane Distance:	20 feet				icleType	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
	nrrier Height:	0.0 feet			Me	edium 7		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0			F	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		N	loise Sc			ns (in fe	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	-	.000	Crada Ad		
•	Pad Elevation:	0.0 feet			Heav	y Truck	(S. E	3.006	Grade Ad	iustment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	feet)		
	Road Grade:	0.0%				Auto	os: 99	9.544			
	Left View:	-90.0 degree	es		Mediui	m Truck	ks: 99	9.504			
	Right View:	90.0 degree	es		Heav	y Truck	rs: 99	9.544			
FHWA Noise Mod	lel Calculations	S									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	64.30	-4.43		-4.59		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	75.75	-21.66		-4.59		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	81.57	-25.62		-4.59		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	er attenu	ıation)						
VehicleType	Leq Peak Hou	r Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	_	.1	52.2		50.4		44	.4	53.0)	53.6
Medium Trucks:	48.	.3	46.8		40.4		38	.9	47.3	3	47.6
Heavy Trucks:	50.	.2	48.7		39.7		41	.0	49.3	3	49.4
Vehicle Noise:	56	.3	54.6		51.2		46	.8	55.3	3	55.7
Centerline Distan	ce to Noise Co	ntour (in feet)								
				70 di	BA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

10

11

23

24

49

52

105

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: s/o Portola Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA				ſ	NOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	25,500 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,550 vehicle	es		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		1	/ehicle	Mix					
Near/Far La	ne Distance:	76 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	J	9.6%	•
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		_	V-: C		'l4!-	(: f-	-41		
Centerline Dist.		100.0 feet			Voise So			•	et)		
Barrier Distance	to Observer:	0.0 feet			N 4 = =1:	Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	_	.000	Grade Ad	liustmont	
_	ad Elevation:	0.0 feet			неач	y Truck	is: 8	3.006	Grade Au	justinent	. 0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Distai	nce (in f	feet)		
	Road Grade:	0.0%				Auto	s: 92	2.547			
	Left View:	-90.0 degre	ees		Mediu	m Truck	rs: 92	2.504			
	Right View:	90.0 degre	ees		Heav	y Truck	rs: 92	2.547			
FHWA Noise Mod	lel Calculation	IS									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.86	6	-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.37	7	-4.11	l	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.33	3	-4.11	l	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	d barr	ier atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	ıy	Leq Ev	vening	Leq	Night		Ldn	Ci	NEL
Autos:		3.8	66.9		65.1		59		67.7	7	68.3
Medium Trucks:		2.0	60.5		54.1		52		61.0		61.3
Heavy Trucks:		1.7	60.3		51.2		52	.5	60.8	3	61.0
Vehicle Noise:	70).3	68.5		65.6		60	.7	69.2	2	69.7
Centerline Distan	ce to Noise C	ontour (in fee	t)					ı			
				70 a	<i>IBA</i>	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

89

95

191

206

411

443

886

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: n/o Irvine Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	TA			N	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard:	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	28,400 vel	hicles					Autos:	15		
= -	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	lour Volume:	2,840 vel	hicles		Hea	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 mp	oh		Vehicle I	Miv					
Near/Far La	ane Distance:	76 fee	et			icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	J	9.6%	,
	rrier Height:	0.0 fe	of		Me	edium T		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0	ec.		F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 fe	et								
Centerline Dist.		100.0 fe		1	Noise Sc				eet)		
Barrier Distance		0.0 fe				Auto		.000			
Observer Height		5.0 fe				n Truck	_	.000	Crada Ad		
ŭ	Pad Elevation:	0.0 fe			Heav	y Truck	s: 8	.006	Grade Ad	justment.	0.0
Ro	ad Elevation:	0.0 fe	et	1	Lane Equ	uivalen	t Distai	nce (in t	eet)		
	Road Grade:	0.0%				Auto	s: 92	2.547			
	Left View:	-90.0 de	egrees		Mediur	n Truck	s: 92	2.504			
	Right View:	90.0 de	egrees		Heav	y Truck	s: 92	2.547			
FHWA Noise Mod	lel Calculatior	18									
VehicleType	REMEL	Traffic Fl	ow Di	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22		1.33	-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-18	5.91	-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-19	9.86	-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo	and barri	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq	Day	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	69	9.2	67.3		65.6		59	.5	68.1	1	68.7
Medium Trucks:		2.5	61.0		54.6		53		61.5		61.7
Heavy Trucks:		2.2	60.7		51.7		52	.9	61.3		61.4
Vehicle Noise:	70	0.7	68.9		66.1		61	.1	69.7	7	70.2
Centerline Distant	ce to Noise C	ontour (in	feet)								
				70 d	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

95

103

205

221

442

476

952

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: s/o Irvine Bl.

Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC IN	NPUT DATA				1	NOISE	MODE	L INPUT	S	
Highway Data					Site Cor	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily 1	Traffic (Adt):	36,700 vehicle	S					Autos:	15		
Peak Hour I	Percentage:	10%			Me	dium Tr	ucks (2	? Axles):	15		
Peak Ho	our Volume:	3,670 vehicle	S		He	avy Tru	cks (3+	- Axles):	15		
Vel	nicle Speed:	60 mph			Vehicle	Mix					
Near/Far Lar	ne Distance:	76 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	_	9.6%	_
	rier Height:	0.0 feet			M	edium T		84.8%		10.3%	
Barrier Type (0-Wa	•	0.0 reet 0.0				-leavy T		86.5%		10.8%	
Centerline Dis	•	100.0 feet									
Centerline Dist. t		100.0 feet			Noise S	ource E		•	eet)		
Barrier Distance t		0.0 feet				Auto		2.000			
Observer Height (A		5.0 feet				m Truck		4.000			
,	d Elevation:	0.0 feet			Heav	y Truck	s:	3.006	Grade Ad	justmen	t: 0.0
	d Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%			<u> </u>	Auto	s: 9	<u>·</u> 2.547			
	Left View:	-90.0 degre	es		Mediu	m Truck		2.504			
	Right View:	90.0 degre			Heav	y Truck	rs: 9	2.547			
FHWA Noise Mode	l Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Be	rm Atten
Autos:	73.22			-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.79		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.75		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrio	er atter	nuation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	70).4	68.5		66.7		60).6	69.3	3	69.9
Medium Trucks:	63	3.6	62.1		55.7		54	1.2	62.6		62.9
Heavy Trucks:	63	3.3	61.8		52.8		54	l.1	62.4	4	62.5
Vehicle Noise:	71	1.8	70.1		67.2		62	2.2	70.8	3	71.3
Centerline Distanc	e to Noise C	ontour (in feet)								
			L		dBA		dBA	6	60 dBA		dBA
			Ldn:	1	13	2	243		524	1	,129

CNEL:

122

262

564

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: n/o Bryan Av.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				ı	NOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	32,200 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	3,220 vehicle	es		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		1	/ehicle	Mix					
Near/Far La	ne Distance:	76 feet				icleTyp	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-		97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		_					- 4		
Centerline Dist.		100.0 feet		<u> </u>	Voise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet			N 4 = =15	Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	_	1.000	Grade Ad	iuotmont	0.0
P	ad Elevation:	0.0 feet			неач	y Truck	(S. C	3.006	Grade Auj	usimeni.	0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediu	m Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547			
FHWA Noise Mod	lel Calculation	1S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	1.88	}	-4.11	l	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-15.36	;	-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-19.32	2	-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout Topo and	barri	ier atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	ening/	Leq	Night		Ldn	CI	VEL
Autos:	69	9.8	67.9		66.1		60	.1	68.7	7	69.3
Medium Trucks:	63	3.0	61.5		55.1		53	.6	62.1	I	62.3
Heavy Trucks:	62	2.7	61.3		52.2		53	.5	61.8	3	62.0
Vehicle Noise:	7′	1.3	69.5		66.6		61	.7	70.2	2	70.7
Centerline Distan	ce to Noise C	ontour (in fee	t)					1		1	
				70 a	<i>IBA</i>	65	dBA	6	60 dBA	55	dBA

103

111

Ldn:

CNEL:

223

240

1,035

1,115

480

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: s/o Bryan Av.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA				ı	IOISE	MODE	L INPUT	S	
Highway Data					,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	51,30	0 vehicles	3					Autos:	15		
Peak Hour	Percentage:	1	0%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	5,13	0 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	6	0 mph			Vehicle l	Miv					
Near/Far La	ne Distance:	7	6 feet				icleType	Ş	Day	Evening	Night	Daily
Site Data						7 011		Autos:	77.5%		9.6%	-
	vviav Haiahtı) O foot			Me	edium T		84.8%		10.3%	1.84%
Barrier Type (0-V	rrier Height:	-).0 feet).0				leavy T		86.5%		10.8%	0.74%
	ist. to Barrier:).0).0 feet									
Centerline Dist.			0.0 feet		1	Noise So			•	eet)		
Barrier Distance).0 feet				Auto		2.000			
Observer Height			5.0 feet				n Truck		1.000			
ŭ	ad Elevation:	_	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment.	0.0
-	ad Elevation:).0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	-	0.0%			<u> </u>	Auto		 2.547			
	Left View:		0.0 degree	es		Mediui	n Truck	s: 92	2.504			
	Right View:		0.0 degree			Heav	y Truck	s: 92	2.547			
FHWA Noise Mod												
VehicleType	REMEL		ffic Flow	Di	stance	Finite		Fres		Barrier Att		m Atten
Autos:			3.90		-4.1		-1.20		-4.87		000	0.000
Medium Trucks:		-	-13.34		-4.1	-	-1.20		-4.97		000	0.000
Heavy Trucks:	87.33	3	-17.29		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout 7	opo and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	our	Leq Day	,	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	7	1.8	(69.9		68.1		62	.1	70.7	7	71.3
Medium Trucks:	6	5.0		63.5		57.2		55	.6	64.1	1	64.3
Heavy Trucks:		4.7		63.3		54.3		55	.5	63.9	9	64.0
Vehicle Noise:	7	3.3		71.5		68.6		63	.7	72.2	2	72.7
Centerline Distan	ce to Noise C	ontou	ır (in feet))								
					70 d	dBA	65	dBA	6	i0 dBA	55	dBA

Ldn:

CNEL:

141

152

304

328

655

706

1,412

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: n/o Trabuco Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	ΛTA			N	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	51,900 ve	ehicles					Autos:	15		
= -	r Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	5,190 ve	ehicles		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 m	ph		Vehicle I	Miv					
Near/Far La	ane Distance:	76 fe	et			icleType	2	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	Ū	9.6%	,
	arrier Height:	0.0 f	oot		Me	edium T		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0	eeı		F	leavy T	rucks:	86.5%		10.8%	0.74%
• • •	ist. to Barrier:	100.0 f	eet								
Centerline Dist.		100.0 f			Noise Sc				eet)		
Barrier Distance		0.0 f				Auto		2.000			
Observer Height		5.0 f				n Truck	_	.000			
•	Pad Elevation:	0.0 f			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0
Ro	ad Elevation:	0.0 f			Lane Equ	uivalen	t Distai	nce (in f	feet)		
	Road Grade:	0.0%				Auto	s: 92	2.547			
	Left View:	-90.0 c	legrees		Mediur	n Truck	s: 92	2.504			
	Right View:	90.0 c	degrees		Heav	y Truck	s: 92	2.547			
FHWA Noise Mod	del Calculation	18									
VehicleType	REMEL	Traffic F	low D	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	2	3.95	-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	3 -1	3.29	-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3 -1	7.24	-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout Topo	and bar	rier atter	nuation)						
VehicleType	Leq Peak Ho	ur Le	q Day	Leq E	vening	Leq	Night		Ldn		NEL
Autos:	7′	1.9	70.0)	68.2		62	.1	70.8	3	71.4
Medium Trucks:		5.1	63.6		57.2		55		64.1		64.4
Heavy Trucks:	64	4.8	63.3		54.3		55	.6	63.9	9	64.0
Vehicle Noise.	73	3.3	71.6	3	68.7		63	.7	72.3	3	72.8
Centerline Distant	ice to Noise C	ontour (in	r feet)		T			ı			
				70	dBA	65	dBA	6	60 dBA	55	dBA

142

153

306

330

660

711

1,423

1,532

Ldn:

CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: s/o I-5 SB Ramps

Number: 8141

Analyst: B. Lawson

	SPECIFIC I	NPUT DAT	Α						L INPUT	S	
Highway Data				;	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	56,900 vehi	cles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	2 Axles):	15		
Peak H	lour Volume:	5,690 vehi	cles		He	avy Tru	icks (3+	- Axles):	15		
Ve	hicle Speed:	60 mph	1	,	Vehicle I	Mix					
Near/Far La	ne Distance:	76 feet				icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	_	9.6%	_
	rrier Height:	0.0 fee			Me	edium 7		84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0	: L		F	leavy T	rucks:	86.5%	2.7%	10.8%	
Centerline Di	•	100.0 fee	t								
Centerline Dist.		100.0 fee		1	Noise Sc				eet)		
Barrier Distance		0.0 fee				Auto		2.000			
Observer Height		5.0 fee				n Truck		4.000			
•	ad Elevation:	0.0 fee			Heav	y Truck	rs:	8.006	Grade Ad	justment	: 0.0
	ad Elevation:	0.0 fee			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0%	•			Auto		2.547			
	Left View:	-90.0 deg	rees		Mediur	n Truck		2.504			
	Right View:	90.0 deg	-			y Truck		2.547			
		00.0 0.0	j. 000								
FHWA Noise Mod											
VehicleType	REMEL	Traffic Flo		istance	Finite		Fre		Barrier Att	en Ber	m Atten
Autos:	73.22		35	-4.1		-1.20		-4.87		000	0.000
Medium Trucks:	83.68			-4.1		-1.20		-4.97		000	0.000
Heavy Trucks:	87.33	3 -16.	84	-4.11	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (wit	hout Topo a	nd barr	ier atten	uation)						
VehicleType	Leq Peak Ho	our Leq I	Day	Leq E	ening ,	Leq	Night		Ldn	C	NEL
Autos:	7	2.3	70.4	-	68.6	<u>-</u>	62	2.5	71.2	2	71.8
Medium Trucks:	6	5.5	64.0		57.6		56	6.1	64.5	5	64.8
Heavy Trucks:	6	5.2	63.7		54.7		56	6.0	64.3	3	64.4
Vehicle Noise:	7	3.7	72.0		69.1		64	1.1	72.7	7	73.2
Centerline Distan	ce to Noise C	Contour (in f	eet)								
				70 c	BA	65	dBA	6	60 dBA	55	dBA
			Ldn:	15	51	3	326		702	1,	512
			O		_	_					

CNEL:

163

351

756

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr. Number: 8141 Road Segment: n/o Walnut Av. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA					NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	51,800 vehicle	s					Autos:	15		
•	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	5,180 vehicle	S		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	60 mph		,	Vehicle I	Miv					
Near/Far La	ne Distance:	76 feet				icleType	2	Day	Evening	Night	Daily
Site Data					V GI I		Autos:	77.5%	J	9.6%	_
		0.0 foot			Me	edium T		84.8%		10.3%	
	rrier Height:	0.0 feet				leavy T		86.5%		10.8%	
Barrier Type (0-W Centerline Di		0.0 100.0 feet									0
Centerline Dist.		100.0 feet		1	Noise So	ource E	levatio	ns (in f	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height (5.0 feet			Mediui	n Truck		1.000			
•	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Adj	iustment	: 0.0
	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto		2.547	,		
	Left View:	-90.0 degree	25		Mediui	n Truck		2.504			
	Right View:	90.0 degree			Heav	y Truck		2.547			
FHWA Noise Mod	el Calculation	าร									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Bei	rm Atten
Autos:	73.22	2 3.94		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-13.30		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-17.25		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	,	Leq E	/ening	Leq	Night		Ldn	С	NEL
Autos:	7	1.8	70.0		68.2		62	.1	70.8	3	71.4
Medium Trucks:	6	5.1	63.6		57.2		55	.7	64.1	I	64.4
Heavy Trucks:	64	4.8	63.3		54.3		55	.6	63.9	9	64.0
Vehicle Noise:	7:	3.3	71.6		68.7		63	.7	72.3	3	72.8
Centerline Distan	ce to Noise C	ontour (in feet)		/D.4		15.4		00 /D:		10.4
			[70 d			dBA		60 dBA		dBA
			Ldn:	14	12	3	806		659	1,	421

153

330

CNEL:

1,530

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Walnut Av. and Deerfiled Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	d=10, So	oft = 15)		
Average Daily Traffic (Adt):	47,800 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks ((2 Axles):	15		
Peak Hour Volume:	4,780 vehicles	S	He	avy Trucks (3	3+ Axles):	15		
Vehicle Speed:	60 mph		Vehicle I	Miss				
Near/Far Lane Distance:	76 feet				Dou		Niosht	Doily
Cita Data			ven	icleType	Day	Evening	Night	Daily
Site Data			A 4.	Autos Autos Trucks			9.6%	97.42%
Barrier Height:				edium Trucks			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			, , , , , , , , , , , , , , , , , , ,	Heavy Trucks	: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:			Noise So	ource Elevati	ons (in f	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0
Pad Elevation:								
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist		feet)		
Road Grade:	0.0%				92.547			
Left View:	-90.0 degree	es	Mediui	m Trucks:	92.504			
Right View:	90.0 degree	es	Heav	ry Trucks:	92.547			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	e Finite		esnel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 3.59	-4	.11	-1.20	<i>-4.87</i>	0.0	000	0.000
Medium Trucks: 83.6	8 -13.64	-4	.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.3	3 -17.60	-4	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier att	enuation)					
VehicleType Leq Peak H			Evening	Leq Night	1	Ldn		VEL
Autos:	71.5	69.6	67.8	6	31.8	70.4	1	71.0
Medium Trucks:	64.7	63.2	56.9	5	5.3	63.8	3	64.0
Heavy Trucks:	64.4	63.0	54.0	5	5.2	63.6	6	63.7
Vehicle Noise:	73.0	71.2	68.3	6	3.4	71.9	9	72.4
Centerline Distance to Noise	Contour (in feet)	,					

70 dBA

135

145

Ldn:

CNEL:

65 dBA

290

312

60 dBA

625

673

55 dBA

1,347

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Deerfield Dr. and ICD

Number: 8141

Analyst: B. Lawson

SITE SPEC	IFIC INF	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily Traffic	(Adt): 42	2,900 vehicles	5					Autos:	15		
Peak Hour Percei	ntage:	10%			Me	dium Tri	ucks (2	Axles):	15		
Peak Hour Vo	olume: 4	1,290 vehicles	5		He	avy Trud	cks (3+	Axles):	15		
Vehicle S	Speed:	60 mph		V	'ehicle l	Miy					
Near/Far Lane Dis	tance:	76 feet				cleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	_
Barrier H	eiaht:	0.0 feet			Ме	edium Ti	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-E	-	0.0			F	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to B	,	100.0 feet						<i>(</i> ; •			
Centerline Dist. to Obs		100.0 feet		Λ	ioise Sc			ns (in fe	eet)		
Barrier Distance to Obs		0.0 feet				Auto		2.000			
Observer Height (Above		5.0 feet				n Truck		1.000	0 , 4 ,		0.0
Pad Elev	•	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment.	: 0.0
Road Elev		0.0 feet		Lane Equivalent Distance (in feet)							
Road (Grade:	0.0%				Auto	s: 92	2.547			
Left	View:	-90.0 degree	es		Mediur	n Truck	s: 92	2.504			
Right	View:	90.0 degree			Heav	y Truck	s: 92	2.547			
FHWA Noise Model Cald	culations										
VehicleType RE	MEL	Traffic Flow	Dista	nce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	3.12		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.11		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.07		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Leve	ls (witho	ut Topo and	barrier	attenu	ıation)						
VehicleType Leq P	eak Hour	Leq Day	L	.eq Ev	ening	Leq	Night		Ldn	CI	NEL
Autos:	71.0)	69.1		67.4		61	.3	69.9	9	70.5
Medium Trucks:	64.3		62.8		56.4		54	.8	63.3		63.5
Heavy Trucks:	63.9)	62.5		53.5		54	.7	63.1	1	63.2
Vehicle Noise:	72.5	5	70.7		67.9		62	.9	71.5	5	72.0
Centerline Distance to N	loise Cor	ntour (in feet)								

70 dBA

125

135

Ldn:

CNEL:

65 dBA

270

291

60 dBA

582

626

55 dBA

1,253

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w ICD and Warner Av.

Number: 8141

Analyst: B. Lawson

SITE SPECII	FIC INP	UT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily Traffic (Adt): 46	,400 vehicles	3					Autos:	15		
Peak Hour Percent	age:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volu	ıme: 4	,640 vehicles	3		He	avy Trud	cks (3+	Axles):	15		
Vehicle Sp	eed:	60 mph		V	'ehicle l	Miy					
Near/Far Lane Dista	nce:	76 feet		-		cleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	_
Barrier He	iaht·	0.0 feet			Ме	edium T	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Be	_	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Ba	•	100.0 feet			laisa Sa	uroo E	lovotio	ns (in fe	201		
Centerline Dist. to Obse	rver:	100.0 feet		^	ioise sc				et)		
Barrier Distance to Obse	rver:	0.0 feet			N 4 1'	Auto		2.000			
Observer Height (Above F		5.0 feet				n Truck		1.000	0 - 4 - 4 - 4	r	0.0
Pad Eleva	•	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0
Road Eleva		0.0 feet		Lane Equivalent Distance (in feet)							
Road Gr	ade:	0.0%				Auto	s: 92	2.547			
Left \		-90.0 degree	es		Mediur	n Truck	s: 92	2.504			
Right \		90.0 degree			Heav	y Truck	s: 92	2.547			
FHWA Noise Model Calcu	ılations										
VehicleType REM	IEL 7	Traffic Flow	Distan	се	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	3.46		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-13.77		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-17.73		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels	(withou	ıt Topo and	barrier a	ttenu	ıation)						
VehicleType Leq Pe	ak Hour	Leq Day	Le	q Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	71.4		69.5		67.7		61	.7	70.3	3	70.9
Medium Trucks:	64.6	(63.1		56.7		55	.2	63.6	6	63.9
Heavy Trucks:	64.3	(62.9		53.8		55	.1	63.4	4	63.6
Vehicle Noise:	72.9		71.1		68.2		63	.3	71.8	8	72.3
Centerline Distance to No	ise Con	tour (in feet))								

70 dBA

132

142

Ldn:

CNEL:

65 dBA

284

306

60 dBA

613

660

55 dBA

1,320

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Warner Av. and Barranca Pkwy.

Number: 8141

Analyst: B. Lawson

Medium Trucks: 83.68 -13.70 -4.11 -1.20 -4.97 0.000 0.000 Heavy Trucks: 87.33 -17.66 -4.11 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) Vehicle Type Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.4 69.5 67.8 61.7 70.3 71.0 Medium Trucks: 64.7 63.2 56.8 55.3 63.7 64.0 Heavy Trucks: 64.4 62.9 53.9 55.1 63.5 63.6	SITE	SPECIFIC I	NPUT D	ATA	NOISE MODEL INPUTS							
Peak Hour Percentage: 10% A,720 vehicles Heavy Trucks (3 + Axles): 15	Highway Data					Site C	Conditions	(Hard	= 10, Sc	oft = 15)		
Peak Hour Volume: Vehicle Speed: 60 mph Near/Far Lane Distance: 76 feet Vehicle Mix Vehicle Type Day Evening Night Daily	Average Daily	Traffic (Adt):	47,200	vehicles	;				Autos:	15		
Vehicle Speed: Near/Far Lane Distance: 60 mph 76 feet Vehicle Mix Vehicle Type Day Evening Night Daily Site Data Autos: 77.5% 12.9% 9.6% 97.42% Barrier Height: Barrier Height: Dist to Union Frame Pick Barrier Type (0-Wall, 1-Berm): 0.0 feet Centerline Dist. to Dasriver: 100.0 feet Barrier Distance to Observer: 0.0 feet Barrier Distance Distance Distance Pad Elevation: 0.0 feet Barrier Distance Distanc	Peak Hour	Percentage:	10%	, D			Medium Tru	ucks (2	Axles):	15		
Near/Far Lane Distance: 76 feet VehicleType Day Evening Night Daily	Peak H	lour Volume:	4,720 \	vehicles	;		Heavy Truc	cks (3+	Axles):	15		
Near/Far Lane Distance: 76 feet VehicleType Day Evening Night Daily	Ve	hicle Speed:	60 ı	mph		Vehic	le Mix					
Barrier Height: 0.0 feet 0.0 feet 0.0 feet 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Distance to Observer: 100.0 feet Distance to Observer: 0.0 feet	Near/Far La	ne Distance:	76 1	feet)	Day	Evening	Night	Daily
Barrier Type (0-Wall, 1-Berm): 0.0 Conterline Dist. to Barrier: 100.0 feet	Site Data							Autos:				97.42%
Heavy Trucks: 86.5% 2.7% 10.8% 0.74%	Ra	rrier Heiaht:	0.0	feet			Medium Tr	rucks:	84.8%	4.9%	10.3%	1.84%
Noise Source Elevations (in feet) Autos: 2.000		_		1001			Heavy Tı	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet feet feet Pad Elevation: 0.0 feet feet feet feet feet feet feet fee	• • • •			feet		Naiss	Course Fl		(: £	41		
Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Autos: 92.547 Left View: 90.0 degrees Right View: 90.0 degrees Philosophic Robust Pad Elevations						Noise				eet)		
Medium Trucks: 4.000 Pad Elevation: Pad Elevation: Road Elevation: Road Grade: 0.0% Left View: -90.0 degrees Left View: 90.0 degrees Medium Trucks: 92.547 Heavy Trucks: Path Noise Model Calculations Traffic Flow Distance Finite Road Fresnel Autos: 73.22 Barrier Atten Berm Atten Autos: 83.68 -13.70 -4.11 -1.20 -4.97 0.000 0.000 Heavy Trucks: Path View: Poblicle Type 87.33 -17.66 -4.11 -1.20 -4.97 0.000 0.000 Medium Trucks: Path View: Poblicle Type 87.33 -17.66 -4.11 -1.20 -5.16 0.000 0.000 Medium Trucks: Path View: Poblicle Type 87.33 -17.66 -4.11 -1.20 -5.16 0.000 0.000 Medium Trucks: Path View:	Barrier Distance	to Observer:										
Pad Elevation: 0.0 feet Heavy Trucks: 8.006 Grade Adjustment. Grade Adjustment. U.0.0 Road Grade: 0.0% Lane Equivalent Distance (in feet) Autos: 92.547 FHWA Noise Model Calculations Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.54 -4.11 -1.20 -4.87 0.000 0.000 Medium Trucks: 83.68 -13.70 -4.11 -1.20 -4.97 0.000 0.000 Heavy Trucks: 87.33 -17.66 -4.11 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.4 69.5 67.8 61.7 70.3 71.0 Medium Trucks: 64.7										0 - 4 - 4 - 4	r	0.0
Road Elevation: 0.0 feet Road Grade: 0.0% Autos: 92.547 Left View: -90.0 degrees Right View: 90.0 degrees Plant View: 90.0 degrees Autos: 92.547 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.54 -4.11 -1.20 -4.87 0.000 0.000 Medium Trucks: 83.68 -13.70 -4.11 -1.20 -4.97 0.000 0.000 Heavy Trucks: 87.33 -17.66 -4.11 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.4 69.5 67.8 61.7 70.3 71.0 Medium Trucks: 64.7 63.2 56.8 55.3 63.7 64.0 Medium Trucks: 64.4 62.9 53.9 55.1 63.5 63.6 Autos: 71.4 69.5 56.8 55.3 63.7 64.0 Medium Trucks: 64.4 62.9 53.9 55.1 63.5 63.6 Medium Trucks: 64.4 62.9 63.5 63.6 Medium Trucks: 70.0 70.0 70.0 _	•				H	eavy Trucks	s: 8	3.006	Grade Ad	justment	: 0.0	
Road Grade: 0.0%	-					Lane	Equivalent	t Distai	nce (in	feet)		
Left View: -90.0 degrees Medium Trucks: 92.504 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.54 -4.11 -1.20 -4.87 0.000 0.000 Medium Trucks: 83.68 -13.70 -4.11 -1.20 -4.97 0.000 0.000 Heavy Trucks: 87.33 -17.66 -4.11 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.4 69.5 67.8 61.7 70.3 71.0 Medium Trucks: 64.7 63.2 56.8 55.3 63.7 64.0 Heavy Trucks: 64.4 62.9 53.9 55.1 63.5 63.6							Autos	s: 92	2.547			
Right View: 90.0 degrees Heavy Trucks: 92.547 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.54 -4.11 -1.20 -4.87 0.000 0.000 Medium Trucks: 83.68 -13.70 -4.11 -1.20 -4.97 0.000 0.000 Heavy Trucks: 87.33 -17.66 -4.11 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.4 69.5 67.8 61.7 70.3 71.0 Medium Trucks: 64.7 63.2 56.8 55.3 63.7 64.0 Heavy Trucks: 64.4 62.9 53.9 55.1 63.5 63.6					ıs.	Med	dium Trucks	s: 92	2.504			
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.54 -4.11 -1.20 -4.87 0.000 0.000 Medium Trucks: 83.68 -13.70 -4.11 -1.20 -4.97 0.000 0.000 Heavy Trucks: 87.33 -17.66 -4.11 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.4 69.5 67.8 61.7 70.3 71.0 Medium Trucks: 64.7 63.2 56.8 55.3 63.7 64.0 Heavy Trucks: 64.4 62.9 53.9 55.1 63.5 63.6		Right View:		-		Н	eavy Trucks	s: 92	2.547			
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.54 -4.11 -1.20 -4.87 0.000 0.000 Medium Trucks: 83.68 -13.70 -4.11 -1.20 -4.97 0.000 0.000 Heavy Trucks: 87.33 -17.66 -4.11 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.4 69.5 67.8 61.7 70.3 71.0 Medium Trucks: 64.7 63.2 56.8 55.3 63.7 64.0 Heavy Trucks: 64.4 62.9 53.9 55.1 63.5 63.6	FHWA Noise Mod	el Calculatio	าร									
Medium Trucks: 83.68 -13.70 -4.11 -1.20 -4.97 0.000 0.000 Heavy Trucks: 87.33 -17.66 -4.11 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) Vehicle Type Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.4 69.5 67.8 61.7 70.3 71.0 Medium Trucks: 64.7 63.2 56.8 55.3 63.7 64.0 Heavy Trucks: 64.4 62.9 53.9 55.1 63.5 63.6				Flow	Distance	Fir	ite Road	Fres	snel	Barrier Att	en Ber	m Atten
Heavy Trucks: 87.33 -17.66 -4.11 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.4 69.5 67.8 61.7 70.3 71.0 Medium Trucks: 64.7 63.2 56.8 55.3 63.7 64.0 Heavy Trucks: 64.4 62.9 53.9 55.1 63.5 63.6	Autos:	73.22	2	3.54	-4.	11	-1.20		-4.87	0.0	000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.4 69.5 67.8 61.7 70.3 71.0 Medium Trucks: 64.7 63.2 56.8 55.3 63.7 64.0 Heavy Trucks: 64.4 62.9 53.9 55.1 63.5 63.6	Medium Trucks:	83.68	3	-13.70	-4.	11	-1.20		-4.97	0.0	000	0.000
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.4 69.5 67.8 61.7 70.3 71.0 Medium Trucks: 64.7 63.2 56.8 55.3 63.7 64.0 Heavy Trucks: 64.4 62.9 53.9 55.1 63.5 63.6	Heavy Trucks:	87.33	3	-17.66	-4.	11	-1.20		-5.16	0.0	000	0.000
Autos: 71.4 69.5 67.8 61.7 70.3 71.0 Medium Trucks: 64.7 63.2 56.8 55.3 63.7 64.0 Heavy Trucks: 64.4 62.9 53.9 55.1 63.5 63.6	Unmitigated Nois	e Levels (with	hout Top	o and l	barrier atte	nuatio	n)					
Medium Trucks: 64.7 63.2 56.8 55.3 63.7 64.0 Heavy Trucks: 64.4 62.9 53.9 55.1 63.5 63.6	VehicleType	Leq Peak Ho	our L	eq Day	Leq I	Evening	g Leq	Night		Ldn	C	NEL
Heavy Trucks: 64.4 62.9 53.9 55.1 63.5 63.6	Autos:	7	1.4	6	89.5	67	7.8	61	.7	70.3	3	71.0
•	Medium Trucks:	6	4.7	6	3.2	56	6.8	55	.3	63.7	7	64.0
Vehicle Noise: 72.9 71.2 68.3 63.3 71.9 72.4	Heavy Trucks:	6	4.4	6	62.9	53.9		55.1		63.5		63.6
	Vehicle Noise:	7	2.9	7	71.2	68	3.3	63	.3	71.9	9	72.4

70 dBA

134

144

Ldn:

CNEL:

65 dBA

288

310

60 dBA

620

668

55 dBA

1,335

1,438

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr. Number: 8141 Road Segment: n/o Alton Pkwy. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	51,500 vehicles	S					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	? Axles):	15				
Peak H	our Volume:	5,150 vehicles	S		He	avy Tru	cks (3+	- Axles):	15				
Vel	hicle Speed:	60 mph			Vehicle i	Mix							
Near/Far Lar	ne Distance:	76 feet				icleType	9	Day	Evening	Night	Daily		
Site Data					70//		Autos:	77.5%	_	9.6%			
	rior Unight	0.0 feet			M	edium T		84.8%		10.3%			
Barrier Type (0-W	rier Height:	0.0 reet 0.0				-leavy T		86.5%		10.8%			
Centerline Dis	,	100.0 feet											
Centerline Dist. t		100.0 feet			Noise So	ource E		•	eet)				
Barrier Distance		0.0 feet				Auto		2.000					
Observer Height (5.0 feet				m Truck		4.000					
• ,	nd Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment	± 0.0		
	nd Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)				
	Road Grade:	0.0%				Auto	s: 9:	<u>·</u> 2.547					
•	Left View:	-90.0 degree	es		Mediu	m Truck		2.504					
	Right View:	90.0 degree			Heav	y Truck	rs: 9	2.547					
FHWA Noise Mode	el Calculation	ıs											
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fre	snel	Barrier Att	en Be	rm Atten		
Autos:	73.22			-4.1	1	-1.20		<i>-4.</i> 87	0.0	000	0.000		
Medium Trucks:	83.68	-13.32		-4.1	1	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-17.28		-4.1	1	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)					,			
VehicleType	Leq Peak Ho			Leq E	vening	Leq	Night		Ldn		NEL		
Autos:	71	1.8	69.9		68.2		62	2.1	70.7	7	71.3		
Medium Trucks:	65	5.1	63.5		57.2		55	5.6	64.1	1	64.3		
Heavy Trucks:	64	1.7	63.3		54.3		55	5.5	63.9	9	64.0		
Vehicle Noise:	73	3.3	71.5		68.7		63	3.7	72.3	3	72.7		
Centerline Distance	e to Noise C	ontour (in feet)							Г			
					dBA		dBA	(60 dBA		dBA		
			Ldn:	14	12	3	05		657	1,	415		

CNEL:

152

328

707

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Alton Pkwy. and Main St.

Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS												
Highway Data				Site Con	ditions (Ha	rd = 10, Se	oft = 15)							
Average Daily	Traffic (Adt):	52,100 vehicles	;			Autos:	15							
Peak Hour	Percentage:	10%		Me	dium Trucks	s (2 Axles):	15							
Peak F	lour Volume:	5,210 vehicles	;	He	avy Trucks	(3+ <i>Axles</i>):	15							
Ve	ehicle Speed:	60 mph		Vehicle I	Wix									
Near/Far La	ane Distance:	76 feet			icleType	Day	Evening	Night	Daily					
Site Data					Auto		-	9.6%	-					
Ra	rrier Height:	0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%					
Barrier Type (0-V	_	0.0		F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%					
Centerline Di	ist. to Barrier:	100.0 feet		Noise So	ource Eleva	tions (in f	eet)							
Centerline Dist.	to Observer:	100.0 feet		110,00 00	Autos:	2.000								
Barrier Distance	to Observer:	0.0 feet		Mediu	n Trucks:	4.000								
Observer Height	(Above Pad):	5.0 feet			y Trucks:	8.006	Grade Ad	iustment	. 0 0					
P	Pad Elevation: 0.0 feet													
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	stance (in	feet)							
	Road Grade:	0.0%		Autos: 92.547										
	Left View:	-90.0 degree	s	Mediui	n Trucks:	92.504								
	Right View:	90.0 degree	s	Heav	ry Trucks:	92.547								
FHWA Noise Mod	lel Calculation	1S												
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten					
Autos:	73.22	3.97	-4.′	11	-1.20	-4.87	0.0	000	0.000					
Medium Trucks:	83.68	-13.27	-4.1	11	-1.20	<i>-4</i> .97	0.0	000	0.000					
Heavy Trucks:	87.33	-17.23	-4.1	11	-1.20	-5.16	0.0	000	0.000					
Unmitigated Nois	e Levels (with	hout Topo and I	barrier atte	nuation)										
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Nigi	ht	Ldn	CI	VEL					
Autos:	7	1.9 7	70.0	68.2		62.2	70.8	3	71.4					
Medium Trucks:	6	5.1 6	63.6	57.2		55.7 64		1	64.4					
Heavy Trucks:	6-	4.8	63.4	54.3		55.6	63.9	9	64.1					

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	143	307	662	1,426
CNEL:	154	331	713	1,536

68.7

63.8

72.3

72.8

71.6

Vehicle Noise:

73.4

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w Main St. and San Leandro

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISI	MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	l = 10, Sc	oft = 15)		
Average Daily Traffic (Adt).	52,600 vehicle	S			Autos:	15		
Peak Hour Percentage.			Ме	dium Trucks (2 Axles):	15		
Peak Hour Volume.	5,260 vehicle	S	He	avy Trucks (3	+ Axles):	15		
Vehicle Speed.	60 mph		Vehicle	Miv				
Near/Far Lane Distance	76 feet			icleType	Day	Evening	Night	Daily
Site Data			VEII	Autos:	•	J	9.6%	97.42%
				.auos edium Trucks			10.3%	1.84%
Barrier Height				J aium Trucks. J eavy Trucks:			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm)			,	leavy Trucks.	00.57	2.1 /0	10.0 /0	0.7470
Centerline Dist. to Barrier			Noise So	ource Elevati	ons (in f	eet)		
Centerline Dist. to Observer				Autos:	2.000			
Barrier Distance to Observer			Mediu	m Trucks:	4.000			
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation								
Road Elevation			Lane Eq	uivalent Dist	•	feet)		
Road Grade					2.547			
Left View	-90.0 degre	es			2.504			
Right View	90.0 degre	es	Heav	y Trucks: 9	2.547			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 73.2	22 4.01	-4	.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	68 -13.23	-4	.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.3	-17.18	-4	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)					
VehicleType Leq Peak F	lour Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	71.9	70.0	68.3	6	2.2	70.8	3	71.4
Medium Trucks:	65.1	63.6	57.3	5	5.7	64.2	2	64.4
Heavy Trucks:	64.8	63.4	54.4	5	5.6	64.0)	64.1
Vehicle Noise:	73.4	71.6	68.7	6	3.8	72.4	4	72.8
Centerline Distance to Noise	Contour (in feet)						

70 dBA

144

155

Ldn:

CNEL:

65 dBA

309

333

60 dBA

666

718

55 dBA 1,435

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Culver Dr.

Road Segment: b/w San Leandro and I-405 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DA	TA			NO	ISE MODE	L INPUT	S					
Highway Data				S	ite Con	ditions (H	lard = 10, S	oft = 15)						
Average Daily	Traffic (Adt):	58,700 vel	nicles				Autos:	15						
Peak Hour	Percentage:	10%			Me	dium Truck	ks (2 Axles):	15						
Peak H	Hour Volume:	5,870 veł	nicles		He	avy Trucks	s (3+ Axles):	15						
Ve	ehicle Speed:	60 mp	h	V	ehicle l	Wix								
Near/Far La	ne Distance:	76 fee	et	-		icleType	Day	Evening	Night	Daily				
Site Data							tos: 77.5%	J	9.6%					
Ra	rrier Height:	0.0 fe	ot		Мє	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%				
Barrier Type (0-W	•	0.0	.C.		F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%				
• • • •	ist. to Barrier:	100.0 fe	et											
Centerline Dist.		100.0 fe		^	loise Sc		ations (in f	eet)						
Barrier Distance		0.0 fe				Autos:	2.000							
Observer Height		5.0 fe				n Trucks:	4.000							
-	ad Elevation:	0.0 fe			Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0				
Road Elevation: 0.0 feet				L	ane Eq	uivalent D	istance (in	feet)						
	Road Grade:	0.0%	Ci			Autos:	92.547	,						
	Left View:	-90.0 de	agrage		Medium Trucks: 92.504									
	Right View:	90.0 de	•			y Trucks:	92.547							
	ragin view.	30.0 ue	giees		77007	y Truono.	02.047							
FHWA Noise Mod	lel Calculation	s												
VehicleType	REMEL	Traffic Flo	ow Di	stance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten				
Autos:	73.22	4	1.49	-4.11		-1.20	-4.87	0.0	000	0.000				
Medium Trucks:	83.68	-12	2.75	-4.11		-1.20	-4.97	0.0	000	0.000				
Heavy Trucks:	87.33	-16	5.71	-4.11		-1.20	-5.16	0.0	000	0.000				
Unmitigated Nois	e Levels (with	out Topo	and barri	er attenu	uation)									
VehicleType	Leq Peak Hou	ır Leq	Day	Leq Ev	ening	Leq Ni	ght	Ldn	CI	VEL				
Autos:	72	2.4	70.5		68.7		62.7	71.3	3	71.9				
Medium Trucks:	65	5.6	64.1		57.8		56.2	64.7	7	64.9				
Heavy Trucks:	65	5.3	63.9		54.8		56.1	64.5	5	64.6				
Vehicle Noise:	73	3.9	72.1		69.2		64.3	72.8	3	73.3				
Contorlino Distan	co to Noiso C	ontour (in	foot)											

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	154	333	717	1,544
CNEL:	166	358	772	1,663

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: E. Yale Lp.

Road Segment: s/o Barranca Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				5	Site Con	ditions	(Hard	= 10, Sc	ft = 15)			
Average Daily	Traffic (Adt):	12,200 vehicle	s					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15			
Peak H	lour Volume:	1,220 vehicle	s		He	avy Tru	icks (3+	Axles):	15			
Ve	ehicle Speed:	50 mph		V	/ehicle l	Wix						
Near/Far La	ne Distance:	50 feet				icleType	е	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		•	97.42%	
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V	_	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%	
• • •	ist. to Barrier:	100.0 feet							- 41			
Centerline Dist.		100.0 feet			Voise So			•	et)			
Barrier Distance	to Observer:	0.0 feet			N / = = /:	Auto		2.000				
Observer Height	(Above Pad):	5.0 feet				n Truck	_	1.000	Grade Ad	iustmont	0.0	
P	ad Elevation:	0.0 feet			неач	y Truck	(S. C	3.006	Grade Auj	justinent.	0.0	
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)			
	Road Grade:	0.0%				Auto	os: 96	6.871				
	Left View:	-90.0 degre	es		Mediui	n Truck	rs: 96	6.830				
	Right View:	90.0 degre	es		Heav	y Truck	rs: 96	5.871				
FHWA Noise Mod	lel Calculation	IS										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	70.20	-1.54		-4.41		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	81.00	-18.78		-4.41		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	85.38	-22.74		-4.41		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	er atteni	uation)							
VehicleType	Leq Peak Ho	ur Leq Day	y	Leq Ev	rening	Leq	Night		Ldn	CI	VEL	
Autos:	63	3.0	61.1		59.4		53	.3	61.9	9	62.6	
Medium Trucks:	56	6.6	55.1		48.7		47	.2	55.7	7	55.9	
Heavy Trucks:	57	7.0	55.6		46.6		47	.8	56.2	2	56.3	
Vehicle Noise:	64	1.7	63.0		59.9		55	.2	63.7	7	64.2	
Centerline Distan	ce to Noise C	ontour (in feet	t)					1				
				70 d	IBA	65	dBA	6	0 dBA	55	dBA	

Ldn:

CNEL:

38

41

82

88

177

190

381

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: E. Yale Lp.

Road Segment: n/o Alton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data						Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt)	11,6	600 vehicles	3					Autos:	15				
Peak Hour Percentage		10%			Me	dium Tı	rucks (2	Axles):	15				
Peak Hour Volume	1,1	160 vehicles	3		He	avy Tru	icks (3+	Axles):	15				
Vehicle Speed		55 mph		-	Vehicle I	Miv							
Near/Far Lane Distance		52 feet				icleType	e	Day	Evening	Night	Daily		
Site Data					V 011		Autos:	77.5%	-		97.42%		
		0.0 foot			Me	edium T		84.8%		10.3%	1.84%		
Barrier Height		0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm) Centerline Dist. to Barrier		0.0 00.0 feet									011 170		
Centerline Dist. to Observer		00.0 feet		1	Voise So	ource E	levatio	ns (in fe	eet)				
Barrier Distance to Observer		0.0 feet				Auto	os: 2	2.000					
Observer Height (Above Pad)		5.0 feet			Mediui	n Truck	rs: 4	1.000					
Pad Elevation		0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	iustment:	0.0		
Road Elevation		0.0 feet		-	Lane Eq	uivalen	t Dista	nce (in f	feet)				
Road Grade		0.0%				Auto		6.607					
Left View: -90.0 degrees					Medium Trucks: 96.566								
Right View		90.0 degree 90.0 degree			Heavy Trucks: 96.608								
raght view	•	oo.o deglee	,3		77047	y maon		3.000					
FHWA Noise Model Calculation	ons			,									
VehicleType REMEL	Tr	raffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 71.	'8	-2.18		-4.39	9	-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 82.4	10	-19.42		-4.39	.39 -1.2		0 <i>-4.97</i>		0.0	000	0.000		
Heavy Trucks: 86.4	10	-23.37		-4.39	9	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (w	thout	Topo and I	barri	er atten	uation)								
VehicleType Leq Peak F	our	Leq Day		Leq E	ening	Leq	Night		Ldn	CI	VEL		
Autos:	64.0	6	52.1		60.3	60.3 54.		.3	62.9		63.5		
Medium Trucks:	57.4	5	55.9		49.5		48	.0	56.4	1	56.7		
Heavy Trucks:	Heavy Trucks: 57.4 56.0			47.0 48.2			56.6	56.6 56.7					
Vehicle Noise:	65.6	(3.8		60.9		56	5.0	64.5	5	65.0		
Centerline Distance to Noise	Conto	our (in feet))										
		· · · · · · ·		70 c	IBA	65	dBA	6	60 dBA	55	dBA		

Ldn:

CNEL:

43

47

93

100

201

216

433

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: E. Yale Lp.

Road Segment: s/o Alton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data						Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	11,500 vehicles	6					Autos:	15				
= -	Peak Hour Percentage: 10%				Medium Trucks (2 Axles): 15								
Peak I	Peak Hour Volume: 1,150 vehicles				Heavy Trucks (3+ Axles): 15								
Ve	ehicle Speed:	55 mph		V	ehicle l	Miv							
Near/Far La	ane Distance:	52 feet		V.		icleType		Day	Evening	Night	Daily		
Site Data					V GI I		tos:	77.5%	Ŭ I	9.6%			
		0.0.61			M	edium Truc		84.8%		10.3%			
	rrier Height:	0.0 feet				Heavy Truc		86.5%		10.8%			
Barrier Type (0-V	•	0.0								10.070	0.7 170		
	ist. to Barrier:	100.0 feet		N	oise So	ource Elev	ation	s (in fe	eet)				
Centerline Dist.		100.0 feet				Autos:	2.	000					
Barrier Distance		0.0 feet			Mediu	m Trucks:	4.	000					
Observer Height	` ,	5.0 feet			Heav	y Trucks:	8.	006	Grade Adj	iustment.	0.0		
	Pad Elevation:	0.0 feet			-			<i>(</i> ')	r 4\				
Ro	ad Elevation:	0.0 feet		Li	Lane Equivalent Distance (in feet)								
Road Grade: 0.0%					Autos: 96.607								
Left View: -90.0 degrees					Medium Trucks: 96.566								
	Right View:	90.0 degree	es		Heavy Trucks: 96.608								
FHWA Noise Mod	lel Calculation	s											
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite	Road	Fresr	nel	Barrier Atte	en Ber	m Atten		
Autos:	71.78	-2.22		-4.39		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-19.45		-4.39	.39 -1.20 -4			-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-23.41		-4.39	.39 -1.20 -5.16			0.000 0.000					
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenu	ation)								
VehicleType	Leq Peak Hou	ır Leq Day	L	eq Eve	Evening Leq N		ght		Ldn	CI	CNEL		
Autos:	64	.0	62.1		60.3 54		54.3	62.9		9	63.5		
Medium Trucks:	Medium Trucks: 57.4 55.9		55.9		49.5 47.9 56.4			1	56.6				
Heavy Trucks:	Heavy Trucks: 57.4 56.0			46.9 48.2 56.5			5	56.7					
Vehicle Noise:	65	5.5	63.8		60.8		56.0)	64.5	5	65.0		
Centerline Distan	ce to Noise C	ontour (in feet))										
				70 dE	3A	65 dE	BA	6	60 dBA	55	dBA		
			Ldn:	43		93			200	4	31		

CNEL:

46

100

215

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: El Camino Real Number: 8141
Road Segment: e/o Tustin Ranch Rd. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS									
Highway Data						Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	16,600 v	vehicles					Autos:	15					
	Percentage:	10%			Me	dium Tri	ucks (2	Axles):	15					
Peak H	Peak Hour Volume: 1,660 vehicles					Heavy Trucks (3+ Axles): 15								
	ehicle Speed:	50 ı	•		Vehicle Mix									
Near/Far La	ne Distance:	70 feet									Daily			
Site Data						,	Autos:	77.5%	12.9%	9.6%	97.42%			
Ba	rrier Height:	0.0	feet		M	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0	1001		ŀ	Heavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%			
• • •	ist. to Barrier:	100.0	feet		Noise So	ource Fi	lovation	ne (in fa	of)					
Centerline Dist.	to Observer:	100.0	feet		140/36 30	Auto.		.000						
Barrier Distance	to Observer:	0.0	feet		N / = =!:									
Observer Height	(Above Pad):	5.0	5.0 feet			Medium Trucks: 4.000								
P		feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0						0.0				
Ro		feet		Lane Eq	uivalent	t Distar	ice (in f	eet)						
	Road Grade:	0.09				Auto	s: 93	.723						
	Left View:		degree	s	Medium Trucks: 93.680									
		0.0 degrees Heavy Trucks: 93.723												
FHWA Noise Mod	lal Calaulation	•												
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten			
Autos:			-0.21	-4.2		-1.20		-4.87		000	0.000			
Medium Trucks:	81.00) .	-17.45	-4.	19	-1.20		-4.97	0.0	000	0.000			
Heavy Trucks:	85.38	}	-21.40	-4.5	20	-1.20		-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	nout Top	o and b	parrier atte	nuation)									
VehicleType	Leq Peak Ho		eq Day	1	Evening	Leq	Night		Ldn	CI	VEL			
Autos:	64	4.6		2.7	60.9		54.	9	63.5	5	64.1			
Medium Trucks:	58	8.2	5	6.7	50.3		48.7		57.2		57.4			
Heavy Trucks:	58	8.6	5	7.2	48.1		49.	4	57.7	7	57.9			
Vehicle Noise:	66	6.3	6	4.5	61.5		56.	7	65.3	3	65.7			

70 dBA

48

52

Ldn: CNEL: 65 dBA

104

112

60 dBA

224

241

55 dBA

483

519

Sunday, May 20, 2012	
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Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: El Camino Real Number: 8141
Road Segment: e/o Jamboree Rd. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS									
Highway Data						Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	24,400 v	ehicles					Autos:	15					
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 /	Axles):	15					
Peak H	our Volume:	2,440 v	ehicles		Heavy Trucks (3+ Axles): 15									
Ve	hicle Speed:	55 n	nph		Vehicle I	Лix								
Near/Far Lai	ne Distance:	52 fe	eet			cleType		Day	Evening	Night	Daily			
Site Data							utos:	77.5%		9.6%	-			
Rai	rier Height:	0.0	feet		Me	edium Tru	ucks:	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	_	0.0	1001		F	leavy Tru	ucks:	86.5%	2.7%	10.8%	0.74%			
Centerline Dis	•	100.0	feet		Noise Ca	uros Els	wation	o (in f	2041					
Centerline Dist.	to Observer:	100.0	feet		Noise Sc			•	eet)					
Barrier Distance	to Observer:	0.0	feet		Madium	Autos		000						
Observer Height (Above Pad):	5.0 feet				n Trucks		4.000 8.006 <i>Grade Adjustment:</i> 0.0						
Pá	0.0	feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0										
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)									
Road Grade: 0.			6			Autos	<i>:</i> 96.	607						
	-90.0	degrees	3	Medium Trucks: 96.566										
	Right View:	90.0	degrees	5	Heav	y Trucks	<i>:</i> 96.	608						
FHWA Noise Mode	el Calculation	ns												
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fresr	nel	Barrier Att	en Ber	m Atten			
Autos:	71.78	3	1.05	-4.3	39	-1.20		-4.87	0.0	000	0.000			
Medium Trucks:	82.40) -	16.19	-4.3	39	-1.20		-4.97	0.0	000	0.000			
Heavy Trucks:	86.40) -	20.14	-4.3	39	-1.20		-5.16	0.0	000	0.000			
Unmitigated Noise	e Levels (with	hout Top	o and b	arrier attei	nuation)									
VehicleType	Leq Peak Ho	our Le	eq Day	Leq E	vening	Leq N	light		Ldn	CI	VEL			
Autos:	6	7.2 65.3		5.3	63.6 57.5		66.1		1	66.7				
Medium Trucks:	6	0.6 59.1		9.1	52.8 51.2			2	59.7	59.9				
Heavy Trucks:	6	0.7	59	9.2	50.2 51.5			59.8 59.9						
Vehicle Noise:	6	8.8	67	7.1	64.1		59.2	2	67.8	3	68.3			

70 dBA

71

76

Ldn:

CNEL:

65 dBA

153

165

60 dBA

330

355

55 dBA

711

765

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: El Camino Real N.

Road Segment: s/o Bryan Ave.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				1	NOISE	MODE	L INPUT	S	
Highway Data				;	Site Con	ditions	(Hard	= 10, So	oft = 15)		
Average Daily	Traffic (Adt):	7,800 vehicle	s					Autos:	15		
	r Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	780 vehicle	S		Hea	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		,	Vehicle I	Miv					
Near/Far La	ane Distance:	52 feet				icleType	2	Day	Evening	Night	Daily
Site Data					VCIII		Autos:	77.5%	Ū	9.6%	,
		0.0.6==1			Me	edium T		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-V		0.0				rouvy r	raono.	00.070	2.1 70	10.070	0.7 170
Centerline Dist.	ist. to Barrier:	100.0 feet 100.0 feet		1	Noise So	urce E	levatio	ns (in fe	eet)		
		0.0 feet				Auto		2.000			
Barrier Distance					Mediur	n Truck	rs: 4	.000			
Observer Height	(Above Pau). Pad Elevation:	5.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment	: 0.0
-	ad Elevation: ad Elevation:	0.0 feet 0.0 feet			Lane Equ	uivalen	t Dista	nce (in t	feet)		
	Road Grade:	0.0 feet 0.0%		-	Lario Ly	Auto		6.607	001)		
	Left View:				Modiur	n Truck		6.566			
	Right View:	-90.0 degree				y Truck		6.608			
	Right view.	90.0 degree	55		Ticav	y ITUCK	.s. 30	.000			
FHWA Noise Mod	lel Calculation	s		1							
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-3.90		-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-21.14		-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-25.10		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hou				vening	Leq	Night		Ldn	C	NEL
Autos:	62	.3	60.4		58.6		52	.6	61.2	2	61.8
Medium Trucks:	55	.7	54.2		47.8		46	.3	54.7	7	55.0
Heavy Trucks:	55	.7	54.3		45.2		46	.5	54.9	9	55.0
Vehicle Noise:	63	.9	62.1		59.1		54	.3	62.8	3	63.3
Centerline Distan	ce to Noise Co	ontour (in feet)								
				70 d	dBA	65	dBA	6	60 dBA	55	dBA

33

36

Ldn:

CNEL:

72

77

154

166

332

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Portola Pkwy./S. Margarita Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15)					
Highway Data				S	ite Con	ditions	(Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt): 2	20,000 veh	icles				Autos:	15		
Peak Hour	Percentage:	10%			Med	dium Tru	icks (2 Axles):	15		
Peak H	lour Volume:	2,000 veh	icles		Hea	avy Truc	ks (3+ Axles):	15		
Ve	hicle Speed:	55 mpl	า	V	'ehicle I	/liv				
Near/Far La	ne Distance:	88 feet				cleType	Day	Evening	Night	Daily
Site Data					VOIII		Autos: 77.5%	•		97.42%
	rrior Usiabti	0.0 fee	.4		Me	edium Tr			10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0	∌ [leavy Tr			10.8%	0.74%
Centerline Di	•	100.0 fee	at .							
Centerline Dist.		100.0 fee		٨	loise So	urce Ele	evations (in f	eet)		
Barrier Distance		0.0 fee				Autos				
		5.0 fee			Mediun	n Trucks	s: 4.000			
Observer Height (ad Elevation:	0.0 fee			Heav	y Trucks	8.006	Grade Ad	iustment.	0.0
	ad Elevation: ad Elevation:	0.0 fee		1	ane Fai	ıivalent	Distance (in	feet)		
	Road Grade:	0.0%	ŧι		<u>_</u> q.	Autos	•			
•	Left View:		arooo		Modiur	n Trucks				
		-90.0 de	_			y Trucks				
	Right View:	90.0 de	grees		i ieav	y Trucks	5. 09.000			
FHWA Noise Mod	el Calculation	s		1						
VehicleType	REMEL	Traffic Flo	w D	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	0	.19	-3.92		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-17	.05	-3.92		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21	.01	-3.92		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo a	nd bar	rier attenu	ıation)					
VehicleType	Leq Peak Hou	ır Leq	Day	Leq Ev	ening	Leq I	Night	Ldn	CI	VEL
Autos:	66	.8	64.9)	63.2		57.1	65.7	7	66.4
Medium Trucks:	60	.2	58.7	,	52.4		50.8	59.3	3	59.5
Heavy Trucks:	60	.3	58.8	3	49.8		51.1	59.4	1	59.5

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	67	144	311	670
CNEL:	72	155	334	720

63.7

58.8

67.4

67.9

66.7

Vehicle Noise:

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd. Number: 8141
Road Segment: s/o Portola Pkwy./S. Margarita Pkwy. Analyst: B. Lawson

SITE	1			N	OISE N	/IODE	L INPUT	S			
Highway Data				S	ite Cond	ditions ((Hard =	10, Sc	oft = 15)		
	Traffic (Adt): Percentage: lour Volume:	42,900 vehic 10% 4,290 vehic				lium Tru avy Truc	icks (2 A	,			
Near/Far La	hicle Speed: ne Distance:	55 mph 88 feet		V	ehicle N Vehic	cleType		Day	Evening 12.9%	Night	<i>Daily</i> 97.42%
Site Data Barrier Type (0-W	rrier Height: /all, 1-Berm):	0.0 feet 0.0				dium Tri eavy Tri	ucks:	77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	1.84% 0.74%
Ro	to Observer: to Observer: (Above Pad): ad Elevation: ad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degi			Heavy ane Equ Mediun	Autos Trucks Trucks	2.0 2: 4.0 3: 8.0 Distance 3: 89.8	000 000 006 ce (in 1 850 805	Grade Ad	ijustment	: 0.0
VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 71.78 82.40	Traffic Flow 3.5 -13.7	0 4	ce -3.92 -3.92 -3.92	Finite I	-1.20 -1.20 -1.20		-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Noise VehicleType	Leq Peak Ho	ur Leq D	ay Le	ttenu eq Eve	ening	Leq l			Ldn		NEL
Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	60 60	0.2 3.5 3.6 1.7	68.3 62.0 62.2 70.0		66.5 55.7 53.1 67.0		60.4 54.1 54.4 62.1		69.1 62.6 62.7 70.7	6 7	69.7 62.8 62.9 71.2

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	111	240	517	1,114
CNEL:	120	258	556	1,198

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Trabuco Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	ATA				ı	NOISE	MODE	L INPUT	S	
Highway Data					,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	22,000 \	vehicles	6					Autos:	15		
Peak Hour	Percentage:	10%	, D			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,200	vehicles	3		He	avy Tru	cks (3+	- Axles):	15		
Ve	hicle Speed:	55	mph			Vehicle i	Mix					
Near/Far La	ne Distance:	88 1	feet				icleType	ė	Day	Evening	Night	Daily
Site Data								Autos:	77.5%	•	9.6%	-
	rrier Height:	0.0	feet			M	edium T		84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0	ieet			I	Heavy T	rucks:	86.5%		10.8%	0.74%
Centerline Dis	•	100.0	feet									
Centerline Dist.		100.0			_	Noise S			•	eet)		
Barrier Distance			feet				Auto		2.000			
Observer Height (feet				m Truck	_	4.000	0 - 4 - 4 - 4		0.0
• ,	ad Elevation:		feet			Heav	y Truck	s: 8	3.006	Grade Ad	iustment.	0.0
Roa	ad Elevation:		feet			Lane Eq	uivalen	t Dista	nce (in f	feet)		
1	Road Grade:	0.0					Auto	s: 8	9.850			
	Left View:		degree	es		Mediu	m Truck	s: 89	9.805			
	Right View:		degree			Heav	y Truck	s: 8	9.850			
FHWA Noise Mode					· · · · · · · ·	- ''	D /		1	D ' A		A ((
VehicleType	REMEL	Traffic		DI	stance		Road	Fre		Barrier Att		m Atten
Autos: Medium Trucks:	71.78		0.60		-3.9		-1.20 -1.20		-4.87 -4.97		000	0.000
	82.40 86.40		-16.64 -20.59		-3.9 -3.9		-1.20 -1.20		-4.97 -5.16		000	0.000
Heavy Trucks:	00.40		-20.59		-3.9		-1.20		-5.16	0.0)OO	0.000
Unmitigated Noise												
VehicleType	Leq Peak Hou		eq Day		Leq E	vening	Leq	Night		Ldn		VEL
Autos:	67			55.4		63.6		57		66.2		66.8
Medium Trucks:	60			59.1		52.8		51		59.7		59.9
Heavy Trucks:	60			59.3		50.2		51		59.8		60.0
Vehicle Noise:	68	.8	(67.1		64.1		59).2	67.8	3	68.3
Centerline Distance	ce to Noise Co	ontour (in feet)	1								
					70 (dBA	65	dBA	6	60 dBA	55	dBA

71

77

154

165

331

356

714

768

Ldn:

CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Toledo Wy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				ſ	NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	43,800 vehicl	es					Autos:	15		
Peak Hou	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	4,380 vehicl	es		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		V	/ehicle l	Wix					
Near/Far La	ane Distance:	106 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	J	9.6%	•
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		^	Voise So			•	eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height	(Above Pad):	5.0 feet				n Truck	_	.000	Crada Ad		
=	Pad Elevation:	0.0 feet			Heav	y Truck	(S: 8	.006	Grade Ad	justment	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distaı	nce (in t	eet)		
	Road Grade:	0.0%				Auto	s: 84	.853			
	Left View:	-90.0 degr	ees		Mediui	n Truck	s: 84	.806			
	Right View:	90.0 degr	ees		Heav	y Truck	rs: 84	.853			
FHWA Noise Mod	lel Calculation	IS									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	3.2	1	-3.55	5	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.0	2	-3.55	5	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-17.9	3	-3.55	5	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	d barr	ier atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	ay	Leq Ev	rening	Leq	Night		Ldn		VEL
Autos:		1.7	69.8		68.0		62	0	70.6	6	71.2
Medium Trucks:		1.9	63.4		57.0		55.		64.0		64.2
Heavy Trucks:		1.6	63.2		54.1		55.		63.7		63.9
Vehicle Noise:	73	3.2	71.4		68.5		63	6	72.′	1	72.6
Centerline Distan	ce to Noise C	ontour (in fee	et)								
				70 d	IBA .	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

139

149

299

322

643

693

1,386

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Jeronimo Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA				ſ	NOISE	MODE	L INPUT	S	
Highway Data					;	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	44,100) vehicles	S					Autos:	15		
Peak Hour	Percentage:	10)%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	4,410) vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60) mph		,	Vehicle i	Miv					
Near/Far La	ne Distance:	106	6 feet				icleType	2	Day	Evening	Night	Daily
Site Data						7011		Autos:	77.5%	-	9.6%	-
	vviav Usiabti		0 foot			М	edium T		84.8%		10.3%	1.84%
Barrier Type (0-V	rrier Height:	U .	.0 feet				Heavy T		86.5%		10.8%	0.74%
	ist. to Barrier:		.0 .0 feet									
Centerline Dist.			.0 feet		1	Noise So			•	eet)		
Barrier Distance			.0 feet				Auto		2.000			
Observer Height			.0 feet				m Truck		1.000		-	
ŭ	ad Elevation:	_	.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment.	0.0
-	ad Elevation:		.0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:		.0%			•	Auto		1.853			
	Left View:		.0 degree	25		Mediui	m Truck		1.806			
	Right View:		.0 degree			Heav	y Truck	rs: 84	4.853			
FHWA Noise Mod	1											
VehicleType	REMEL		fic Flow	Di	stance	Finite		Fres		Barrier Att		m Atten
Autos:			3.24		-3.5		-1.20		-4.87		000	0.000
Medium Trucks:			-13.99		-3.5		-1.20		-4.97		000	0.000
Heavy Trucks:	87.33	3	-17.95		-3.5	5	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout To	opo and	barri	ier atten	uation)						
VehicleType	Leq Peak Ho	our	Leq Day	,	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	7	1.7	(69.8		68.1		62	.0	70.6	3	71.2
Medium Trucks:	6	4.9	(63.4		57.1		55	.5	64.0)	64.2
Heavy Trucks:	6	4.6	(63.2		54.2		55	.4	63.8	3	63.9
Vehicle Noise:	7	3.2		71.4		68.5		63	.6	72.2	2	72.6
Centerline Distan	ce to Noise C	ontou	r (in feet)								
			. 2		70 c	dBA	65	dBA	6	60 dBA	55	dBA
				L								

Ldn:

CNEL:

139

150

300

323

646

696

1,392

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o Jeronimo Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA				r	NOISE	MODE	L INPUT	S	
Highway Data					,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	46,000) vehicles	3					Autos:	15		
Peak Hour	Percentage:	10	0%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	4,600) vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60) mph		-	Vehicle i	Mix					
Near/Far La	ane Distance:	106	6 feet				icleType	Э	Day	Evening	Night	Daily
Site Data								Autos:	77.5%	_	9.6%	,
Ra	rrier Height:	0	.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0				ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:		.0 feet		_	W-' O		· · · · · · · · · · · · · · · · · · ·	(* f	4)		
Centerline Dist.	to Observer:		.0 feet		<u> </u>	Noise So			•	eet)		
Barrier Distance			.0 feet			A 4 1'	Auto		2.000			
Observer Height	(Above Pad):	5	.0 feet				m Truck		1.000	Crada Ad	li ratmant	
J	ad Elevation:	0	.0 feet			Heav	y Truck	is: E	3.006	Grade Ad	justment	0.0
Ro	ad Elevation:		.0 feet		1	Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0	.0%				Auto	s: 84	4.853			
	Left View:	-90	.0 degree	es		Mediu	m Truck	rs: 84	4.806			
	Right View:	90	.0 degree	es		Heav	y Truck	rs: 84	4.853			
FHWA Noise Mod	lel Calculation	ns										
VehicleType	REMEL	Trafi	fic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	2	3.43		-3.5	5	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	3	-13.81		-3.5	5	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3	-17.77		-3.5	5	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout T	opo and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	our	Leq Day	,	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	7	1.9	•	70.0		68.2		62	.2	70.8	3	71.4
Medium Trucks:	6	5.1	(63.6		57.3		55	.7	64.2	2	64.4
Heavy Trucks:	6	4.8	(63.4		54.4		55	.6	64.0)	64.1
Vehicle Noise:	7	3.4		71.6		68.7		63	.8	72.3	3	72.8
Centerline Distan	ce to Noise C	ontou	r (in feet))					I			
					70 d	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

143

154

308

332

664

716

1,432

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Rockfield Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT I	DATA				r	NOISE	MODE	L INPUT	S	
Highway Data					,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	50,000	vehicles	S					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	5,000	vehicles	S		He	avy Tru	cks (3+	- Axles):	15		
Ve	ehicle Speed:	60	mph			Vehicle l	Wix					
Near/Far La	ne Distance:	106	feet				icleType	9	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	_
	rrier Height:	0.0) feet			М	edium T	rucks:	84.8%		10.3%	
Barrier Type (0-W	•	0.0				ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:) feet			W-' 0		'' 4' -	(' f	4)		
Centerline Dist.) feet		-	Noise So			•	eet)		
Barrier Distance	to Observer:) feet			N 4 1'	Auto		2.000			
Observer Height	(Above Pad):	5.0) feet				n Truck	_	4.000	Crada Ad	i. iotmont	
_	ad Elevation:	0.0) feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	. 0.0
Ro	ad Elevation:) feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0)%				Auto	s: 8	4.853			
	Left View:	-90.0	degree	es		Mediu	n Truck	rs: 8	4.806			
	Right View:	90.0) degree	es		Heav	y Truck	rs: 8	4.853			
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traffi	c Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	m Atten
Autos:	73.22		3.79		-3.5	5	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		-13.45		-3.5	5	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33		-17.40		-3.5	5	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and	barri	ier atten	uation)						
VehicleType	Leq Peak Ho	ur	Leq Day	′	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	72	2.3		70.4		68.6		62	2.5	71.2	2	71.8
Medium Trucks:	65	5.5	(64.0		57.6		56	5.1	64.5	5	64.8
Heavy Trucks:	65	5.2	(63.8		54.7		56	5.0	64.3	3	64.4
Vehicle Noise:	73	3.7		72.0		69.1		64	.1	72.7	7	73.2
Centerline Distan	ce to Noise C	ontour	(in feet)								
					70 (dBA	65	dBA	ϵ	60 dBA	55	dBA

Ldn:

CNEL:

151

163

326

351

702

757

1,513

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: b/w Rockfield Bl.and I-5 NB Ramps

Number: 8141

Analyst: B. Lawson

Highway Data Average Daily Traffic (Adt)		SITE SPECIFIC INPUT DATA Highway Data							
				Site Con	ditions (H	lard = 10, S	oft = 15)		
	: 65,000 v	vehicles				Autos:	15		
Peak Hour Percentage				Me	dium Truci	ks (2 Axles):	15		
Peak Hour Volume	6,500 v	vehicles		He	avy Trucks	s (3+ Axles):	15		
Vehicle Speed	: 60 r	mph	-	Vehicle I	Mix				
Near/Far Lane Distance	: 106 f	eet	-		cleType	Day	Evening	Night	Daily
Site Data					Au	tos: 77.5%		9.6%	97.42%
Barrier Height	. 00	feet		Me	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)				F	leavy Truc	cks: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier		feet		Noise Se	uroo Elov	ations (in f	oot)		
Centerline Dist. to Observer	100.0	feet	-	Noise Sc			eet)		
Barrier Distance to Observer	2 0.0	feet		1.4 l'	Autos:	2.000			
Observer Height (Above Pad)	5.0	feet			n Trucks:	4.000	Crada Ad	iuotmont	
Pad Elevation		feet		Heav	y Trucks:	8.006	Grade Ad	iustment.	0.0
Road Elevation		feet	-	Lane Equ	uivalent D	istance (in	feet)		
Road Grade	<i>:</i> 0.09	%			Autos:	84.853			
Left View		degree	S	Mediur	n Trucks:	84.806			
Right View		degree		Heav	y Trucks:	84.853			
FHWA Noise Model Calculati	ons								
VehicleType REMEL	Traffic	Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos: 73.	22	4.93	-3.5	55	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.	· 88	-12.31	-3.5	55	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.	33 -	-16.27	-3.5	55	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	thout Top	o and b	parrier atte	nuation)					
VehicleType Leq Peak I	lour L	eq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL
Autos:	73.4	7	'1.5	69.7		63.7	72.3	3	72.9
Medium Trucks:	66.6	6	5.1	58.8		57.2	65.7	7	65.9
Heavy Trucks:	66.3	6	64.9	55.9		57.1	65.5	5	65.6
Vehicle Noise:	74.9	7	'3.1	70.2		65.3	73.8	3	74.3

70 dBA

180

194

Ldn:

CNEL:

65 dBA

388

418

60 dBA

837

901

55 dBA

1,803

1,942

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: b/w I-5 SB Ramps and Avenida Carlota

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DAT	A			NC	DISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions (l	Hard:	= 10, Sc	oft = 15)		
Average Daily Peak Hour	Traffic (Adt): Percentage:	44,700 vehi	cles		Me	dium Truc	cks (2	Autos: Axles):			
	lour Volume:	4,470 vehi	cles			avy Truck	•	,			
Ve	hicle Speed:	55 mph		1	/ehicle l		•				
Near/Far La	ne Distance:	88 feet		V		icleType		Day	Evening	Night	Daily
Site Data					VCIII		utos:	77.5%	_	9.6%	-
Ва	rrier Height:	0.0 fee	t			edium Tru Heavy Tru	ıcks:	84.8% 86.5%	4.9%	10.3% 10.8%	1.84% 0.74%
Barrier Type (0-W	,	0.0			,	leavy IIu	icns.	00.570	2.1 /0	10.076	0.7476
Centerline Dist		100.0 fee		٨	loise Sc	ource Ele	vatio	ns (in fe	eet)		
Centerline Dist. Barrier Distance Observer Height (to Observer:	100.0 fee 0.0 fee 5.0 fee 0.0 fee	t t			Autos: m Trucks: ry Trucks:	: 4	2.000 2.000 3.006	Grade Ad	justment.	0.0
	ad Elevation:	0.0 fee		L	ane Ea	uivalent l	Distai	nce (in	feet)		
	Road Grade:	0.0%				Autos:		9.850			
	Left View:	-90.0 deg	arees		Mediur	n Trucks:		9.805			
	Right View:	90.0 deg			Heav	y Trucks:	89	9.850			
FHWA Noise Mod	el Calculation	าร									
VehicleType	REMEL	Traffic Flo	w Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3.	68	-3.92	<u>.</u>	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40) -13.	56	-3.92	2	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40) -17.	51	-3.92	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Topo a	nd barr	ier attenu	uation)						
VehicleType	Leq Peak Ho	our Leq I		Leq Ev	rening	Leq N	light		Ldn	CI	VEL
Autos:	7	0.3	68.4		66.7		60	.6	69.2	2	69.8
Medium Trucks:	6	3.7	62.2		55.9		54	.3	62.8	3	63.0
Heavy Trucks:	6	3.8	62.3		53.3		54	.6	62.9	9	63.0
Vehicle Noise:	7	1.9	70.2		67.2		62	.3	70.9	9	71.4
Centerline Distant	ce to Noise C	ontour (in f	eet)								

70 dBA

114

123

Ldn:

CNEL:

65 dBA

247

265

60 dBA

531

572

55 dBA

1,145

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Paseo de Valencia

Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				Site Con	ditions (F	Hard = 10, Sc	oft = 15)				
Average Daily	Traffic (Adt): 2	29,600 vehicles	3			Autos:	15				
Peak Hour	Percentage:	10%		Med	dium Truc	ks (2 Axles):	15				
Peak H	lour Volume:	2,960 vehicles	3	Hea	avy Truck	rs (3+ Axles):	15				
Ve	hicle Speed:	55 mph		Vehicle Mix							
Near/Far La	ne Distance:	88 feet			cleType	Day	Evening	Night	Daily		
Site Data				_		itos: 77.5%	_	9.6%			
Ra	rrier Height:	0.0 feet		Ме	edium True	cks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0		H	leavy Tru	cks: 86.5%	2.7%	10.8%	0.74%		
• • • • • • • • • • • • • • • • • • • •	st. to Barrier:	100.0 feet		Naina Ca	- []-		4\				
Centerline Dist.	Centerline Dist. to Observer: 10			Noise So		vations (in fe	eet)				
Barrier Distance	to Observer:	0.0 feet			Autos:						
Observer Height	(Above Pad):	5.0 feet			n Trucks:		Crada Adi				
Pad Elevation:		0.0 feet		Heav	y Trucks:	8.006	Grade Adji	istment.	0.0		
Ro	ad Elevation:	0.0 feet		Lane Equ	uivalent E	Distance (in	feet)				
	Road Grade:	0.0%			Autos:	89.850					
	Left View:	-90.0 degree	es	Mediun	n Trucks:	89.805					
	Right View:	90.0 degree	es	Heav	y Trucks:	89.850					
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:	71.78	1.89	-3.	92	-1.20	-4.87	0.0	00	0.000		
Medium Trucks:	82.40	-15.35	-3.	92	-1.20	-4.97	0.0	00	0.000		
Heavy Trucks:	86.40	-19.30	-3.	92	-1.20	-5.16	0.0	00	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Hou	ır Leq Day	Leq	Evening	Leq N	ight	Ldn	CI	VEL		
Autos:	68	.5	66.7	64.9		58.8	67.5		68.1		
Medium Trucks:	61	.9	60.4	54.1		52.5	61.0		61.2		
Heavy Trucks:	62	.0	60.5	51.5		52.8	61.1		61.2		

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	87	187	404	870						
CNEL:	94	202	434	936						

65.4

60.5

69.1

69.6

68.4

Vehicle Noise:

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o Paseo de Valencia

Number: 8141

Analyst: B. Lawson

SITE SF	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				9	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Tra	affic (Adt):	33,000 vehicl	es					Autos:	15		
Peak Hour Pe	, ,	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak Hou	ır Volume:	3,300 vehicl	es		Heavy Trucks (3+ Axles): 15						
Vehic	cle Speed:	55 mph		,	/ehicle l	Miss					
Near/Far Lane	Distance:	88 feet		,				Day	Fuening	Niaht	Doily
Cita Data					verii	icleType		Day 50/	Evening	Night	Daily
Site Data					Λ.4.		Autos:	77.5%		9.6%	
	er Height:	0.0 feet				edium Tr		84.8%		10.3%	1.84%
Barrier Type (0-Wall	•	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist.		100.0 feet		^	Voise Sc	ource El	evatio	ns (in fe	eet)		
Centerline Dist. to		100.0 feet				Autos	s: 2	2.000			
Barrier Distance to	Observer:	0.0 feet			Mediur	n Trucks		.000			
Observer Height (Ab	oove Pad):	5.0 feet				y Trucks		3.006	Grade Ad	iustment.	0.0
Pad	Elevation:	0.0 feet				-					
Road	Elevation:	0.0 feet		L	ane Eq			•	feet)		
Ro	ad Grade:	0.0%				Autos		9.850			
	Left View:	-90.0 degre	ees		Mediur	n Trucks	s: 89	9.805			
F	Right View:	90.0 degre	ees		Heav	y Trucks	s: 89	9.850			
FHWA Noise Model	Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	2.36	3	-3.92	2	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-14.88	3	-3.92	2	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-18.83	3	-3.92	<u> </u>	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise L	evels (with	out Topo and	d barri	er atteni	uation)						
VehicleType Le	eq Peak Hou	ur Leq Da	ay	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos: 69.0 67.1			65.4		59	.3	67.9)	68.5		
Medium Trucks: 62.4 60.9			54.5 53.0 61.		61.5	5	61.7				
Heavy Trucks:	2.4	61.0		52.0 53		53.2 61.6		3	61.7		
Vehicle Noise:	70	0.6	68.8		65.9		61	.0	69.6	6	70.0
Centerline Distance	to Noise Co	ontour (in fee	et)								

70 dBA

94

101

Ldn:

CNEL:

65 dBA

201

217

60 dBA

434

467

55 dBA 935

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o Moulton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data					Site Con	ditions (Ha	rd = 10, So	oft = 15)			
	Traffic (Adt): Percentage: Hour Volume:	10%				dium Trucks avy Trucks (,	15			
	ehicle Speed: ane Distance:	55 I 88 I	mph feet		Vehicle Veh	Mix icleType	Day	Evening	Night	Daily	
Site Data						Auto	s: 77.5%	12.9%	9.6%	97.42%	
Barrier Type (0-V	•	0.0	feet			edium Truck Heavy Truck			10.3% 10.8%	1.84% 0.74%	
Centerline D Centerline Dist.	ist. to Barrier:	100.0			Noise So	ource Eleva	tions (in f	eet)			
Barrier Distance Observer Height	0.0 5.0	100.0 feet 0.0 feet 5.0 feet 0.0 feet			Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0						
Ro		feet		Lane Eq	uivalent Dis	tance (in	feet)				
	Road Grade: Left View: Right View:		% degrees degrees			Autos: m Trucks: ry Trucks:	89.850 89.805 89.850				
FHWA Noise Mod	lel Calculatio	ns									
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten	
Autos	71.78	3	2.26	-3.	92	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	82.40)	-14.98	-3.	92	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40)	-18.94	-3.9	92	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (wit	hout Top	oo and b	arrier atte	nuation)						
VehicleType	Leq Peak Ho	our L	eq Day	Leq I	Evening	Leq Nigh	nt	Ldn	CI	VEL	
Autos:	6	8.9	67	7.0	65.3		59.2	67.8	3	68.4	
Medium Trucks: 62.3 60.8		54.4 52.9 6		61.3		61.6					
Heavy Trucks: 62.3 60.9				0.9	51.9 53.1 61.5			5	61.6		
Vehicle Noise.		0.5		8.7	65.8		60.9	69.5	5	69.9	
Centerline Distan	ce to Noise C	Contour (in feet)								

70 dBA

92

99

Ldn:

CNEL:

65 dBA

198

213

60 dBA

427

459

55 dBA

920

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o Aliso Creek Rd.

Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	26,600 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,660 vehicle	es		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		V	ehicle l	Miv					
Near/Far La	ne Distance:	88 feet		_		icleType	3	Day	Evening	Night	Daily
Site Data					V 0111		Autos:	77.5%	•		97.42%
	rrior Hoight	0.0 feet			Ме	edium T	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 reet 0.0				leavy T		86.5%		10.8%	0.74%
Centerline Dis	,	100.0 feet									
Centerline Dist.		100.0 feet		Ν	oise Sc	ource E	levatio	ns (in fe	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
_ = = = = = = = = = = = = = = = = = = =		5.0 feet			Mediur	n Truck	s: 4	.000			
Observer Height (Above Pad): Pad Elevation:		0.0 feet			Heav	y Truck	s: 8	3.006	Grade Adj	iustment	: 0.0
	Road Elevation: 0.0			L	ane Eq	uivalen	t Distai	nce (in	feet)		
	Road Grade:	0.0%				Auto		9.850	,		
•	Left View:	-90.0 degre	200		Mediur	n Truck		9.805			
	Right View:	90.0 degre				y Truck		9.850			
	rugin vion.	oo.o dogi	,00			,					
FHWA Noise Mode	el Calculatior	าร		·							
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.43	3	-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.8	l	-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.77	7	-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	nout Topo and	l barri	ier attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	ıy	Leq Eve	ening	Leq	Night		Ldn	CI	NEL
Autos:	68	3.1	66.2		64.4		58	.4	67.0)	67.6
Medium Trucks:	6′	1.5	60.0		53.6		52.1		60.5		60.8
Heavy Trucks:	6′	1.5	60.1		51.0		52.3		60.7	7	60.8

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	81	174	376	810						
CNEL:	87	188	404	871						

64.9

60.1

67.9

69.1

68.6

Vehicle Noise:

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: n/o SR-73

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				3	Site Con	ditions	(Hard :	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	30,100 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	3,010 vehicle	es		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	55 mph		1	/ehicle	Mix					
Near/Far La	ane Distance:	88 feet		-		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	J	9.6%	•
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • • • • • • • • • • • • • • • • • • •	ist. to Barrier:	100.0 feet		_	V-: C			(! £.	-41		
Centerline Dist.		100.0 feet		<u> </u>	Voise So			•	et)		
Barrier Distance	to Observer:	0.0 feet			N 4 = =15	Auto		.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	_	.000	Grade Ad	iuotmont	
_	Pad Elevation:	0.0 feet			неач	y Truck	S: 8	.006	Graue Au	justrient	0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Distai	nce (in f	eet)		
	Road Grade:	0.0%				Auto	s: 89	.850			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 89	.805			
	Right View:	90.0 degre	es		Heav	y Truck	s: 89	0.850			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	D	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.96		-3.92	2	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.28	;	-3.92	2	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.23		-3.92	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barr	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	ening/	Leq	Night		Ldn	CI	VEL
Autos:		3.6	66.7		65.0		58	.9	67.5	5	68.1
Medium Trucks:	62	2.0	60.5		54.1		52	.6	61.1		61.3
Heavy Trucks:	62	2.0	60.6		51.6		52.	.8	61.2	2	61.3
Vehicle Noise:	70).2	68.4		65.5		60	.6	69.2	2	69.6
Centerline Distan	ce to Noise C	ontour (in fee	t)		,						
				70 a	<i>IBA</i>	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

88

95

189

204

408

439

879

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: El Toro Rd.

Road Segment: s/o SR-73

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				S	Site Con	ditions	(Hard :	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	17,800 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	Hour Volume:	1,780 vehicle	s		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	50 mph		V	/ehicle l	Mix					
Near/Far La	ane Distance:	70 feet		-		icleType	Э	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	•
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
• • • • • • • • • • • • • • • • • • • •	ist. to Barrier:	100.0 feet						<i>(</i> ' • •			
Centerline Dist.		100.0 feet		^	Noise Source Elevations (in feet)						
Barrier Distance	to Observer:	0.0 feet				Auto		.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	_	.000	Crada Ad	li ratmant	
_	Pad Elevation:	0.0 feet			Heav	y Truck	(S: 8	.006	Grade Adj	justment	0.0
Ro	Road Elevation: 0.0 feet				ane Eq	uivalen	t Distai	nce (in f	eet)		
	0.0%				Auto	s: 93	3.723				
	Left View:	-90.0 degre	es	Medium Trucks: 93.680							
	Right View:	90.0 degre	es		Heav	y Truck	(s: 93	3.723			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	0.10		-4.20)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-17.14		-4.19)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-21.10		-4.20)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barr	ier attenu	uation)						
VehicleType	Leq Peak Hot	ur Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:		.9	63.0		61.2		55.	.2	63.8	3	64.4
Medium Trucks:	58	3.5	57.0		50.6		49.	.1	57.5	5	57.7
Heavy Trucks:	58	3.9	57.5		48.4		49	.7	58.0)	58.2
Vehicle Noise:	66	5.6	64.8		61.8		57	.0	65.6	6	66.0
Centerline Distan	ce to Noise C	ontour (in feet)								
				70 d	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

51

54

109

117

235

252

506

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Fortune Dr.

Road Segment: b/w Gateway Bl. and Spectrum

Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				Site Con	ditions (H	lard = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	8,700 vehicles				Autos:	15				
= -	Percentage:	10%		Me	dium Truci	ks (2 Axles).	15				
Peak H	lour Volume:	870 vehicles		He	avy Trucks	s (3+ Axles).	15				
Ve	ehicle Speed:	55 mph		Vehicle I	Miv						
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data	Site Data			V 0/1		tos: 77.5%	_	9.6%			
	uuisu Hsiarbt.	0.0 foot		Me	edium Truc			10.3%	1.84%		
	rrier Height:	0.0 feet 0.0			Heavy Truc			10.8%	0.74%		
Barrier Type (0-W	ist. to Barrier:	0.0 100.0 feet									
Centerline Dist.		100.0 feet		Noise So	ource Elev	ations (in f	eet)				
		0.0 feet			Autos:	2.000					
Barrier Distance				Mediui	m Trucks:	4.000					
Observer Height	(Above Pad): ad Elevation:	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0		
	0.0 feet		I ane Fa	uivalent D	istance (in	foot)					
	ad Elevation:	0.0 feet		Lane Lq	Autos:	96.607	rect)				
	Road Grade:	0.0%		1.4li							
	Left View:	-90.0 degrees			m Trucks:	96.566					
	Right View:	90.0 degrees	S	Heav	y Trucks:	96.608					
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	-3.43	-4.3	39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-20.67	-4.3	39	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-24.62	-4.3	39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and b	arrier attei	nuation)							
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	NEL		
Autos:	62	2.8 6	0.9	59.1		53.0	61.7	7	62.3		
Medium Trucks:	56	5.1 5	4.6	48.3		46.7	55.2	2	55.4		
Heavy Trucks:	56	5.2 5	4.8	45.7		47.0	55.3	3	55.5		
		1.0	0.0	50.0		- 4 -					

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	36	77	166	358

38

59.6

54.7

83

63.3

179

63.8

385

62.6

CNEL:

Vehicle Noise:

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Fortune Dr.

Road Segment: b/w Pacifica and Spectrum

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data			Site Cond	ditions (Hard	d = 10, Sc	oft = 15)					
Average Daily Traffic (Adt):	8,900 vehicles	S			Autos:	15					
Peak Hour Percentage:	10%		Med	dium Trucks (2 Axles):	15					
Peak Hour Volume:	890 vehicles	S	Hea	avy Trucks (3	+ Axles):	15					
Vehicle Speed:	55 mph		Vehicle N	Niv							
Near/Far Lane Distance:	52 feet			cleType	Day	Evening	Night	Daily			
Site Data				Autos	77.5%	12.9%	9.6%	97.42%			
Barrier Height:	0.0 feet		Me	dium Trucks	84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-Wall, 1-Berm):	0.0		H	leavy Trucks	86.5%	2.7%	10.8%	0.74%			
Centerline Dist. to Barrier:	100.0 feet		Noise So	urce Elevati	ons (in f	pet)					
Centerline Dist. to Observer:	100.0 feet		110100 00	Autos:	2.000	<i></i>					
Barrier Distance to Observer: 0.0 feet			Mediun	n Trucks:	4.000						
Observer Height (Above Pad):	5.0 feet			r Trucks: y Trucks:	8.006	Grade Ad	liustment	. 0 0			
Pad Elevation:	0.0 feet		Heav	y Trucks.	0.000	Orado ria	jaotimomi	0.0			
Road Elevation:	0.0 feet		Lane Equ	ıivalent Dist	ance (in	feet)					
Road Grade:	0.0%			Autos:	96.607						
Left View:	-90.0 degree	es	Mediun	n Trucks:	96.566						
Right View:	90.0 degree	es	Heavy Trucks: 96.608								
FHWA Noise Model Calculation	15										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fro	esnel	Barrier Att	en Ber	m Atten			
Autos: 71.78	-3.33	-4.3	39	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 82.40	-20.57	-4.3	39	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 86.40	-4.3	39	-1.20	-5.16	0.0	000	0.000				
Unmitigated Noise Levels (with	nout Topo and	barrier atter	nuation)				,				
VehicleType Leq Peak Ho		Leq E	vening	Leq Night		Ldn	CI	VEL			

Į	Unmitigated Nois						
VehicleType Leq F		Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
	Autos:	62.9	61.0	59.2	53.1	61.8	62.4
	Medium Trucks:	56.2	54.7	48.4	46.8	55.3	55.5
	Heavy Trucks:	56.3	54.9	45.8	47.1	55.4	55.6
	Vehicle Noise:	64.4	62.7	59.7	54.8	63.4	63.9

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	36	78	168	363
CNFL:	39	84	181	391

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Gateway Bl.

Road Segment: w/o Fortune Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFI	C INF	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic (A	dt): 7	7,100 vehicles	3					Autos:	15		
Peak Hour Percentag	ge:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volur	ne:	710 vehicles	3		He	avy Trud	cks (3+	Axles):	15		
Vehicle Spe	ed:	55 mph		-	Vehicle I	Wiy					
Near/Far Lane Distan	ce:	52 feet		_		icleType	1	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	Ŭ I	9.6%	,
	ht.	0.0 feet			Me	edium Ti		84.8%		10.3%	1.84%
Barrier Heig Barrier Type (0-Wall, 1-Ben		0.0 reet 0.0				leavy T		86.5%		10.8%	0.74%
Centerline Dist. to Barr	•	100.0 feet									
Centerline Dist. to Observ		100.0 feet		1	Voise So			•	eet)		
Barrier Distance to Observ		0.0 feet				Auto		.000			
Observer Height (Above Pa		5.0 feet				n Truck		.000			
Pad Elevati	•	0.0 feet			Heav	y Truck	s: 8	.006	Grade Adj	iustment.	: 0.0
Road Elevati		0.0 feet		I	Lane Eq	uivalen	t Distar	nce (in i	feet)		
Road Gra		0.0%				Auto		 6.607			
Left Vie		-90.0 degree	es		Mediu	n Truck	s: 96	5.566			
Right Vie		90.0 degree			Heav	y Truck	s: 96	3.608			
FHWA Noise Model Calcula											_
VehicleType REME		Traffic Flow	Di	stance	Finite		Fres		Barrier Att		m Atten
	1.78	-4.31		-4.39		-1.20		-4.87		000	0.000
	2.40	-21.55		-4.39		-1.20		-4.97		000	0.000
Heavy Trucks: 8	6.40	-25.50		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels	witho	ut Topo and	barri	ier atten	uation)						
VehicleType Leq Peal	k Hour	Leq Day	,	Leq Ev	ening/	Leq	Night		Ldn	CI	NEL
Autos:	61.9) (0.0		58.2		52.	.2	60.8	3	61.4
Medium Trucks:	55.3		53.8		47.4		45.		54.3		54.5
Heavy Trucks:	55.3	3 :	53.9		44.8		46		54.4	1	54.6
Vehicle Noise:	63.5	5	61.7		58.7		53	.9	62.4	1	62.9
Centerline Distance to Nois	se Cor	ntour (in feet))								
		·		70 c	BA .	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

31

34

67

72

145

156

312

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Gateway Bl.

Road Segment: n/o Alton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SI	PECIFIC INF	PUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data				Site Con	ditions (Har	d = 10, S	oft = 15)		
Average Daily Tr	raffic (Adt): 1	1,700 vehicles				Autos:	15		
Peak Hour Pe	ercentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak Hou	ur Volume:	170 vehicles	,	He	avy Trucks (3	3+ Axles):	15		
Vehic	icle Speed:	55 mph		Vehicle I	Mix				
Near/Far Lane	e Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data					Autos	•		9.6%	
Barri	ier Height:	0.0 feet		Me	edium Trucks	: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wal	•	0.0		F	Heavy Trucks	: 86.5%	2.7%	10.8%	0.74%
Centerline Dist.	•	100.0 feet		Noisa Sa	ource Elevat	ions (in f	oot)		
Centerline Dist. to	Observer:	100.0 feet		NOISE SC	Autos:	2.000			
Barrier Distance to	Observer:	0.0 feet		Madiu	Autos. m Trucks:	4.000			
Observer Height (Al	bove Pad):	5.0 feet					Crada Ad	iuotmont	
Pad	l Elevation:	0.0 feet		неач	y Trucks:	8.006	Grade Ad	usimeni.	0.0
Road	l Elevation:	0.0 feet		Lane Eq	uivalent Dist	tance (in	feet)		
Ro	oad Grade:	0.0%			Autos:	96.607			
	Left View:	-90.0 degree	s	Mediui	m Trucks:	96.566			
F	Right View:	90.0 degree	s	Heav	y Trucks:	96.608			
FHWA Noise Model	Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road Fr	resnel	Barrier Att	en Ber	m Atten
Autos:	71.78	-10.52	-4.3	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-27.76	-4.3	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-31.71	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise L	Levels (witho	ut Topo and b	barrier atte	nuation)					
VehicleType L	.eq Peak Hour	Leq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL
Autos:	55.7	7 5	3.8	52.0	4	1 5.9	54.6	6	55.2
Medium Trucks:	49.1	4	17.5	41.2	3	39.6	48.1	I	48.3
Heavy Trucks:	49.1	4	17.7	38.6	3	39.9	48.2	2	48.4
Vehicle Noise:	57.2	2 5	55.5	52.5		17.7	56.2	2	56.7
Centerline Distance	to Noise Cor	ntour (in feet)							

70 dBA

12

13

Ldn:

CNEL:

65 dBA

26

28

60 dBA

56

60

55 dBA 120

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Gateway Bl.

Road Segment: w/o ICD

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	2,800 vehicle	s					Autos:	15			
	r Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15			
Peak H	Hour Volume:	280 vehicle	S		Hea	avy Tru	cks (3+	Axles):	15			
Ve	ehicle Speed:	55 mph		-	Vehicle I	Miv						
Near/Far La	ane Distance:	52 feet				icleType	۵	Day	Evening	Night	Daily	
Site Data					VOIII		Autos:	77.5%		9.6%	-	
		0.0 (1			Me	edium T		84.8%		10.3%		
	rrier Height:	0.0 feet				leavy T		86.5%		10.8%		
Barrier Type (0-V		0.0				rouvy r	raono.	00.070	2.1 70	10.070	0.7 170	
Centerline Di Centerline Dist.	ist. to Barrier:	100.0 feet 100.0 feet		1	Noise So	urce E	levatio	ns (in fe	eet)			
		0.0 feet				Auto		2.000				
Barrier Distance					Mediur	n Truck	rs: 4	.000				
Observer Height	(Above Pau). Pad Elevation:	5.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment	: 0.0	
-	ad Elevation: ad Elevation:	0.0 feet 0.0 feet		-	Lane Equ	uivalen	t Distai	nce (in t	feet)			
	Road Grade:	0.0 feet 0.0%		F	zano zy	Auto		6.607	001)			
	Left View:				Modiur			6.566				
	Right View:	-90.0 degree			Medium Trucks: 96.566 Heavy Trucks: 96.608							
	Right view.	90.0 degre	55		i icav	y ITUCK	.s. 30	.000				
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-8.35		-4.39	9	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-25.59		-4.39	9	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-29.55		-4.39	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)							
VehicleType	Leg Peak Hou			Leg Ev		Leq	Night		Ldn	C	NEL	
Autos:	57	.8	55.9	· · ·	54.2		48	.1	56.7	7	57.3	
Medium Trucks:	51	.2	49.7		43.4		41	.8	50.3	3	50.5	
Heavy Trucks:	51	.3	49.8	49.8 40.8 42.0 50.4				50.5				
Vehicle Noise:	59	.4	57.7		54.7		49	.8	58.4	4	58.9	
Centerline Distan	ce to Noise Co	ontour (in feet)									
		-		70 c	<i>IBA</i>	65	dBA	6	60 dBA	55	dBA	

17

18

Ldn:

CNEL:

78

84

168

181

36

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Glenn Ranch Rd.

Road Segment: n/o Portola Pkwy.

Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS									
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	29,000 vehicles	S			Auto	s: 15				
• •	Percentage:	10%		Me	dium Tru	cks (2 Axles): 15				
	lour Volume:	2,900 vehicles	S	He	avy Truc	ks (3+ Axles): 15				
Ve	hicle Speed:	50 mph	-	Vehicle	Miss						
Near/Far La	ne Distance:	70 feet				Dov	Evening	Night	Doily		
Cita Data				ven	icleType	<i>Utos:</i> 77.5		Night 9.6%	<i>Daily</i> 97.42%		
Site Data				Λ.4							
Bai	rrier Height:	0.0 feet			edium Tri			10.3%	1.84%		
Barrier Type (0-W	'all, 1-Berm):	0.0		-	Heavy Tri	ucks: 86.5	% 2.7%	10.8%	0.74%		
Centerline Dis		100.0 feet	=	Noise S	ource Ele	evations (in	feet)				
Centerline Dist.		100.0 feet			Autos	2.000					
Barrier Distance	to Observer:	0.0 feet		Mediu	m Trucks						
Observer Height (Above Pad):	5.0 feet			y Trucks		Grade Ad	justment.	0.0		
	Pad Elevation: 0.0 feet				-						
Roa	Road Elevation: 0.0 feet					Distance (ii	n feet)				
1	Road Grade:	0.0%			Autos						
	Left View:	-90.0 degree	es	Mediu	m Trucks	93.680					
	Right View:	90.0 degree	es	Heav	/y Trucks	93.723					
FHWA Noise Mode	el Calculation	15									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	70.20	2.22	-4.2	20	-1.20	-4.8	7 0.0	000	0.000		
Medium Trucks:	81.00	-15.02	-4.1	19	-1.20	-4.9	7 0.0	000	0.000		
Heavy Trucks:	85.38	-18.98	-4.2	20	-1.20	-5.10	6 0.0	000	0.000		
Unmitigated Noise	e Levels (with	nout Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq N	Vight	Ldn	CI	VEL		
Autos:	6	7.0	65.1	63.4		57.3	65.9	9	66.5		
Medium Trucks:	60	0.6	59.1	52.7		51.2	59.6	3	59.9		
Heavy Trucks:	6	1.0	59.6	50.5 51.8			60.1		60.3		
Vehicle Noise:	68	8.7	67.0	63.9		59.1	67.	7	68.2		
Centerline Distant	ce to Noise C	ontour (in feet)						l		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	70	151	325	701
CNEL:	75	162	349	753

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Glenwood Dr./Indian Creek
Road Segment: w/o Moulton Pkwy.

Number: 8141
Analyst: B. Lawson

SITE		NOISE MODEL INPUTS									
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt): 1	11,700 vehicles	S			Autos:	15				
Peak Hour	Percentage:	10%		Med	dium Tru	icks (2 Axles).	15				
Peak H	lour Volume:	1,170 vehicles	S	Hea	avy Truc	ks (3+ Axles).	15				
Ve	hicle Speed:	50 mph		Vehicle I	/liy						
Near/Far La	ne Distance:	70 feet			cleType	Day	Evening	Night	Daily		
Site Data						utos: 77.5%		9.6%			
Ba	rrier Height:	0.0 feet		Me	edium Tr	ucks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0		H	leavy Tr	ucks: 86.5%	6 2.7%	10.8%	0.74%		
Centerline Di	,	100.0 feet		Noise Co	uraa Ele	avotiona (in f	in a 4 l				
Centerline Dist.	to Observer:	100.0 feet	-	Noise 30		evations (in f	eet)				
Barrier Distance	to Observer:	0.0 feet		Madium	Autos n Trucks						
Observer Height	(Above Pad):	5.0 feet					Grade Adj	ustmont			
Pad Elevation: 0.0 feet				Heav _.	y Trucks	8.006	Grade Auj	usimeni.	0.0		
Ro	ad Elevation:	0.0 feet		Lane Equ	ıivalent	Distance (in	feet)				
	Road Grade:	0.0%			Autos	: 93.723					
	Left View:	-90.0 degree	es	Mediun	n Trucks	e: 93.680					
	Right View:	90.0 degree	es	Heav	y Trucks	93.723					
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:	70.20	-1.73	-4.2	20	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-18.97	-4.1	9	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-22.92	-4.2	20	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq l	Vight	Ldn	CI	VEL		
Autos:	63	.1	61.2	59.4		53.4	62.0)	62.6		
Medium Trucks:	56	.6	55.1	48.8		47.2	55.7	•	55.9		
Heavy Trucks:	57	.1	55.6	46.6		47.9	56.2	2	56.3		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	38	82	178	383
CNFI ·	4 1	89	191	∆ 11

60.0

55.2

63.7

64.2

63.0

Vehicle Noise:

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Handy Creek Rd.

Road Segment: e/o Jamboree Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				r	NOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	2,100 vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak F	lour Volume:	210 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	40 mph		V	/ehicle l	Mix					
Near/Far La	ane Distance:	12 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%		10.3%	
Barrier Type (0-V	_	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
•••	ist. to Barrier:	100.0 feet						/: r			
Centerline Dist.		100.0 feet		^	loise So				eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	_	1.000	0		. 0.0
<u>-</u>	ad Elevation:	0.0 feet			Heav	y Truck	s: E	3.006	Grade Ad	iustment.	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0%				Auto	s: 99	9.865			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 99	9.825			
	Right View:	90.0 degree	es		Heav	y Truck	rs: 99	9.865			
FHWA Noise Mod	lel Calculation	 S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	66.51	-8.22		-4.61		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	77.72	-25.46		-4.61		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	82.99	-29.41		-4.61		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atteni	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	rening	Leq	Night		Ldn	CI	NEL
Autos:	52	.5	50.6		48.8		42	.8	51.4	1	52.0
Medium Trucks:	46	.5	44.9		38.6		37	.0	45.5	5	45.7
Heavy Trucks:	47	.8	46.4		37.3		38	.6	46.9)	47.0
Vehicle Noise:	54	.5	52.8		49.5		44	.9	53.5	5	53.9
Centerline Distan	ce to Noise Co	ontour (in feet,)								
				70 d	BA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

8

8

17

18

37

39

79

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Harvard Av.

Road Segment: s/o Walnut Av.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				I	IOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	11,500 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak F	lour Volume:	1,150 vehicle	es		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	35 mph		1	Vehicle I	Mix					
Near/Far La	ane Distance:	20 feet				icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	•	9.6%	,
Ba	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet			Voise So	ourco E	lovatio	ns (in fo	not)		
Centerline Dist.	to Observer:	100.0 feet		<u>'</u>	VOISE SC	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auto m Truck		.000			
Observer Height	(Above Pad):	5.0 feet					_		Grade Ad	iustmont	. 0 0
P	ad Elevation:	0.0 feet			пеач	y Truck	S. C	3.006	Grade Auj	usunent	. 0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Distai	nce (in f	feet)		
	Road Grade:	0.0%				Auto	s: 99).544			
	Left View:	-90.0 degre	es		Mediui	m Truck	s: 99	9.504			
	Right View:	90.0 degre	es		Heav	y Truck	s: 99).544			
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	64.30	-0.25	,	-4.59	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	75.75	-17.49)	-4.59	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	81.57	-21.45	;	-4.59	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barr	ier atten	uation)						
VehicleType	Leq Peak Hou	ur Leq Da	У	Leq Ev	ening/	Leq	Night		Ldn	CI	NEL
Autos:	58	3.3	56.4		54.6		48	.5	57.2	2	57.8
Medium Trucks:	52	2.5	51.0		44.6		43	.1	51.5	5	51.8
Heavy Trucks:	54	1.3	52.9		43.9		45	.1	53.5	5	53.6
Vehicle Noise:	60).5	58.8		55.3		50	.9	59.5	5	59.9
Centerline Distan	ce to Noise C	ontour (in fee	t)	T				П			
				70 a	iBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

20

21

43

46

92

98

199

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Harvard Av. Number: 8141 Road Segment: n/o Edinger Av. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				S	Site Con	ditions (Hard =	10, Sc	ft = 15)		
Average Daily	Traffic (Adt): 1	3,100 vehicles	3				,	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	cks (2 A	Axles):	15		
Peak H	our Volume:	1,310 vehicles	3		He	avy Truci	ks (3+ A	Axles):	15		
Ve	hicle Speed:	55 mph			/ehicle l	Miv					
Near/Far La	ne Distance:	52 feet				icleType		Day	Evening	Night	Daily
Site Data					V 011			77.5%	J	9.6%	-
	vior Usiabti	0.0 feet			Me	edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 reet 0.0				Heavy Tru		86.5%		10.8%	0.74%
Centerline Dis		0.0 100.0 feet									
Centerline Dist.		100.0 feet		٨	Voise So	ource Ele	evation	s (in fe	et)		
Barrier Distance		0.0 feet				Autos		000			
		5.0 feet			Mediui	m Trucks	: 4.0	000			
Observer Height (ad Elevation:	0.0 feet			Heav	y Trucks	<i>:</i> 8.0	006	Grade Adj	iustment:	0.0
	ad Elevation: ad Elevation:	0.0 feet		1	ane Fo	uivalent	Distano	ce (in t	eet)		
	Road Grade:	0.0%		_		Autos		•			
'	Left View:	-90.0 degree	00		Mediu	n Trucks					
	Right View:	90.0 degree				ry Trucks					
	ragin view.	90.0 degree	,,		77047	y Traono		000			
FHWA Noise Mode	el Calculation:	S		"							
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresn	el	Barrier Atte	en Ber	m Atten
Autos:	71.78	-1.65		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-18.89		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-22.84		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er attenu	uation)						
VehicleType	Leq Peak Hou			Leq Ev		Leq N	light		Ldn	CI	VEL
Autos:	64.	.5	62.6	-	60.9		54.8	3	63.4	1	64.0
Medium Trucks:	57.	.9	56.4		50.1		48.5	;	57.0)	57.2
Heavy Trucks:	58.	.0	56.5	47.5 48.8				57.1	<u> </u>	57.2	
Vehicle Noise:	66	.1	64.4		61.4		56.5	5	65.1		65.6
Centerline Distance	ce to Noise Co	ntour (in feet))								
L				70 d	IBA	65 a	IBA .	6	0 dBA	55	dBA

47

51

Ldn: CNEL: 101

109

218

235

470

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Harvard Av. Number: 8141
Road Segment: b/w Edinger Av. And Paseo Westpark Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data				Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	15,300 vehicles	3			Autos:	15			
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles):	15			
Peak H	lour Volume:	1,530 vehicles	3	He	avy Trucks ((3+ <i>Axles</i>):	15			
Ve	hicle Speed:	55 mph		Vehicle I	Miy					
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily	
Site Data					Auto			9.6%		
	rrier Height:	0.0 feet		Ме	edium Truck	s: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	_	0.0		F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%	
Centerline Di	,	100.0 feet								
Centerline Dist.		100.0 feet		Noise Sc	ource Eleva	•	eet)			
Barrier Distance		0.0 feet			Autos:	2.000				
Observer Height		5.0 feet		Mediur	n Trucks:	4.000				
-	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0	
-	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	stance (in	feet)			
	Road Grade:	0.0%		<u> </u>	Autos:	96.607	,			
	Left View:	-90.0 degree	26	Mediui	n Trucks:	96.566				
	Right View:	90.0 degree			y Trucks:	96.608				
FHWA Noise Mod										
VehicleType	REMEL	Traffic Flow	Distance	Finite		resnel	Barrier Att		m Atten	
Autos:	71.78	-0.98	-4.3	39	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-18.21	-4.3	39	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-22.17	-4.3	39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	nout Topo and	barrier atte	nuation)						
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	Evening	Leq Nigl	nt	Ldn	CI	VEL	
Autos:	6	5.2	63.3	61.5		55.5	64.1	1	64.7	
Medium Trucks:	58	8.6	57.1	50.7		49.2	57.6	6	57.9	
Heavy Trucks:	58	8.6	57.2	48.2		49.4	57.8	3	57.9	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	52	112	242	521
CNEL:	56	121	260	560

62.1

57.2

65.8

66.2

65.0

Vehicle Noise:

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Hubble Number: 8141
Road Segment: n/o ICD Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				ı	IOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	2,000 vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak F	Hour Volume:	200 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		1	/ehicle l	Wix					
Near/Far La	ane Distance:	52 feet				icleType	e e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	•	9.6%	-
	nrrier Height:	0.0 feet			Me	edium T	rucks:	84.8%		10.3%	
Barrier Type (0-V	_	0.0 leet 0.0			ŀ	leavy T	rucks:	86.5%		10.8%	
• • •	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet			Voise So			ns (in fe	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	_	1.000	0 - 4 - 4 - 4		0.0
-	Pad Elevation:	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	iustment	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	feet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 degree	es		Mediui	n Truck	s: 96	6.566			
	Right View:	90.0 degree	es		Heav	y Truck	s: 96	6.608			
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-9.81		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-27.05		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-31.01		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier atteni	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	rening	Leq	Night		Ldn	C	NEL
Autos:	56	.4	54.5		52.7		46	.7	55.3	3	55.9
Medium Trucks:			48.3		41.9		40		48.8		49.0
Heavy Trucks:			48.4		39.3		40	.6	48.9	9	49.1
Vehicle Noise:	58	.0	56.2		53.2		48	.4	56.9	9	57.4
Centerline Distan	ce to Noise Co	ontour (in feet)								
				70 a	IBA .	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

13

14

29

31

62

67

134

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: b/w Newport and Red Hill

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA						L INPUT	S	
Highway Data				Site Cor	nditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 5	5,500 vehicles	3				Autos:	15		
Peak Houl	Percentage:	10%		Me	edium Tr	rucks (2 A	Axles):	15		
Peak I	Hour Volume:	5,550 vehicles	3	He	avy Tru	cks (3+ A	Axles):	15		
Ve	ehicle Speed:	55 mph		Vehicle	Miy					
Near/Far La	ane Distance:	88 feet			icleType	Э	Day	Evening	Night	Daily
Site Data							77.5%	_	9.6%	
Ba	rrier Height:	0.0 feet		М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • • •	ist. to Barrier:	100.0 feet		Noise S	ouroo E	lovotion	o (in f	204)		
Centerline Dist.	to Observer:	100.0 feet		Noise 3				ei)		
Barrier Distance	to Observer:	0.0 feet		Madiu	Auto m Truck		000			
Observer Height	(Above Pad):	5.0 feet					000	Grade Ad	iustmont	
F	Pad Elevation:	0.0 feet		пеа	/y Truck	.5. 0.0	006	Grade Auj	ustinent	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalen	t Distan	ce (in i	feet)		
	Road Grade:	0.0%			Auto	s: 89.	850			
	Left View:	-90.0 degree	es	Mediu	m Truck	s: 89.	805			
	Right View:	90.0 degree	es	Hea	⁄y Truck	rs: 89.	850			
FHWA Noise Mod	lel Calculations	5								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresr	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	4.62	-3.	92	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-12.62	-3.	92	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-16.57	-3.9	92	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)						
VehicleType	Leq Peak Hou	r Leq Day	Leq	Evening	Leq	Night		Ldn	CI	VEL
Autos:	71.	.3 (69.4	67.6		61.6	3	70.2	2	70.8
Marilla Transfer	0.4	_	20.0	500				00 -		00.0

Unmitigated Nois	e Levels (withou	it Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	71.3	69.4	67.6	61.6	70.2	70.8
Medium Trucks:	64.7	63.2	56.8	55.3	63.7	63.9
Heavy Trucks:	64.7	63.3	54.2	55.5	63.8	64.0
Vehicle Noise:	72.9	71.1	68.1	63.3	71.8	72.3

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	132	285	614	1,322
CNEL:	142	306	660	1,423

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: b/w Red Hill and Browning

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA			NOI	SE MODE	L INPUT	S		
Highway Data				Site Cor	ditions (Ha	rd = 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	54,100 vehicles	;			Autos:	15			
Peak Hour	Percentage:	10%		Me	dium Trucks	s (2 Axles):	15			
Peak H	lour Volume:	5,410 vehicles	;	He	avy Trucks	(3+ <i>Axles</i>):	15			
Ve	ehicle Speed:	50 mph		Vehicle	Miy					
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily	
Site Data				7011	Auto		J	9.6%	-	
	rrier Height:	0.0 feet		M	edium Truck			10.3%	1.84%	
Barrier Type (0-W	•	0.0 reet 0.0		1	leavy Truck	s: 86.5%		10.8%	0.74%	
	ist. to Barrier:	100.0 feet								
Centerline Dist.		100.0 feet		Noise S	ource Eleva	•	eet)			
Barrier Distance		0.0 feet		Autos: 2.000						
Observer Height		5.0 feet		Medium Trucks: 4.000						
_	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment.	0.0	
	ad Elevation:	0.0 feet		Lane Eq	uivalent Di	stance (in	feet)			
	Road Grade:	0.0%			Autos:	93.723	,			
	Left View:	-90.0 degree		Mediu	m Trucks:	93.680				
	Right View:	· ·			ry Trucks:	93.723				
	Night view.	90.0 degree	:5	ricat	y Trucks.	33.723				
FHWA Noise Mod	lel Calculation	ıs								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten	
Autos:	70.20	4.92	-4.2	20	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	81.00	-12.31	-4.′	19	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	85.38	-16.27	-4.2	20	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and I	barrier atte	nuation)						
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Nig	ht	Ldn	CI	VEL	
Autos:	69	9.7	67.8	66.1		60.0	68.6	6	69.2	
Medium Trucks:	63	3.3	81.8	55.4		53.9	62.3	3	62.6	

Vehicle Noise:	71.4 6	9.7	66.6	61.8	70.4	70.9
Centerline Distance to	Noise Contour (in feet)					
			70 dBA	65 dBA	60 dBA	55 dBA
	L	dn:	106	229	493	1,062
	CN	IFI ·	114	246	530	1 141

53.3

54.5

62.9

63.0

62.3

Heavy Trucks:

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Tustin Ranch Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			N	OISE MODE	L INPUT	S	
Highway Data				Site Con	ditions	(Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt): 4	18,300 vehicles	3			Autos	: 15		
Peak Hour	Percentage:	10%		Me	dium Tru	icks (2 Axles)	: 15		
Peak H	lour Volume:	4,830 vehicles	3	He	avy Truc	ks (3+ Axles)	: 15		
Ve	ehicle Speed:	55 mph		Vehicle I	Miv				
Near/Far La	ne Distance:	88 feet			icleType	Day	Evening	Night	Daily
Site Data				V 0111		Autos: 77.5%	Ū	9.6%	,
	uuiau Haiadat.	0.0 feet		Me	edium Tr			10.3%	1.84%
	rrier Height:	0.0 teet 0.0			leavy Tr			10.8%	0.74%
Barrier Type (0-W	ist. to Barrier:	0.0 100.0 feet							
Centerline Di		100.0 feet		Noise Sc	urce El	evations (in f	eet)		
Barrier Distance		0.0 feet			Autos				
Observer Height		5.0 feet		Mediur	n Trucks	s: 4.000			
	ad Elevation:	0.0 feet		Heav	y Trucks	s: 8.006	Grade Ad	ustment	: 0.0
	ad Elevation: ad Elevation:	0.0 feet		Lane Eq	uivalent	Distance (in	feet)		
	Road Grade:	0.0%		•	Autos	•			
	Left View:	-90.0 degree	es	Mediur	n Trucks				
	Right View:	90.0 degree		Heav	y Trucks	s: 89.850			
FHWA Noise Mod	lel Calculations	s							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	4.02	-3	.92	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-13.22	-3	.92	-1.20	<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks:	86.40	-17.18	-3	.92	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)					
VehicleType	Leq Peak Hou	ır Leq Day	Leq	Evening	Leq i	Night	Ldn	CI	NEL
Autos:			68.8	67.0		61.0	69.6	5	70.2
Medium Trucks:	64	.1	62.6	56.2		54.6	63.1		63.3
Heavy Trucks:	64	.1	62.7	53.6		54.9	63.2	2	63.4

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	121	260	559	1,205
CNEL:	130	279	602	1,297

67.5

71.2

62.7

71.7

70.5

Vehicle Noise:

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Jamboree Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	ATA			N	OISE	MODE	L INPUT	S	
Highway Data					Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	42,200 v	vehicles	i				Autos:	15		
	Percentage:	10%			М	ledium Tru	icks (2	Axles):	15		
Peak H	Hour Volume:	4,220 \	ehicles/	i	Н	leavy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	55 r	mph		Vehicle	Miy					
Near/Far La	ne Distance:	88 f	eet			hicleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%	-	9.6%	
	rrier Height:	0.0	feet		٨	∕ledium Tr	ucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0	ieei			Heavy Tr		86.5%		10.8%	0.74%
• • •	ist. to Barrier:	100.0	foot								
Centerline Dist.					Noise S	Source Ele	evatio	ns (in fe	eet)		
		100.0				Autos	s: 2	.000			
Barrier Distance			feet		Medi	um Trucks	s: 4	.000			
Observer Height	. ,		feet		Hea	avy Trucks	s: 8	.006	Grade Ad	justment.	0.0
	ad Elevation:		feet								
Ro	ad Elevation:		feet		Lane E	quivalent			feet)		
	Road Grade:	0.09	%			Autos	s: 89	.850			
	Left View:	-90.0	degree	S	Medi	um Trucks	s: 89	.805			
	Right View:	90.0	degree	s	Hea	avy Trucks	s: 89	.850			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic	Flow	Distance	Finit	e Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78		3.43	-3.9	92	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	•	-13.81	-3.9	92	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	•	-17.76	-3.9	92	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	o and b	parrier atte	nuation))					
VehicleType	Leq Peak Hou	ur L	eq Day	Leq E	Evening	Leq I	Night		Ldn	CI	VEL
Autos:	70).1	6	8.2	66.4	4	60.	.4	69.0	כ	69.6
Medium Trucks:	63	3.5	6	52.0	55.0	6	54.	.1	62.5	5	62.8
Heavy Trucks:	63	3.5	6	52.1	53.	1	54.	.3	62.7	7	62.8
Vehicle Noise:	71	.7	6	9.9	67.	0	62.	.1	70.6	ĵ	71.1
Contorlino Distan	ce to Noise C	ontour /	in foot)								

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	110	237	511	1,102
CNEL:	119	255	550	1,185

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Jamboree Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data			S	ite Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily Traffic (Adt):	45,400 vehicles	3					Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tru	ucks (2	Axles):	15		
Peak Hour Volume:	4,540 vehicles	6		He	avy Trud	cks (3+	Axles):	15		
Vehicle Speed:	60 mph		V	ehicle l	Miy					
Near/Far Lane Distance:	76 feet				icleType)	Day	Evening	Night	Daily
Site Data						Autos:	77.5%	0	9.6%	_
Barrier Height:	0.0 feet			Me	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			F	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		M	loisa Sc	urca El	lovatio	ns (in fe	of)		
Centerline Dist. to Observer:	100.0 feet		/4	0/36 30	Autos		2.000			
Barrier Distance to Observer:	0.0 feet			Modium	Auto: n Truck:		1.000			
Observer Height (Above Pad):	5.0 feet							Grade Ad	liustmont	
Pad Elevation:	0.0 feet			неач	y Truck	S. c	3.006	Grade Au	jusimem	. 0.0
Road Elevation:	0.0 feet		L	ane Eq	uivalent	t Dista	nce (in t	eet)		
Road Grade:	0.0%				Autos	s: 92	2.547			
Left View:	-90.0 degree	es		Mediur	n Trucks	s: 92	2.504			
Right View:	90.0 degree			Heav	y Truck	s: 92	2.547			
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distan	ce	Finite	Road	Fres	snel	Barrier Att	en Bei	m Atten
Autos: 73.22	2 3.37		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 83.68	-13.87		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87.33	3 -17.82		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier a	ttenu	ation)						
VehicleType Leq Peak Ho	our Leq Day	Le	q Eve	ening	Leq	Night		Ldn	С	NEL
Autos: 7	1.3	69.4		67.6		61	.6	70.2	2	70.8
Medium Trucks: 6	4.5	63.0		56.6		55	.1	63.6	6	63.8
Heavy Trucks: 6	4.2	62.8		53.7		55	.0	63.3	3	63.5
Vehicle Noise: 7	2.8	71.0		68.1		63	.2	71.7	7	72.2
Centerline Distance to Noise C	Contour (in feet))								

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	130	280	604	1,301
CNEL:	140	302	650	1,401

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: b/w SR-261 Ramps

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS					s		
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	44,200 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak H	lour Volume:	4,420 vehicle	es		He	avy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		V	ehicle l	Mix					
Near/Far La	ane Distance:	76 feet				icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet			Me	edium Tr	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			F	leavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline D	ist. to Barrier:	100.0 feet		N	oise Sc	urce El	evatio	ns (in fe	eet)		
Centerline Dist.	to Observer:	100.0 feet				Autos		.000	/		
Barrier Distance	to Observer:	0.0 feet			Mediur	n Trucks		.000			
Observer Height	(Above Pad):	5.0 feet				y Trucks		.006	Grade Ad	iustment	. 0 0
P	ad Elevation:	0.0 feet			ricav	y Trucke	s. O	.000	Orado riaj	, a o ti i i o i i t	0.0
Ro	ad Elevation:	0.0 feet Lane Equivalent Distance (in feet)									
	Road Grade:	0.0%		Autos: 92.547							
	Left View:	-90.0 degre	es		Mediur	n Trucks	s: 92	.504			
	Right View:	90.0 degre			Heav	y Trucks	s: 92	.547			
FHWA Noise Moo	lel Calculatio	าร									
VehicleType	REMEL	Traffic Flow	Distand	се	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	3.25	-	4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-13.98	-	4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-17.94	-	4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)											
VehicleType	Leq Peak Ho	our Leq Day	y Le	q Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	7	1.2	69.3		67.5		61.	4	70.1	1	70.7
Medium Trucks:	6-	4.4	62.9		56.5		55.	0	63.4	4	63.7
Heavy Trucks:	6-	4.1	62.6		53.6		54.	9	63.2	2	63.3
Vehicle Noise:	72	2.6	70.9		68.0		63.	0	71.6	6	72.1

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	128	275	593	1,278						
CNEL:	138	297	639	1,377						

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o SR-261 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA				N	IOISE	MODE	L INPUT	S				
Highway Data			S	Site Conditions (Hard = 10, Soft = 15)									
Average Daily Traffic (Adt):	45,500 vehicle	S					Autos:	15					
Peak Hour Percentage:	10%			Me	dium Tri	ucks (2	Axles):	15					
Peak Hour Volume:	4,550 vehicle	S		He	avy Truc	cks (3+	Axles):	15					
Vehicle Speed:	60 mph		14	'ehicle l	Miv								
Near/Far Lane Distance:	76 feet				icleType	,	Day	Evening	Night	Daily			
Site Data				VEIII		Autos:	77.5%	J	9.6%				
				1.10	r edium Tı		84.8%		10.3%	1.84%			
Barrier Height:		0.0 feet			leavy Ti		86.5%		10.3%	0.74%			
Barrier Type (0-Wall, 1-Berm).				,	icavy ii	iucns.	00.576	2.1 /0	10.076	0.7470			
Centerline Dist. to Barrier.			٨	loise Sc	urce El	levatio	ns (in fe	eet)					
Centerline Dist. to Observer.					Auto	s: 2	2.000						
Barrier Distance to Observer		0.0 feet			Medium Trucks: 4.000								
Observer Height (Above Pad):				Heav	y Truck	s: 8	3.006	Grade Ad	justment	0.0			
Pad Elevation:					-			•					
Road Elevation:						Lane Equivalent Distance (in feet)							
Road Grade:		Autos: 92.547											
Left View:	3 -				n Truck								
Right View:	90.0 degre	es		Heav	y Truck	s: 92	2.547						
FHWA Noise Model Calculation	ons												
VehicleType REMEL	Traffic Flow	Distan	се	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten			
Autos: 73.2	22 3.38	-	4.11		-1.20		-4.87	0.0	000	0.000			
Medium Trucks: 83.6	68 -13.86	-	4.11		-1.20		-4.97	0.0	000	0.000			
Heavy Trucks: 87.3	-17.81	-	4.11		-1.20		-5.16	0.0	000	0.000			
Unmitigated Noise Levels (wi	thout Topo and	barrier a	ttenu	uation)									
VehicleType Leq Peak H	our Leq Day	/ Le	q Ev	ening	Leq	Night		Ldn	C	NEL			
Autos:	71.3	69.4		67.6		61	.6	70.2	2	70.8			
Medium Trucks:	64.5	63.0		56.6		55	.1	63.6	6	63.8			
Heavy Trucks:	64.2	62.8		53.7	55.0 63.3		3	63.5					
Vehicle Noise:	72.8	71.0		68.1		63	.2	71.7	7	72.2			
Centerline Distance to Noise	Contour (in feet)											

CNEL:	140	302	651	1,403

70 dBA

130

Ldn:

65 dBA

281

60 dBA

605

55 dBA

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Culver Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DAT	DATA NOISE MODEL INPUTS				S				
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)						
	Traffic (Adt): Percentage: Hour Volume:	38,900 vehice 10% 3,890 vehice				dium Tru avy Trud	•	,			
Near/Far La	ehicle Speed: ane Distance:	60 mph 76 feet		ν	/ehicle l Veh	icleType		Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%		9.6%	
Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 fee 0.0	:			edium Ti Ieavy Ti		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline D	ist. to Barrier:	100.0 feet		۸	loise Sc	ource El	levatio	ns (in fe	eet)		
Ro	to Observer:	0.0 feet 5.0 feet 0.0 feet 0.0% -90.0 deg	100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degrees 90.0 degrees			Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547					0.0
FHWA Noise Mod	1										
VehicleType	REMEL	Traffic Flov		stance	Finite		Fres		Barrier Att		m Atten
Autos:				-4.11		-1.20		-4.87		000	0.000
Medium Trucks: Heavy Trucks:				-4.11 -4.11		-1.20 -1.20		-4.97 -5.16		000	0.000
Unmitigated Nois	e Levels (with	hout Topo ai	nd barri	ier attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq E	ay ay	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:		0.6	68.7		66.9		60.	-	69.5		70.1
Medium Trucks:		3.8	62.3		56.0		54.		62.9		63.1
Heavy Trucks:		3.5	62.1		53.1		54.		62.7		62.8
Vehicle Noise:	7.	2.1	70.3		67.4		62.	5	71.0)	71.5

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	117	253	545	1,174							
CNEL:	126	272	587	1,264							

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Culver Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	MODE	L INPUT	S							
Highway Data			Site Con	ditions (Hard	I = 10, Sc	oft = 15)								
Average Daily Traffic (Adt).	39,400 vehicle	S			Autos:	15								
Peak Hour Percentage.	10%		Me	dium Trucks (2 Axles):	15								
Peak Hour Volume:	3,940 vehicle	S	He	avy Trucks (3	+ Axles):	15								
Vehicle Speed:	60 mph		Vehicle I	Miv										
Near/Far Lane Distance.	76 feet			icleType	Day	Evening	Night	Daily						
Site Data			VEII	Autos:	•	J	9.6%	97.42%						
			Λ./.	.auos edium Trucks			10.3%	1.84%						
Barrier Height.				alum Trucks. Heavy Trucks:			10.8%	0.74%						
Barrier Type (0-Wall, 1-Berm).			,	leavy Trucks.	00.57	2.1 /0	10.676	0.7476						
Centerline Dist. to Barrier			Noise So	ource Elevation	ons (in f	eet)								
Centerline Dist. to Observer				Autos:	2.000									
Barrier Distance to Observer			Mediui	m Trucks:	4.000									
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0						
Pad Elevation														
Road Elevation.			Lane Equivalent Distance (in feet)											
Road Grade	0.0%				2.547									
Left View	-90.0 degre	es			2.504									
Right View	90.0 degre	es	Heav	ry Trucks: 9	2.547									
FHWA Noise Model Calculation	ons													
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten						
Autos: 73.2	22 2.75	-4	.11	-1.20	-4.87	0.0	000	0.000						
Medium Trucks: 83.6	68 -14.48	-4	.11	-1.20	-4.97	0.0	000	0.000						
Heavy Trucks: 87.3	-18.44	-4	.11	-1.20	-5.16	0.0	000	0.000						
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)											
VehicleType Leq Peak H	lour Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL						
Autos:	70.7	68.8	67.0	6	0.9	69.6	6	70.2						
Medium Trucks:	63.9	62.4	56.0	5	4.5	62.9)	63.2						
Heavy Trucks:	63.6	62.2	53.1	5	4.4	62.7	7	62.8						
Vehicle Noise:	72.1	70.4	67.5	6	2.5	71.1		71.6						
Centerline Distance to Noise	Contour (in feet)												

70 dBA

118

128

Ldn:

CNEL:

65 dBA

255

275

60 dBA

549

592

55 dBA 1,184

Sunday, Ma	ay 20, 2012
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Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Yale Av.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA				ı	IOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	42,800	0 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10	0%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	our Volume:	4,280	0 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60	0 mph		,	Vehicle l	Miv					
Near/Far La	ne Distance:	76	6 feet				icleType	2	Day	Evening	Night	Daily
Site Data						7 011		Autos:	77.5%	_	9.6%	-
	uuiau Haiadat.		0 foot			Me	edium T		84.8%		10.3%	
Barrier Type (0-V	rrier Height:	-	.0 feet .0				leavy T		86.5%		10.8%	
	ist. to Barrier:		.0 .0 feet									
Centerline Dist.			.0 feet		1	Noise So			•	eet)		
Barrier Distance			.0 feet				Auto		2.000			
Observer Height			.0 feet				n Truck		.000			
•	ad Elevation:	_	.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0
-	ad Elevation:		.0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:		.0%			•	Auto		2.547			
	Left View:		.0 degree	es		Mediui	n Truck	s: 92	2.504			
	Right View:		.0 degree			Heav	y Truck	s: 92	2.547			
FHWA Noise Mod												
VehicleType	REMEL		fic Flow	Dis	stance	Finite		Fres		Barrier Att		m Atten
Autos:			3.11		-4.1		-1.20		-4.87		000	0.000
Medium Trucks:			-14.12		-4.1		-1.20		-4.97		000	0.000
Heavy Trucks:	87.33	3	-18.08		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (wit	hout T	opo and	barri	er atten	uation)						
VehicleType	Leq Peak Ho	our	Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	7	1.0		69.1		67.4		61	.3	69.9	9	70.5
Medium Trucks:	6	4.2	(62.7		56.4		54	.8	63.3	3	63.5
Heavy Trucks:	6	3.9		62.5		53.5		54	.7	63.1	1	63.2
Vehicle Noise:	7	2.5		70.7		67.9		62	.9	71.5	5	71.9
Centerline Distan	ce to Noise C	ontou	r (in feet)								
			. ,		70 d	dBA	65	dBA	6	60 dBA	55	dBA
						-						

Ldn:

CNEL:

125

135

270

290

581

625

1,251

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Jeffrey Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	37,700 vehicles	6					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	2 Axles):	15				
Peak He	our Volume:	3,770 vehicles	3		He	avy Tru	cks (3+	- Axles):	15				
Vel	hicle Speed:	60 mph			Vehicle	Mix							
Near/Far Lar	ne Distance:	76 feet				icleType	9	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%		9.6%	_		
	rior Unight	0.0 feet			M	edium T		84.8%		10.3%			
Barrier Type (0-Wa	rier Height:	0.0 reet 0.0				Heavy T		86.5%		10.8%			
Centerline Dis	,	0.0 100.0 feet											
Centerline Dist. t		100.0 feet			Noise S	ource E		•	eet)				
Barrier Distance t		0.0 feet				Auto		2.000					
Observer Height (5.0 feet				m Truck		4.000		_			
• .	nd Elevation:	0.0 feet			Heav	y Truck	s:	8.006	Grade Ad	justmen	t: 0.0		
	nd Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)				
	Road Grade:	0.0%			•	Auto		2.547					
	Left View:	-90.0 degree	es		Mediu	m Truck		2.504					
	Right View:	90.0 degree			Heav	y Truck	rs: 9	2.547					
FHWA Noise Mode	el Calculation	ıs											
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fre	snel	Barrier Att	en Be	rm Atten		
Autos:	73.22			-4.1	1	-1.20		<i>-4.</i> 87	0.0	000	0.000		
Medium Trucks:	83.68	-14.68		-4.1	1	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-18.63		-4.1	1	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	out Topo and	barrie	er atten	uation)								
VehicleType	Leq Peak Ho	ur Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL		
Autos:	70).5	68.6		66.8		60).7	69.4	4	70.0		
Medium Trucks:	63	3.7	62.2		55.8		54	1.3	62.7	7	63.0		
Heavy Trucks:	63	3.4	62.0		52.9		54	1.2	62.	5	62.7		
Vehicle Noise:	71	.9	70.2		67.3		62	2.4	70.9	9	71.4		
Centerline Distance	e to Noise C	ontour (in feet,)										
					dBA		dBA	(60 dBA		5 dBA		
			Ldn:	1	15	2	248		534	1	,150		

CNEL:

124

267

575

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Jeffrey Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NO	ISE MOD	EL INPUT	S					
Highway Data			Site Cor	nditions (H	ard = 10, \$	Soft = 15)						
Average Daily Traffic (Adt):	36,600 vehicle	es .			Auto	s: 15						
Peak Hour Percentage:			Me	edium Truck	ks (2 Axles) <i>:</i> 15						
Peak Hour Volume:	3,660 vehicle	es	He	avy Trucks	s (3+ Axles): 15						
Vehicle Speed:	60 mph		Vehicle	Miss								
Near/Far Lane Distance:	76 feet				Dov	Evening	Night	Doily				
Site Date			ven	nicleType	Day tos: 77.5	Evening % 12.9%	Night 9.6%	Daily				
Site Data				Aut edium Truc								
Barrier Height:							10.3%	1.84%				
Barrier Type (0-Wall, 1-Berm).			1	Heavy Truc	ks: 86.5	% 2.7%	10.8%	0.74%				
Centerline Dist. to Barrier.			Noise S	ource Elev	ations (in	feet)						
Centerline Dist. to Observer.				Autos:	2.000	<u> </u>						
Barrier Distance to Observer.			Mediu	m Trucks:	4.000							
Observer Height (Above Pad).				y Trucks:	8.006	Grade Ad	justment.	0.0				
Pad Elevation.												
Road Elevation.			Lane Equivalent Distance (in feet)									
Road Grade.	0.0%			Autos:	92.547							
Left View.	-90.0 degre	es	Mediu	m Trucks:	92.504							
Right View.	90.0 degre	es	Heav	vy Trucks:	92.547							
FHWA Noise Model Calculation	ons											
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road	Fresnel	Barrier Att	ten Ber	m Atten				
Autos: 73.2	22 2.43	-4	4.11	-1.20	-4.87	7 0.0	000	0.000				
Medium Trucks: 83.6	68 -14.80	-4	4.11	-1.20	-4.97	7 0.0	000	0.000				
Heavy Trucks: 87.3	-18.76	-2	4.11	-1.20	-5.16	6 0.0	000	0.000				
Unmitigated Noise Levels (wi	thout Topo and	barrier at	tenuation)									
VehicleType Leq Peak H	lour Leq Day	y Leq	g Evening	Leq Ni	ght	Ldn	CI	VEL				
Autos:	70.3	68.4	66.7		60.6	69.2	2	69.8				
Medium Trucks:	63.6	62.1	55.7		54.2	62.0	6	62.8				
Heavy Trucks:	63.3	61.8	52.8		54.0	62.4	4	62.5				
Vehicle Noise:	71.8	70.1	67.2		62.2	70.8	8	71.3				
Centerline Distance to Noise	Contour (in feet	t)										

70 dBA

113

121

Ldn: CNEL: 65 dBA

243

262

60 dBA

523

563

55 dBA

1,127

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Groveland

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT D	ATA				N	NOISE	MODE	L INPUT	S	
Highway Data					S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	36,800 v	ehicles						Autos:	15		
•	r Percentage:	10%				Med	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	3,680 v	ehicles			Hea	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 r	nph		V	'ehicle I	Miv					
Near/Far La	ane Distance:	76 f	eet				icleType		Day	Evening	Night	Daily
Site Data								Autos:	77.5%	Ū	9.6%	_
	arrier Height:	0.0	feet			Ме	edium T		84.8%		10.3%	
Barrier Type (0-V	•	0.0	ieet			F	leavy T	rucks:	86.5%		10.8%	
• • •	ist. to Barrier:	100.0	feet									
Centerline Dist.		100.0			۸	loise So				eet)		
Barrier Distance		0.0					Auto		2.000			
Observer Height			feet				n Truck	_	.000			
J	Pad Elevation:	0.0				Heav	y Truck	:s: 8	3.006	Grade Ad	justment	: 0.0
Ro	ad Elevation:	0.0			L	ane Equ	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0%					Auto	s: 92	2.547			
	Left View:	-90.0	degrees	6		Mediur	n Truck	s: 92	2.504			
	Right View:	90.0	degrees	8		Heav	y Truck	rs: 92	2.547			
FHWA Noise Mod	del Calculation	15										
VehicleType	REMEL	Traffic	Flow	Distan	се	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos.	73.22)	2.46		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks.	83.68	} -	-14.78	-	-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks.	87.33	3 -	18.74		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	nout Top	o and b	arrier a	ttenu	ation)						
VehicleType	Leq Peak Ho	ur Le	eq Day	Le	q Ev	ening	Leq	Night		Ldn	C	NEL
Autos.	70	0.4	68	8.5		66.7		60	.6	69.3	3	69.9
Medium Trucks.	: 63	3.6	62	2.1		55.7		54	.2	62.6	5	62.9
Heavy Trucks.	60	3.3	6	1.9		52.8		54	.1	62.4	4	62.5
Vehicle Noise	7	1.8	70	0.1		67.2		62	.2	70.8	3	71.3
Centerline Distan	ice to Noise C	ontour (i	in feet)									
					70 d	BA	65	dBA	6	i0 dBA	55	dBA

Ldn:

CNEL:

113

122

244

262

525

565

1,131

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Sand Canyon. Av.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S					
Highway Data			Site Conditions (Hard = 10, Soft = 15)									
Average Daily Traffic (Adt):	39,400 vehicles	S			Autos:	15						
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15						
Peak Hour Volume:	3,940 vehicles	S	He	avy Trucks (3	3+ Axles):	15						
Vehicle Speed:	60 mph		Vehicle I	Miss								
Near/Far Lane Distance:	76 feet				Dou		Niaht	Doily				
Cita Data			ven	icleType	Day	Evening	Night	Daily				
Site Data				Autos			9.6%	97.42%				
Barrier Height:				edium Trucks			10.3%	1.84%				
Barrier Type (0-Wall, 1-Berm):	0.0		<i> </i>	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%				
Centerline Dist. to Barrier:			Noise So	ource Elevati	ions (in f	eet)						
Centerline Dist. to Observer:				Autos:	2.000							
Barrier Distance to Observer:			Mediui	m Trucks:	4.000							
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0				
	Pad Elevation: 0.0 feet											
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist		feet)						
Road Grade:	0.0%				92.547							
Left View:	-90.0 degree	es	Mediui	n Trucks:	92.504							
Right View:	90.0 degree	es	Heav	ry Trucks:	92.547							
FHWA Noise Model Calculation	ons											
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten				
Autos: 73.2	2 2.75	-4	.11	-1.20	-4.87	0.0	000	0.000				
Medium Trucks: 83.6	8 -14.48	-4	.11	-1.20	-4.97	0.0	000	0.000				
Heavy Trucks: 87.3	3 -18.44	-4	.11	-1.20	-5.16	0.0	000	0.000				
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)									
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Night	L	Ldn	CI	VEL				
Autos:	70.7	68.8	67.0	6	60.9	69.6	6	70.2				
Medium Trucks:	63.9	62.4	56.0	5	54.5	62.9	9	63.2				
Heavy Trucks:6	63.6	62.2	53.1	5	54.4	62.7	7	62.8				
Vehicle Noise:	72.1	70.4	67.5	6	62.5	71.′	1	71.6				
Centerline Distance to Noise	Contour (in feet)										

70 dBA

118

128

Ldn:

CNEL:

65 dBA

255

275

60 dBA

549

592

55 dBA

1,184

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o SR-133 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPU	JT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Ad	t): 43,1	100 vehicles						Autos:	15		
Peak Hour Percentag	•	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volum	e: 4,3	310 vehicles			He	avy Tru	cks (3+	- Axles):	15		
Vehicle Spee	d:	60 mph		,	/ehicle	Miv					
Near/Far Lane Distand	e:	76 feet				icleType	2	Day	Evening	Night	Daily
Site Data					V 011		Autos:	77.5%	•	9.6%	•
	.4.	0.0 foot			M	edium T		84.8%		10.3%	1.84%
Barrier Heigl		0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Bern Centerline Dist. to Barri	•	0.0 00.0 feet									
Centerline Dist. to Observe		00.0 feet		1	Voise So	ource E	levatio	ns (in fe	eet)		
Barrier Distance to Observe		0.0 feet				Auto		2.000			
Observer Height (Above Page)		5.0 feet				n Truck		4.000			
Pad Elevation	,	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Adj	iustment	: 0.0
Road Elevation		0.0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
Road Grad		0.0%				Auto		2.547	,,,		
Left Vie		90.0 degree	e		Mediu	n Truck		2.504			
Right Vie		90.0 degree				ry Truck		2.547			
rugin vio	,,,	oo.o acgico				,					
FHWA Noise Model Calcula											
VehicleType REMEL	. Tr	raffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten
	3.22	3.14		-4.1°	I	-1.20		-4.87		000	0.000
Medium Trucks: 83	3.68	-14.09		-4.1°	I	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87	'.33	-18.05		-4.1		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (vithout	Topo and I	barrie	er atten	uation)						
VehicleType Leq Peak	Hour	Leq Day		Leg E	ening	Leq	Night		Ldn	C	NEL
Autos:	71.1	(9.2	-	67.4		61	.3	70.0)	70.6
Medium Trucks:	64.3	6	32.8		56.4		54	.9	63.3	3	63.6
Heavy Trucks:	64.0	6	32.5		53.5		54	.8	63.1	l	63.2
Vehicle Noise:	72.5	7	70.8		67.9		62	2.9	71.5	5	72.0
Centerline Distance to Nois	e Conto	our (in feet)									
				70 c		65	dBA	6	60 dBA	55	dBA
		L	.dn:	12	:6	2	71		583	1,	257

CNEL:

135

292

628

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o O St.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffi	ic (Adt): 3	7,200 vehicles	3					Autos:	15				
Peak Hour Perc	entage:	10%			Me	dium Tr	ucks (2	? Axles):	15				
Peak Hour \	/olume:	3,720 vehicles	3		He	avy Tru	cks (3+	- Axles):	15				
Vehicle	Speed:	60 mph			Vehicle i	Miy							
Near/Far Lane Di	istance:	76 feet				icleType	9	Day	Evening	Night	Daily		
Site Data					*011		Autos:	77.5%		9.6%			
	l laiosb4.	0.0 feet			М	edium T		84.8%		10.3%			
Barrier Type (0 Well 1	•	0.0 feet 0.0				Heavy T		86.5%		10.8%			
Barrier Type (0-Wall, 1 Centerline Dist. to	•	0.0 100.0 feet											
Centerline Dist. to Ol		100.0 feet			Noise So	ource E			eet)				
Barrier Distance to Ol		0.0 feet				Auto		2.000					
Observer Height (Abov					Mediu	m Truck	s: ·	4.000					
• ,	e rau). evation:	5.0 feet			Heav	y Truck	s:	3.006	Grade Ad	justment	: 0.0		
Road Ele		0.0 feet 0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)				
	Grade:	0.0%				Auto		2.547					
	oft View:	-90.0 degree	00		Mediu	m Truck		2.504					
	ht View:	90.0 degree				y Truck		2.547					
rugi	n view.	30.0 degree	<i>-</i> 3		77041	y maon		2.017					
FHWA Noise Model Ca	lculations	3											
VehicleType R	EMEL	Traffic Flow	Dis	tance	Finite	Road	Fre	snel	Barrier Att	en Be	rm Atten		
Autos:	73.22	2.51		-4.1	1	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-14.73		-4.1	1	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-18.69		-4.1	1	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Lev	els (witho	out Topo and	barrie	er atter	nuation)								
-	Peak Hou				vening	Leq	Night		Ldn	С	NEL		
Autos:	70.	4	68.5		66.7		60).7	69.3	3	69.9		
Medium Trucks:	63.	6	62.1		55.8		54	1.2	62.7	7	62.9		
Heavy Trucks:	63.	3	61.9		52.9		54	l.1	62.5	5	62.6		
Vehicle Noise:	71.	9	70.1		67.2		62	2.3	70.8	3	71.3		
Centerline Distance to	Noise Co	ntour (in feet))										
				70	dBA	65	dBA	(60 dBA	55	dBA		
			Ldn:	1	14	2	45		529	1,	139		

CNEL:

123

264

1,227

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o O St.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA					NOISE	MODE	L INPUT	S		
Highway Data				3	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	40,000 vehicle	s					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15			
Peak H	lour Volume:	4,000 vehicle	s		He	avy Tru	icks (3+	Axles):	15			
Ve	ehicle Speed:	60 mph		1	Vehicle I	Wix						
Near/Far La	ne Distance:	76 feet				icleTyp	е	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		9.6%	-	
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V	_	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%	
• • •	ist. to Barrier:	100.0 feet							- 41			
Centerline Dist.		100.0 feet		<i>I</i>	Voise So			•	et)			
Barrier Distance	to Observer:	0.0 feet			1.4li	Auto		2.000				
Observer Height	(Above Pad):	5.0 feet				n Truck	_	1.000	Grade Ad	iustmont	0.0	
P	ad Elevation:	0.0 feet			неач	y Truck	(S. C	3.006	Grade Auj	justinent.	0.0	
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Dista	nce (in f	eet)			
	Road Grade:	0.0%				Auto	os: 92	2.547				
	Left View:	-90.0 degre	es		Mediui	n Truck	ks: 92	2.504				
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547				
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	73.22	2.82		-4.11	1	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-14.42		-4.11	1	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-18.37		-4.11	1	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)							
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Ev	ening/	Leq	Night		Ldn	CI	VEL	
Autos:	70).7	68.8		67.1		61	.0	69.6	6	70.2	
Medium Trucks:	64	1.0	62.4		56.1		54	.5	63.0)	63.2	
Heavy Trucks:	63	3.6	62.2		53.2		54	.4	62.8	3	62.9	
Vehicle Noise:	72	2.2	70.4		67.6		62	.6	71.2	2	71.6	
Centerline Distan	ce to Noise C	ontour (in feet)		-1			1				
				70 a	<i>IBA</i>	65	dBA	6	0 dBA	55	dBA	

120

129

258

277

Ldn:

CNEL:

1,196

1,288

555

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o A St.

Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S			
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt): 4	10,500 vehicle	s					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15				
Peak H	our Volume:	4,050 vehicle	S		He	avy Tru	cks (3+	Axles):	15				
Vel	hicle Speed:	60 mph		1	/ehicle l	Mix							
Near/Far Lar	ne Distance:	76 feet				icleType)	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%		9.6%	•		
Rar	rier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dis	,	100.0 feet		-				<i>(</i> ' •					
Centerline Dist.		100.0 feet		<u> </u>	Voise So				eet)				
Barrier Distance	to Observer:	0.0 feet			N 4 1'	Auto		.000					
Observer Height (5.0 feet				n Truck		.000	0	"	. 0.0		
• ,	nd Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	justment.	0.0		
Roa	nd Elevation:	0.0 feet		L	ane Eq	uivalen	t Distar	ice (in i	feet)				
F	Road Grade:	0.0%				Auto	s: 92	.547					
	Left View:	-90.0 degree	es		Mediui	n Truck	s: 92	.504					
	Right View:	90.0 degree	es		Heav	y Truck	s: 92	.547					
FHWA Noise Mode	el Calculation	 S											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	73.22	2.87		-4.11		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-14.36		-4.11		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-18.32		-4.11		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	out Topo and	barri	er atten	uation)								
VehicleType	Leq Peak Hou	r Leq Day	,	Leq Ev	rening	Leq	Night		Ldn	CI	NEL		
Autos:	70	.8	68.9		67.1		61.	1	69.7	7	70.3		
Medium Trucks:	64	.0	62.5		56.1		54.	6	63.1	1	63.3		
Heavy Trucks:	63	.7	62.3		53.2		54.	5	62.8	3	63.0		
Vehicle Noise:	72	.3	70.5		67.6		62.	7	71.2	2	71.7		
Centerline Distance	e to Noise Co	ontour (in feet)										
				70 a	IBA	65	dBA	6	60 dBA	55	dBA		

Ldn:

CNEL:

121

130

260

280

560

603

1,206

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Z St.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	ΛTA			N	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	46,400 ve	ehicles					Autos:	15		
= -	r Percentage:	10%			Me	dium Tri	ucks (2	Axles):	15		
Peak I	Hour Volume:	4,640 ve	ehicles		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 m	ph		Vehicle I	Wiy					
Near/Far La	ane Distance:	76 fe	et			icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	Ū	9.6%	_
	nrrier Height:	0.0 f	oot		Ме	edium Ti		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0	EEL		F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 f	eet								
Centerline Dist.		100.0 f			Noise Sc				eet)		
Barrier Distance		0.0 f				Auto		.000			
Observer Height		5.0 f				n Truck	_	.000	0		. 0.0
•	Pad Elevation:	0.0 f			Heav	y Truck	s: 8	.006	Grade Ad	justment	0.0
Ro	ad Elevation:	0.0 f	eet		Lane Eq	uivalen	t Distai	nce (in t	feet)		
	Road Grade:	0.0%				Auto	s: 92	2.547			
	Left View:	-90.0 c	degrees		Mediur	n Truck	s: 92	2.504			
	Right View:	90.0 c	legrees		Heav	y Truck	s: 92	2.547			
FHWA Noise Mod	lel Calculatior	18									
VehicleType	REMEL	Traffic F	low D	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22		3.46	-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-1	3.77	-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-1	7.73	-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo	and barr	rier atter	nuation)						
VehicleType	Leq Peak Ho	ur Le	q Day	Leq E	vening	Leq	Night		Ldn	Ci	NEL
Autos:	7′	1.4	69.5	j	67.7		61.	.7	70.3	3	70.9
Medium Trucks:		4.6	63.1		56.7		55.		63.6		63.9
Heavy Trucks:	64	4.3	62.9		53.8		55	.1	63.4		63.6
Vehicle Noise:	72	2.9	71.1		68.2		63	.3	71.8	3	72.3
Centerline Distant	ce to Noise C	ontour (ir	r feet)		,						
				70	dBA	65	dBA	6	60 dBA	55	dBA

132

142

284

306

613

660

1,320

1,422

Ldn:

CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl. Number: 8141 Road Segment: e/o Z St. Analyst: B. Lawson

SITE S		NOISE MODEL INPUTS									
Highway Data					Site Cor	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	48,000 vehicle	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	2 Axles):	15		
Peak H	our Volume:	4,800 vehicle	S		He	avy Tru	cks (3+	- Axles):	15		
Vel	hicle Speed:	60 mph			Vehicle	Miy					
Near/Far Lar	ne Distance:	76 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
	rier Height:	0.0 feet			M	edium T		84.8%		10.3%	
Barrier Type (0-W	•	0.0 reet 0.0				Heavy T		86.5%		10.8%	
Centerline Dis	•	100.0 feet									
Centerline Dist. t		100.0 feet			Noise S	ource E			eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height (5.0 feet				m Truck		4.000			
• ,	nd Elevation:	0.0 feet			Heav	y Truck	s:	8.006	Grade Ad	justment	± 0.0
	nd Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto	s: 9	 2.547			
•	Left View:	-90.0 degree	es		Mediu	m Truck		2.504			
	Right View:	90.0 degree			Heav	y Truck	rs: 9	2.547			
FHWA Noise Mode	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	rm Atten
Autos:	73.22			-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-13.63		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-17.58		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barri	er atter	nuation)					,	
VehicleType	Leq Peak Ho			Leq E	vening	Leq	Night		Ldn		NEL
Autos:	71	.5	69.6		67.9		61	8.	70.4	4	71.0
Medium Trucks:	64	1.7	63.2		56.9		55	5.3	63.8	3	64.0
Heavy Trucks:	64	1.4	63.0		54.0		55	5.2	63.6	3	63.7
Vehicle Noise:	73	3.0	71.2		68.3		63	3.4	72.0)	72.4
Centerline Distance	e to Noise C	ontour (in feet)								
					dBA		dBA	(60 dBA		dBA
			Ldn:	1:	35	2	91		627	1,	350

145

313

1,454

675

CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o LQ St.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOISE MODEL INPUTS								
Highway Data					Site Cor	nditions	(Hard	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	45,600 vehicle	es					Autos:	15				
•	Percentage:	10%			Ме	edium Tr	ucks (2	Axles):	15				
	lour Volume:	4,560 vehicle	es		He	eavy Tru	cks (3+	- Axles):	15				
Ve	hicle Speed:	60 mph			Vehicle	1/:>							
Near/Far La	ne Distance:	76 feet						Davi	F. ramina	Nicolat	Daile		
Cita Data					ven	icleType		<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	Daily		
Site Data					A 4		Autos:						
	rrier Height:	0.0 feet				ledium T		84.8%		10.3%	1.84%		
Barrier Type (0-W	•	0.0			ı	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dis		100.0 feet			Noise S	ource E	levatio	ns (in f	eet)				
Centerline Dist.		100.0 feet				Auto	s: 2	2.000					
Barrier Distance		0.0 feet			Mediu	m Truck		4.000					
Observer Height (Above Pad):	5.0 feet			Hear	vy Truck		3.006	Grade Ad	justment	0.0		
Pa	ad Elevation:	0.0 feet											
Roa	ad Elevation:	0.0 feet		1	Lane Eq	uivalen		<u> </u>	feet)				
ı	Road Grade:	0.0%				Auto		2.547					
	Left View:	-90.0 degre	ees			m Truck		2.504					
	Right View:	90.0 degre	ees		Hear	vy Truck	rs: 91	2.547					
FHWA Noise Mode	el Calculation	าร											
VehicleType	REMEL	Traffic Flow	D	istance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten		
Autos:	73.22	3.39	9	-4.1	1	-1.20		<i>-4.</i> 87	0.0	000	0.000		
Medium Trucks:	83.68	-13.8	5	-4.1	1	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	3 -17.80)	-4.1°	1	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	hout Topo and	d barr	ier atten	uation)								
VehicleType	Leq Peak Ho	ur Leq Da	•		vening		Night		Ldn		NEL		
Autos:	7	1.3	69.4		67.6		61	.6	70.2	2	70.8		
Medium Trucks:	64	4.5	63.0		56.7		55	5.1	63.6	6	63.8		
Heavy Trucks:	64	4.2	62.8		53.7		55	5.0	63.4	4	63.5		
Vehicle Noise:	72	2.8	71.0		68.1		63	3.2	71.7	7	72.2		
Centerline Distant	ce to Noise C	ontour (in fee	et)		15.4								
				70 0			dBA	6	60 dBA		dBA		
			Ldn:	13	30	2	81		606	1,	305		

CNEL:

141

303

1,405

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o LQ St.

Number: 8141

Analyst: B. Lawson

Highway Data Site Conditions (Hard = 10, Soft = 15) Average Daily Traffic (Adt): 49,400 vehicles Autos: 15 Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Volume: 4,940 vehicles Heavy Trucks (3+ Axles): 15 Vehicle Speed: 60 mph Vehicle Mix Near/Far Lane Distance: 76 feet Vehicle Type Day Evening Nighter N	ht Daily
Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Volume: 4,940 vehicles Heavy Trucks (3+ Axles): 15 Vehicle Speed: 60 mph Vehicle Mix Near/Far Lane Distance: 76 feet Vehicle Type Day Evening Night Site Data Autos: 77.5% 12.9% 9. Medium Trucks: 84.8% 4.9% 10.	ht Daily
Peak Hour Volume: 4,940 vehicles Heavy Trucks (3+ Axles): 15 Vehicle Speed: 60 mph Vehicle Mix Near/Far Lane Distance: 76 feet Vehicle Type Day Evening Nigh Site Data Autos: 77.5% 12.9% 9 Medium Trucks: 84.8% 4.9% 10	ht Daily
Vehicle Speed: 60 mph Vehicle Mix Near/Far Lane Distance: 76 feet Vehicle Type Day Evening Night Site Data Autos: 77.5% 12.9% 9. Medium Trucks: 84.8% 4.9% 10.	ht Daily
Near/Far Lane Distance: 76 feet VehicleType Day Evening Nigh Site Data Autos: 77.5% 12.9% 9. Medium Trucks: 84.8% 4.9% 10.	ht Daily
Near/Far Lane Distance: 76 feet VehicleType Day Evening Night Site Data Autos: 77.5% 12.9% 9. Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.	ht Daily
Site Data Autos: 77.5% 12.9% 9. Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.	in Dany
Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.	6% 97.42%
Darrier Height. 0.0 feet	
Contarling Dist to Parrier: 100.0 fact	
Centerline Dist to Observer: 100.0 feet	
Parrier Dictance to Observer: 0.0 feet	
Observer Height (Above Red): 5.0 feet Medium Trücks: 4.000	
Pad Elevation: 0.0 feet Heavy Trucks: 8.006 Grade Adjustm	ent: 0.0
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)	
Road Grade: 0.0% Autos: 92.547	
Left View: -90.0 degrees Medium Trucks: 92.504	
Right View: 90.0 degrees Heavy Trucks: 92.547	
rught view. 30.0 degrees	
FHWA Noise Model Calculations	
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten	Berm Atten
Autos: 73.22 3.74 -4.11 -1.20 -4.87 0.000	0.000
Medium Trucks: 83.68 -13.50 -4.11 -1.20 -4.97 0.000	0.000
Heavy Trucks: 87.33 -17.46 -4.11 -1.20 -5.16 0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)	
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn	CNEL
Autos: 71.6 69.7 68.0 61.9 70.5	71.2
Medium Trucks: 64.9 63.4 57.0 55.5 63.9	64.2
Heavy Trucks: 64.6 63.1 54.1 55.3 63.7	63.8
Vehicle Noise: 73.1 71.4 68.5 63.5 72.1	72.6
Centerline Distance to Noise Contour (in feet)	
70 dBA 65 dBA 60 dBA	55 dBA

Ldn:

CNEL:

138

148

297

319

639

688

1,376

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o Alton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA				r	NOISE	MODE	L INPUT	S	
Highway Data			S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	51,800 vehicle	s					Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume:	5,180 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Vehicle Speed:	60 mph		V	ehicle l	Miy					
Near/Far Lane Distance:	76 feet		•		icleType	ė	Day	Evening	Night	Daily
Site Data						Autos:	77.5%		9.6%	
	0.0 feet			Me	edium T		84.8%		10.3%	1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 teet 0.0				leavy T		86.5%		10.8%	0.74%
Centerline Dist. to Barrier:	0.0 100.0 feet									
Centerline Dist. to Observer:	100.0 feet		۸	loise So			ns (in fe	eet)		
Barrier Distance to Observer:	0.0 feet				Auto		2.000			
Observer Height (Above Pad):	5.0 feet				n Truck	_	1.000			
Pad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	iustment:	0.0
Road Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)		
Road Grade:	0.0%				Auto		2.547	,		
Left View:	-90.0 degre	es		Mediui	n Truck		2.504			
Right View:	90.0 degre				y Truck		2.547			
3	colo degle				,					
FHWA Noise Model Calculation										
VehicleType REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 73.22	3.94		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 83.68	-13.30		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87.33	-17.25		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barri	er attenu	uation)						
VehicleType Leq Peak Ho	ur Leq Day	y	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos: 7	1.8	70.0		68.2		62	.1	70.8	3	71.4
Medium Trucks: 6	5.1	63.6		57.2		55	.7	64.1		64.4
Heavy Trucks: 6	4.8	63.3		54.3		55	.6	63.9)	64.0
Vehicle Noise: 7	3.3	71.6		68.7		63	.7	72.3	3	72.8
Centerline Distance to Noise C	ontour (in feet	t)								
	•	-	70 d	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

142

153

306

330

659

710

1,421

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Alton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	ATA				r	NOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	42,400 v	ehicles						Autos:	15		
Peak Hour	Percentage:	10%				Me	dium Tr	ucks (2	? Axles):	15		
Peak F	lour Volume:	4,240 v	ehicles			He	avy Tru	cks (3+	- Axles):	15		
Ve	ehicle Speed:	60 r	nph		,	Vehicle l	Wix					
Near/Far La	ne Distance:	76 f	eet				icleType	Э	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	-
Ba	rrier Height:	0.0	feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V		0.0	1001			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0	feet			Noise So	uroo E	lovatio	ns (in f	201		
Centerline Dist.	to Observer:	100.0	feet		-	NOISE SC	Auto		2.000	(C I)		
Barrier Distance	to Observer:	0.0	feet			Madiu	Auto n Truck		4.000			
Observer Height	(Above Pad):	5.0	feet					_		Grade Ad	iustmant	. 00
P	ad Elevation:	0.0	feet			пеач	y Truck	.S. (3.006	Grade Auj	justin o nt	. 0.0
Ro	ad Elevation:	0.0	feet		1	Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0%	6				Auto	s: 9:	2.547			
	Left View:	-90.0	degrees	3		Mediui	n Truck	s: 9	2.504			
	Right View:	90.0	degrees	8		Heav	y Truck	rs: 9:	2.547			
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic	Flow	Dis	tance	Finite	Road	Fre	snel	Barrier Att	en Bei	rm Atten
Autos:	73.22	1	3.07		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-	14.17		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-	18.12		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	o and b	arrie	er atten	uation)						
VehicleType	Leq Peak Ho	ur Le	eq Day		Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	71	.0	6	9.1		67.3		61	.3	69.9	9	70.5
Medium Trucks:	64	1.2	6	2.7		56.3		54	8.	63.3	3	63.5
Heavy Trucks:	63	3.9	6	2.5		53.4		54	.7	63.0)	63.2
Vehicle Noise:	72	2.5	7	0.7		67.8		62	2.9	71.4	4	71.9
Centerline Distan	ce to Noise C	ontour (i	in feet)	1		1						
					70 c	dBA	65	dBA	6	60 dBA	55	dBA

124

134

Ldn: CNEL: 268

288

577

621

1,243

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: ICD/Edinger Av.

Road Segment: w/o Jamboree

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT D	ATA			I	IOISE	MODE	L INPUT	S	
Highway Data					Site Cor	nditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	27,200 v	ehicles					Autos:	15		
Peak Hour	Percentage:	10%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,720 v	ehicles		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 n	nph		Vehicle	Mix					
Near/Far La	ne Distance:	88 fe	eet			icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.6%	_
Ra	rrier Height:	0.0	feet		М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	1001			Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
	st. to Barrier:	100.0	feet		Noise S	ourco E	lovatio	ns (in fo	not)		
Centerline Dist.	to Observer:	100.0	feet		NOISE 3	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0	feet		Modiu	Auto m Truck		1.000			
Observer Height	(Above Pad):	5.0	feet				_		Grade Ad	iustmant	
P	ad Elevation:	0.0	feet		пеа	vy Truck	S. C	3.006	Grade Auj	usimeni.	0.0
Ro	ad Elevation:	0.0	feet		Lane Eq	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0%	6			Auto	s: 89	9.850			
	Left View:	-90.0	degrees		Mediu	m Truck	s: 89	9.805			
	Right View:	90.0	degrees		Hear	vy Truck	s: 89	9.850			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic	Flow I	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78		1.52	-3.9	92	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-	15.72	-3.9	92	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-	19.67	-3.9	92	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	o and bai	rrier atte	nuation)						
VehicleType	Leq Peak Hou	ır Le	eq Day	Leq E	Evening	Leq	Night		Ldn	CI	VEL
Autos:	68	.2	66.	3	64.5		58	.5	67.1		67.7
Medium Trucks:	61	.6	60.	1	53.7		52	.2	60.6	6	60.8
Heavy Trucks:	61	.6	60.	2	51.1		52	.4	60.8	3	60.9
Vehicle Noise:	69	.8	68.	0	65.0		60	.2	68.7	7	69.2
Centerline Distan	ce to Noise C	ontour (i	n feet)			I					
				70	dBA	65	dBA	6	60 dBA	55	dBA

82

88

Ldn:

CNEL:

177

191

822

884

382

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: ICD/Edinger Av.

Road Segment: e/o Jamboree

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume: Vehicle Speed:	10% 3,030 vehicles			dium Trucks (2 avy Trucks (3- Mix	,			
Near/Far Lane Distance:	88 feet			icleType	Day	Evening	Night	Daily
Site Data				Autos:	77.5%		9.6%	
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	100.0 feet		ŀ	edium Trucks: Heavy Trucks: Durce Elevatio	84.8% 86.5% ons (in fe	2.7%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	0.0 feet 5.0 feet			m Trucks:	2.000 4.000 8.006	Grade Adj	justment:	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent Dista	nce (in f	feet)		
Road Grade: Left View: Right View:	-90.0 degree			m Trucks: 8	9.850 9.805 9.850			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 1.99	-3.	92	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4		-3.		-1.20	-4.97		000	0.000
Heavy Trucks: 86.4	0 -19.20	-3.	92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	nuation)					
VehicleType Leq Peak H	our Leq Day	Leq I	Evening	Leq Night		Ldn	CI	VEL
		8.66	65.0		3.9	67.6	5	68.2
	-	60.5	54.2		2.6	61.1		61.3
, <u> </u>		60.7	51.6	52	2.9	61.2		61.3
Vehicle Noise:	70.2	68.5	65.5	60	0.6	69.2	2	69.7
Centerline Distance to Noise	Contour (in feet))						

70 dBA

88

95

Ldn:

CNEL:

65 dBA

190

205

60 dBA

410

441

55 dBA

883

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141
Road Segment: e/o Hearthstone Bl. Analyst: B. Lawson

SITE SPECIFIC	INPUT	DATA			NC	DISE N	10DE	L INPUT	S	
Highway Data				Site Con	ditions (l	Hard =	10, Sc	oft = 15)		
Average Daily Traffic (Adt Peak Hour Percentage Peak Hour Volume Vehicle Speed	e: 10 e: 2,600	0 vehicles 0% 0 vehicles 0 mph		He	dium Truc avy Truck	ks (2 A	,			
Near/Far Lane Distance		6 feet		Vehicle I						
	,	J 1001		Veh	icleType		Day	Evening	Night	Daily
Site Data							77.5%		9.6%	
Barrier Heigh Barrier Type (0-Wall, 1-Berm): 0	.0 feet			edium Tru Heavy Tru		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Barrie		.0 feet		Noise So	ource Ele	vations	in fe	eet)		
Centerline Dist. to Observe Barrier Distance to Observe Observer Height (Above Pad Pad Elevation	r: 0): 5	.0 feet .0 feet .0 feet			Autos: m Trucks: ry Trucks:	4.0	000	Grade Adj	iustment:	0.0
Road Elevation	_	.0 feet		Lane Equivalent Distance (in feet)						
Road Grade Left Viev Right Viev	v: -90	.0% .0 degrees .0 degrees			Autos: m Trucks: ry Trucks:	92.5	504			
FHWA Noise Model Calculat	ions									
VehicleType REMEL	Traf	fic Flow	Distance	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos: 73	.22	0.95	-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 83.	.68	-16.29	-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87	.33	-20.24	-4.1	1	-1.20	•	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout T	opo and b	arrier atten	uation)						
VehicleType Leq Peak	Hour	Leq Day	Leq E	vening	Leq N	ight		Ldn	CI	VEL
Autos:	68.9	6	7.0	65.2		59.1		67.8	3	68.4
Medium Trucks:	62.1	6	0.6	54.2 52.7 61.1						61.4
Heavy Trucks:	61.8	6	0.3	51.3		52.6		60.9)	61.0
Vehicle Noise:	70.3	6	8.6	65.7		60.7		69.3	3	69.8

70 dBA

90

97

Ldn:

CNEL:

65 dBA

193

208

60 dBA

416

449

55 dBA

897

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141 Road Segment: e/o Culver Dr. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				1	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	26,900 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	2,690 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	hicle Speed:	60 mph		1	/ehicle l	Miy					
Near/Far La	ne Distance:	76 feet		-		icleType	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	,	100.0 feet									
Centerline Dist.		100.0 feet		^	Voise So			•	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height (5.0 feet				n Truck	_	1.000			
• .	ad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment:	0.0
	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediui	n Truck	rs: 92	2.504			
	Right View:	90.0 degre			Heav	y Truck	rs: 92	2.547			
FHWA Noise Mod	al Calculation	16									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22			-4.11		-1.20		-4.87		000	0.000
Medium Trucks:	83.68	-16.14		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.10		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	69	0.0	67.1		65.3		59	.3	67.9	Э	68.5
Medium Trucks:	62	2.2	60.7		54.4		52	.8	61.3	3	61.5
Heavy Trucks:	61	.9	60.5		51.5		52	.7	61.1	1	61.2
Vehicle Noise:	70).5	68.7		65.8		60	.9	69.4	4	69.9
Centerline Distance	ce to Noise C	ontour (in feet)								
				70 d	IBA	65	dBA	6	0 dBA	55	dBA

92

99

Ldn:

CNEL:

198

213

426

459

918

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141
Road Segment: b/w Yale Av. And Fontaine Av. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT [DATA		NOISE MODEL INPUTS							
Highway Data					S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	28,800	vehicles	S					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Tru	ıcks (2	Axles):	15		
Peak H	lour Volume:	2,880	vehicles	S		He	avy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	60	mph		ν	ehicle l	Wix					
Near/Far La	ne Distance:	76	feet		-		icleType		Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	-
Ra	rrier Height:	0.0	feet			Me	edium Tr	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0				F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0			_				<i>(</i> ; c	4)		
Centerline Dist.		100.0			^	ioise Sc	ource El		•	eet)		
Barrier Distance			feet				Autos		2.000			
Observer Height			feet				n Trucks		.000			
	ad Elevation:		feet		Heavy Trucks: 8.006 Grade Adjustmen							: 0.0
	ad Elevation:		feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0				<u> </u>	Autos		 2.547	,		
	Left View:		degree	26		Mediur	n Trucks		2.504			
	Right View:		degree				y Trucks		2.547			
	rugin view.	50.0	dogice				,					
FHWA Noise Mod	el Calculation	าร										
VehicleType	REMEL	Traffic	Flow	Dista	ance	Finite	Road	Fres	snel	Barrier Att	en Be	rm Atten
Autos:	73.22	<u> </u>	1.39		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	3	-15.84		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3	-19.80		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout To	po and	barrier	r attenu	ation)						
VehicleType	Leq Peak Ho		Leq Day		Leq Evening Leq Night Ldn							NEL
Autos:	69	9.3		67.4	-	65.6		59	.6	68.2	2	68.8
Medium Trucks:	62	2.5	(61.0	54.7 53.1 61.6					6	61.8	
Heavy Trucks:	62	2.2	(8.00		51.8		53	.0	61.4	1	61.5
Vehicle Noise:	70	8.0		69.0		66.1		61	.2	69.7	7	70.2

70 dBA

96

103

Ldn: CNEL: 65 dBA

207

223

60 dBA

446

480

55 dBA

961

1,035

Cundou	May 20	2012
Sunday.	iviav zu.	2012

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: ICD

Road Segment: e/o Jeffrey Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				1	VOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	41,500 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	4,150 vehicle	es		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		1	/ehicle l	Miy					
Near/Far La	ne Distance:	76 feet				icleType	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-	•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			F	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		_					- 4		
Centerline Dist.		100.0 feet			Voise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet			N 4 = -1:	Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				n Truck	_	1.000	Grade Ad	iuotmont	0.0
P	ad Elevation:	0.0 feet			неач	y Truck	(S. C	3.006	Grade Auj	usimeni.	0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediui	n Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	rs: 92	2.547			
FHWA Noise Mod	lel Calculation	18									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	2.98		-4.11	l	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-14.26		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-18.21		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout Topo and	barri	ier atteni	uation)						
VehicleType	Leq Peak Ho	ur Leq Da	У	Leq Ev	vening	Leq	Night		Ldn	CI	VEL
Autos:	70	0.9	69.0		67.2		61	.2	69.8	3	70.4
Medium Trucks:	64	4.1	62.6		56.2		54	.7	63.2	2	63.4
Heavy Trucks:	63	3.8	62.4		53.3		54	.6	62.9)	63.1
Vehicle Noise:	72	2.4	70.6		67.7		62	.8	71.3	3	71.8
Centerline Distan	ce to Noise C	ontour (in fee	t)		-1			1		1	
				70 a	<i>IBA</i>	65	dBA	6	60 dBA	55	dBA

123

132

264

284

Ldn:

CNEL:

1,226

1,320

569

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141
Road Segment: w/o Sand Canyon. Av. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt): 2	26,100 vehicle	S					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15			
Peak H	lour Volume:	2,610 vehicle	S		He	avy Tru	cks (3+	Axles):	15			
Ve	hicle Speed:	60 mph		V	/ehicle	Miv						
Near/Far La	ne Distance:	76 feet				icleType	2	Day	Evening	Night	Daily	
Site Data					V 0//		Autos:	77.5%	Ū	9.6%	,	
	i.a.u. I la laula ta	0.0 foot			M	edium T		84.8%		10.3%	1.84%	
	rrier Height:	0.0 feet 0.0				Heavy T		86.5%		10.8%	0.74%	
Barrier Type (0-W Centerline Di	,	0.0 100.0 feet			•	loury 1		00.070	2 70	101070	011 170	
Centerline Dist.				٨	loise S	ource E	levatio	ns (in f	eet)			
		100.0 feet				Auto	s: 2	.000				
Barrier Distance		0.0 feet			Mediu	m Truck	s: 4	.000				
Observer Height (,	5.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	iustment.	0.0	
	Pad Elevation: 0.0 feet		,	ana Fa	uivalen	t Distar	noo (in	footl				
	ad Elevation:	0.0 feet		<u> </u>	.ane Eq			•	ieei)			
	Road Grade:	0.0%				Auto		.547				
	Left View:	-90.0 degre				m Truck		.504				
	Right View:	90.0 degree	es		Heav	y Truck	s: 92	.547				
FHWA Noise Mod	el Calculation	S										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	73.22	0.97		-4.11		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-16.27		-4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-20.23		-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and	barrie	er attenu	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	68	.9	67.0		65.2		59.	2	67.8	3	68.4	
Medium Trucks:	62	.1	60.6		54.2		52.	7	61.1	I	61.4	
Heavy Trucks:	61	.8	60.4			51.3 52		6	60.9	9	61.1	
Vehicle Noise:	70	.4	68.6		65.7		60.	8	69.3	3	69.8	

Centerline Distance to Noise Contour (in feet)			
	70 dBA	65 dBA	

 70 dBA
 65 dBA
 60 dBA
 55 dBA

 Ldn:
 90
 194
 418
 900

 CNEL:
 97
 209
 450
 969

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: ICD

Road Segment: e/o Sand Canyon Av.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA				N	IOISE MOD	EL INPUT	S		
Highway Data				S	ite Con	ditions	(Hard = 10, S	oft = 15)			
Average Daily	Traffic (Adt): 1	9,500 vehicles	S				Autos	: 15			
Peak Hour	Percentage:	10%			Medium Trucks (2 Axles): 15						
Peak F	lour Volume:	1,950 vehicles	S		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	60 mph		V	Vehicle Mix						
Near/Far La	ne Distance:	76 feet				cleType	e Day	Evening	Night	Daily	
Site Data							Autos: 77.5°		9.6%	,	
Ba	rrier Height:	0.0 feet			Мє	edium Ti	rucks: 84.8°	% 4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			F	leavy Ti	rucks: 86.5°	% 2.7%	10.8%	0.74%	
	ist. to Barrier:	100.0 feet		N	nisa So	urce Fl	levations (in	foot)			
Centerline Dist.	to Observer:	100.0 feet		-	0/30 00	Auto		iccij			
Barrier Distance	Barrier Distance to Observer: 0.0 feet			Medium Trucks: 4.000							
Observer Height	Observer Height (Above Pad): 5.0 feet				y Truck		Grade Ad	iustment.	0.0		
P	Pad Elevation: 0.0 feet				•						
Ro	ad Elevation:	0.0 feet		L	ane Equ	uivalent	t Distance (in	feet)			
	Road Grade:	0.0%				Auto					
	Left View:	-90.0 degree	es		Medium Trucks: 92.504						
	Right View:	90.0 degree	es		Heavy Trucks: 92.547						
FHWA Noise Mod	lel Calculations	3									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos:	73.22	-0.30		-4.11		-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-17.54		-4.11		-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-21.49		-4.11		-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Hou	r Leq Day	′	Leq Eve	ening	Leq	Night	Ldn	CI	VEL	
Autos:	67.	.6	65.7		63.9	57.9		66.5	5	67.1	
Medium Trucks:		.8	59.3		53.0		51.4	59.9	9	60.1	
Heavy Trucks:	60.	.5	59.1		50.1		51.3	59.7	7	59.8	

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	74	160	344	741							
CNEL:	80	172	370	798							

64.4

59.5

68.0

68.5

67.3

Vehicle Noise:

69.1

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141
Road Segment: b/w Laguna Canyon Rd. and Discovery Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Co.	nditions	(Hard =	10, Sc	oft = 15)	-		
Average Daily	Traffic (Adt):	17,900 vehicle	S			A	lutos:	15			
Peak Hour	Percentage:	10%		Me	edium Tri	ucks (2 A	xles):	15			
Peak F	lour Volume:	1,790 vehicle	s	He	eavy Truc	cks (3+ A	xles):	15			
Ve	ehicle Speed:	60 mph		Vehicle Mix							
Near/Far La	ne Distance:	76 feet			nicleType)	Day	Evening	Night	Daily	
Site Data							77.5%	•	9.6%	-	
Ra	rrier Height:	0.0 feet		N	ledium Ti	rucks: 8	34.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0			Heavy T	rucks: 8	36.5%	2.7%	10.8%	0.74%	
Centerline Di	,	100.0 feet		·							
Centerline Dist.	to Observer:	100.0 feet		Noise Source Elevations (in feet) Autos: 2.000							
Barrier Distance	to Observer:	0.0 feet		Madi	Auto. Im Truck						
Observer Height	(Above Pad):	5.0 feet						Crada Ad	iuotmont		
Pad Elevation:		0.0 feet		Hea	vy Truck	s: 8.0	06	Grade Ad	iustment	0.0	
Ro	Road Elevation: 0.0 feet			Lane Ed	quivalent	t Distanc	e (in i	feet)			
	Road Grade:	0.0%			Auto	s: 92.5	47				
	Left View:	-90.0 degre	es	Medium Trucks: 92.504							
	Right View:	90.0 degre		Heavy Trucks: 92.547							
FHWA Noise Mod VehicleType	el Calculation REMEL	ns Traffic Flow	Distance	Einite	Road	Fresne	2/	Barrier Att	on Por	m Atten	
				.11	-1.20		-4.87)00	0.000	
Autos: Medium Trucks:				.11	-1.20 -1.20						
			•				·4.97 ·5.16		000	0.000	
Heavy Trucks:	87.33	-21.87	-4	.11	-1.20		·5. 16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	nout Topo and	barrier att	enuation)							
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq	Evening	Leq	Night		Ldn	CI	VEL	
Autos:	67	7.2	65.3	63.6	;	57.5		66.1		66.7	
Medium Trucks:	60	0.5	59.0	52.6	5	51.0		59.5	5	59.7	
Heavy Trucks:	60	0.1	58.7	49.7	,	50.9		59.3	3	59.4	
Vehicle Noise:	68	8.7	66.9	64.1		59.1		67.7	7	68.2	

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	70	151	325	700							
CNEL:	75	162	350	754							

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141
Road Segment: w/o Barranca Pkwy. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions ((Hard =	: 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: our Volume:	22,200 vehicle 10% 2,220 vehicle				dium Tru avy Truc	icks (2	,			
Near/Far Lar	hicle Speed: ne Distance:	60 mph 76 feet	•		ehicle I Vehi	cleType		Day	Evening	Night	Daily
Site Data Barrier Type (0-W	rier Height: all, 1-Berm):	0.0 feet 0.0				A edium Tr leavy Tr		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees				Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504 Heavy Trucks: 92.547							: 0.0
FHWA Noise Mode VehicleType Autos: Medium Trucks: Heavy Trucks:	REMEL 73.22 83.68 87.33	7 Traffic Flow 0.26 -16.98	-4	e 4.11 4.11 4.11	Finite	-1.20 -1.20 -1.20	Fresi	nel -4.87 -4.97 -5.16	0.0	en Ber 000 000	m Atten 0.000 0.000 0.000
Unmitigated Noise VehicleType	Leq Peak Hou	ur Leq Day	/ Led		ening	Leq I	Night		Ldn	C	NEL
Autos: Medium Trucks: Heavy Trucks: Vehicle Noise:	61 61	.4 .1	66.3 59.9 59.7 67.9		64.5 53.5 50.6 65.0		58.4 52.4 51.9 60.	0 9	67. ² 60. ² 68.6	4 2	67.7 60.7 60.4 69.1

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	81	174	375	808							
CNEL:	87	187	404	870							

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141
Road Segment: b/w Barranca Pkwy. and Gateway Bl. Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data					S	ite Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	23,600 v	ehicles	;					Autos:	15		
Peak Hour	Percentage:	10%)			Me	dium Tr	ucks (2 /	Axles):	15		
Peak H	lour Volume:	2,360 v	ehicles	5		He	avy Tru	cks (3+ /	Axles):	15		
Ve	hicle Speed:	60 r	nph		V	ehicle l	Wiy					
Near/Far La	ne Distance:	76 f	eet		•			Day	Evening	Night	Daily	
Site Data						Vern		Autos:	77.5%	J		97.42%
	vviav Haimbt.	0.0	foot			Me	edium T		84.8%		10.3%	
	rrier Height:	0.0	feet				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-W Centerline Di		100.0	foot									
Centerline Dist.		100.0			Ν	Noise Source Elevations (in feet)						
Barrier Distance			feet				Auto	s: 2.	000			
						Mediur	n Truck	s: 4.	000			
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet				Heav	y Truck	s: 8.	006	Grade Adj	iustment	: 0.0		
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet			1	ane Fai	uivalen	t Distan	ce (in	feet)				
	Road Grade:	0.09			_	uno 29	Auto		547	1001)		
	Left View:					Modium	אנוט n Truck		504			
	Right View:		degree degree				ry Truck		547			
	rigiti view.	90.0	degree	:5		Heav	y ITUCK	3. 32.	J+1			
FHWA Noise Mod	el Calculation	าร										
VehicleType	REMEL	Traffic	Flow	Distar	псе	Finite	Road	Fresr	nel	Barrier Att	en Bei	m Atten
Autos:	73.22		0.53		-4.11		-1.20		<i>-4.8</i> 7	0.0	000	0.000
Medium Trucks:	83.68	-	-16.71		-4.11		-1.20		<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks:	87.33	-	-20.67		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Top	o and l	barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	ur Le	eq Day	Le	eq Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	68	3.4	6	66.5		64.8		58.7	7	67.3	3	67.9
Medium Trucks:	6	1.7	60.2			53.8 52.		52.2	2.2 60.7		7	60.9
Heavy Trucks:	6	1.3	5	59.9		50.9		52.1	<u> </u>	60.5	5	60.6

Vehicle Noise:

69.9

Centerline Distance to Noise Contour (in feet)

68.1

Ldn:

CNEL:

65.3

70 dBA

84

91

60.3

65 dBA

181

195

68.9

60 dBA

390

421

69.4

55 dBA

841

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141
Road Segment: b/w Gateway Bl.and Alton Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NOISE MODEL INPUTS							
Highway Data				Site	e Conditio	ons (Ha	ard = 10, Se	oft = 15)				
Average Daily	Traffic (Adt): 2	20,900 vehicles	S				Autos:	15				
Peak Hour	Percentage:	10%			Medium	n Truck	s (2 Axles):	15				
Peak H	lour Volume:	2,090 vehicles	S		Heavy	Trucks	(3+ Axles):	15				
Ve	hicle Speed:	60 mph		Vel	hicle Mix							
Near/Far La	ne Distance:	76 feet		• • •	VehicleT	vne	Day	Evening	Night	Daily		
Site Data					7 07 11010 1	Auto		•	-	97.42%		
	vviov Uojahti	0.0 feet			Mediur				10.3%	1.84%		
Barrier Type (0-W	rrier Height:	0.0 reet 0.0				y Truci			10.8%	0.74%		
Centerline Di	•	100.0 feet										
Centerline Dist.		100.0 feet		No			ations (in f	eet)				
Barrier Distance		0.0 feet				utos:	2.000					
	Observer Height (Above Pad): 5.0 feet			/	Medium Tr		4.000					
Pad Elevation: 0.0 feet				Heavy Tr	ucks:	8.006	Grade Adj	ustment.	0.0			
	ad Elevation:	0.0 feet		Lai	ne Equiva	lent Di	stance (in	feet)				
	Road Grade:	0.0%				utos:	92.547					
	Left View:	-90.0 degree	es	/	Medium Tr	ucks:	92.504					
	Right View:	90.0 degree			Heavy Tr	ucks:	92.547					
FHWA Noise Mod												
VehicleType	REMEL	Traffic Flow	Distanc		Finite Roa		Fresnel	Barrier Atte		m Atten		
Autos:	73.22	0.00		4.11	-1.		-4.87	0.0		0.000		
Medium Trucks:	83.68	-17.24		4.11	-1.		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-21.19	-	4.11	-1.	20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier at	tenua	tion)							
VehicleType	Leq Peak Hou	r Leq Day	' Le	q Ever	ning L	Leq Nig	ht	Ldn	CI	VEL		
Autos:	67.	.9	66.0				58.2	66.8	3	67.4		
Medium Trucks:	61.	.1	59.6		53.3		51.7	60.2	2	60.4		

Vehicle Noise:	69.4	67.6	64.7	59.8	68.3	68.8
Centerline Distance to	Noise Contour (in fee	t)				
			70 dBA	65 dBA	60 dBA	55 dBA
		Ldn:	78	167	360	776
	С	NEL:	84	180	388	836

50.4

59.4

60.0

60.1

51.6

Heavy Trucks:

60.8

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141
Road Segment: b/w Alton Pkwy.and Spectrum Analyst: B. Lawson

SITE SPECIFIC	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)						
Average Daily Traffic (Adt)	: 34,800 vehicle	es			Autos:	15						
Peak Hour Percentage			Med	dium Trucks (2	2 Axles):	15						
Peak Hour Volume	: 3,480 vehicle	es	Heavy Trucks (3+ Axles): 15									
Vehicle Speed	: 60 mph		Vehicle I	/liv								
Near/Far Lane Distance	. 76 feet			cleType	Day	Evening	Night	Daily				
Site Data			VEIII	Autos:	77.5%	J	9.6%	97.42%				
			1/10	edium Trucks:	84.8%		10.3%	1.84%				
Barrier Height			Heavy Trucks: 86.5% 2.7%				10.8%	0.74%				
Barrier Type (0-Wall, 1-Berm)			,	leavy Trucks.	00.576	2.1 /0	10.076	0.7476				
Centerline Dist. to Barrier			Noise So	urce Elevatio	ns (in fe	eet)						
Centerline Dist. to Observer				Autos:	2.000							
Barrier Distance to Observer			Mediur	n Trucks:	4.000							
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0				
Pad Elevation				· ·-'	<i>(*</i>	C 4\						
	Road Elevation: 0.0 feet				nce (in	reet)						
Road Grade					2.547							
Left View	3		Medium Trucks: 92.504									
Right View	: 90.0 degre	es	Heav	y Trucks: 9	2.547							
FHWA Noise Model Calculati	ons											
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Atte	en Ber	m Atten				
Autos: 73.5	22 2.22	2 -4.	11	-1.20	-4.87	0.0	000	0.000				
Medium Trucks: 83.0	68 -15.02	2 -4.	11	-1.20	-4.97	0.0	000	0.000				
Heavy Trucks: 87.5	33 -18.98	-4.	11	-1.20	-5.16	0.0	000	0.000				
Unmitigated Noise Levels (w	ithout Topo and	l barrier atte	enuation)									
VehicleType Leq Peak F	Hour Leq Da	y Leq	Evening	Leq Night		Ldn	CI	VEL				
Autos:	70.1	68.2	66.5	60).4	69.0)	69.6				
Medium Trucks:	63.4	61.8	55.5	53	3.9	62.4	ļ.	62.6				
Heavy Trucks:	63.0	61.6		52.6 53.		53.8 62.2		62.3				
Vehicle Noise:	71.6	69.8	67.0	62	2.0	70.6	3	71.0				
Centerline Distance to Noise	Contour (in fee	t)										

70 dBA

109

117

Ldn:

CNEL:

65 dBA

235

253

60 dBA

506

545

55 dBA

1,090

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141
Road Segment: b/w Pacifica and Enterprise Dr. Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data				Site Cor	ditions (H	ard = 10, S	oft = 15)							
Average Daily	Traffic (Adt):	35,000 vehicles	3			Autos	: 15							
Peak Hou	Percentage:	10%		Medium Trucks (2 Axles): 15										
Peak I	Hour Volume:	3,500 vehicles	;	He	avy Trucks	(3+ <i>Axles</i>)	: 15							
Ve	ehicle Speed:	60 mph		Vehicle Mix										
Near/Far La	ane Distance:	76 feet			icleType	Day	Evening	Night	Daily					
Site Data				V 011	Aut		•	9.6%	_					
		0.0 foot		M	edium Truc			10.3%	1.84%					
	rrier Height:	0.0 feet			Heavy Truc			10.8%	0.74%					
Barrier Type (0-V	•	0.0			Today Trac		2.170	10.070	0.7 170					
	ist. to Barrier:	100.0 feet		Noise Source Elevations (in feet)										
Centerline Dist.		100.0 feet		Autos: 2.000										
Barrier Distance		0.0 feet		Mediu	m Trucks:	4.000								
Observer Height (Above Pad): 5.0 feet				Heav	y Trucks:	8.006	Grade Ad	justment	0.0					
	Pad Elevation:	0.0 feet					• 4							
	ad Elevation:	0.0 feet		Lane Eq		istance (in	teet)							
	Road Grade:	0.0%		Autos: 92.547										
	Left View:	-90.0 degree	es	Medium Trucks: 92.504										
	Right View:	90.0 degree	es	Heavy Trucks: 92.547										
FHWA Noise Mod	lel Calculation	18												
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten					
Autos:	73.22	2.24	-4.1	1	-1.20	-4.87	0.0	000	0.000					
Medium Trucks:	83.68	-15.00	-4.1	1	-1.20	-4.97	0.0	000	0.000					
Heavy Trucks:	87.33	-18.95	-4.1	1	-1.20	-5.16	0.0	000	0.000					
Unmitigated Nois	e Levels (with	nout Topo and I	barrier atter	nuation)										
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Ni	ght	Ldn		NEL					
Autos:	70	0.1	68.2	66.5	5 60.4		69.0)	69.7					
Medium Trucks:	63	3.4	61.9	55.5		54.0	62.4	4	62.7					

Vehicle Noise:	71.6 69.9	67.0	62.0	70.6	71.1
Centerline Distance to	Noise Contour (in feet)				
		70 dBA	65 dBA	60 dBA	55 dBA
	Ldn	109	236	508	1,094
	CNEL	118	254	547	1,178

52.6

53.8

62.2

62.3

61.6

Heavy Trucks:

63.1

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141
Road Segment: b/w Enterprise and I-405 SB Ramps Analyst: B. Lawson

Site Conditions (Hard = 10, Soft = 15)	SITE	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Peak Hour Percentage: 10% Peak Hour Volume: 5,280 vehicles Vehicle Speed: 60 mph Near/Far Lane Distance: 76 feet Vehicle Mix Vehicle Type Day Evening Night Daily	Highway Data			S	Site Conditions (Hard = 10, Soft = 15)										
Near/Far Lane Distance: 76 feet Verlicle Inject Verlicle Inject Verlicle Inject Night Daily	Peak Hour	Percentage:	10%					•	Axles):	15					
Barrier Height: D.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 0.0	Near/Far La	•	•		V		cleType					-			
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Grade Adjustment: 0.0 Grade Adjustment: 0.0 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Grade Adjustment: 0.0 Heavy Trucks: 92.547 Medium Trucks: 83.68 -13.21 -4.11 -1.20 -4.87 0.000 0.000 0.000 Medium Trucks: 83.68 -13.21 -4.11 -1.20 -4.87 0.000 0.000 0.000 Medium Trucks: 87.33 -17.17 -4.11 -1.20 -5.16 0.000 0.000 0.000 Medium Trucks: 87.33 -17.17 -4.11 -1.20 -5.16 0.000 0.000 0.000 Medium Trucks: 65.2 63.7 57.3 55.7 64.2 64.4 Medium Trucks: 65.2 63.7 57.3 55.7 64.2 64.4 Medium Trucks: 64.8 63.4 54.4 55.6 64.0 64.1 Medium Trucks: 64.8 63.4 54.4 55.6 64	Barrier Type (0-V	Vall, 1-Berm):	0.0				edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%			
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 4.03 -4.11 -1.20 -4.87 0.000 0.000 Medium Trucks: 83.68 -13.21 -4.11 -1.20 -4.97 0.000 0.000 Heavy Trucks: 87.33 -17.17 -4.11 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.9 70.0 68.3 62.2 70.8 71.4 Medium Trucks: 65.2 63.7 57.3 55.7 64.2 64.4 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64.1	Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees					Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 92.547 Medium Trucks: 92.504									
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.9 70.0 68.3 62.2 70.8 71.4 Medium Trucks: 65.2 63.7 57.3 55.7 64.2 64.4 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64.1	VehicleType Autos: Medium Trucks:	73.22 83.68	Traffic Flow 4.03 -13.21	-	4.11 4.11	Finite	-1.20 -1.20	Fres	-4.87 -4.97	0.0	000	0.000			
Medium Trucks: 65.2 63.7 57.3 55.7 64.2 64.4 Heavy Trucks: 64.8 63.4 54.4 55.6 64.0 64.1	VehicleType	Leq Peak Ho	our Leq Da	y Le		ening	Leq								
	Medium Trucks: Heavy Trucks:	65 64	5.2 4.8	63.7 63.4		57.3 54.4		55. 55.	7 6	64.2 64.0	<u>2</u>)	64.4 64.1			

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	144	310	668	1,439
CNEL:	155	334	719	1,550

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141 Road Segment: b/w I-405 SB Ramps and Research Dr. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt).	13,400) vehicles	S					Autos:	15				
Peak Hour Percentage.	10	0%			Me	dium Tı	rucks (2	Axles):	15				
Peak Hour Volume.	1,340	vehicles	S		He	avy Tru	icks (3+	Axles):	15				
Vehicle Speed:	65	5 mph			Vehicle I	Miv							
Near/Far Lane Distance.	175	5 feet				icleType	e	Day	Evening	Night	Daily		
Site Data					V 011		Autos:	77.5%	-	•	97.42%		
	•	0 foot			Me	edium T		84.8%		10.3%	1.84%		
Barrier Height		.0 feet				leavy 7		86.5%		10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm). Centerline Dist. to Barrier		.0 .0 feet									011 170		
Centerline Dist. to Observer.		.0 feet			Noise So	ource E	levatio	ns (in fe	eet)				
Barrier Distance to Observer.		.0 feet				Auto	os: 2	2.000					
Observer Height (Above Pad)	_	.0 feet			Mediui	m Truck	rs: 4	1.000					
Pad Elevation.		.0 feet			Heav	y Truck	rs: 8	3.006	Grade Adj	iustment:	0.0		
Road Elevation.	_	.0 feet			Lane Eq	uivalen	t Dista	nce (in t	feet)				
Road Grade.		.0 ieei .0%		-	Lano Lq	Auto		3.505	001)				
Left View		.0	20		Mediu	m Truck		3.423					
Right View		.0 degree .0 degree				ry Truck		3.506					
Night view.	90.	.o degree	50		ricav	y ITUON	T	3.500					
FHWA Noise Model Calculation	ns												
VehicleType REMEL	Traft	fic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 74.5	5	-2.28		0.0	9	-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 84.8	6	-19.52		0.1	1	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 88.1	8	-23.47		0.0	9	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout To	opo and	barri	er atter	nuation)								
VehicleType Leq Peak H		Leq Day			vening	Leg	Night		Ldn	CI	VEL		
	71.2		69.3	<u> </u>	67.5	•	61	.4	70.1		70.7		
Medium Trucks:	64.3	(62.7		56.4		54	.8	63.3	3	63.5		
Heavy Trucks:	63.6	(62.2		53.1		54	.4	62.8	3	62.9		
Vehicle Noise:	72.6		70.8		68.0		63	.0	71.5	5	72.0		
Centerline Distance to Noise	Contou	r (in feet))										
		<u> </u>		70	dBA	65	dBA	6	60 dBA	55	dBA		

126

136

Ldn:

CNEL:

272

293

586

631

1,262

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: ICD

Road Segment: b/w Research Dr. and Hubble

Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS											
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	23,800 \	vehicles	3				Autos:	15				
	Percentage:	10%				Medium Tru	ıcks (2	Axles):	15				
Peak H	lour Volume:	2,380 \	vehicles	;	Heavy Trucks (3+ Axles): 15								
Ve	ehicle Speed:	60 ı	mph		Vehicle Mix								
Near/Far La	ne Distance:	76 f	feet		VOI	VehicleType		Day	Evening	Night	Daily		
Site Data							\utos:	77.5%	_	9.6%	,		
	rrier Height:	0.0	feet			Medium Tr	ucks:	84.8%		10.3%	1.84%		
Barrier Type (0-W	•	0.0	ieet			Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%		
• • •	ist. to Barrier:	100.0	feet										
Centerline Dist.		100.0			Nois	se Source El		•	eet)				
Barrier Distance			feet			Autos		2.000					
Observer Height			feet			ledium Trucks		.000					
•	ad Elevation:		feet			Heavy Trucks	s: 8	3.006	Grade Ad	justment	: 0.0		
-	ad Elevation:		feet		Lan	e Equivalent	Dista	nce (in	feet)				
	Road Grade:	0.0				Autos		2.547					
	Left View:		degree	·c	٨,	ledium Trucks		2.504					
	Right View:		degree			Heavy Trucks		2.547					
	ragin view.	30.0	uegree			riouvy riuone). O2	0 17					
FHWA Noise Mod	lel Calculatio	ns											
VehicleType	REMEL	Traffic	Flow	Distance	F	inite Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	73.22	2	0.57	-4.	11	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	83.68	3	-16.67	-4.	11	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	3	-20.63	-4.	11	-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (wit	hout Top	o and l	barrier atte	nuat	ion)							
VehicleType	Leq Peak Ho	our L	eq Day	Leq I	Eveni	ing Leq I	Night		Ldn	C	NEL		
Autos:	6	8.5	6	66.6		64.8	58	.8	67.4	4	68.0		
Medium Trucks:	6	1.7	6	60.2	53.8		52.3		60.7	7	61.0		
Heavy Trucks:	6	1.4	6	60.0	50.9 5		52	52.2 60.5		5	60.7		
Vehicle Noise:	7	0.0		68.2		65.3	60	.4	68.9	9	69.4		

70 dBA

85

91

Ldn:

CNEL:

65 dBA

182

196

60 dBA

393

423

55 dBA

846

911

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: ICD

Road Segment: b/w Hubble and Bake Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS								
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	22,300 vehicles	;			Autos:	15					
Peak Hour	Percentage:	10%		Me	dium Truci	ks (2 Axles):	15					
Peak H	lour Volume:	2,230 vehicles	;	He	avy Trucks	s (3+ Axles):	15					
Ve	hicle Speed:	60 mph		Vehicle	Mix							
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily			
Site Data						tos: 77.5%		9.6%	_			
Ra	rrier Height:	0.0 feet		М	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-W	•	0.0		1	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%			
Centerline Di	,	100.0 feet		Noise S	ouroo Elov	rations (in f	204)					
Centerline Dist.	to Observer:	100.0 feet		Noise 3		ations (in fo	eer)					
Barrier Distance	to Observer:	0.0 feet		Modiu	Autos: m Trucks:	4.000						
Observer Height	(Above Pad):	5.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.								
P	ad Elevation:	0.0 feet		пеач	y Trucks.	0.000	Orace Auj	ustrient	. 0.0			
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)					
	Road Grade:	0.0%			Autos:	92.547						
	Left View:	-90.0 degree	s	Mediu	m Trucks:	92.504						
	Right View:	90.0 degree	es	Heav	y Trucks:	92.547						
FHWA Noise Mod	lel Calculation	ns										
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten			
Autos:	73.22	0.28	-4.	11	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	83.68	-16.96	-4.	11	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	87.33	-20.91	-4.	11	-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	hout Topo and I	barrier atte	nuation)								
VehicleType	Leq Peak Ho	our Leq Day	Leq I	Evening	Leq Ni	ght	Ldn	C	NEL			
Autos:	6	8.2	6.3	64.5		58.5	67.1		67.7			
Medium Trucks:	6	1.4 5	59.9	53.5		52.0	60.5	5	60.7			
Heavy Trucks:	6	1.1 5	59.7	50.6		51.9	1.9 60.2					

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	81	175	376	810						
CNEL:	87	188	405	872						

65.0

60.1

67.9

69.1

68.6

Vehicle Noise:

69.7

Scenario: Post 2030 - 2012 Modified Project (Option 2) :ct Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141
Road Segment: b/w Bake Pkwy. and Muller Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)					
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	21,200 vehicle 10% 2,120 vehicle				dium Tru avy Truc	ucks (2	,						
Near/Far La	ehicle Speed: ane Distance:	60 mph 76 feet		V	Vehicle Mix VehicleType Day Evening Night						Daily			
	Barrier Height: 0.0 feet Type (0-Wall, 1-Berm): 0.0 terline Dist. to Barrier: 100.0 feet					edium Tr Heavy Tr		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%			
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Mediur Heav ane Eq u Mediur	Autos Autos Trucks y Trucks uivalent Autos m Trucks y Trucks	s: 2. s: 4. s: 8. EDISTAN s: 92 s: 92	.000 .000 .006	Grade Ad	ijustment	: 0.0			
VehicleType Autos: Medium Trucks: Heavy Trucks:	73.22 83.68	7raffic Flow 0.06 -17.18	-	e 4.11 4.11 4.11	Finite	Road -1.20 -1.20 -1.20	Fresi	nel -4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000			
Unmitigated Nois VehicleType	Leq Peak Ho	ur Leq Day	/ Le		ening	Leq	Night		Ldn		NEL			
Autos: Medium Trucks: Heavy Trucks:	6′ 60	1.2).9	66.1 59.7 59.5		64.3 53.3 50.4		58. 51. 51.	8 7	66.9 60.2 60.0	2)	67.5 60.5 60.2			
Vehicle Noise:	69	9.4	67.7		64.8		59.	9	68.4	4	68.9			

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	78	169	364	783						
CNEL:	84	182	392	843						

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: ICD

Road Segment: b/w Muller and Tesla

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS								
Highway Data					Site Conditions (Hard = 10, Soft = 15)									
Average Daily	Traffic (Adt):	20,600	vehicles	5					Autos:	15				
Peak Hour	Percentage:	109	%			Me	dium Tru	cks (2	Axles):	15				
Peak H	lour Volume:	2,060	vehicles	;		Heavy Trucks (3+ Axles): 15								
	ehicle Speed:		mph		V	ehicle l	Vix							
Near/Far La	ane Distance:	76	feet			Vehi	icleType		Day	Evening	Night	Daily		
Site Data							A	utos:	77.5%	12.9%	9.6%	97.42%		
Ва	rrier Height:	0.0	feet			Me	edium Tru	ucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-V		0.0				F	leavy Tru	ucks:	86.5%	2.7%	10.8%	0.74%		
	ist. to Barrier:	100.0) feet		٨	loise Sc	ource Ele	evatio	ns (in fa	pet)				
Centerline Dist.	to Observer:	100.0) feet		-	0,00 00	Autos.		.000	,,,				
Barrier Distance	to Observer:	0.0) feet			Mediur	n Trucks		.000					
Observer Height	(Above Pad):	5.0) feet				y Trucks		.006	Grade Ad	liustment	. 0 0		
P	ad Elevation:	0.0) feet			i icav	y Trucks	. 0	.000	Orado ria	jadanone	. 0.0		
Ro	ad Elevation:	0.0) feet		L	ane Eq	uivalent	Distar	nce (in i	feet)				
	Road Grade:	0.0)%				Autos	: 92	2.547					
	Left View:	-90.0	degree	s		Mediur	n Trucks	: 92	2.504					
	Right View:	90.0	degree	es		Heav	y Trucks	: 92	2.547					
FHWA Noise Mod	lel Calculation	าร												
VehicleType	REMEL		Flow	Dist	tance	Finite	Road	Fres	nel	Barrier Att	ten Ber	m Atten		
Autos:	73.22	2	-0.06		-4.11	1	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	83.68	3	-17.30		-4.11		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	3	-21.26		-4.11		-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout To	po and l	barrie	r attenu	ation)								
VehicleType	Leq Peak Ho	ur I	Leq Day		Leq Ev	ening	Leq N	Night		Ldn	C	NEL		
Autos:	67	7.8	6	55.9		64.2		58.	.1	66.	7	67.4		
Medium Trucks:	6	1.1	5	59.6		53.2		51.	.7	60.	1	60.4		
Heavy Trucks:	60	8.0	5	59.3		50.3		51.	.5	59.9	9	60.0		
Vehicle Noise:	69	9.3	6	67.6		64.7		59.	.7	68.3	3	68.8		

70 dBA

77

83

Ldn:

CNEL:

65 dBA

166

178

60 dBA

357

384

55 dBA

768

827

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: ICD Number: 8141
Road Segment: w/o Lake Forest Dr. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS								
Highway Data		;	Site Conditions (F	Hard = 10, Sc	oft = 15)						
Average Daily Traffic (Adt)	: 20,100 vehicle	s		Autos:	15						
Peak Hour Percentage	: 10%		Medium Truc	ks (2 Axles):	15						
Peak Hour Volume	2,010 vehicle	s	Heavy Truck	s (3+ Axles):	15						
Vehicle Speed	•	1	Vehicle Mix								
Near/Far Lane Distance	76 feet		VehicleType	Day	Evening	Night	Daily				
Site Data			Au	itos: 77.5%	12.9%	9.6%	97.42%				
Barrier Height	: 0.0 feet		Medium Tru	cks: 84.8%	4.9%	10.3%	1.84%				
Barrier Type (0-Wall, 1-Berm)			Heavy Tru	cks: 86.5%	2.7%	10.8%	0.74%				
Centerline Dist. to Barrier	: 100.0 feet	<u>, </u>	Voise Source Ele	vations (in f	eet)						
Centerline Dist. to Observer	: 100.0 feet		Autos:	2.000							
Barrier Distance to Observer	: 0.0 feet		Medium Trucks:	4.000							
Observer Height (Above Pad)	: 5.0 feet		Heavy Trucks:	8.006	Grade Ad	iustment:	0.0				
Pad Elevation	: 0.0 feet		Tieavy Trucks.	8.000	Orado Alaj	dottriorit.	0.0				
Road Elevation	: 0.0 feet	I	Lane Equivalent L	Distance (in	feet)						
Road Grade	: 0.0%		Autos:	92.547							
Left View	: -90.0 degree	es	Medium Trucks:	92.504							
Right View	: 90.0 degre	es	Heavy Trucks:	92.547							
FHWA Noise Model Calculati	ons										
VehicleType REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atte	en Ber	m Atten				
Autos: 73.:	22 -0.17	-4.1	1 -1.20	-4.87	0.0	000	0.000				
Medium Trucks: 83.0	68 -17.41	-4.11	1 -1.20	-4.97	0.0	000	0.000				
Heavy Trucks: 87.3	-21.36	-4.1	1 -1.20	-5.16	0.0	000	0.000				
Unmitigated Noise Levels (w	ithout Topo and	barrier atten	uation)								
VehicleType Leq Peak F	lour Leq Day	/ Leq Ev	vening Leq N	ight	Ldn	CI	VEL				
Autos:	67.7	65.8	64.1	58.0	66.6	6	67.2				
Medium Trucks:	61.0	59.5	53.1	51.6	60.0)	60.2				
Heavy Trucks:	60.6	59.2	50.2	51.4	59.8	3	59.9				
Vehicle Noise:	69.2	67.4	64.6	59.6	68.2	2	68.7				

70 dBA

76

81

Ldn:

CNEL:

65 dBA

163

175

60 dBA

351

378

55 dBA

756

814

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Number: 8141
Road Segment: n/o Chapman/Santiago Cyn. Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA	NOISE MODEL INPUTS						
Highway Data			Site Con	ditions (Ha	ard = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	21,300 vehicles	3			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Truck	s (2 Axles):	15		
Peak Hour Volume:	2,130 vehicles	S	He	avy Trucks	(3+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Miv				
Near/Far Lane Distance:	88 feet			icleType	Day	Evening	Night	Daily
Site Data			V 0111	Auto	•		9.6%	97.42%
	0.0 feet		Ме	edium Truck			10.3%	1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 reet 0.0			leavy Truck			10.8%	0.74%
Centerline Dist. to Barrier:	0.0 100.0 feet							
Centerline Dist. to Observer:	100.0 feet		Noise So	ource Eleva	ations (in fe	eet)		
				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediui	n Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0
Pad Elevation:	0.0 feet					• 4		
Road Elevation:	0.0 feet		Lane Eq		stance (in	reet)		
Road Grade:	0.0%			Autos:	89.850			
Left View:	-90.0 degree	es	Mediui	n Trucks:	89.805			
Right View:	90.0 degree	es	Heav	y Trucks:	89.850			
FHWA Noise Model Calculatio	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road I	Fresnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 0.46	-3.9	2	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -16.78	-3.9	2	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -20.73	-3.9	2	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)					
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nig	ht	Ldn	CI	VEL
Autos: 6	57.1	65.2	63.5		57.4	66.0)	66.6
Medium Trucks: 6	60.5	59.0	52.6		51.1	59.6	6	59.8
Heavy Trucks: 6	60.5	59.1	50.1		51.3	59.7	7	59.8
Vehicle Noise:	8.7	66.9	64.0		59.1	67.7	7	68.1

70 dBA

70

75

Ldn:

CNEL:

65 dBA

150

162

60 dBA

324

349

55 dBA

698

751

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Number: 8141
Road Segment: s/o Chapman Av. Analyst: B. Lawson

SITE SPECIFIC	INPUT	ΓDATA				N	NOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt,	: 15,30	00 vehicles	6					Autos:	15		
Peak Hour Percentage	•	0%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume	<i>:</i> 1,53	30 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Vehicle Speed	: 5	55 mph		1/	ehicle l	Miv					
Near/Far Lane Distance	: 8	38 feet		V			_	Day	Evening	Night	Doily
Site Data					ven	icleType		77.5%	Evening 12.9%	9.6%	<i>Daily</i> 97.42%
					1.1.	ر edium T	Autos:				
Barrier Height		0.0 feet						84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm		0.0			,	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrie		0.0 feet		N	oise Sc	ource E	levatio	ns (in fe	eet)		
Centerline Dist. to Observe		0.0 feet				Auto	s: 2	2.000	<u> </u>		
Barrier Distance to Observe	: (0.0 feet			Mediui	n Truck	s: 4	.000			
Observer Height (Above Pad		5.0 feet				y Truck		3.006	Grade Ad	justment.	0.0
Pad Elevation		0.0 feet				-					
Road Elevation	: (0.0 feet		L	ane Eq			nce (in i	feet)		
Road Grade	: (0.0%				Auto		9.850			
Left View	: -90	0.0 degree	es		Mediui	n Truck	s: 89	9.805			
Right View	: 90	0.0 degree	es		Heav	y Truck	rs: 89	9.850			
FHWA Noise Model Calculate	ons										
VehicleType REMEL	Trai	ffic Flow	Distand	ce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
<i>Aut</i> os: 71.	78	-0.98	-	3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.	40	-18.21	-	3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.	40	-22.17	-	3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout 1	Topo and	barrier at	tenu	ation)						
VehicleType Leq Peak I	lour	Leq Day	Le	q Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	65.7	(63.8		62.0		56.	.0	64.6	5	65.2
Medium Trucks:	59.1		57.6		51.2		49.		58.1		58.4
Heavy Trucks:	59.1	ţ	57.7	_	48.6		49	.9	58.3	3	58.4
Vehicle Noise:	67.3		65.5		62.5		57	.7	66.2	2	66.7
Centerline Distance to Noise	Conto	ur (in feet))								

70 dBA

56

60

Ldn:

CNEL:

65 dBA

121

130

60 dBA

260

280

55 dBA

560

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: s/o Canyon View Av.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				3	Site Con	ditions	(Hard = 10, S	oft = 15)			
Average Daily	Traffic (Adt):	25,400 veh	icles				Autos	: 15			
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2 Axles)	: 15			
Peak H	lour Volume:	2,540 veh	icles		He	avy Truc	cks (3+ Axles)	: 15			
Ve	hicle Speed:	55 mpl	า	-	/ehicle l	Wiy					
Near/Far La	ne Distance:	88 feet		_		icleType	Day	Evening	Night	Daily	
Site Data					V GI I		Autos: 77.5%			97.42%	
	unio u II o i o lo 4	0.0.6-	.4		Me	edium Tr			10.3%	1.84%	
	rrier Height:	0.0 fee	Œ			leavy Tr			10.8%	0.74%	
Barrier Type (0-W	*	100.0 fee	\ 4								
Centerline Dist.				1	Voise So	ource El	evations (in t	eet)			
		100.0 fee				Autos	s: 2.000				
Barrier Distance		0.0 fee			Mediui	n Trucks	s: 4.000				
Observer Height (ad Elevation:	5.0 fee			Heav	y Trucks	s: 8.006	Grade Ad	iustment	0.0	
	ad Elevation: ad Elevation:	0.0 fee		1	ane Fo	uivalent	: Distance (in	feet)			
	Road Grade:	0.0%	ŧl	-	-ue _q	Autos		1001)			
•	Left View:	-90.0 de	arooc		Mediu	n Trucks					
	Right View:	90.0 de	-			y Trucks					
	ragin view.	90.0 de	grees		ricav	y Trucke	3. 03.000				
FHWA Noise Mode	el Calculation	s		1							
VehicleType	REMEL	Traffic Flo	w L	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten	
Autos:	71.78	1	.23	-3.92	2	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-16	.01	-3.92	2	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-19	.97	-3.92	<u> </u>	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	out Topo a	nd bar	rier atten	uation)						
VehicleType	Leq Peak Hou	ır Leq	Day	Leq Ev	rening	Leq	Night	Ldn	CI	NEL	
Autos:	67	.9	66.0)	64.2	·	58.2	66.8	3	67.4	
Medium Trucks:	61	.3	59.8	3	53.4		51.9	60.3	3	60.6	
Heavy Trucks:	61	.3	59.9	9	50.8		52.1	60.5	5	60.6	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	79	169	365	785
CNEL:	84	182	392	845

64.7

59.9

68.4

68.9

67.7

Vehicle Noise:

69.5

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Number: 8141
Road Segment: n/o Tustin Ranch Rd. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	$d = 10, S_{c}$	oft = 15)		
Average Daily Traffic (Adt):	27,300 vehicle	es			Autos:	15		
Peak Hour Percentage:	·		Ме	dium Trucks	(2 Axles).	15		
Peak Hour Volume:	2,730 vehicle	es	He	avy Trucks (3	3+ Axles).	15		
Vehicle Speed:	55 mph		Vehicle	Mix				
Near/Far Lane Distance:	88 feet				Dov	Evenina	Night	Doily
Site Date			ven	icleType	Day 77.5%	Evening 12.9%	Night 9.6%	Daily
Site Data				Autos edium Trucks				
Barrier Height:							10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			'	Heavy Trucks	: 86.5%	6 2.7%	10.8%	0.74%
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediu	m Trucks:	4.000			
Observer Height (Above Pad):				y Trucks:	8.006	Grade Ad	iustment:	0.0
Pad Elevation:	0.0 feet							
Road Elevation:	0.0 feet		Lane Eq	uivalent Dis		feet)		
Road Grade:	0.0%			Autos:	89.850			
Left View:	-90.0 degre	es	Mediu	m Trucks:	89.805			
Right View:	90.0 degre	es	Heav	y Trucks:	89.850			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road Fr	resnel	Barrier Att	en Ber	m Atten
Autos: 71.7	'8 1.54	-3	3.92	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -15.70	-3	3.92	-1.20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks: 86.4	-19.66	-3	3.92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)					
VehicleType Leq Peak H	our Leq Da	y Leq	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos:	68.2	66.3	64.5	ţ	58.5	67.	1	67.7
Medium Trucks:	61.6	60.1	53.7	ļ	52.2	60.6	6	60.9
Heavy Trucks:	61.6	60.2	51.2	ļ	52.4	60.8	3	60.9
Vehicle Noise:	69.8	68.0	65.1	(60.2	68.7	7	69.2
Centerline Distance to Noise	Contour (in fee	t)						

70 dBA

82

89

Ldn:

CNEL:

65 dBA

178

191

60 dBA

382

411

55 dBA

824

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Number: 8141
Road Segment: s/o Tustin Ranch Rd. Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Con	ditions (Har	d=10, So	oft = 15)					
Average Daily Traffic (Adt):	27,400 vehicles	3			Autos:	15					
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15					
Peak Hour Volume:	2,740 vehicles	S	Hea	avy Trucks (3	3+ Axles):	15					
Vehicle Speed:	55 mph		Vehicle I	Mix							
Near/Far Lane Distance:	88 feet			cleType	Day	Evening	Night	Daily			
Site Data				Autos	: 77.5%	_	9.6%				
Barrier Height:	0.0 feet		Me	edium Trucks	: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-Wall, 1-Berm):	0.0		F	łeavy Trucks	: 86.5%	2.7%	10.8%	0.74%			
Centerline Dist. to Barrier:	100.0 feet		M-: 0-		<i>(: •</i>	41					
Centerline Dist. to Observer:	100.0 feet		Noise Sc	urce Elevati	•	eet)					
Barrier Distance to Observer:	0.0 feet			Autos:	2.000						
Observer Height (Above Pad):	5.0 feet			n Trucks:	4.000	0 - 4 - 4 - 4		0.0			
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0			
Road Elevation:	0.0 feet		Lane Equ	uivalent Dist	ance (in	feet)					
Road Grade:	0.0%			Autos:	89.850						
Left View:	-90.0 degree	es	Mediur		89.805						
Right View:	90.0 degree		Heav	y Trucks:	89.850						
FHWA Noise Model Calculatio	ns										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten			
Autos: 71.7	8 1.55	-3.9	92	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 82.4	0 -15.68	-3.9	92	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 86.4	0 -19.64	-3.9	92	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	nuation)								
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL			
Autos: 6	8.2	66.3	64.5	5	8.5	67.	1	67.7			
Medium Trucks: 6	31.6	60.1	53.7	5	52.2	60.6	3	60.9			
Heavy Trucks:6	31.6	60.2	51.2	5	52.4	60.8	3	60.9			
Vehicle Noise:	9.8	68.0	65.1		60.2	68.8	3	69.2			

70 dBA

83

89

Ldn:

CNEL:

65 dBA

178

191

60 dBA

383

412

55 dBA

826

889

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Number: 8141
Road Segment: n/o Irvine Bl. Analyst: B. Lawson

SITE SP	PECIFIC IN	PUT DATA	1			NOIS	SE MODE	L INPUT	S	
Highway Data				5	Site Con	ditions (Ha	rd = 10, Se	oft = 15)		
Average Daily Tra Peak Hour Pe Peak Hou Vehio Near/Far Lane	ercentage: or Volume: cle Speed:	27,600 vehic 10% 2,760 vehic 55 mph 88 feet		1	He /ehicle l		(3+ Axles):	15 15		
Site Data					Veh	icleType Auto	<i>Day</i> s: 77.5%	Evening 12.9%	Night 9.6%	<i>Daily</i> 97.42%
	,	0.0 feet 0.0 100.0 feet			ŀ	edium Truck Heavy Truck	s: 84.8% s: 86.5%	4.9% 5 2.7%	10.3% 10.8%	1.84%
Centerline Dist. to Barrier Distance to Observer Height (Ab Pad	Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet			Mediui	Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	ijustment:	0.0
Road	Elevation:	0.0 feet		L	.ane Eq	uivalent Dis	tance (in	feet)		
	ad Grade: Left View: Right View:	0.0% -90.0 degr 90.0 degr				Autos: m Trucks: ry Trucks:	89.850 89.805 89.850			
FHWA Noise Model	Calculation	S								
VehicleType	REMEL	Traffic Flow	/ Di	istance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	71.78	1.5	9	-3.92	2	-1.20	-4.87	0.0	000	0.000
Medium Trucks: Heavy Trucks:	82.40 86.40	-15.6 -19.6		-3.92 -3.92		-1.20 -1.20	-4.97 -5.16		000 000	0.000
Unmitigated Noise L	evels (with	out Topo an	d barr	ier atteni	uation)					
VehicleType Le	eq Peak Hou	ır Leq D	ay	Leq Ev	rening	Leq Nigh	nt	Ldn	CI	VEL
Autos:	68	.2	66.3		64.6		58.5	67.	1	67.8
Medium Trucks:	61	_	60.1		53.8		52.2	60.7		60.9
Heavy Trucks:	61		60.2		51.2		52.5	60.8		60.9
Vehicle Noise:	69	.8	68.1		65.1		60.2	68.8	3	69.3
Centerline Distance	to Noise Co	ontour (in fe	et)							

70 dBA

83

89

Ldn:

CNEL:

65 dBA

179

192

60 dBA

385

414

55 dBA

830

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Number: 8141
Road Segment: s/o Irvine Bl. Analyst: B. Lawson

SITE S	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data					Site Cor	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt): 3	37,500 vehicles	3					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tr	rucks (2	2 Axles):	15			
Peak H	our Volume:	3,750 vehicles	3		He	avy Tru	icks (3-	- Axles):	15			
Vel	hicle Speed:	65 mph		H	Vehicle	Miy						
Near/Far Lar	ne Distance:	175 feet				icleType	e	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	_	9.6%	_	
	rior Hoiabti	0.0 feet			M	edium T		84.8%		10.3%		
Barrier Type (0-W	rier Height:	0.0 reet 0.0				-leavy T		86.5%		10.8%		
Centerline Dis	•	0.0 100.0 feet										
Centerline Dist. t		100.0 feet			Noise S	ource E		•	eet)			
Barrier Distance		0.0 feet				Auto		2.000				
Observer Height (5.0 feet				m Truck		4.000				
• ,	nd Elevation:	0.0 feet			Heav	y Truck	(S:	8.006	Grade Ad	justment	: 0.0	
	nd Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)			
	Road Grade:	0.0%			•	Auto		8.505				
•	Left View:	-90.0 degree	es		Mediu	m Truck		8.423				
	Right View:	90.0 degree			Heav	y Truck	ks: 4	8.506				
FHWA Noise Mode	el Calculation	S										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	rm Atten	
Autos:	74.55	2.19		0.0	9	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	84.86	-15.05		0.1	1	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	88.18	-19.00		0.0	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (with	out Topo and	barri	er atter	uation)							
VehicleType	Leq Peak Hou			Leq E	vening	Leq	Night		Ldn		NEL	
Autos:	75		73.7		72.0			5.9	74.5		75.1	
Medium Trucks:	68		67.2		60.9			9.3	67.8		68.0	
Heavy Trucks:	68	.1	66.7		57.6		58	3.9	67.2	2	67.3	
Vehicle Noise:	77	.0	75.3		72.4		67	7.4	76.0)	76.5	
Centerline Distance	e to Noise Co	ontour (in feet,)									
			L		dBA		dBA		60 dBA		dBA	
			Ldn:	2	51	5	540		1,163	2,	506	

CNEL:

270

582

1,254

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Number: 8141
Road Segment: s/o Bryan Av. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				ľ	NOISE	MODE	L INPUT	S	
Highway Data				3	Site Cond	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	39,200 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Mea	lium Tr	ucks (2	2 Axles):	15		
Peak H	lour Volume:	3,920 vehicle	es		Hea	vy Tru	cks (3+	- Axles):	15		
Ve	hicle Speed:	65 mph		,	/ehicle M	liv					
Near/Far La	ne Distance:	175 feet				il x cleType	2	Day	Evening	Night	Daily
Site Data					Verno		Autos:	77.5%		9.6%	
					Mo	dium T		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet				eavy T		86.5%		10.3%	0.74%
Barrier Type (0-W		0.0			11	eavy i	rucks.	00.5 /0	2.1 /0	10.0 /0	0.7470
Centerline Di		100.0 feet		^	loise So	urce E	levatio	ns (in fe	et)		
Centerline Dist.		100.0 feet				Auto	s: 2	2.000			
Barrier Distance		0.0 feet			Medium	n Truck	s: 4	4.000			
Observer Height	•	5.0 feet			Heavy	/ Truck	s: 8	8.006	Grade Ad	justment.	0.0
	ad Elevation:	0.0 feet		_							
	ad Elevation:	0.0 feet		L	.ane Equ				eet)		
	Road Grade:	0.0%				Auto		8.505			
	Left View:	-90.0 degre			Medium		_	8.423			
	Right View:	90.0 degre	es		Heavy	/ Truck	s: 4	8.506			
FHWA Noise Mod	el Calculation	าร									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite F	Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos:	74.55	2.38		0.09)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	84.86	-14.85		0.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	88.18	-18.81		0.09)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrie	er atteni	uation)						
VehicleType	Leq Peak Ho	our Leq Da	У	Leq Ev	rening	Leq	Night		Ldn	CI	NEL
Autos:	7:	5.8	73.9		72.2		66	6.1	74.7	7	75.3
Medium Trucks:	68	8.9	67.4		61.0		59	9.5	68.0)	68.2
Heavy Trucks:	68	8.3	66.8		57.8		59	9.1	67.4	4	67.5
Vehicle Noise:	7	7.2	75.4		72.6		67	7.6	76.2	2	76.7
Centerline Distan	ce to Noise C	Contour (in fee	t)								
				70 a	'BA	65	dBA	6	0 dBA	55	dBA
			Ldn:	25	8	5	56		1,198	2,	581
		_			_	_				_	

CNEL:

278

599

1,291

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Number: 8141
Road Segment: b/w El Camino Real and I-5 NB Ramps Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA				N	OISE	MODE	L INPUT	S	
Highway Data					S	ite Con	ditions (Hard	= 10, Sc	oft = 15)		
Peak H	Traffic (Adt): Percentage: lour Volume: hicle Speed:	10° 6,150				He	dium Tru avy Truc	•	,	15 15 15		
	ne Distance:		feet		V	ehicle l						
	no Biolanoo.		1001			Veh	icleType		Day	Evening	Night	Daily
Barrier Type (0-W Centerline Dis Centerline Dist.	st. to Barrier:	0.0 100.0) feet) feet) feet		N	ŀ	edium Tro Heavy Tro Durce Ele Autos	ucks: evatio	77.5% 84.8% 86.5% ns (in fe	4.9% 2.7%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%
		5.0 0.0) feet) feet) feet) feet			Heav	n Trucks y Trucks uivalent	:: 4 :: 8	1.000 3.006	Grade Ad	justment.	0.0
	Road Grade: Left View: Right View:	0.0 -90.0)%) degree:) degree:			Mediui	Autos m Trucks ry Trucks	: 48 : 48	3.505 3.423 3.506	,		
FHWA Noise Mode	el Calculation	าร										
VehicleType	REMEL	Traffic	c Flow	Distar	псе	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	74.55	5	4.34		0.09		-1.20		-4.87	0.0	000	0.000
Medium Trucks: Heavy Trucks:	84.86 88.18		-12.90 -16.85		0.11 0.09		-1.20 -1.20		-4.97 -5.16		000	0.000
Unmitigated Noise	e Levels (with	hout To	po and b	arrier a	attenu	ation)						
VehicleType	Leq Peak Ho	our	Leq Day		eq Eve		Leq l	Vight		Ldn	CI	VEL
Autos:		7.8		5.9		74.1		68		76.7		77.3
Medium Trucks:		0.9	_	9.4		63.0		61	_	69.9	-	70.2
Heavy Trucks:	7	0.2	6	8.8		59.8		61	.0	69.4	4	69.5
Vehicle Noise:		9.2		7.4		74.6		69	.6	78.′	1	78.6
Centerline Distant	ce to Noise C	ontour	(ın feet)									

70 dBA

348

376

Ldn:

CNEL:

65 dBA

751

809

60 dBA

1,617

1,744

55 dBA

3,485

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Number: 8141
Road Segment: n/o Michelle Dr. Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS								
Highway Data			Site Con	ditions (Hard	I = 10, Sc	oft = 15)				
Average Daily Traffic (Adt):	60,400 vehicle	S			Autos:	15				
Peak Hour Percentage:	10%		Me	dium Trucks (2 Axles):	15				
Peak Hour Volume:	6,040 vehicle	S	He	avy Trucks (3	+ Axles):	15				
Vehicle Speed:	65 mph		Vehicle	Mix						
Near/Far Lane Distance:	175 feet			icleType	Day	Evening	Night	Daily		
Site Data				Autos:	•	J	9.6%	•		
Barrier Height:	0.0 feet		M	edium Trucks.			10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm).			ı	Heavy Trucks:	86.5%		10.8%	0.74%		
Centerline Dist. to Barrier.										
Centerline Dist. to Observer.			Noise So	ource Elevati	•	eet)				
Barrier Distance to Observer.				Autos:	2.000					
Observer Height (Above Pad).				m Trucks:	4.000					
Pad Elevation.			Heav	y Trucks:	8.006	Grade Adj	ustment:	0.0		
Road Elevation.			Lane Eq	uivalent Dist	ance (in	feet)				
Road Grade.				Autos: 4	18.505					
Left View.	-90.0 degre	es	Mediu	m Trucks: 4	18.423					
Right View.	•		Heav	y Trucks: 4	18.506					
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Atte	en Ber	m Atten		
Autos: 74.5	55 4.26	0.	09	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 84.8	36 -12.98	0.	11	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 88.1	8 -16.93	0.	09	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	nuation)							
VehicleType Leq Peak H	lour Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL		
Autos:	77.7	75.8	74.0	6	8.0	76.6	6	77.2		
Medium Trucks:	70.8	69.3	62.9	6	1.4	69.8	3	70.1		
Heavy Trucks:	70.1	68.7	59.7	6	0.9	69.3	3	69.4		
Vehicle Noise:	79.1	77.3	74.5	6	9.5	78.1		78.5		
Centerline Distance to Noise	Contour (in feet)								

70 dBA

344

371

Ldn:

CNEL:

65 dBA

742

800

60 dBA

1,598

1,723

55 dBA

3,443

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd.

Road Segment: s/o Michelle Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA				ı	NOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	58,600) vehicles	S					Autos:	15		
Peak Hour	Percentage:	10	0%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	5,860) vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60) mph			Vehicle i	Miv					
Near/Far La	ne Distance:	76	6 feet				icleType	2	Day	Evening	Night	Daily
Site Data						• • • • • • • • • • • • • • • • • • • •		Autos:	77.5%		9.6%	-
	wwiew Heierlet.		0 foot			Me	edium T		84.8%		10.3%	1.84%
Barrier Type (0-V	rrier Height:	0	.0 feet				Heavy T		86.5%		10.8%	0.74%
	ist. to Barrier:		.0 .0 feet									
Centerline Dist.			.0 feet			Noise So			•	eet)		
Barrier Distance			.0 feet				Auto		2.000			
Observer Height			.0 feet				m Truck		1.000			
J	ad Elevation:	_	.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment.	0.0
-	ad Elevation:		.0 feet			Lane Eq	uivalen	t Dista	nce (in t	feet)		
	Road Grade:	-	.0%				Auto		2.547	- · ·		
	Left View:		.0 degree	25		Mediu	m Truck		2.504			
	Right View:		.0 degree				y Truck		2.547			
	g											
FHWA Noise Mod	el Calculatio											
VehicleType	REMEL	Trafi	fic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:		2	4.48		-4.1		-1.20		<i>-4.</i> 87	0.0	000	0.000
Medium Trucks:	83.68	3	-12.76		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	3	-16.72		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (wit	hout To	opo and	barri	ier atten	nuation)						
VehicleType	Leg Peak Ho		Leq Day			vening	Leq	Night		Ldn	CI	VEL
Autos:	7	2.4	•	70.5	<u> </u>	68.7		62	.7	71.3	3	71.9
Medium Trucks:	6	5.6	(64.1		57.7		56	.2	64.7	7	64.9
Heavy Trucks:	6	5.3	(63.9		54.8		56	.1	64.4	4	64.6
Vehicle Noise:	7	3.9		72.1		69.2		64	.3	72.8	3	73.3
Centerline Distan	ce to Noise C	ontou	r (in feet))								
					70 (dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

154

166

332

358

716

771

1,542

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Number: 8141
Road Segment: n/o Edinger Av. Analyst: B. Lawson

SITE S	SPECIFIC IN	PUT DATA				ſ	NOISE	MODE	L INPUT	S		
Highway Data				;	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	7,900 vehicle	s					Autos:	15			
Peak Hour I	Percentage:	10%			Me	dium Tr	ucks (2	2 Axles):	15			
Peak He	our Volume:	9,790 vehicle	S		He	avy Tru	cks (3+	- Axles):	15			
Vel	nicle Speed:	65 mph		,	Vehicle	Miv						
Near/Far Lar	ne Distance:	175 feet				icleType	2	Day	Evening	Night	Daily	
Site Data					VCII		Autos:	77.5%	_	9.6%	_	
		0.0.61			M	edium T		84.8%		10.3%	1.84%	
	rier Height:	0.0 feet 0.0				Heavy T		86.5%		10.8%	0.74%	
Barrier Type (0-Wa Centerline Dis	,	0.0 100.0 feet									011 170	
Centerline Dist. t		100.0 feet		1	Voise S	ource E		ns (in f	eet)			
Barrier Distance t		0.0 feet				Auto		2.000				
Observer Height (/		5.0 feet			Mediu	m Truck	is:	4.000				
• .	d Elevation:	0.0 feet			Heav	y Truck	s:	8.006	Grade Ad	iustment.	: 0.0	
	d Elevation: d Elevation:	0.0 feet			Lane Eo	uivalen	t Dista	nce (in	feet)			
	Road Grade:	0.0%				Auto		8.505	,			
,	Left View:	-90.0 degree	20		Mediu	m Truck		8.423				
	Right View:	90.0 degree				y Truck		8.506				
	rugine viewi	co.o dog.o.	50			,						
FHWA Noise Mode	l Calculation											
VehicleType	REMEL	Traffic Flow	Dis	stance		Road	Fre	snel	Barrier Att	en Ber	m Atten	
Autos:	74.55	6.36		0.09		-1.20		-4.87		000	0.000	
Medium Trucks:	84.86	-10.88		0.1	1	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	88.18	-14.83		0.09	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	Levels (with	out Topo and	barri	er atten	uation)							
	Leq Peak Hou			Leg E		Leg	Night		Ldn	CI	NEL	
Autos:	79	.8	77.9	·	76.1	<u> </u>	70).1	78.7	7	79.3	
Medium Trucks:	72	.9	71.4		65.0		63	3.5	71.9	9	72.2	
Heavy Trucks:	72	.2	70.8		61.8		63	3.0	71.4	1	71.5	
Vehicle Noise:	81	.2	79.4		76.6		71	1.6	80.2	2	80.6	
Centerline Distance	e to Noise Co	ontour (in feet)		15.4		.			I	15.4	
			L	70 c			dBA		60 dBA		dBA	
			Ldn:	47	5	1,	024		2,205	4,	751	

CNEL:

512

1,103

2,377

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jamboree Rd. Number: 8141
Road Segment: s/o Edinger Av. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Cor	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Tra	affic (Adt): 8	6,600 vehicles	S					Autos:	15			
Peak Hour Pe	ercentage:	10%			Me	dium Tr	ucks (2	? Axles):	15			
Peak Hou	ır Volume:	8,660 vehicles	S		He	avy Tru	cks (3+	- Axles):	15			
Vehic	ele Speed:	65 mph		,	Vehicle	Miv						
Near/Far Lane	Distance:	175 feet				icleType	2	Day	Evening	Night	Daily	
Site Data					Veri		Autos:	77.5%	_	9.6%	_	
					Λ/.	edium T		84.8%		10.3%	1.84%	
	er Height:	0.0 feet				Heavy T		86.5%		10.8%	0.74%	
Barrier Type (0-Wall	,	0.0				loavy i	ruono.	00.070	2.170	10.070	0.7 4 70	
Centerline Dist.		100.0 feet		1	Voise S	ource E	levatio	ns (in fe	eet)			
Centerline Dist. to		100.0 feet				Auto	s: 2	2.000				
Barrier Distance to		0.0 feet			Mediu	m Truck	rs: 4	4.000				
Observer Height (Ab	•	5.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment	0.0	
	Elevation:	0.0 feet			Lane Eq	uivalon	t Dieta	nco (in	foot)			
	Elevation:	0.0 feet		-	Larie Ly			8.505	ieel)			
	ad Grade:	0.0%			Modiu	Auto m Truck		8.423				
	Left View:	-90.0 degree										
K	Right View:	90.0 degree	es		пеач	y Truck	is. 4	8.506				
FHWA Noise Model	Calculations	;										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten	
Autos:	74.55	5.83		0.09	9	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	84.86	-11.41		0.1	1	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	88.18	-15.37		0.09	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise L	evels (witho	out Topo and	barri	er atten	uation)							
	eq Peak Hou			Leq E		Leq	Night		Ldn	C	NEL	
Autos:	79.	3	77.4	-	75.6		69).5	78.2	2	78.8	
Medium Trucks:	72.	4	70.8		64.5		62	2.9	71.4	4	71.6	
Heavy Trucks:	71.	7	70.3		61.3		62	2.5	70.9	9	71.0	
Vehicle Noise:	80.	7	78.9		76.1		71	.1	79.6	3	80.1	
Centerline Distance	to Noise Co	ntour (in feet)									
				70 c	<i>IBA</i>	65	dBA	ć	60 dBA	55	dBA	
			Ldn:	43	88	9	943		2,032	4,	378	

CNEL:

472

1,017

2,191

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd. Number: 8141
Road Segment: e/o SR-241 NB Ramps Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA				NOIS	E MODE	L INPUT	S		
Highway Data			S	Site Conditions (Hard = 10, Soft = 15)						
Average Daily Traffic (Adt):	3,900 vehicle	s				Autos:	15			
Peak Hour Percentage:	10%			Med	lium Trucks ((2 Axles):	15			
Peak Hour Volume:	390 vehicle	s		Hea	vy Trucks (3	+ Axles):	15			
Vehicle Speed:	55 mph		V	ehicle M	liy					
Near/Far Lane Distance:	52 feet				leType	Day	Evening	Night	Daily	
Site Data					Autos			9.6%	-	
Barrier Height:	0.0 feet			Med	dium Trucks			10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm):	0.0			Н	eavy Trucks	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier:	100.0 feet									
Centerline Dist. to Observer:	100.0 feet		N	oise Soi	urce Elevati	•	eet)			
Barrier Distance to Observer:	0.0 feet				Autos:	2.000				
Observer Height (Above Pad):	5.0 feet				Trucks:	4.000	0 1- 4-1		0.0	
Pad Elevation:	0.0 feet			Heavy	Trucks:	8.006	Grade Ad	iustment:	0.0	
Road Elevation:	0.0 feet		Li	ane Equ	ivalent Dist	ance (in i	feet)			
Road Grade:	0.0%				Autos:	96.607				
Left View:	-90.0 degre	es		Medium	Trucks:	96.566				
Right View:	90.0 degre	es		Heavy	Trucks:	96.608				
FHWA Noise Model Calculatio										
VehicleType REMEL	Traffic Flow	Dista	nce	Finite F	Road Fr	esnel	Barrier Att	en Ber	m Atten	
Autos: 71.7		Distai	-4.39	1 mmc 1	-1.20	-4.87		000	0.000	
Medium Trucks: 82.4			-4.39		-1.20	-4.97		000	0.000	
Heavy Trucks: 86.4			-4.39		-1.20	-5.16		000	0.000	
Unmitigated Noise Levels (wit	hout Tong and	barriar	ottonu	ration)						
VehicleType Leq Peak Ho			eq Eve		Leg Night		Ldn	CI	VEL	
**		57.4	.cq _vc	55.6	, ,	9.6	58.2		58.8	
		51.2		44.8		3.2	51.7		51.9	
		51.3		42.2		3.5	51.8		52.0	
		•								
•	0.9	59.1		56.1	5	1.3	59.8	3	60.3	
•				56.1	5	1.3	59.8	3	60.3	

Ldn:

CNEL:

21

23

45

49

97

105

209

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd. Number: 8141
Road Segment: n/o Portola Pkwy. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Tr	affic (Adt): 1	1,000 vehicles	S					Autos:	15			
Peak Hour P	ercentage:	10%			Me	dium Tr	ucks (2	? Axles):	15			
Peak Hou	ur Volume:	1,100 vehicles	3		He	avy Tru	cks (3+	- Axles):	15			
Vehi	cle Speed:	55 mph		-	/ehicle	Miv						
Near/Far Lane	Distance:	52 feet				icleType	2	Day	Evening	Night	Daily	
Site Data					VGH		Autos:	77.5%	_	9.6%	_	
					1/1	edium T		84.8%		10.3%	1.84%	
	er Height:	0.0 feet				-leavy T		86.5%		10.8%	0.74%	
Barrier Type (0-Wal	,	0.0			·	loavy i	ruono.	00.070	2.1 /0	10.070	0.7 4 70	
Centerline Dist.		100.0 feet		1	Voise So	ource E	levatio	ns (in fe	eet)			
Centerline Dist. to		100.0 feet				Auto	s: 2	2.000				
Barrier Distance to		0.0 feet			Mediu	m Truck	is:	4.000				
Observer Height (Al	•	5.0 feet			Heav	y Truck	s: 8	3.006	Grade Adj	justment	0.0	
	Elevation:	0.0 feet			Lane Eq	uivalon	t Dieta	nco (in	foot)			
	Elevation:	0.0 feet		-	Larie Ly			6.607	ieei)			
RO	oad Grade:	0.0%			Modiu	Auto m Truck		6.566				
r	Left View:	-90.0 degree										
r	Right View:	90.0 degree	es		пеач	y Truck	is. 9	8.608				
FHWA Noise Model	Calculations											
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-2.41		-4.39)	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-19.65		-4.39)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-23.60		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise I	Levels (witho	out Topo and	barri	er atten	uation)							
	eq Peak Hou			Leg E		Leq	Night		Ldn	C	NEL	
Autos:	63.	8	61.9	-	60.1		54	.1	62.7	7	63.3	
Medium Trucks:	57.	2	55.7		49.3		47	'.8	56.2	2	56.4	
Heavy Trucks:	57.	2	55.8		46.7		48	3.0	56.3	3	56.5	
Vehicle Noise:	65.	4	63.6		60.6		55	5.8	64.3	3	64.8	
Centerline Distance	to Noise Co	ntour (in feet)									
				70 c	IBA	65	dBA	É	60 dBA	55	dBA	
			Ldn:	4:	2	- (90		194	4	18	

CNEL:

45

97

209

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: n/o Irvine Bl.

Number: 8141

Analyst: B. Lawson

Highway DataSite Conditions (Hard = 10, Soft = 15)Average Daily Traffic (Adt): 34,000 vehiclesAutos: 15Peak Hour Percentage: 10%Medium Trucks (2 Axles): 15Peak Hour Volume: 3,400 vehiclesHeavy Trucks (3+ Axles): 15	
Peak Hour Percentage:10%Medium Trucks (2 Axles):15Peak Hour Volume:3,400 vehiclesHeavy Trucks (3+ Axles):15	
Peak Hour Volume: 3,400 vehicles Heavy Trucks (3+ Axles): 15	1
Vehicle Speed: 60 mph	
Near/For Lang Distance: 76 foot	ight Daily
	9.6% 97.42%
	0.3% 1.84%
	0.8% 0.74%
Contarling Diet to Parriers 100.0 feet	
Centerline Dist to Observer: 100.0 foot	
Parrier Distance to Observer: 0.0 feet	
Observer Height (Above Pad): 5.0 foot	
Pad Elevation: 0.0 feet Heavy Trucks: 8.006 Grade Adjust	ment: 0.0
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)	
Road Grade: 0.0% Autos: 92.547	
Left View: -90.0 degrees Medium Trucks: 92.504	
Right View: 90.0 degrees Heavy Trucks: 92.547	
FHWA Noise Model Calculations	
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten	
Autos: 73.22 2.11 -4.11 -1.20 -4.87 0.000	
Medium Trucks: 83.68 -15.12 -4.11 -1.20 -4.97 0.000	
Heavy Trucks: 87.33 -19.08 -4.11 -1.20 -5.16 0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)	
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn	CNEL
Autos: 70.0 68.1 66.4 60.3 68.9	69.5
Medium Trucks: 63.2 61.7 55.4 53.8 62.3	62.5
Heavy Trucks: 62.9 61.5 52.5 53.7 62.1	62.2
Valida Naires 74.5 00.7 00.0 04.0 70.5	70.9
Vehicle Noise: 71.5 69.7 66.9 61.9 70.5	
Vehicle Noise: /1.5 69.7 66.9 61.9 70.5 Centerline Distance to Noise Contour (in feet)	

Ldn:

CNEL:

107

116

231

249

498

536

1,073

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd. Number: 8141
Road Segment: n/o Bryan Av. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	35,900	vehicles	3					Autos:	15			
Peak Hour	Percentage:	10	%			Me	dium Tr	ucks (2	Axles):	15			
Peak H	lour Volume:	3,590	vehicles	S		He	avy Trud	cks (3+	Axles):	15			
Ve	hicle Speed:	60	mph			Vehicle i	Mix						
Near/Far La	ne Distance:	76	feet				icleType	,	Day	Evening	Night	Daily	
Site Data								Autos:	77.5%		9.6%	,	
	rrier Height:	0	0 feet			М	edium T		84.8%		10.3%		
Barrier Type (0-W	•	0.				ŀ	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Di	,		0 0 feet										
Centerline Dist.			0 feet			Noise So			•	eet)			
Barrier Distance			0 feet				Auto		2.000				
Observer Height			0 feet				m Truck		.000	0		. 0.0	
•	ad Elevation:		0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0	
Ro	ad Elevation:		0 feet			Lane Eq	uivalen	t Distai	nce (in t	feet)			
	Road Grade:	0.	0%				Auto	s: 92	2.547				
	Left View:	-90.	0 degree	es		Mediui	m Truck	s: 92	2.504				
	Right View:	90.	0 degree	es		Heav	y Truck	s: 92	2.547				
FHWA Noise Mod	el Calculation	าร											
VehicleType	REMEL	Traff	ic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	73.22	2	2.35		-4.1	1	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	3	-14.89		-4.1	1	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	3	-18.84		-4.1	1	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout To	po and	barri	er atten	uation)							
VehicleType	Leq Peak Ho	our	Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL	
Autos:	7	0.3	(68.4		66.6		60	.5	69.2	2	69.8	
Medium Trucks:		3.5		62.0		55.6		54	.1	62.5		62.8	
Heavy Trucks:	6	3.2	(61.7		52.7		54	.0	62.3	3	62.4	
Vehicle Noise:	7	1.7		70.0		67.1		62	.1	70.7	7	71.2	
Centerline Distan	ce to Noise C	ontour	(in feet)									
					70 (dBA	65	dBA	6	60 dBA	55	dBA	

Ldn:

CNEL:

111

120

240

258

516

556

1,113

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: n/o Trabuco Rd.

Number: 8141

Analyst: B. Lawson

Highway Data Average Daily Traffic (Adt) Peak Hour Percentage	IIVP	UT DATA				N	OISE	MODE	L INPUT	S	
• • • • • • • • • • • • • • • • • • • •				S	Site Conditions (Hard = 10, Soft = 15)						
Peak Hour Percentage	: 47,	000 vehicles	3					Autos:	15		
i can i loui i crocinago		10%			Med	dium Tru	cks (2	Axles):	15		
Peak Hour Volume	: 4,	700 vehicles	3		Hea	avy Truc	ks (3+ .	Axles):	15		
Vehicle Speed	:	60 mph		1	/ehicle N	/liv					
Near/Far Lane Distance	:	76 feet		_		cleType		Day	Evening	Night	Daily
Site Data					V 0777		utos:	77.5%	-	9.6%	,
		0.0 foot			Me	edium Tri		84.8%		10.3%	1.84%
Barrier Height Barrier Type (0-Wall, 1-Berm)		0.0 feet 0.0			_	leavy Tru		86.5%		10.8%	0.74%
Centerline Dist. to Barrier		0.0 100.0 feet									
Centerline Dist. to Observer		100.0 feet		٨	Voise So			•	eet)		
Barrier Distance to Observer		0.0 feet				Autos		.000			
Observer Height (Above Pad)	=	5.0 feet			Mediun	n Trucks	: 4.	.000			
Pad Elevation		0.0 feet			Heav	y Trucks	: 8.	.006	Grade Ad	iustment.	0.0
Road Elevation	-	0.0 feet		1	ane Equ	ıivalent	Distan	ce (in t	eet)		
Road Grade		0.0%				Autos		.547			
Left View		-90.0 degree	00		Mediun	n Trucks		.504			
Right View		-90.0 degree 90.0 degree				y Trucks		.547			
raght view	-	30.0 degree	73		ricar	y Traono	. 02	.0-17			
FHWA Noise Model Calculati	ons										
VehicleType REMEL	7	raffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos: 73.	22	3.52		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 83.0	86	-13.72		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 87.3	33	-17.67		-4.11		-1.20		-5.16	0.0	000	0.000
1121, 11231.01	ithou	t Topo and	barrie	er atteni	uation)						
		•				Leq N	l: o.lo.t		Ldn	1	
Unmitigated Noise Levels (w.		Leg Day		Leg Ev	ening	Legi	vigrit		Lan	CI	VEL
Unmitigated Noise Levels (w.			69.5	Leq Ev	67.8	Legi	<i>nigrit</i> 61.	7	70.3		VEL 70.9
Unmitigated Noise Levels (w. VehicleType Leq Peak F	lour	(Leg Ev		Legi				3	
VehicleType Leq Peak H Autos: Medium Trucks:	our 71.4	(69.5	Leq Ev	67.8	Legi	61.	2	70.3	3 7	70.9
VehicleType Leq Peak F Autos: Medium Trucks: Heavy Trucks:	dour 71.4 64.7	(69.5 63.1	Leq Ev	67.8 56.8	Legi	61. 55.	2 1	70.3 63.7	3 7 5	70.9 63.9
VehicleType Leq Peak F Autos: Medium Trucks: Heavy Trucks:	four 71.4 64.7 64.3 72.9	(69.5 63.1 62.9 71.1	Leg Ev	67.8 56.8 53.9	Legi	61. 55. 55.	2 1	70.3 63.7 63.5	3 7 5	70.9 63.9 63.6

Ldn:

CNEL:

133

143

287

309

618

666

1,332

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: s/o Trabuco Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS								
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	51,600	vehicles	S					Autos:	15				
Peak Hour	Percentage:	109	%			Me	dium Tr	ucks (2	Axles):	15				
Peak H	lour Volume:	5,160	vehicles	3		He	avy Tru	cks (3+	Axles):	15				
Ve	ehicle Speed:	60	mph			Vehicle i	Miv							
Near/Far La	ne Distance:	76	feet				icleType		Day	Evening	Night	Daily		
Site Data						• • • • • • • • • • • • • • • • • • • •		Autos:	77.5%		9.6%	-		
	urior Usiabt	0.0	feet			М	edium T		84.8%		10.3%	1.84%		
	rrier Height:	0.0					Heavy T		86.5%		10.8%	0.74%		
Barrier Type (0-W Centerline Di	•	100.0												
Centerline Dist.		100.0				Noise So				eet)				
Barrier Distance) feet				Auto		2.000					
Observer Height) feet				m Truck		.000					
•	ad Elevation:) feet			Heav	y Truck	s: 8	3.006	Grade Adj	iustment.	0.0		
	ad Elevation:) feet			Lane Eq	uivalen	t Dista	nce (in 1	feet)				
	Road Grade:	0.0					Auto		2.547	,				
	Left View:) degree	25		Mediu	m Truck		2.504					
	Right View:) degree			Heav	y Truck	s: 92	2.547					
FHWA Noise Mod														
VehicleType	REMEL		Flow	Di	stance		Road	Fres		Barrier Att		m Atten		
Autos:			3.93		-4.1		-1.20		-4.87		000	0.000		
Medium Trucks:			-13.31		-4.1	-	-1.20		-4.97		000	0.000		
Heavy Trucks:	87.33		-17.27		-4.1	1	-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out To	po and	barri	er atter	uation)								
VehicleType	Leq Peak Ho	ur I	Leq Day	,	Leq E	vening	Leq	Night		Ldn	CI	VEL		
Autos:	7′	1.8	(69.9		68.2		62	.1	70.7	7	71.3		
Medium Trucks:	65	5.1	(63.6		57.2		55	.6	64.1	I	64.3		
Heavy Trucks:	64	4.7		63.3		54.3		55	.5	63.9	9	64.0		
Vehicle Noise:	73	3.3		71.5		68.7		63	.7	72.3	3	72.8		
Centerline Distan	ce to Noise C	ontour	(in feet))										
			. ,		70	dBA	65	dBA	6	60 dBA	55	dBA		
				_										

Ldn:

CNEL:

142

153

305

329

658

708

1,417

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: b/w Roosevelt and I-5 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard =	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	69,700 vehicle	es					Autos:	15			
Peak Hour	Percentage:	10%			Med	dium Tri	ucks (2	Axles):	15			
Peak H	lour Volume:	6,970 vehicle	es		Hea	avy Trud	cks (3+	Axles):	15			
Ve	hicle Speed:	60 mph		V	ehicle N	/lix						
Near/Far La	ne Distance:	76 feet				cleType	,	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		9.6%		
	rrior Hoiabti	0.0 feet			Ме	dium Ti		84.8%		10.3%	1.84%	
Barrier Type (0-W	rrier Height:	0.0 reet 0.0				leavy T		86.5%		10.8%	0.74%	
Centerline Di	*	100.0 feet										
Centerline Dist.		100.0 feet		N	oise So			•	eet)			
Barrier Distance		0.0 feet				Auto		.000				
Observer Height		5.0 feet			Mediun	n Truck	s: 4	.000				
	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	justment	: 0.0	
	ad Elevation:	0.0 feet		Li	ane Equ	ıivalen	t Distar	nce (in i	feet)			
	Road Grade:	0.0%				Auto		.547	,			
	Left View:	-90.0 degre	200		Mediun			.504				
	Right View:	90.0 degre				y Truck		.547				
	ragin view.	30.0 degre	.63		riouv.	y maon	0. 02	.0 17				
FHWA Noise Mod	el Calculation	ns										
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:	73.22	2 5.23	3	-4.11		-1.20		<i>-4.8</i> 7	0.0	000	0.000	
Medium Trucks:	83.68	3 -12.01		-4.11		-1.20		<i>-4.</i> 97	0.0	000	0.000	
Heavy Trucks:	87.33	3 -15.96	6	-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	l barriei	r attenu	ation)							
VehicleType	Leq Peak Ho			Leg Eve		Leg	Night		Ldn	C	NEL	
Autos:	7	3.1	71.2		69.5		63.	4	72.0) '	72.6	
Medium Trucks:	6	6.4	64.9		58.5		57.	0	65.4	4	65.6	
Heavy Trucks:	6	6.0	64.6		55.6		56.	8	65.2	2	65.3	
Vehicle Noise:	7-	4.6	72.8		70.0		65.	0	73.6	3	74.1	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	173	373	804	1,732
CNEL:	186	402	866	1,865

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: s/o Walnut Av./I-5 SB Ramps

Number: 8141

Analyst: B. Lawson

Highway Data			NOISE MODEL INPUTS							
Accessed Daile Traffic (A-11)			Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt)	: 50,300 vehicl	es			Autos:	15				
Peak Hour Percentage			Me	dium Trucks	s (2 Axles):	15				
Peak Hour Volume	5,030 vehicl	es	He	avy Trucks	(3+ <i>Axles</i>):	15				
Vehicle Speed	: 60 mph		Vehicle I	Miy						
Near/Far Lane Distance	: 76 feet			icleType	Day	Evening	Night	Daily		
Site Data				Auto		_	9.6%	-		
Barrier Height	: 0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm)			F	Heavy Truck	s: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier										
Centerline Dist. to Observer			Noise So	ource Eleva		eet)				
Barrier Distance to Observer				Autos:	2.000					
Observer Height (Above Pad)				m Trucks:	4.000					
Pad Elevation			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0		
Road Elevation			Lane Eq	uivalent Dis	stance (in	feet)				
Road Grade				Autos:	92.547	,				
Left View		222	Mediu	m Trucks:	92.504					
Right View				y Trucks:	92.547					
, ug.n. v.e.n	. cc.c dogi	000		,						
FHWA Noise Model Calculati										
VehicleType REMEL	Traffic Flow	Distance	e Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos: 73.3	22 3.8	2 -4	.11	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 83.0	68 -13.4	2 -4	.11	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 87.3	33 -17.3	8 -4	.11	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (w.	ithout Topo and	d barrier att	enuation)							
VehicleType Leq Peak F	lour Leq Da	ay Leq	Evening	Leq Nigi	ht	Ldn	CI	VEL		
Autos:	71.7	69.8	68.1		62.0	70.6	6	71.2		
Medium Trucks:	65.0	63.4	57.1		55.5	64.0)	64.2		
Heavy Trucks:	64.6	63.2	54.2		55.4	63.8	3	63.9		
Vehicle Noise:	73.2	71.4	68.6		63.6	72.2	2	72.6		

70 dBA

139

150

Ldn:

CNEL:

65 dBA

300

323

60 dBA

647

696

55 dBA

1,393

1,500

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd.

Road Segment: s/o Irvine Center Drive

Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)									
	Traffic (Adt): r Percentage: Hour Volume:	10%			Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15									
Ve	ehicle Speed: ane Distance:	60	60 mph 76 feet			Mix icleType	Day	Evening	Night	Daily				
Site Data						Autos	77.5%	12.9%	9.6%	97.42%				
Barrier Type (0-V	•	0.0				edium Trucks Heavy Trucks			10.3% 10.8%	1.84% 0.74%				
Centerline D Centerline Dist.	ist. to Barrier:	100.0 100.0			Noise Source Elevations (in feet)									
Barrier Distance Observer Height	to Observer:	0.0 5.0	feet feet feet			Autos: m Trucks: ry Trucks:	2.0004.0008.006	Grade Ad	justment:	0.0				
Road Elevation: 0.0 feet					Lane Eq	uivalent Dist	ance (in	feet)						
	Road Grade: Left View: Right View:		% degrees degrees			m Trucks:	92.547 92.504 92.547							
FHWA Noise Mod	lel Calculatio	ns												
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten				
Autos:	73.22	2	3.75	-4.	11	-1.20	-4.87	0.0	000	0.000				
Medium Trucks:	83.68	3	-13.49	-4.	11	-1.20	-4.97	0.0	000	0.000				
Heavy Trucks:	87.33	3	-17.45	-4.	11	-1.20	-5.16	0.0	000	0.000				
Unmitigated Nois	se Levels (with	hout Top	oo and b	arrier atte	nuation)									
VehicleType	Leq Peak Ho	our L	.eq Day	Leq E	vening	Leq Night	1	Ldn	CI	VEL				
Autos	7	1.7	69	9.8	68.0	ϵ	51.9	70.6	6	71.2				
Medium Trucks:	6	4.9	63	3.4	57.0	5	5.5	63.9	9	64.2				
Heavy Trucks:	6	4.6	63	3.1	1 54.1 55.4 63.7					63.8				
Vehicle Noise:	7	3.1	7′	1.4	68.5	6	3.5	72.′	1	72.6				
Centerline Distant	ce to Noise C	ontour	(in feet)											

70 dBA

138

148

Ldn:

CNEL:

65 dBA

297

320

60 dBA

640

689

55 dBA

1,378

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd. Number: 8141
Road Segment: n/o Alton Pkwy. Analyst: B. Lawson

Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8% 0.74	SITE	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15	Highway Data				S	ite Con	ditions (Ha	rd = 10,	Soft = 15)						
Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15	Average Daily	Traffic (Adt):	47,800 vehicle	S				Auto	os: 15						
Peak Hour Volume: Vehicle Speed: Near/Far Lane Distance: 76 feet Vehicle Mix Vehicle Type Day Evening Night Daily Site Data	•	• •				Ме	dium Truck	s (2 Axle	s): 15						
Near/Far Lane Distance: 76 feet VehicleType Day Evening Night Daily	Peak H	lour Volume:	4,780 vehicles	S		He	avy Trucks	(3+ Axle	s): 15						
Near/Far Lane Distance: 76 feet VehicleType Day Evening Night Daily	Ve	hicle Speed:	60 mph		V	ohiolo	Miv								
Site Data Autos: 77.5% 12.9% 9.6% 97.42	Near/Far La	ne Distance:	76 feet					Day	, Evenina	Night	Daily				
Barrier Height: 0.0 feet Barrier Trype (0-Wall, 1-Berm): 0.0 0.0	Sito Data					V GI I			_		,				
Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8% 0.74						M					1.84%				
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Chestric Distance (in feet) Chestric Distanc		_									0.74%				
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Autos: 92.547 Autos: 92.547	'	•								10.070	0.7 170				
Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Autos: 92.547 Left View: -90.0 degrees Right View: 90.0 degrees PhicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.59 -4.11 -1.20 -4.87 0.000 0.00 Medium Trucks: 87.33 -17.60 -4.11 -1.20 -5.16 0.000 0.00					N	oise So	ource Eleva	tions (ii	n feet)						
Medium Trucks: 4.000 Medium Trucks: 4.000 Pad Elevation: Pad Elevation: 0.0 feet Road Elevation: 0.0% Left View: 90.0 degrees Right View: 90.0 degrees Left View: 90.0 degrees Policy Pol								2.000							
Pad Elevation: 0.0 feet Heavy Trucks: 8.006 Grade Adjustment. Grade Adjustment. U.0 Road Elevation: Left View: -90.0 degrees Medium Trucks: 92.547 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.59 -4.11 -1.20 -4.87 0.000 0.0 Medium Trucks: 83.68 -13.64 -4.11 -1.20 -4.97 0.000 0.0 Heavy Trucks: 87.33 -17.60 -4.11 -1.20 -5.16 0.000 0.0 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.5 69.6 67.8 61.8 70.4 77 Medium Trucks: 64.7 63.2 56.9 <td></td> <td></td> <td></td> <td></td> <td></td> <td>Mediu</td> <td>m Trucks:</td> <td>4.000</td> <td></td> <td></td> <td></td>						Mediu	m Trucks:	4.000							
Road Elevation: 0.0 feet Road Grade: 0.0% Autos: 92.547	• ,	,				Heav	y Trucks:	8.006	Grade Ad	ljustment.	0.0				
Road Grade:					1	ane Fa	uivalent Di	stance (in feet)						
Left View:						une Eq		•	-						
Right View: 90.0 degrees Heavy Trucks: 92.547 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 73.22 3.59 -4.11 -1.20 -4.87 0.000 0.00 Medium Trucks: 83.68 -13.64 -4.11 -1.20 -4.97 0.000 0.00 Heavy Trucks: 87.33 -17.60 -4.11 -1.20 -5.16 0.000 0.0 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.5 69.6 67.8 61.8 70.4 70.4 Medium Trucks: 64.7 63.2 56.9 55.3 63.8 64.8 Heavy Trucks: 64.4 63.0 54.0 55.2 63.6 63.6 Vehicle Noise: 73.0 71.2 68.3 63.4 71.9 72.2	•														
FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atter Autos: 73.22 3.59 -4.11 -1.20 -4.87 0.000 0.0 Medium Trucks: 83.68 -13.64 -4.11 -1.20 -4.97 0.000 0.0 Heavy Trucks: 87.33 -17.60 -4.11 -1.20 -5.16 0.000 0.0 Unmitigated Noise Levels (without Topo and barrier attenuation) Vehicle Type Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.5 69.6 67.8 61.8 70.4 77 Medium Trucks: 64.7 63.2 56.9 55.3 63.8 64 Heavy Trucks: 64.4 63.0 54.0 55.2 63.6 63.6 Vehicle Noise: 73.0 71.2 68.3 63.4 71.9 72.2			•												
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atter Autos: 73.22 3.59 -4.11 -1.20 -4.87 0.000 0.0 Medium Trucks: 83.68 -13.64 -4.11 -1.20 -4.97 0.000 0.0 Heavy Trucks: 87.33 -17.60 -4.11 -1.20 -5.16 0.000 0.0 Unmitigated Noise Levels (without Topo and barrier attenuation) Vehicle Type Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.5 69.6 67.8 61.8 70.4 77 Medium Trucks: 64.7 63.2 56.9 55.3 63.8 64 Heavy Trucks: 64.4 63.0 54.0 55.2 63.6 63 Vehicle Noise: 73.0 71.2 68.3 63.4 71.9 72		ragin view.	90.0 degree	55		77001	y Tracko.	02.047							
Autos: 73.22 3.59 -4.11 -1.20 -4.87 0.000 0.0 Medium Trucks: 83.68 -13.64 -4.11 -1.20 -4.97 0.000 0.0 Heavy Trucks: 87.33 -17.60 -4.11 -1.20 -5.16 0.000 0.0 Unmitigated Noise Levels (without Topo and barrier attenuation) Vehicle Type Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.5 69.6 67.8 61.8 70.4 77 Medium Trucks: 64.7 63.2 56.9 55.3 63.8 64 Heavy Trucks: 64.4 63.0 54.0 55.2 63.6 63 Vehicle Noise: 73.0 71.2 68.3 63.4 71.9 72	FHWA Noise Mode	el Calculation	s												
Medium Trucks: 83.68 -13.64 -4.11 -1.20 -4.97 0.000 0.00 Heavy Trucks: 87.33 -17.60 -4.11 -1.20 -5.16 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.5 69.6 67.8 61.8 70.4 7° Medium Trucks: 64.7 63.2 56.9 55.3 63.8 64 Heavy Trucks: 64.4 63.0 54.0 55.2 63.6 63 Vehicle Noise: 73.0 71.2 68.3 63.4 71.9 72	VehicleType	REMEL	Traffic Flow	Distan	ce	Finite	Road I	resnel	Barrier Att	ten Ber	m Atten				
Heavy Trucks: 87.33 -17.60 -4.11 -1.20 -5.16 0.000 0.00 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.5 69.6 67.8 61.8 70.4 77 Medium Trucks: 64.7 63.2 56.9 55.3 63.8 64 Heavy Trucks: 64.4 63.0 54.0 55.2 63.6 63 Vehicle Noise: 73.0 71.2 68.3 63.4 71.9 72	Autos:	73.22	3.59		-4.11		-1.20	-4.8	37 0.0	000	0.000				
Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.5 69.6 67.8 61.8 70.4 70.4 Medium Trucks: 64.7 63.2 56.9 55.3 63.8 64.8 Heavy Trucks: 64.4 63.0 54.0 55.2 63.6 63.6 Vehicle Noise: 73.0 71.2 68.3 63.4 71.9 72.0	Medium Trucks:	83.68	-13.64		-4.11		-1.20	-4.9	97 0.0	000	0.000				
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.5 69.6 67.8 61.8 70.4 7' Medium Trucks: 64.7 63.2 56.9 55.3 63.8 64 Heavy Trucks: 64.4 63.0 54.0 55.2 63.6 63 Vehicle Noise: 73.0 71.2 68.3 63.4 71.9 72	Heavy Trucks:	87.33	-17.60		-4.11		-1.20	-5.1	16 0.0	000	0.000				
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 71.5 69.6 67.8 61.8 70.4 7' Medium Trucks: 64.7 63.2 56.9 55.3 63.8 64 Heavy Trucks: 64.4 63.0 54.0 55.2 63.6 63 Vehicle Noise: 73.0 71.2 68.3 63.4 71.9 72	Unmitigated Noise	e Levels (with	out Topo and	barrier a	ttenu	ation)									
Autos: 71.5 69.6 67.8 61.8 70.4 77 Medium Trucks: 64.7 63.2 56.9 55.3 63.8 64 Heavy Trucks: 64.4 63.0 54.0 55.2 63.6 63 Vehicle Noise: 73.0 71.2 68.3 63.4 71.9 72							Leg Nig	ht	Ldn	CI	VEL				
Heavy Trucks: 64.4 63.0 54.0 55.2 63.6 63.0 Vehicle Noise: 73.0 71.2 68.3 63.4 71.9 72.0		•					, ,		70.	4	71.0				
Vehicle Noise: 73.0 71.2 68.3 63.4 71.9 72.2	Medium Trucks:	64	.7	63.2		56.9		55.3	63.8	8	64.0				
	Heavy Trucks:	64	.4	63.0		54.0		55.2	63.0	6	63.7				
Centerline Distance to Noise Contour (in feet)	Vehicle Noise:	73	3.0	71.2		68.3		63.4	71.	9	72.4				
1 /	Centerline Distant	ce to Noise Co	ontour (in feet)											
70 dBA 65 dBA 60 dBA 55 dBA					70 dl	BA	65 dBA	4	60 dBA	55	dBA				
Ldn: 135 290 625 1,347				Ldn:	135	5	290		625	1,	347				

CNEL:

145

312

673

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Jeffrey Rd. Number: 8141
Road Segment: b/w Quailcreek and I-405 NB Ramps Analyst: B. Lawson

SITE		NOISE MODEL INPUTS										
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	57,900 v	ehicles/				Autos:	15				
•	Percentage:	10%			Me	dium Truck	ks (2 Axles):	15				
Peak F	lour Volume:	5,790 \	ehicles/		Heavy Trucks (3+ Axles): 15 Vehicle Mix							
Ve	hicle Speed:	60 r	mph									
Near/Far La	ne Distance:	76 f	eet			icleType	Day	Evening	Night	Daily		
Site Data						Aut			9.6%			
Ra	rrier Height:	0.0	feet		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0	icci		ŀ	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Di		100.0	feet				/					
Centerline Dist.		Noise Source Elevations (in feet)										
Barrier Distance		100.0	feet			Autos:	2.000					
Observer Height			feet			n Trucks:	4.000					
-	ad Elevation:		feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
	ad Elevation: ad Elevation:		feet		Lane Eq	uivalent D	istance (in	feet)				
	0.09				Autos:	92.547	,					
	Road Grade: Left View:		degree	9	Mediui	n Trucks:	92.504					
	Right View:		degree			y Trucks:	92.547					
FHWA Noise Mod	ol Calculation											
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:		Tramo	4.43	-4.1		-1.20	-4.87		000	0.000		
Medium Trucks:			-12.81	-4.1		-1.20	-4.97		000	0.000		
Heavy Trucks:			-16.77	-4.1		-1.20	-5.16		000	0.000		
Unmitigated Nois	e Levels (with	out Top	o and b	parrier atte	nuation)							
VehicleType	Leq Peak Hou		eq Day		vening	Leq Nig	ght	Ldn	CI	VEL		
Autos:	72			0.4	68.7	, ,	62.6	71.2	2	71.8		
Medium Trucks:	65	5.6	6	64.1	57.7		56.1	64.6	3	64.8		
Heavy Trucks:	65			3.8			56.0	64.4		64.5		
Vehicle Noise: 73.8 72.0					69.2 64.2 72.8					73.3		
Contorlino Distan	co to Noise C	ontour (in foot)									

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	153	330	710	1,530
CNEL:	165	355	765	1,648

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd. Number: 8141
Road Segment: e/o Alton Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				ľ	VOISE	MODE	L INPUT	S			
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	7,300 vehicle	s					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15				
Peak I	lour Volume:	730 vehicle	s		He	avy Tru	icks (3+	Axles):	15				
Ve	ehicle Speed:	55 mph		V	/ehicle l	Miy							
Near/Far La	ane Distance:	52 feet		•		icleType	e	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%		9.6%	-		
	nrrier Height:	0.0 feet			Me	edium 7		84.8%		10.3%	1.84%		
Barrier Type (0-V	•	0.0 leet 0.0				leavy 7		86.5%		10.8%	0.74%		
- ' '	ist. to Barrier:	100.0 feet		_									
Centerline Dist.		100.0 feet		۸	loise So			ns (in fe	et)				
Barrier Distance		0.0 feet				Auto		2.000					
Observer Height		5.0 feet				m Truck	-	.000	0 1- 4-1		0.0		
•	Pad Elevation:	0.0 feet			Heav	y Truck	rs: E	3.006	Grade Ad	justment.	0.0		
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)				
	Road Grade:	0.0%				Auto	os: 96	6.607					
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 96	6.566					
	Right View:	90.0 degree	es		Heav	y Truck	rs: 96	6.608					
FHWA Noise Mod	lel Calculation	 S											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	71.78	-4.19		-4.39)	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-21.43		-4.39)	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-25.38		-4.39)	-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)								
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL		
Autos:	_	.0	60.1		58.3		52	.3	60.9	9	61.5		
Medium Trucks:	55	.4	53.9		47.5		46	.0	54.4	4	54.7		
Heavy Trucks:	55	.4	54.0		45.0		46	.2	54.6	6	54.7		
Vehicle Noise:	63	.6	61.8		58.9		54	.0	62.5	5	63.0		
Centerline Distan	ce to Noise Co	ontour (in feet)										
				70 d	BA	65	dBA	6	0 dBA	55	dBA		

Ldn:

CNEL:

32

34

69

74

148

159

318

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd. Number: 8141 Road Segment: w/o Lake Forest Dr. Analyst: B. Lawson

	CIFIC INP	UT DATA		NOISE MODEL INPUTS							
Highway Data				Site Condit	ions (Hard	= 10, Sc	oft = 15)				
Average Daily Traff	ic (Adt): 11	,900 vehicles				Autos:	15				
Peak Hour Perc	entage:	10%		Mediu	m Trucks (2	Axles):	15				
Peak Hour	Volume: 1	,190 vehicles		Heavy	Trucks (3+	· Axles):	15				
Vehicle	Speed:	50 mph		Vehicle Mix							
Near/Far Lane D	istance:	70 feet		Vehicle		Day	Evening	Night	Daily		
Site Data					Autos:	77.5%	_	9.6%	97.42%		
Barrier	Heiaht:	0.0 feet		Media	ım Trucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1	•	0.0		Hea	vy Trucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to	•	100.0 feet		Noise Source Elevations (in feet)							
Centerline Dist. to O	bserver:	100.0 feet				2.000	,				
Barrier Distance to O	bserver:	0.0 feet		Medium 7		1.000					
Observer Height (Abov	∕e Pad):	5.0 feet		Heavy 7		3.006	Grade Ad	iustment:	0.0		
Pad El	evation:	0.0 feet		Heavy I	TUCKS.	5.000	Orace Au	astricire.	0.0		
Road El	evation:	0.0 feet		Lane Equiv	alent Dista	nce (in f	feet)				
Road	l Grade:	0.0%			Autos: 93	3.723					
Le	eft View:	-90.0 degrees	3	Medium 7	rucks: 93	3.680					
Rig	ht View:	90.0 degrees	5	Heavy 7	rucks: 93	3.723					
FHWA Noise Model Ca	lculations										
VehicleType R	EMEL 7	Traffic Flow	Distance	Finite Ro	ad Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	70.20	-1.65	-4.2	0 -	1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-18.89	-4.1	9 -	1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-22.85	-4.2	0 -	1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Lev	vels (withou	ıt Topo and b	arrier atter	nuation)							
VehicleType Leq	Peak Hour	Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL		
Autos:	63.2	6	1.3	59.5	53	.4	62.1		62.7		
Medium Trucks:	56.7	5	5.2	48.8	47	.3	55.8	3	56.0		

iiiiagatea i v ois	c Ecvels (William	t ropo ana ban	ici atteriaationi,			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	63.2	61.3	59.5	53.4	62.1	62.7
Medium Trucks:	56.7	55.2	48.8	47.3	55.8	56.0
Heavy Trucks:	57.1	55.7	46.7	47.9	56.3	56.4
Vehicle Noise:	64.8	63.1	60.1	55.3	63.8	64.3
١	VehicleType Autos: Medium Trucks: Heavy Trucks:	VehicleType Leq Peak Hour Autos: 63.2 Medium Trucks: 56.7 Heavy Trucks: 57.1	VehicleTypeLeq Peak HourLeq DayAutos:63.261.3Medium Trucks:56.755.2Heavy Trucks:57.155.7	Autos: 63.2 61.3 59.5 Medium Trucks: 56.7 55.2 48.8 Heavy Trucks: 57.1 55.7 46.7	VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Autos: 63.2 61.3 59.5 53.4 Medium Trucks: 56.7 55.2 48.8 47.3 Heavy Trucks: 57.1 55.7 46.7 47.9	VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn Autos: 63.2 61.3 59.5 53.4 62.1 Medium Trucks: 56.7 55.2 48.8 47.3 55.8 Heavy Trucks: 57.1 55.7 46.7 47.9 56.3

Centerline Distance to Noise Contour (in feet)		Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA									
Ldn:	39	83	180	387									
CNEL:	42	90	193	416									

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd.

Road Segment: e/o Lake Forest Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS									
Highway Data				Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt)	: 16,900) vehicles				A	Autos:	15			
Peak Hour Percentage)%		Ме	dium Truck	ks (2 A	xles):	15			
Peak Hour Volume	: 1,690) vehicles		Heavy Trucks (3+ Axles): 15							
Vehicle Speed	: 50) mph		Vehicle Mix							
Near/Far Lane Distance) feet					Day	Funning	Niaht	Doily	
Site Data				ven	icleType		Day	Evening	Night	Daily	
Site Data					Aut		77.5%		9.6%		
Barrier Height		.0 feet			edium Truc		84.8%		10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm)				,	Heavy Truc	cks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrie		.0 feet		Noise So	ource Elev	ations	s (in fe	eet)			
Centerline Dist. to Observe		.0 feet			Autos:	2.0	000				
Barrier Distance to Observe	~ 0.	.0 feet		Mediu	m Trucks:		000				
Observer Height (Above Pad	: 5.	.0 feet			y Trucks:		006	Grade Ad	justment	: 0.0	
Pad Elevation	<i>:</i> 0.	.0 feet									
Road Elevation	<i>:</i> 0.	.0 feet		Lane Eq	uivalent D			feet)			
Road Grade	<i>:</i> 0.	.0%			Autos:	93.7	723				
Left View	<i>:</i> -90.	.0 degree	S	Mediu	m Trucks:	93.6	088				
Right View	<i>:</i> 90.	.0 degree	s	Heav	y Trucks:	93.7	723				
FHWA Noise Model Calculati	ons										
VehicleType REMEL	Traff	ic Flow	Distance	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten	
<i>Aut</i> os: 70.	20	-0.13	-4.	20	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 81.	00	-17.37	-4.	19	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 85.	38	-21.32	-4.	20	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (w	ithout To	opo and b	parrier atte	enuation)							
VehicleType Leq Peak I	lour	Leq Day	Leq	Evening	Leq Ni	ght		Ldn	C	NEL	
Autos:	64.7	6	52.8	61.0		55.0		63.6	3	64.2	
Medium Trucks:	58.2	5	6.7	50.4		48.8		57.3	3	57.5	
Heavy Trucks:	58.7	5	57.2	48.2		49.4		57.8	3	57.9	
Vehicle Noise:	66.4	6	64.6	61.6		56.8		65.3	3	65.8	
Centerline Distance to Noise	Contou	r (in feet)									

70 dBA

49

53

Ldn:

CNEL:

65 dBA

105

113

60 dBA

227

244

55 dBA

489

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd.

Road Segment: e/o Ridge Route Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	10%		Autos: 15 Medium Trucks (2 Axles): 15 Heavy Trucks (3+ Axles): 15								
Vehicle Speed: Near/Far Lane Distance:	•	-	Vehicle Mix VehicleType Day Evening Night Day								
Site Data				Autos	-	-		97.42%			
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Left View:	0.0 100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0%	es	Medium Heav		60ns (in for 2.000 4.000 8.006	eet) Grade Adj	10.3% 10.8% iustment:	1.84% 0.74% 0.0			
Right View:	3		Heav		93.723						
FHWA Noise Model Calculation	ons										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fro	esnel	Barrier Att	en Ber	m Atten			
Autos: 70.2 Medium Trucks: 81.0 Heavy Trucks: 85.3	0 -17.89	-4.2 -4.1 -4.2	9	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0)00)00)00	0.000 0.000 0.000			
Unmitigated Noise Levels (wi	thout Topo and	barrier attei	nuation)								
VehicleType Leq Peak H			vening	Leq Night	1	Ldn		VEL			
		62.3	60.5	_	54.4	63.1		63.7			
		56.2 56.7	49.9 47.7		8.3 8.9	56.8 57.3		57.0 57.4			
· · · · · · · · · · · · · · · · · · ·		64.1	61.1		66.3	64.8		65.3			
Centerline Distance to Noise	Contour (in feet)									

Contornio Dictarios to Moiso Contoar (in 1881)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	45	97	210	452
CNEL:	49	105	225	485

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeromino Rd.

Road Segment: w/o Los Alisos Bl.

Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					,	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	27,800	vehicles	6					Autos:	15				
Peak Hour	Percentage:	10%	, D			Me	dium Tr	ucks (2	Axles):	15				
Peak H	lour Volume:	2,780	vehicles	5		He	avy Tru	cks (3+	- Axles):	15				
Ve	ehicle Speed:	50 ।	mph			Vehicle l	Wix							
Near/Far La	ne Distance:	70 1	feet				icleType	Э	Day	Evening	Night	Daily		
Site Data								Autos:	77.5%		9.6%	-		
Ba	rrier Height:	0.0	feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W		0.0	1001			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
• • •	ist. to Barrier:	100.0	feet			Noise So	uroo E	lovatio	ns (in f	201				
Centerline Dist.	to Observer:	100.0	feet			NOISE SC	Auto		2.000	(C I)				
Barrier Distance	to Observer:	0.0	feet			Modiu	Auto n Truck		4.000 4.000					
Observer Height	(Above Pad):	5.0	feet					_		Grade Ad	iustmont			
P	ad Elevation:	0.0	feet			неач	y Truck	S. C	3.006	Grade Auj	iusiiri e rii.	. 0.0		
Ro	ad Elevation:	0.0	feet			Lane Eq	uivalen	t Dista	nce (in i	feet)				
	Road Grade:	0.0	%				Auto	s: 9:	3.723					
	Left View:	-90.0	degree	S		Mediui	n Truck	s: 9	3.680					
	Right View:	90.0	degree	s		Heav	y Truck	rs: 9	3.723					
FHWA Noise Mod	lel Calculation	ıs												
VehicleType	REMEL	Traffic	Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten		
Autos:	70.20		2.03		-4.2	0	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	81.00		-15.21		-4.1	9	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	85.38		-19.16		-4.2	0	-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Top	o and l	barri	ier atten	uation)								
VehicleType	Leq Peak Hou	ur L	eq Day		Leq E	vening	Leq	Night		Ldn	CI	NEL		
Autos:	66	6.8	6	64.9		63.2		57	'.1	65.7	7	66.3		
Medium Trucks:	60).4	5	58.9		52.5		51	.0	59.4	1	59.7		
Heavy Trucks:	60	8.0	5	59.4		50.4		51	.6	60.0)	60.1		
Vehicle Noise:	68	3.5	(6.8		63.7		59	0.0	67.5	5	68.0		
Centerline Distan	ce to Noise C	ontour (in feet)											
					70 d	dBA	65	dBA	ϵ	60 dBA	55	dBA		

Ldn:

CNEL:

68

73

147

158

316

340

681

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Jeromino Rd.

Road Segment: e/o Los Alisos Bl.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	23,600 v	ehicles				Auto	s: 15				
Peak Hour	Percentage:	10%			Med	dium Truc	cks (2 Axle	s): 15				
Peak H	lour Volume:	2,360 v	ehicles		Hea	avy Truck	rs (3+ Axle	s): 15				
Ve	hicle Speed:	50 n	nph		Vehicle Mix							
Near/Far La	ne Distance:	70 f	eet			cleType	Day	Evening	Night	Daily		
Site Data							utos: 77.5	J	9.6%	-		
Bai	rrier Height:	0.0	feet		Ме	dium Tru	icks: 84.8	3% 4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0	1001		F	leavy Tru	icks: 86.5	5% 2.7%	10.8%	0.74%		
Centerline Dis	•	100.0	feet		Noice Se	uroo Elo	vations (in	foot)				
Centerline Dist.	to Observer:	100.0	feet		Noise 30	Autos:	•	i ieet)				
Barrier Distance	to Observer:	0.0	feet		Madiur	:Autos :n Trucks						
Observer Height (Above Pad):		5.0 feet				. 0 0						
Pa	0.0	feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0								
Roa	0.0	feet		Lane Equivalent Distance (in feet)								
	Road Grade:	0.0%	6			Autos:	93.723					
	Left View:	-90.0	-90.0 degrees			Medium Trucks: 93.680						
	Right View:	90.0	degrees	s	Heavy Trucks: 93.723							
FHWA Noise Mode	el Calculation	ns										
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road	Fresnel	Barrier At	ten Ber	m Atten		
Autos:	70.20)	1.32	-4.2	20	-1.20	-4.8	7 0.	000	0.000		
Medium Trucks:	81.00) -	15.92	-4.1	9	-1.20	-4.9	7 0.	000	0.000		
Heavy Trucks:	85.38	3 -	19.87	-4.2	20	-1.20	-5.1	6 0.	000	0.000		
Unmitigated Noise	e Levels (with	hout Top	o and b	arrier atter	nuation)							
VehicleType	Leq Peak Ho	our Le	eq Day	Leq E	vening	Leq N	light	Ldn	CI	VEL		
Autos:	6	6.1	64	4.2	62.5		56.4	65.	0	65.6		
Medium Trucks:	5	9.7	58	3.2	51.8		50.3	58.	7	59.0		
Heavy Trucks:	6	0.1	58	3.7	49.7		50.9	59.	3	59.4		
Vehicle Noise:	6	7.8	66	6.1	63.0		58.2	66.	8	67.3		

70 dBA

61

66

Ldn:

CNEL:

65 dBA

132

141

60 dBA

284

305

55 dBA

611

656

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Jeronimo Rd.

Road Segment: s/o Alicia Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	SE MODI	EL INPUT	S			
Highway Data	Site Cor	Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt):	25,400 vehicle	es			Autos	: 15				
Peak Hour Percentage:	•		Me	dium Trucks	(2 Axles)	: 15				
Peak Hour Volume:	2,540 vehicle	es	He	avy Trucks	(3+ Axles)	: 15				
Vehicle Speed:	50 mph		Vehicle	Mix						
Near/Far Lane Distance:	70 feet				Day	Evening	Night	Doily		
Site Data			ven	icleType Auto		Evening 6 12.9%	9.6%	<i>Daily</i> 97.42%		
				Auto edium Truck			10.3%	1.84%		
Barrier Height:							10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm).			'	Heavy Truck	s: 86.5%	6 Z.170	10.6%	0.74%		
Centerline Dist. to Barrier.			Noise S	ource Eleva	tions (in	feet)				
Centerline Dist. to Observer.				Autos:	2.000					
Barrier Distance to Observer.			Mediu	m Trucks:	4.000					
Observer Height (Above Pad).			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
Pad Elevation.										
Road Elevation.			Lane Equivalent Distance (in feet)							
Road Grade.			Autos: 93.723							
Left View.		es	Medium Trucks: 93.680							
Right View.	90.0 degre	es	Heavy Trucks: 93.723							
FHWA Noise Model Calculation										
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos: 70.2	20 1.64	-2	.20	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 81.0	00 -15.60	-2	.19	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 85.3	38 -19.55	-2	.20	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)							
VehicleType Leq Peak H	our Leq Day	y Leq	Evening	Leq Nigl	nt	Ldn	CI	VEL		
Autos:	66.4	64.5	62.8		56.7	65.3	3	66.0		
	60.0	58.5	52.1		50.6	59.		59.3		
Heavy Trucks:	60.4	59.0	50.0	50.0 51.2			3	59.7		
Vehicle Noise:	68.1	66.4	63.3		58.6	67.	1	67.6		
Centerline Distance to Noise	Contour (in fee	t)								

70 dBA

64

69

Ldn:

CNEL:

65 dBA

138

148

60 dBA

298

320

55 dBA

642

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: b/w ICD and Discovery

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Ad	lt): 6	,800 vehicles	3					Autos:	15			
Peak Hour Percentag	,	10%			Me	dium Tr	ucks (2	Axles):	15			
Peak Hour Volun	ne:	680 vehicles	3		He	avy Tru	cks (3+	Axles):	15			
Vehicle Spee	ed:	55 mph		_	/ehicle l	Miss						
Near/Far Lane Distant	e:	52 feet						- Cyoning	Niaht	Doile		
Cita Data					ven	icleType		Day	Evening	Night	Daily	
Site Data					Λ./.		Autos:	77.5%		9.6%		
Barrier Heig		0.0 feet				edium T		84.8%		10.3%		
Barrier Type (0-Wall, 1-Berr	•	0.0			r	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barri		100.0 feet		٨	loise Sc	ource E	levatio	ns (in fe	eet)			
Centerline Dist. to Observ		100.0 feet				Auto	s: 2	2.000				
Barrier Distance to Observ	er:	0.0 feet			Medium Trucks: 4.000							
Observer Height (Above Pa	d):	5.0 feet				y Truck		3.006	Grade Ad	iustment	: 0.0	
Pad Elevation	on:	0.0 feet				-						
Road Elevation	on:	0.0 feet	L	Lane Equivalent Distance (in feet)								
Road Grad	de:	0.0%			Autos: 96.607							
Left Vie	W:	-90.0 degree		Medium Trucks: 96.566								
Right Vie	W.	90.0 degrees			Heavy Trucks: 96.608							
FHWA Noise Model Calcula	tions											
VehicleType REME	_ 7	Traffic Flow	Dista	ance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos: 7	1.78	-4.50		-4.39)	-1.20	20 -4.87		4.87 0.000		0.000	
Medium Trucks: 83	2.40	-21.74		-4.39)	-1.20		<i>-4.97</i> 0.00		000	0.000	
Heavy Trucks: 80	5.40	-25.69		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (withou	ıt Topo and	barrier	attent	uation)							
VehicleType Leq Peak	Hour	Leq Day	· I	Leq Ev	rening	Leq	Night		Ldn		NEL	
Autos:	61.7	:	59.8		58.0		52	52.0 60.6		5	61.2	
Medium Trucks:	55.1	;	53.6		47.2		45	.7	54.	1	54.4	
Heavy Trucks:	55.1	;	53.7		44.7 45		45	45.9 54.3		3	54.4	
Vehicle Noise:	63.3		61.5		58.6		53	.7	62.2	2	62.7	
Centerline Distance to Nois	e Con	tour (in feet))									

70 dBA

30

33

Ldn:

CNEL:

65 dBA

65

70

60 dBA

141

151

55 dBA 303

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd. Number: 8141
Road Segment: b/w Waterworks Wy. and ICD Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data						Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	6,900 vehicles	3					Autos:	15				
Peak Hour	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15				
Peak F	lour Volume:	690 vehicles	3		Hea	avy Tru	cks (3+	Axles):	15				
Ve	ehicle Speed:	55 mph	Ve	Vehicle Mix									
Near/Far La	ne Distance:	52 feet						Day	Evening	Night	Daily		
Site Data							Autos:	77.5%		9.6%			
Ba	rrier Height:	0.0 feet			Me	dium T	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0			Н	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
• • • •	ist. to Barrier:	100.0 feet		N/	oice Co	oo E	lovotio	ns (in fe	2041				
Centerline Dist.	to Observer:	100.0 feet		/٧٥	oise so			•	et)				
Barrier Distance	to Observer:	0.0 feet			Mediun	Auto	_	2.000 1.000					
Observer Height	5.0 feet			Truck Truck	_	3.006	Grade Ad	iustmont					
P	ad Elevation:	0.0 feet			пеач	y Truck	S. C	5.006	Orace Au	ustinent	. 0.0		
Ro	ad Elevation:	0.0 feet		La	Lane Equivalent Distance (in feet)								
	Road Grade:	0.0%		Autos: 96.607									
	Left View:	-90.0 degrees			Medium Trucks: 96.566								
	Right View:	90.0 degree	es		Heavy	/ Truck	s: 96	8.608					
FHWA Noise Mod	lel Calculations	5											
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite I	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:		-4.43		-4.39		-1.20		-4.87		000	0.000		
Medium Trucks:	82.40	-21.67		-4.39		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-25.63		-4.39		-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (witho	out Topo and	barrier a	attenua	ation)								
VehicleType	Leq Peak Hou	r Leq Day	· L	eq Eve	ening	Leq	Night		Ldn	CI	NEL		
Autos:	61.	.8	59.9		58.1	-	52	.0	60.7		61.3		
Medium Trucks:	55.	.1	53.6		47.3 45.7			.7	54.2	54.4			
Heavy Trucks:	55.	.2	53.8		44.7		46	.0	54.3	3	54.4		

Sunday,	May	20	2012
Suriuay,	iviay	20,	2012

Vehicle Noise:

63.3

Centerline Distance to Noise Contour (in feet)

61.6

Ldn:

CNEL:

58.6

70 dBA

31

33

53.7

65 dBA

66

71

62.3

60 dBA

142

153

62.8

55 dBA

306

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: n/o Alton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA				ľ	VOISE	MODE	L INPUT	S		
Highway Data				S	ite Con	ditions	(Hard	= 10, So	oft = 15)			
Average Daily	Traffic (Adt):	6,100 vehicles	s					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15			
Peak H	lour Volume:	610 vehicles	s		He	avy Tru	icks (3+	Axles):	15			
Ve	ehicle Speed:	55 mph		V	ehicle l	Mix						
Near/Far La	ane Distance:	52 feet				icleType	e	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		9.6%	-	
	nrrier Height:	0.0 feet			М	edium 7		84.8%		10.3%	1.84%	
Barrier Type (0-V	•	0.0			ŀ	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
	ist. to Barrier:	100.0 feet										
Centerline Dist.		100.0 feet		۸	loise So			ns (in fe	eet)			
Barrier Distance	to Observer:	0.0 feet				Auto		2.000				
Observer Height		5.0 feet				m Truck	_	1.000	Crada Ad			
•	Pad Elevation:	0.0 feet			Heav	y Truck	(S. E	3.006	Grade Ad	justment.	0.0	
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	eet)			
	Road Grade:	0.0%				Auto	os: 96	6.607				
	Left View:	-90.0 degree	es		Medium Trucks: 96.566							
	Right View:	90.0 degree	es		Heavy Trucks: 96.608							
FHWA Noise Mod	lel Calculations	S										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	-4.97		-4.39		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-22.21		-4.39		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-26.16		-4.39		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	ıation)							
VehicleType	Leq Peak Hou			Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	_	.2	59.3		57.6		51		60.1	1	60.7	
Medium Trucks:	54		53.1		46.7		45	.2	53.7	7	53.9	
Heavy Trucks:		.6	53.2		44.2		45	.4	53.8	3	53.9	
Vehicle Noise:	62	.8	61.0		58.1		53	.2	61.8	3	62.2	
Centerline Distan	ce to Noise Co	ontour (in feet)									
				70 d	BA	65	dBA	6	0 dBA	55	dBA	

Ldn:

CNEL:

28

30

61

65

131

141

282

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: s/o Alton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	9,500 vehicles	S					Autos:	15			
Peak Hou	Percentage:	10%			Me	dium Tı	ucks (2	Axles):	15			
Peak I	Hour Volume:	950 vehicles	S		He	avy Tru	cks (3+	Axles):	15			
Ve	ehicle Speed:	55 mph		V	ehicle l	Miy						
Near/Far La	ane Distance:	52 feet				icleType	9	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		9.6%		
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V	•	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%	
• • • •	ist. to Barrier:	100.0 feet			/-: C-			/! f.	-41			
Centerline Dist.		100.0 feet		N	ioise Sc		levation	•	eet)			
Barrier Distance	to Observer:	0.0 feet			N 4 = =1:	Auto		.000				
Observer Height	(Above Pad):	5.0 feet			Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0							
F	Pad Elevation:	0.0 feet			neav	у ттиск	is. 8	.006	Grade Auj	usimeni.	0.0	
Road Elevation: 0.0 feet				L	Lane Equivalent Distance (in feet)							
	Road Grade:	0.0%			Autos: 96.607							
	Left View:	-90.0 degree	es		Medium Trucks: 96.566							
	Right View:	90.0 degree	es		Heavy Trucks: 96.608							
FHWA Noise Mod	lel Calculation	S										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Atte	en Ber	m Atten	
Autos:	71.78	-3.05		-4.39		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40	-20.28		-4.39		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-24.24		-4.39		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barrie	er attenu	ation)							
VehicleType	Leq Peak Hou			Leq Eve	ening	Leq	Night		Ldn	CI	VEL	
Autos:			61.2		59.5		53.		62.0		62.6	
Medium Trucks:	56	.5	55.0		48.7		47.	1	55.6	6	55.8	
•	Heavy Trucks: 56.6 55.1				46.1		47.		55.7		55.8	
Vehicle Noise:	64	.7	63.0		60.0		55.	1	63.7	7	64.2	
Centerline Distan	ce to Noise Co	ontour (in feet,)		1					1		
				70 dl	BA	65	dBA	6	60 dBA	55	dBA	

Ldn:

CNEL:

38

41

82

88

176

189

379

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: n/o Quail Hill Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	7,600 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	760 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		1	/ehicle l	Miy					
Near/Far La	ne Distance:	52 feet		_		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	_	9.6%	-
	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0			ŀ	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		^	Voise So			•	eet)		
Barrier Distance		0.0 feet				Auto		.000			
Observer Height		5.0 feet				m Truck		.000	0 1- 4-1		0.0
•	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	justment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distai	nce (in t	feet)		
	Road Grade:	0.0%				Auto	s: 96	5.607			
	Left View:	-90.0 degree	es		Mediui	m Truck	s: 96	5.566			
	Right View:	90.0 degree			Heav	y Truck	s: 96	8.608			
FHWA Noise Mod	lal Calavilatian										
VehicleType	er Carculation REMEL	S Traffic Flow	Di	stance	Finite	Road	Fres	nol	Barrier Att	en Ber	m Atten
Autos:		-4.01	Di	-4.39		-1.20	1163	-4.87		000	0.000
Medium Trucks:	_	-21.25		-4.39		-1.20		-4.97		000	0.000
Heavy Trucks:		-25.21		-4.39		-1.20		-5.16		000	0.000
<u> </u>											
Unmitigated Nois VehicleType	•					100	Niabt		l do		VEL
Autos:	Leq Peak Hou 62		60.3	Leq Ev	58.5	Leq	Night 52	5	<i>Ldn</i> 61.1		v <i>⊑L</i> 61.7
Medium Trucks:			54.1		47.7		46		54.6		54.8
Heavy Trucks:			54.1		45.1		46		54.0 54.7		54.9
Vehicle Noise:			62.0		59.0		54		62.7		63.2
										•	33.2
Centerline Distan	ce to Noise Co	ontour (in teet	<i>)</i>	70 d	IBA	65	dBA	6	60 dBA	55	dBA
			L	, 5 4	_, ,		ر ر ر ر ر ر ر			50	G-27 1

Ldn:

CNEL:

33

35

70

76

152

163

327

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: s/o Quail Hill Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				1	NOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, So	oft = 15)		
Average Daily	Traffic (Adt):	12,000 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	1,200 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		V	/ehicle l	Miy					
Near/Far La	ne Distance:	52 feet				icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-	•	97.42%
Ra	rrier Height:	0.0 feet			Ме	edium 7	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0			F	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet									
Centerline Dist.		100.0 feet		^	loise So			ns (in fe	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height (5.0 feet				m Truck	_	1.000	0 - 4 - 4 - 4		0.0
• .	ad Elevation:	0.0 feet			Heav	y Truck	rs: E	3.006	Grade Ad	iustment:	0.0
	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	feet)		
	Road Grade:	0.0%				Auto	os: 96	6.607	<u> </u>		
	Left View:	-90.0 degre	es		Mediui	m Truck	ks: 96	6.566			
	Right View:	90.0 degre			Heav	y Truck	ks: 96	6.608			
FHWA Noise Mod	al Calculation										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-2.03		-4.39		-1.20		-4.87		000	0.000
Medium Trucks:	82.40	-19.27		-4.39		-1.20		-4.97		000	0.000
Heavy Trucks:	86.40	-23.22		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Hou			Leq Ev		Leq	Night		Ldn	CI	VEL
Autos:	64	.2	62.3	-	60.5	<u>-</u>	54	.4	63.1		63.7
Medium Trucks:	57	'.5	56.0		49.7		48	.1	56.6	3	56.8
Heavy Trucks:	57	. .6	56.2		47.1		48	.4	56.7	7	56.9
Vehicle Noise:	65	5.7	64.0		61.0		56	.1	64.7	7	65.2
Centerline Distance	ce to Noise Co	ontour (in feet	t)								
				70 d	BA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

44

48

95

103

206

221

443

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Laguna Canyon Rd.

Road Segment: n/o SR-73 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)		
Average Daily Traffic (Adt):	34,400 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	3,440 vehicles	S	He	avy Trucks (3+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Mix				
Near/Far Lane Distance:	52 feet			icleType	Dov	Evening	Night	Doily
Site Date			veri		Day 5: 77.5%	•	9.6%	<i>Daily</i> 97.42%
Site Data			A 4.	Autos edium Trucks			10.3%	1.84%
Barrier Height:	0.0 feet							0.74%
Barrier Type (0-Wall, 1-Berm):			<i>'</i>	Heavy Trucks	s: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:	0.0 feet					- ·		
Road Elevation:	0.0 feet		Lane Eq	uivalent Dis		feet)		
Road Grade:					96.607			
Left View:					96.566			
Right View:	90.0 degree	es	Heav	y Trucks:	96.608			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 2.54	-4.	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -14.70	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -18.65	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H			Evening	Leq Nigh	t	Ldn		VEL
Autos:	88.7	66.8	65.1	;	59.0	67.6	3	68.2
Medium Trucks: 6	52.1	60.6	54.2	;	52.7	61.2	2	61.4
Heavy Trucks:	52.2	60.7	51.7		52.9	61.3	3	61.4
Vehicle Noise:	70.3	68.5	65.6		60.7	69.3	3	69.7
Centerline Distance to Noise	Contour (in feet)						

70 dBA

89

96

Ldn:

CNEL:

65 dBA

193

207

60 dBA

415

446

55 dBA

894

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Laguna Hills Dr.

Road Segment: s/o Paseo de Valencia

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 24,200 vehicle	es			Autos:	15		
Peak Hour Percentage	·		Me	dium Trucks (2	2 Axles):	15		
Peak Hour Volume	: 2,420 vehicle	es	He	avy Trucks (3-	- Axles):	15		
Vehicle Speed	: 50 mph		Vehicle I	Mix				
Near/Far Lane Distance	. 70 feet				Dou	Fuening	Niaht	Doilu
Site Date			veni	icleType	<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	Daily
Site Data				Autos:				97.42%
Barrier Height				edium Trucks:	84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)				leavy Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier			Noise Sc	ource Elevation	ns (in fe	eet)		
Centerline Dist. to Observer				Autos:	2.000			
Barrier Distance to Observer	: 0.0 feet		Mediur		4.000			
Observer Height (Above Pad)	5.0 feet				8.006	Grade Adj	iustment:	0.0
Pad Elevation	: 0.0 feet							
Road Elevation	: 0.0 feet		Lane Eq	uivalent Dista		feet)		
Road Grade	: 0.0%				3.723			
Left View	: -90.0 degre	es	Mediur	n Trucks: 9	3.680			
Right View	: 90.0 degre	es	Heav	y Trucks: 9	3.723			
FHWA Noise Model Calculati	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Att	en Ber	m Atten
Autos: 70.3	20 1.43	-4.	.20	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 81.	00 -15.81	-4.	.19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 85.5	38 -19.76	-4.	.20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout Topo and	barrier atte	enuation)					
VehicleType Leq Peak F	lour Leq Day	y Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	66.2	64.3	62.6	56	6.5	65.1		65.7
Medium Trucks:	59.8	58.3	51.9	50).4	58.8	3	59.1
Heavy Trucks:	60.2	58.8	49.8	51	0.1	59.4	<u> </u>	59.5
Vehicle Noise:	67.9	66.2	63.1	58	3.3	66.9)	67.4
Centerline Distance to Noise	Contour (in feet	t)						

70 dBA

62

67

Ldn:

CNEL:

65 dBA

134

144

60 dBA

288

310

55 dBA

621

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Laguna Hills Dr.

Road Segment: w/o Moulton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIF	IC INP	UT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (A Peak Hour Percenta Peak Hour Volu	ge:	,700 vehicles 10% ,070 vehicles					•	Autos: Axles): Axles):			
Vehicle Spe Near/Far Lane Distar		55 mph 88 feet		ν	/ehicle l Veh	Vlix icleType	<u>.</u>	Day	Evening	Night	Daily
Site Data							Autos:	77.5%			97.42%
Barrier Heig Barrier Type (0-Wall, 1-Bel Centerline Dist. to Barrier Centerline Dist. to Obser Barrier Distance to Obser Observer Height (Above Pad Pad Elevat	rm): rier: ver: ver: ad): ion:	0.0 feet 0.0 100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet			loise So Mediui	Auto n Truck ry Truck	rucks: levatio s: 2 s: 4 s: 8	2.000 4.000 3.006	2.7% eet) Grade Adj	10.3% 10.8% iustment.	1.84% 0.74% 0.0
Road Gra Left Vi Right Vi	ew: ew:	0.0% -90.0 degree 90.0 degree				Auto n Truck ry Truck	s: 89	9.850 9.805 9.850			
FHWA Noise Model Calcul					1						
Medium Trucks:	71.78 32.40 36.40	2.05 -15.19 -19.15		<i>ce</i> -3.92 -3.92 -3.92		-1.20 -1.20 -1.20 -1.20	Fres	-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Noise Levels	(withou	ıt Topo and	barrier a	ttenı	ıation)						
VehicleType Leq Pea	k Hour	Leq Day	Le	q Ev	ening	Leq	Night		Ldn	CI	VEL
Autos: Medium Trucks: Heavy Trucks:	68.7 62.1 62.1	(66.8 60.6 60.7		65.0 54.2 51.7		59 52 52	.7	67.6 61.1 61.3	1	68.2 61.4 61.4
Vehicle Noise: Centerline Distance to Noi	70.3	(68.5		65.6		60		69.2		69.7

70 dBA

89

96

Ldn:

CNEL:

65 dBA

192

207

60 dBA

414

445

55 dBA

891

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Lake Rd. Number: 8141
Road Segment: n/o Alton Pkwy. Analyst: B. Lawson

SITE SPECIFIC	INPU	T DATA			N	IOISE	MODE	L INPUT	S	
Highway Data				Site Cor	nditions	(Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt	: 5,80	00 vehicles	S				Autos:	15		
Peak Hour Percentage	-	10%		Me	edium Tr	ucks (2	Axles):	15		
Peak Hour Volume	: 58	80 vehicles	;	He	eavy True	cks (3+	Axles):	15		
Vehicle Speed	l: 3	35 mph		Vehicle	Miv					
Near/Far Lane Distance	: 2	20 feet				,	Dov	Evening	Night	Doily
Site Data				ver	nicleType		<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	Daily
Site Data					ر ledium T	Autos:				
Barrier Heigh		0.0 feet					84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm		0.0			Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrie		0.0 feet		Noise S	ource E	levatio	ns (in fe	eet)		
Centerline Dist. to Observe	_	0.0 feet			Auto	s: 2	.000	<u> </u>		
Barrier Distance to Observe	T (0.0 feet		Mediu	ım Truck	s: 4	.000			
Observer Height (Above Pad		5.0 feet			vy Truck		.006	Grade Ad	iustment.	0.0
Pad Elevation		0.0 feet								
Road Elevation): (0.0 feet		Lane Eq				feet)		
Road Grade	e: (0.0%			Auto).544			
Left Viev	<i>:</i> -9	0.0 degree	es .	Mediu	ım Truck	s: 99	.504			
Right Viev	<i>i:</i> 90	0.0 degree	es.	Hea	vy Truck	s: 99).544			
FHWA Noise Model Calculate	ons									
VehicleType REMEL	Tra	affic Flow	Distance	e Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
<i>Aut</i> os: 64.	30	-3.23	-4	.59	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 75.	75	-20.46	-4	.59	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 81.	57	-24.42	-4	.59	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout	Topo and I	barrier att	enuation)						
VehicleType Leq Peak I	lour	Leq Day	Leq	Evening	Leq	Night		Ldn	CI	VEL
Autos:	55.3	į	53.4	51.6	;	45.	.6	54.2	2	54.8
Medium Trucks:	49.5	4	18.0	41.6	;	40.	.1	48.5	5	48.8
Heavy Trucks:	51.4		19.9	40.9)	42.	.2	50.5	5	50.6
Vehicle Noise:	57.5	ļ	55.8	52.4		48.	.0	56.5	5	56.9
Centerline Distance to Noise	Conto	ur (in feet)								

70 dBA

13

13

Ldn: CNEL: 65 dBA

27

29

60 dBA

58

62

55 dBA

126

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Portola Pkwy.

Number: 8141

Analyst: B. Lawson

SITE S	SPECIFIC IN	PUT DATA				ſ	NOISE	MODE	L INPUT	S	
Highway Data				3	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 1	8,000 vehicles	S					Autos:	15		
Peak Hour I	Percentage:	10%			Me	dium Tr	ucks (2	2 Axles):	15		
Peak Ho	our Volume:	1,800 vehicles	3		He	avy Tru	cks (3+	- Axles):	15		
Vel	nicle Speed:	50 mph		,	/ehicle l	Miv					
Near/Far Lar	ne Distance:	70 feet		_		icleType	2	Day	Evening	Night	Daily
Site Data					VCIII		Autos:	77.5%	_	9.6%	_
		0.0 (1			lΛe	edium T		84.8%		10.3%	1.84%
	rier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-Wa Centerline Dis	•	0.0 100.0 feet									011 170
Centerline Dist. t		100.0 feet		^	loise Sc	urce E	levatio	ns (in fe	eet)		
Barrier Distance t		0.0 feet				Auto		2.000			
Observer Height (A		5.0 feet				n Truck	_	4.000			
• ,	d Elevation:	0.0 feet			Heav	y Truck	s:	8.006	Grade Ad	iustment.	: 0.0
	d Elevation:	0.0 feet		I	ane Eq	uivalen	t Dista	nce (in	feet)		
	Road Grade:	0.0%				Auto		3.723	,		
,	Left View:	-90.0 degree	25		Mediui	n Truck		3.680			
	Right View:	90.0 degree				y Truck		3.723			
FHWA Noise Mode											_
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite		Fre		Barrier Att		m Atten
Autos:	70.20	0.14		-4.20		-1.20		-4.87		000	0.000
Medium Trucks:	81.00	-17.09		-4.19		-1.20		-4.97		000	0.000
Heavy Trucks:	85.38	-21.05		-4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	er atteni	uation)						
VehicleType	Leq Peak Hou			Leq Ev	Ŭ	Leq	Night		Ldn	CI	NEL
Autos:	65	.0	63.1		61.3		55	5.2	63.9	9	64.5
Medium Trucks:	58.	.5	57.0		50.6		49	9.1	57.6	6	57.8
Heavy Trucks:	58.	.9	57.5		48.5		49	9.7	58.1		58.2
Vehicle Noise:	66	.6	64.9		61.8		57	7.1	65.6	6	66.1
Centerline Distanc	e to Noise Co	ontour (in feet,)								
				70 a			dBA	ϵ	60 dBA		dBA
			Ldn:	5′		1	10		237	5	10

CNEL:

55

254

118

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o SR-241 SB Ramps

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	ATA			NO	ISE MODE	L INPUT	S	
Highway Data					Site Con	ditions (H	ard = 10, So	oft = 15)		
Average Daily	Traffic (Adt):	27,500 ve	ehicles				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truck	ks (2 Axles):	15		
Peak F	lour Volume:	2,750 ve	ehicles		He	avy Trucks	s (3+ Axles):	15		
Ve	ehicle Speed:	50 m	ıph		Vehicle I	Wix				
Near/Far La	ane Distance:	70 fe	eet			icleType	Day	Evening	Night	Daily
Site Data						Aut		J	9.6%	97.42%
Ra	rrier Height:	0.0 f	oot		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
, ,	ist. to Barrier:	100.0 f	eet				(' t	4)		
Centerline Dist.		100.0 f		1	Noise Sc		ations (in f	eet)		
Barrier Distance		0.0 f				Autos:	2.000			
Observer Height		5.0 f			Mediui	n Trucks:	4.000			
_	(Above Fau). Pad Elevation:	0.0 f			Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0
	ad Elevation:	0.0 f			Lane Eq	uivalent D	istance (in	feet)		
	Road Grade:	0.0%				Autos:	93.723	,		
	Left View:		degrees		Mediu	m Trucks:	93.680			
	Right View:		degrees			y Trucks:	93.723			
	ragin view.	90.0	aegrees		noav	y Truono.	30.720			
FHWA Noise Mod	lel Calculation	าร		1						
VehicleType	REMEL	Traffic F	-low	Distance	Finite	Road	Fresnel	Barrier Att	en Beri	m Atten
Autos:	70.20)	1.98	-4.20	0	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00) -	15.25	-4.19	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	} -	19.21	-4.20	0	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	nout Topo	and ba	rrier atten	uation)					
VehicleType	Leq Peak Ho	ur Le	q Day	Leg E	vening	Leq Ni	ght	Ldn	CI	VEL
Autos:	60	6.8	64	.9	63.1		57.1	65.7	7	66.3
Medium Trucks:	60	0.4	58	.8	52.5		50.9	59.4	1	59.6
Heavy Trucks:	60	3.0	59	.4	50.3		51.6	59.9	9	60.0
Vehicle Noise:	68	8.5	66	.7	63.7		58.9	67.5	5	67.9

70 dBA

68

73

Ldn: CNEL: 65 dBA

146

157

60 dBA

314

337

55 dBA

676

727

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Rancho Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			NOIS	E MODE	L INPUT	S		
Highway Data				Site Cor	nditions (Har	d = 10, So	oft = 15)			
Average Daily	Traffic (Adt):	36,400 vehicles	S			Autos:	15			
Peak Hour	Percentage:	10%		Me	edium Trucks	(2 Axles):	15			
Peak F	lour Volume:	3,640 vehicles	S	He	eavy Trucks (3+ <i>Axles):</i>	15			
Ve	ehicle Speed:	50 mph		Vehicle	Mix					
Near/Far La	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily	
Site Data					Autos		J	9.6%	97.42%	
Ba	rrier Height:	0.0 feet		М	edium Trucks	s: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V	•	0.0			Heavy Trucks	s: 86.5%	2.7%	10.8%	0.74%	
	ist. to Barrier:	100.0 feet		Noise Source Elevations (in feet)						
Centerline Dist.	to Observer:	100.0 feet		Autos: 2.000						
Barrier Distance	to Observer:	0.0 feet		Modiu	m Trucks:	4.000				
Observer Height	(Above Pad):	5.0 feet				8.006	Grade Ad	iustmont		
P	ad Elevation:	0.0 feet		пеа	vy Trucks:	6.006	Grade Ad	justin e nt.	0.0	
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)			
	Road Grade:	0.0%			Autos:	93.723				
	Left View:	-90.0 degree	es	Mediu	m Trucks:	93.680				
	Right View:	90.0 degree	es	Hea	vy Trucks:	93.723				
FHWA Noise Mod	lel Calculation	ne								
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten	
Autos:	70.20	3.20	-4	.20	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	81.00	-14.04	-4	.19	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	85.38	-17.99	-4	.20	-1.20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrier att	enuation)						
VehicleType	Leq Peak Ho	our Leq Day	Leq	Evening	Leq Nigh	t	Ldn	CI	VEL	
Autos:	6	8.0	66.1	64.3		58.3	66.9	9	67.5	
Medium Trucks:	6	1.6	60.1	53.7		52.2	60.6	3	60.9	
Heavy Trucks:	6	2.0	60.6	51.5		52.8	61.	1	61.3	
Vehicle Noise:	68.0	64.9		60.1	68.7	7	69.1			

70 dBA

82

88

Ldn:

CNEL:

65 dBA

176

189

60 dBA

379

407

55 dBA

815

876

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: n/o Trabuco Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DAT	ГА			NO	ISE MODE	L INPUT	S	
Highway Data					Site Con	ditions (H	ard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	36,100 veh	nicles				Autos:	15		
	Percentage:	10%			Med	dium Truck	ks (2 Axles):	15		
Peak H	lour Volume:	3,610 veh	nicles		Hea	avy Trucks	s (3+ Axles):	15		
Ve	ehicle Speed:	50 mp	h	,	Vehicle N	Niy				
Near/Far La	ne Distance:	70 fee	t			cleType	Day	Evening	Night	Daily
Site Data						Aut		_	9.6%	,
	rrier Height:	0.0 fe	ot		Ме	dium Truc	ks: 84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0	EL		H	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 fe	≏ t							
Centerline Dist.		100.0 fe		1	Noise So		ations (in f	eet)		
Barrier Distance		0.0 fe				Autos:	2.000			
Observer Height		5.0 fe				n Trucks:	4.000			
•	ad Elevation:	0.0 fe			Heav	/ Trucks:	8.006	Grade Ad	justment:	0.0
-	ad Elevation:	0.0 fe		1	ane For	ivalent D	istance (in	feet)		
	Road Grade:	0.0%	El	_	-uo =q	Autos:	93.723			
	Left View:	-90.0 de	arooo		Mediun	n Trucks:	93.680			
			•			/ Trucks:	93.723			
	Right View:	90.0 de	grees		i icav	y Trucks.	93.723			
FHWA Noise Mod	lel Calculatio	ns								
VehicleType	REMEL	Traffic Flo	ow Di	istance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20) 3	3.17	-4.20)	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00) -14	.07	-4.19	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	3 -18	3.03	-4.20)	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (wit	hout Topo a	and barr	ier atten	uation)					
VehicleType	Leq Peak Ho	our Leq	Day	Leq Ev	ening	Leq Ni	ght	Ldn	CI	VEL
Autos:	6	8.0	66.1		64.3		58.3	66.9	9	67.5
Medium Trucks:	6	1.5	60.0		53.7		52.1	60.6	6	60.8
Heavy Trucks:	6	2.0	60.5		51.5		52.7	61.1	1	61.2
Vehicle Noise:	6	9.7	67.9		64.9		60.1	68.6	5	69.1

70 dBA

81

87

Ldn:

CNEL:

65 dBA

175

188

60 dBA

376

404

55 dBA

811

871

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Trabuco Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	d=10, So	oft = 15)		
Average Daily Traffic (Adt):	41,000 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks (2 Axles):	15		
Peak Hour Volume:	4,100 vehicles	S	He	avy Trucks (3	+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Miv				
Near/Far Lane Distance:	88 feet			icleType	Day	Evening	Night	Daily
Site Data			V 077	Autos.	_	J	9.6%	97.42%
	0.0.5		Me	edium Trucks.			10.3%	1.84%
Barrier Height:	0.0 feet 0.0			leavy Trucks.			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:							101070	011 170
Centerline Dist. to Barrier: Centerline Dist. to Observer:			Noise So	ource Elevati	ons (in fe	eet)		
				Autos:	2.000			
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad): Pad Elevation:			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Road Elevation:	0.0 feet		I ane Fa	uivalent Dist	ance (in :	foot)		
Road Grade:	0.0 feet 0.0%		Lanc Lq		39.850	1001)		
Left View:			Modiu		39.805			
Right View:					39.850			
Aight view.	90.0 degree	55	ricav	y Trucks.	33.030			
FHWA Noise Model Calculation	ns		II.					
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 3.31	-3.	92	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -13.93	-3.	92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -17.89	-3.	92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL
Autos: 7	70.0	68.1	66.3	6	0.2	68.9	9	69.5
Medium Trucks:	3.4	61.8	55.5	5	3.9	62.4	1	62.6
Heavy Trucks:6	3.4	62.0	52.9	5	4.2	62.5	5	62.7
Vehicle Noise:	' 1.5	69.8	66.8	6	2.0	70.5	5	71.0
Centerline Distance to Noise	Contour (in feet)						

70 dBA

108

116

Ldn:

CNEL:

65 dBA

233

250

60 dBA

502

540

55 dBA

1,081

1,163

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: n/o Jeronimo Rd.

Number: 8141

Analyst: B. Lawson

	INPUT DATA				NOIS	E MODE	L INPUT	S	
Highway Data			S	ite Cond	ditions (Har	d = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	39,500 vehicl	es				Autos:	15		
Peak Hour Percentage:	10%			Med	lium Trucks	(2 Axles):	15		
Peak Hour Volume:	3,950 vehicl	es		Hea	avy Trucks (3+ Axles):	15		
Vehicle Speed:	55 mph		V	ehicle N	liy				
Near/Far Lane Distance:	88 feet				cleType	Day	Evening	Night	Daily
Site Data				70777	Autos			9.6%	,
	0.0 feet			Me	dium Trucks			10.3%	1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm):				_	eavy Trucks			10.8%	0.74%
Centerline Dist. to Barrier:									
Centerline Dist. to Observer:			N	oise So	urce Elevat	•	eet)		
Barrier Distance to Observer:					Autos:	2.000			
Observer Height (Above Pad):					n Trucks:	4.000			
Pad Elevation:				Heavy	/ Trucks:	8.006	Grade Adj	justment:	0.0
Road Elevation:			Lá	ane Equ	ivalent Dis	ance (in	feet)		
Road Grade:						89.850			
Left View:		ees		Medium	n Trucks:	89.805			
Right View:	•			Heavy	/ Trucks:	89.850			
FHWA Noise Model Calculation									
VehicleType REMEL	Traffic Flow		ance	Finite I			Barrier Att		m Atten
Autos: 71.7			-3.92		-1.20	-4.87		000	0.000
	0 -14.0	a	200						
Medium Trucks: 82.4		-	-3.92		-1.20	-4.97		000	0.000
Medium Trucks: 82.4 Heavy Trucks: 86.4		-	-3.92 -3.92		-1.20 -1.20	-4.97 -5.16		000	0.000
	0 -18.0	5	-3.92						
Heavy Trucks: 86.4	0 -18.0	5 d barrie i	-3.92	ation)		-5.16		000	
Heavy Trucks: 86.4 Unmitigated Noise Levels (wind Vehicle Type Leq Peak H	0 -18.0	5 d barrie i	-3.92 r attenu	ation)	-1.20 Leq Nigh	-5.16	0.0	000 <i>CI</i>	0.000
Heavy Trucks: 86.4 Unmitigated Noise Levels (wind Vehicle Type Leq Peak House Autos: 66.4	0 -18.0 thout Topo and our Leq Da	5 d barrie i ay	-3.92 r attenu	ation) ening	-1.20 Leq Nigh	-5.16	0.0	000 CI	0.000 VEL
Heavy Trucks: 86.4 Unmitigated Noise Levels (wind VehicleType Leq Peak House Autos: 66.4 Medium Trucks: 66.4	thout Topo and our Leq Date 59.8	5 d barrier ay 67.9	-3.92 r attenu	ening 66.1	-1.20 Leq Nigh	-5.16	0.0 Ldn 68.7	000 CI 7 2	0.000 VEL 69.3
Heavy Trucks: 86.4 Unmitigated Noise Levels (wind Noise Levels) VehicleType Leq Peak Homeonic Control Legister (Noise Levels) Autos: 66 Medium Trucks: 66 Heavy Trucks: 66	0 -18.0 thout Topo and our Leq Da 69.8 63.2	5 d barrie ay 67.9 61.7	-3.92 r attenu	ening 66.1 55.3	-1.20 Leq Nigh	-5.16 t 60.1	0.0 Ldn 68.7 62.2	000 <i>CI</i> 7 2 4	0.000 VEL 69.3 62.5
Heavy Trucks: 86.4 Unmitigated Noise Levels (wind Noise Levels) VehicleType Leq Peak Homeonic Community	18.0 chout Topo and our Leq Date 69.8 63.2 63.2	67.9 61.8 69.6	-3.92 r attenu	ening 66.1 55.3 52.8	-1.20 Leq Nigh	-5.16 t 60.1 53.8 54.0	0.0 <i>Ldn</i> 68.7 62.2 62.4	000 <i>CI</i> 7 2 4	0.000 NEL 69.3 62.5 62.5

Ldn:

CNEL:

105

113

227

244

489

526

1,054

1,134

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Jeronimo Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)		
Average Daily Traffic (Adt)	: 40,400 vehicle	es			Autos:	15		
Peak Hour Percentage	•		Me	dium Trucks	(2 Axles):	15		
Peak Hour Volume	4,040 vehicle	es	He	avy Trucks (3	3+ Axles).	15		
Vehicle Speed	: 55 mph		Vehicle i	Mix				
Near/Far Lane Distance	: 88 feet			icleType	Day	Evening	Night	Daily
Site Data			ven	Autos		_	9.6%	_
			Λ.4.	Autos edium Trucks			10.3%	1.84%
Barrier Height				J aium Trucks J eavy Trucks			10.3%	0.74%
Barrier Type (0-Wall, 1-Berm)			'	leavy Trucks	. 60.57	0 2.1/0	10.0 /0	0.7470
Centerline Dist. to Barrier			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist. to Observer				Autos:	2.000			
Barrier Distance to Observer			Mediu	m Trucks:	4.000			
Observer Height (Above Pad)			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation								
Road Elevation			Lane Eq	uivalent Dist		feet)		
Road Grade					89.850			
Left View	: -90.0 degre	es			89.805			
Right View	: 90.0 degre	es	Heav	y Trucks:	89.850			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos: 71.	78 3.24	-3.	92	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	-14.00	-3.	92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	40 -17.95	-3.	92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	thout Topo and	l barrier atte	nuation)					
VehicleType Leq Peak F	lour Leq Da	y Leq	Evening	Leq Nigh	<u> </u>	Ldn	CI	VEL
Autos:	69.9	68.0	66.2	6	60.2	68.8	3	69.4
Medium Trucks:	63.3	61.8	55.4	Ę	53.9	62.3	3	62.6
Heavy Trucks:	63.3	61.9	52.9	Ę	54.1	62.5	5	62.6
Vehicle Noise:	71.5	69.7	66.8	(61.9	70.4	4	70.9
Centerline Distance to Noise	Contour (in fee	t)						

70 dBA

107

115

Ldn: CNEL: 65 dBA

231

248

60 dBA

497

534

55 dBA

1,070

1,151

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: n/o Muirlands Bl.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d=10, S	oft = 15)		
Average Daily Traffic (Adt):	31,300 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles).	15		
Peak Hour Volume:	3,130 vehicle	s	He	avy Trucks (3	3+ Axles).	15		
Vehicle Speed:	55 mph		Vehicle	Miy				
Near/Far Lane Distance:	88 feet			icleType	Day	Evening	Night	Daily
Site Data				Autos		J	9.6%	•
Barrier Height:	0.0 feet		M	edium Trucks			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):			1	Heavy Trucks	: 86.5%	6 2.7%	10.8%	0.74%
Centerline Dist. to Barrier.								
Centerline Dist. to Observer.			Noise So	ource Elevati	•	eet)		
Barrier Distance to Observer:				Autos:	2.000			
Observer Height (Above Pad):				m Trucks:	4.000			
Pad Elevation:			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Road Elevation:			Lane Eq	uivalent Dist	ance (in	feet)		
Road Grade:			•		89.850			
Left View:		es	Mediu		89.805			
Right View:					89.850			
g	00.0 dog.0			,				
FHWA Noise Model Calculation	ons			,				
VehicleType REMEL	Traffic Flow	Distance			esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	78 2.13	-3	.92	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -15.11	-3	.92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	-19.06	-3	.92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night	<u> </u>	Ldn	CI	VEL
Autos:	68.8	66.9	65.1	5	59.1	67.7	7	68.3
Medium Trucks:	62.2	60.7	54.3	5	52.8	61.2	2	61.5
Heavy Trucks:	62.2	60.8	51.8	5	3.0	61.4	4	61.5
Vehicle Noise:	70.4	68.6	65.7		80.8	69.3	3	69.8
Centerline Distance to Noise	Contour (in feet)						

70 dBA

90

97

Ldn:

CNEL:

65 dBA

194

209

60 dBA

419

451

55 dBA

903

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: n/o Rockfield Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS						
Highway Data				S	ite Con	ditions (l	Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt): 4	47,400 vehicles	5				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Truc	cks (2 Axles):	15		
Peak H	our Volume:	4,740 vehicles	5		He	avy Truck	(s (3+ Axles):	15		
Ve	hicle Speed:	55 mph		V	'ehicle l	Miv				
Near/Far La	ne Distance:	88 feet		-		icleType	Day	Evening	Night	Daily
Site Data							utos: 77.5%		9.6%	
	rier Height:	0.0 feet			Me	edium Tru			10.3%	1.84%
Barrier Type (0-W		0.0			F	leavy Tru	icks: 86.5%	2.7%	10.8%	0.74%
Centerline Dis		100.0 feet								
Centerline Dist.		100.0 feet		N	loise So		vations (in f	eet)		
Barrier Distance		0.0 feet				Autos:				
Observer Height (5.0 feet				n Trucks:		0 1 4 1		0.0
• ,	ad Elevation:	0.0 feet			Heav	y Trucks:	8.006	Grade Adj	ustment:	0.0
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalent l	Distance (in	feet)		
	Road Grade:	0.0%				Autos:	89.850			
	Left View:	-90.0 degree	es		Mediui	n Trucks:	89.805			
	Right View:	90.0 degree			Heav	y Trucks:	89.850			
FHWA Noise Mode	el Calculation	S								
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	71.78	3.94		-3.92		-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-13.30		-3.92		-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-17.26		-3.92		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ation)					
VehicleType	Leq Peak Hou	ır Leq Day	L	eq Eve	ening	Leq N	light	Ldn	CI	VEL
Autos:	70	.6	68.7		66.9		60.9	69.5	5	70.1
Medium Trucks:	64	.0	62.5		56.1		54.6	63.0)	63.3
Heavy Trucks:	64	.0	62.6		53.6		54.8	63.2	2	63.3
Vehicle Noise:	72	.2	70.4		67.5		62.6	71.1		71.6

70 dBA

119

128

Ldn:

CNEL:

65 dBA

256

276

60 dBA

553

594

55 dBA

1,190

1,281

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: b/w Rockfield Bl. and I-5 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE SPE	CIFIC IN	PUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Ha	rd = 10, Se	oft = 15)				
Average Daily Traff	fic (Adt): 7	6,500 vehicles	3			Autos:	15				
Peak Hour Perd	entage:	10%		Me	dium Trucks	s (2 Axles):	15				
Peak Hour	Volume:	7,650 vehicles	6	He	avy Trucks	(3+ <i>Axles</i>):	15				
Vehicle	Speed:	55 mph		Vehicle	Miy						
Near/Far Lane D	istance:	88 feet			icleType	Day	Evening	Night	Daily		
Site Data				V 011	Auto		-	9.6%			
	I I a laula ta	0.0 foot		M	edium Truck			10.3%	1.84%		
	Height:	0.0 feet			Heavy Truck			10.8%	0.74%		
Barrier Type (0-Wall, 1 Centerline Dist. to	,	0.0 100.0 feet						. 0.070	011 170		
Centerline Dist. to O		100.0 feet		Noise So	ource Eleva	tions (in f	eet)				
					Autos:	2.000					
Barrier Distance to O		0.0 feet		Mediu	m Trucks:	4.000					
Observer Height (Abo	,	5.0 feet		Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0		
	levation:	0.0 feet		Lano Fo	uivalent Di	stanco (in	foot)				
	levation:	0.0 feet		Lane Eq		-	ieei)				
	d Grade:	0.0%		A 4 12	Autos:	89.850					
	eft View:	-90.0 degree			m Trucks:	89.805					
Rig	ht View:	90.0 degree	es	Heav	y Trucks:	89.850					
FHWA Noise Model Ca	alculations	;									
VehicleType R	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	6.01	-3.	92	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-11.22	-3.	92	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-15.18	-3.	92	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Le	vels (witho	out Topo and I	barrier atte	enuation)							
VehicleType Leq	Peak Hou	r Leq Day	Leq	Evening	Leq Nig	ht	Ldn	CI	VEL		
Autos:	72.	7	70.8	69.0		63.0	71.6	6	72.2		
Medium Trucks:	66.	1 6	64.6	58.2 56.6 65.1							

		Ldn:	164	353	760	1,638
			70 dBA	65 dBA	60 dBA	55 dBA
Centerline Distance to	Noise Contour (in	r feet)				
Vehicle Noise:	74.3	72.5	69.5	64.7	73.2	73.7
Heavy Trucks:	66.1	64.7	55.6	56.9	65.2	65.4

176

380

818

1,762

CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o Avenida Carlota/I-5 SB Ramps

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, S	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	22,900 vehicles 10% 2,290 vehicles			dium Trucks avy Trucks (3		15		
Vehicle Speed: Near/Far Lane Distance:	60 mph 76 feet	3	Vehicle I	· .	Day	Evening	Night	Daily
Site Data				Autos			-	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer:	0.0 feet 0.0 100.0 feet 100.0 feet		ŀ	edium Trucks Heavy Trucks Durce Elevat Autos:	: 86.5%	2.7%	10.3% 10.8%	1.84% 0.74%
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation:	0.0 feet 5.0 feet 0.0 feet 0.0 feet		Heav	m Trucks: yy Trucks: uivalent Dist	4.000 8.006	Grade Ad	justment:	0.0
Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree			m Trucks:	92.547 92.504 92.547			
FHWA Noise Model Calculatio	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	resnel	Barrier Att	en Ber	m Atten
Autos: 73.2 Medium Trucks: 83.6 Heavy Trucks: 87.3	8 -16.84	-4. -4.	11	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	000 000 000	0.000 0.000 0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	nuation)					
VehicleType Leq Peak Ho	our Leq Day	Leq L	Evening	Leq Night	t	Ldn	CI	VEL
Medium Trucks: 6	51.5	66.4 60.0	64.6 53.7	Ę	58.6 52.1	67.2 60.6	6	67.8 60.8
		59.8 68.0	50.8 65.1		52.0 60.2	60.4 68.7		60.5 69.2
Centerline Distance to Noise (Contour (in feet)						

70 dBA

82

89

Ldn:

CNEL:

65 dBA

178

191

60 dBA

383

412

55 dBA

824

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: s/o ICD

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DAT	4			N	NOISE	MODE	L INPUT	S	
Highway Data				,	Site Con	ditions	(Hard:	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	12,700 vehi	cles					Autos:	15		
	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	1,270 vehic	cles		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		_	Vehicle l	Wiy					
Near/Far La	ane Distance:	76 feet				icleType	۵	Day	Evening	Night	Daily
Site Data					VCIII		Autos:	77.5%		9.6%	-
		0.0.6			Me	, edium T		84.8%		10.3%	
	rrier Height:	0.0 fee	i			leavy T		86.5%		10.8%	
Barrier Type (0-V		0.0			<u>'</u>	roavy r	raono.	00.070	2.1 70	10.070	0.7 170
Centerline Dist.	ist. to Barrier:	100.0 feet			Noise Sc	ource E	levatio	ns (in fe	eet)		
		0.0 feet				Auto		2.000			
Barrier Distance					Mediur	n Truck	rs: 4	.000			
Observer Height	(Above Pau). Pad Elevation:	5.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment	: 0.0
-	ad Elevation: ad Elevation:	0.0 feet 0.0 feet			Lane Eq	uivalen	t Distai	nce (in t	feet)		
	Road Grade:	0.0%	•	-	Lune Ly	Auto		2.547	001)		
	Left View:		r000		Modium	אנוט n Truck		2.504			
	Right View:	-90.0 deg				y Truck		2.547			
	Right view.	90.0 deg	1662		Heav	y IIuck	.3. 32				
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flov	v Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	-2.	16	-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-19.	40	-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-23.3	36	-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo ai	nd barr	ier atten	uation)						
VehicleType	Leg Peak Ho		1		vening	Leq	Night		Ldn	C	NEL
Autos:	65	5.7	63.8		62.1		56	.0	64.6	5	65.3
Medium Trucks:	. 59	0.0	57.5		51.1		49	.6	58.0)	58.3
Heavy Trucks:	58	3.7	57.2		48.2		49	.4	57.8	3	57.9
Vehicle Noise:	67	7.2	65.5		62.6		57	.6	66.2	2	66.7
Centerline Distan	ce to Noise C	ontour (in fe	eet)								
		<u>`</u>	-	70 (dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

56

60

120

129

258

278

557

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: b/w Scientific Way and Tesla

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT	DATA		NOISE MODEL INPUTS					
Highway Data					Site Con	ditions (Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	21,800	vehicles				Autos	: 15		
Peak Hour	Percentage:	10	%		Me	dium Trud	cks (2 Axles)	: 15		
Peak I	Hour Volume:	2,180	vehicles		He	avy Truck	rs (3+ Axles)	: 15		
Ve	ehicle Speed:	60	mph		Vehicle	Mix				
Near/Far La	ane Distance:	76	feet			icleType	Day	Evening	Night	Daily
Site Data							utos: 77.5%	J	9.6%	97.42%
	rrier Height:	0.4	0 feet		M	edium Tru			10.3%	1.84%
Barrier Type (0-V	•	0.0			I	Heavy Tru	icks: 86.5%		10.8%	0.74%
	ist. to Barrier:		0 feet							
Centerline Dist.			0 feet		Noise So		vations (in t	eet)		
Barrier Distance			0 feet			Autos:				
Observer Height			0 feet			m Trucks:				
•	Pad Elevation:		0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
	ad Elevation:		0 feet		Lane Eq	uivalent l	Distance (in	feet)		
	Road Grade:		0%		-	Autos:		,		
	Left View:		0 degree	s	Mediu	m Trucks:				
	Right View:		0 degree			y Trucks:				
FHWA Noise Mod										
VehicleType	REMEL		c Flow	Distance		Road	Fresnel	Barrier Att		m Atten
Autos:	73.2	2	0.18	-4.	11	-1.20	<i>-4.</i> 87	0.0	000	0.000
Medium Trucks:	83.6	8	-17.05	-4.	11	-1.20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks:	87.3	3	-21.01	-4.	11	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (wit	hout To	po and b	arrier atte	nuation)					
VehicleType	Leq Peak Ho	our	Leq Day	Leq I	Evening	Leq N	light	Ldn	CI	VEL
Autos:	6	8.1	6	6.2	64.4		58.4	67.0)	67.6
Medium Trucks:	. 6	1.3	5	9.8	53.5		51.9	60.4	4	60.6
Heavy Trucks:	6	1.0	5	9.6	50.5		51.8	60.	1	60.3
1//// 1//				7.0	04.0		00.0		_	20.0

64.9

70 dBA

80

86

60.0

65 dBA

172

185

68.5

60 dBA

370

399

69.0

55 dBA 798

859

Vehicle Noise:

69.6

Centerline Distance to Noise Contour (in feet)

67.8

Ldn: CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: e/o Bake Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				Г	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, So	oft = 15)		
Average Daily	Traffic (Adt): 2	23,700 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	2,370 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		V	/ehicle l	Miy					
Near/Far La	ane Distance:	76 feet		_		icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
	rrier Height:	0.0 feet			Me	edium 7		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0 1661				leavy 7		86.5%		10.8%	0.74%
'	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		۸	loise So			ns (in fe	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	-	.000	0 - 4 - 4 - 4		0.0
•	ad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	iustment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediu	m Truck	rs: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547			
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.55		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.69		-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.65		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:			66.6		64.8		58		67.4	1	68.0
Medium Trucks:			60.2		53.8		52		60.7		61.0
Heavy Trucks:			59.9		50.9		52		60.5		60.6
Vehicle Noise:	69	.9	68.2		65.3		60	.3	68.9)	69.4
Centerline Distan	ce to Noise Co	ontour (in feet)								
				70 d	BA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

84

91

182

196

392

422

844

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Lake Forest Dr.

Road Segment: w/o Bake Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT D	DATA			NOIS	SE MODE	L INPUT	S	
Highway Data					Site Cor	nditions (Ha	rd = 10, Sc	oft = 15)		
Average Daily Peak Hour	Traffic (Adt): Percentage:	22,400 10%			Ме	edium Trucks	Autos: s (2 Axles):			
Peak H	lour Volume:	2,240	vehicles		He	avy Trucks	(3+ <i>Axles</i>):	15		
	hicle Speed: ne Distance:		mph feet		Vehicle Veh	Mix icleType	Day	Evening	Night	Daily
Site Data						Auto			9.6%	_
Barrier Type (0-W	•	0.0				edium Truck Heavy Truck			10.3% 10.8%	1.84% 0.74%
Centerline Dis		100.0			Noise So	ource Eleva	tions (in f	eet)		
Centerline Dist. Barrier Distance Observer Height (to Observer:	5.0	feet feet feet			Autos: m Trucks: yy Trucks:	2.000 4.000 8.006	Grade Ad	ijustment:	0.0
	ad Elevation:		feet		Lane Eq	uivalent Dis	stance (in	feet)		
1	Road Grade: Left View: Right View:		% degrees degrees			Autos: m Trucks: vy Trucks:	96.607 96.566 96.608			
FHWA Noise Mode	el Calculatio	าร								
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	71.78	3	0.68	-4.3	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40)	-16.56	-4.3	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40)	-20.51	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Top	oo and b	arrier atte	nuation)					
VehicleType	Leq Peak Ho	our L	.eq Day		Evening	Leq Nigi	ht	Ldn	CI	VEL
Autos:		6.9		5.0	63.2		57.1	65.8		66.4
Medium Trucks:		0.3		8.7	52.4		50.8	59.3		59.5
Heavy Trucks:		0.3		8.9	49.8		51.1	59.4	4	59.6
Vehicle Noise:	6	8.4	66	6.7	63.7		58.9	67.4	4	67.9
Centerline Distance	ce to Noise C	contour	(in feet)							

70 dBA

67

72

Ldn: CNEL: 65 dBA

145

156

60 dBA

312

335

55 dBA

672

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl. Number: 8141 Road Segment: n/o Trabuco Rd. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data			5	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	22,600 vehicle	es					Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak Hour Volume:	2,260 vehicle	es		He	avy Truc	ks (3+	Axles):	15		
Vehicle Speed:	50 mph		1	/ehicle l	Mix					
Near/Far Lane Distance:	70 feet				icleType		Day	Evening	Night	Daily
Site Data						lutos:	77.5%		9.6%	-
Barrier Height:	0.0 feet			Ме	edium Tr		84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):					leavy Tr		86.5%		10.8%	0.74%
Centerline Dist. to Barrier:										
Centerline Dist. to Observer:			^	Voise So	ource Ele			eet)		
Barrier Distance to Observer:					Autos		.000			
Observer Height (Above Pad):					n Trucks		.000			
Pad Elevation:				Heav	y Trucks	s: 8	.006	Grade Adj	iustment.	0.0
Road Elevation:			L	ane Eq	uivalent	Distar	nce (in i	feet)		
Road Grade:					Autos		3.723			
Left View:		es		Mediui	n Trucks		3.680			
Right View:	3 -			Heav	y Trucks	s: 93	3.723			
FHWA Noise Model Calculation		T		1						
VehicleType REMEL	Traffic Flow		stance	Finite		Fres		Barrier Att		m Atten
Autos: 70.2			-4.20		-1.20		<i>-4.87</i>		000	0.000
Medium Trucks: 81.0			-4.19		-1.20		-4.97		000	0.000
Heavy Trucks: 85.3	-20.06	;	-4.20)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	l barri	ier atteni	uation)						
VehicleType Leq Peak H	our Leq Da	У	Leq Ev	rening	Leq I	Night		Ldn	CI	VEL
Autos:	65.9	64.0		62.3		56	.2	64.8	3	65.4
Medium Trucks:	59.5	58.0		51.6		50	.1	58.5	5	58.8
Heavy Trucks:	59.9	58.5		49.5		50	.7	59.1		59.2
Vehicle Noise:	67.6	65.9		62.8		58	.1	66.6	6	67.1
Centerline Distance to Noise	Contour (in fee	t)								
			70 d	IBA	65 d	dBA	6	60 dBA	55	dBA

59

64

Ldn:

CNEL:

128

137

275

296

593

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: s/o Trabuco Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPU	JT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt): 28,1	100 vehicles	6					Autos:	15		
Peak Hour Percentage		10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume	e: 2,8	310 vehicles	3		He	avy Truc	cks (3+	Axles):	15		
Vehicle Speed	l:	55 mph		,	/ehicle l	l <i>dise</i>					
Near/Far Lane Distance) <i>:</i>	88 feet		v				Dov	- Cyoning	Niaht	Doily
Site Data					ven	icleType		<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	Daily
Site Data					Λ.4.		Autos:				
Barrier Heigh		0.0 feet				edium T		84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm		0.0			,	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrie		00.0 feet		٨	loise Sc	ource E	levatio	ns (in fe	eet)		
Centerline Dist. to Observe		00.0 feet				Auto	s: 2	2.000			
Barrier Distance to Observe	r:	0.0 feet			Mediui	n Truck		1.000			
Observer Height (Above Pad):	5.0 feet				y Truck		3.006	Grade Ad	iustment	: 0.0
Pad Elevation	n:	0.0 feet				-					
Road Elevation	n:	0.0 feet		L	ane Eq				feet)		
Road Grade) <i>:</i>	0.0%				Auto		9.850			
Left Viev	/: -9	90.0 degree	es		Mediui	n Truck	s: 89	9.805			
Right Viev	/:	90.0 degree	es		Heav	y Truck	s: 89	9.850			
FHWA Noise Model Calculate	ions										
VehicleType REMEL	Tr	affic Flow	Dista	ance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
<i>Autos:</i> 71.	78	1.66		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.	40	-15.57		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.	40	-19.53		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout	Topo and	barrie	r attenu	uation)						
VehicleType Leq Peak	Hour	Leq Day		Leq Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	68.3	(66.4		64.7		58	.6	67.2	2	67.8
Medium Trucks:	61.7	(60.2		53.8		52	.3	60.8	3	61.0
Heavy Trucks:	61.7	(60.3		51.3		52	.5	60.9	9	61.0
Vehicle Noise:	69.9		68.1		65.2		60	.3	68.9	9	69.3
Centerline Distance to Noise	Conto	our (in feet))								

70 dBA

84

90

Ldn:

CNEL:

65 dBA

181

195

60 dBA

390

419

55 dBA 840

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: e/o Muirlands Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT DA	TA NOISE MODEL INPUTS												
Highway Data				S	Site Cond	ditions (H	lard = 10, S	oft = 15)							
Average Daily	Traffic (Adt):	41,200 vel	hicles				Autos.	15							
Peak Hour	Percentage:	10%			Med	dium Truci	ks (2 Axles).	15							
Peak H	lour Volume:	4,120 vel	hicles		Hea	avy Trucks	s (3+ Axles).	15							
Ve	ehicle Speed:	55 mp	oh	· ·	/ehicle N	/lix									
Near/Far La	ne Distance:	88 fee	et			cleType	Day	Evening	Night	Daily					
Site Data							tos: 77.5%	_	9.6%	-					
Ra	rrier Height:	0.0 fe	not		Me	dium Truc	cks: 84.8%	6 4.9%	10.3%	1.84%					
Barrier Type (0-W	•	0.0	.c.		Н	leavy Truc	cks: 86.5%	6 2.7%	10.8%	0.74%					
• • •	ist. to Barrier:	100.0 fe	et												
Centerline Dist.		100.0 fe		^	voise So		ations (in f	eet)							
Barrier Distance		0.0 fe				Autos:	2.000								
Observer Height		5.0 fe				n Trucks:	4.000								
•	ad Elevation:	0.0 fe			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0					
-	ad Elevation:	0.0 fe		L	ane Equ	ıivalent D	istance (in	feet)							
	Road Grade:	0.0%			Autos: 89.850										
	Left View:	-90.0 de	earees		Mediun	n Trucks:	89.805								
	Right View:	90.0 de	•			y Trucks:	89.850								
	rugiic rieiii	00.0 4	og.000			,									
FHWA Noise Mod															
VehicleType	REMEL	Traffic Fl		istance	Finite		Fresnel	Barrier Att	en Ber	m Atten					
Autos:	71.78	3 ;	3.33	-3.92	<u> </u>	-1.20	<i>-4.</i> 87	0.0	000	0.000					
Medium Trucks:	82.40) -1:	3.91	-3.92	<u> </u>	-1.20	<i>-4</i> .97	0.0	000	0.000					
Heavy Trucks:	86.40) -17	7.87	-3.92	2	-1.20	-5.16	0.0	000	0.000					
Unmitigated Nois	e Levels (with	hout Topo	and barr	ier attenu	uation)										
VehicleType	Leq Peak Ho	our Leq	Day	Leq Ev	rening	Leq Ni	ght	Ldn	CI	VEL					
Autos:	7	0.0	68.1		66.3		60.3	68.9	9	69.5					
Medium Trucks:	6	3.4	61.9		55.5		54.0	62.4	1	62.7					
Heavy Trucks:	6	3.4	62.0		52.9		54.2	62.6	3	62.7					
Vehicle Noise:	7	1.6	69.8		66.8		62.0	70.5	5	71.0					

70 dBA

108

117

Ldn:

CNEL:

65 dBA

234

251

60 dBA

503

541

55 dBA 1,084

1,166

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: w/o Muirlands Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NOISE MODEL INPUTS							
Highway Data				Si	ite Con	ditions	(Hard = 10, S	oft = 15)				
Peak Hour	Traffic (Adt): 3 Percentage: Hour Volume:	36,200 vehicles 10% 3,620 vehicles					Autos ucks (2 Axles) cks (3+ Axles)	: 15				
	ehicle Speed: nne Distance:	50 mph 70 feet		Ve	ehicle N							
	mo Biotarioo.	70 1001			Vehi	cleType	,	Evening	Night	Daily		
Site Data						=	<i>lutos:</i> 77.5%		9.6%			
Ва	rrier Height:	0.0 feet				edium Tr			10.3%	1.84%		
Barrier Type (0-W	/all, 1-Berm):	0.0			H	leavy Tr	rucks: 86.5%	6 2.7%	10.8%	0.74%		
Centerline Di	st. to Barrier:	100.0 feet		N	oise So	urce El	evations (in f	eet)				
Centerline Dist.	to Observer:	100.0 feet				Autos						
Barrier Distance	to Observer:	0.0 feet			Mediun	n Trucks						
Observer Height	,	5.0 feet			Heav	y Trucks		Grade Ad	iustment.	0.0		
	ad Elevation:	0.0 feet						·				
	ad Elevation:	0.0 feet		La	ane Equ		Distance (in	teet)				
	Road Grade:	0.0%				Autos						
	Left View:	-90.0 degree				n Trucks						
	Right View:	90.0 degree	es		Heav	y Trucks	s: 93.723					
FHWA Noise Mod	lel Calculations	S										
VehicleType	REMEL	Traffic Flow	Distai	псе	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	70.20	3.18		-4.20		-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-14.06		-4.19		-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-18.02		-4.20		-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (witho	out Topo and	barrier a	attenu	ation)							
VehicleType	Leq Peak Hou	r Leq Day	L	eq Eve	ening	Leq	Night	Ldn	CI	VEL		
Autos:	68.	.0	66.1		64.3		58.3	66.9)	67.5		
Medium Trucks:	61.	.5	60.0		53.7		3.7 52.1		6	60.8		
Heavy Trucks:	62.	.0	60.5		51.5		52.8	61.1		61.2		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	81	175	377	812
CNEL:	87	188	405	873

64.9

60.1

68.6

69.1

67.9

Vehicle Noise:

69.7

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: s/o Rockfield Bl./Fordview St.

Number: 8141

Analyst: B. Lawson

SITE SPECII	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data				S	ite Conditions (I	Hard =	10, Sc	oft = 15)						
Average Daily Traffic (Adt): 3	31,000 vehicles	6			,	Autos:	15						
Peak Hour Percent	tage:	10%			Medium Truc	cks (2 A	Axles):	15						
Peak Hour Volu	ume:	3,100 vehicles	3		Heavy Truck	rs (3+ A	Axles):	15						
Vehicle Sp	eed:	55 mph		1/4	ehicle Mix									
Near/Far Lane Dista	nce:	88 feet		VehicleType Day Evening Night						Daily				
Site Data							77.5%		9.6%					
Barrier He	iaht:	0.0 feet			Medium Tru	ıcks:	84.8%		10.3%					
Barrier Type (0-Wall, 1-Be	•	0.0			Heavy Tru	icks:	86.5%	2.7%	10.8%	0.74%				
Centerline Dist. to Ba	,	100.0 feet			·									
Centerline Dist. to Obse		100.0 feet		N	oise Source Ele		•	eet)						
					Autos:	2.0	000							
Barrier Distance to Obse		0.0 feet			Medium Trucks:	4.0	000							
Observer Height (Above F	,	5.0 feet			Heavy Trucks:	8.0	006	Grade Ad	iustment	: 0.0				
Pad Eleva		0.0 feet			ana Equivalent I	Dioton	oo (in i	faatl						
Road Eleva		0.0 feet		L	ane Equivalent l		•	ieet)						
Road Gr	rade:	0.0%			Autos:		850							
Left \	/iew:	-90.0 degree	es		Medium Trucks:	89.	805							
Right \	/iew:	90.0 degree	es		Heavy Trucks:	89.	850							
FHWA Noise Model Calcu	ılations	S												
VehicleType REM	1EL	Traffic Flow	Distance	,	Finite Road	Fresr	nel	Barrier Att	en Bei	m Atten				
Autos:	71.78	2.09	-3.	.92	-1.20		-4.87	0.0	000	0.000				
Medium Trucks:	82.40	-15.15	-3.	.92	-1.20		-4.97	0.0	000	0.000				
Heavy Trucks:	86.40	-19.10	-3.	.92	-1.20		-5.16	0.0	000	0.000				
Unmitigated Noise Levels	s (with	out Topo and	barrier atte	enu	ation)									

Unmitigated Nois	Inmitigated Noise Levels (without Topo and barrier attenuation)												
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL							
Autos:	68.8	66.9	65.1	59.0	67.7	68.3							
Medium Trucks:	62.1	60.6	54.3	52.7	61.2	61.4							
Heavy Trucks:	62.2	60.8	51.7	53.0	61.3	61.4							
Vehicle Noise:	70.3	68.6	65.6	60.7	69.3	69.8							

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	90	193	416	897
CNEL:	96	208	448	965

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Los Alisos Bl.

Road Segment: b/w Avenida Carlota and Paseo de Valencia

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				5	Site Con	ditions	(Hard	= 10, So	ft = 15)			
Average Daily	Traffic (Adt): 2	25,100 vehicle	s					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15			
Peak H	our Volume:	2,510 vehicle	s		He	avy Tru	icks (3+	Axles):	15			
Vei	hicle Speed:	55 mph		,	/ehicle l	Miv						
Near/Far Lai	ne Distance:	88 feet				icleType	e	Day	Evening	Night	Daily	
Site Data					V 011		Autos:	77.5%		•	97.42%	
	wiew Heierbe	0.0 foot			Me	edium T		84.8%		10.3%	1.84%	
	rrier Height:	0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%	
Barrier Type (0-W Centerline Dis		0.0 100.0 feet									011 170	
Centerline Dist.		100.0 feet		1	Voise So	ource E	levatio	ns (in fe	et)			
Barrier Distance		0.0 feet				Auto		2.000				
Observer Height (5.0 feet			Mediui	n Truck	rs: 4	.000				
• ,	ad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment:	0.0	
	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	eet)			
	Road Grade:	0.0%				Auto		9.850	,			
,	Left View:	-90.0 degre	A S		Mediui	n Truck		9.805				
	Right View:	90.0 degre				y Truck		9.850				
FHWA Noise Mode												
VehicleType	REMEL	Traffic Flow		stance	Finite		Fres		Barrier Att		m Atten	
Autos:	71.78	1.17		-3.92		-1.20		-4.87		000	0.000	
Medium Trucks:	82.40	-16.06		-3.92		-1.20		-4.97		000	0.000	
Heavy Trucks:	86.40	-20.02		-3.92	2	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and	barri	ier atteni	uation)							
VehicleType	Leq Peak Hou	ır Leq Daj	y	Leq Ev	vening	Leq	Night		Ldn	CI	VEL	
Autos:	67	7.8	65.9		64.2		58	.1	66.7	7	67.3	
Medium Trucks:	61	.2	59.7		53.4		51	.8	60.3	3	60.5	
Heavy Trucks:	61	.3	59.8		50.8		52	.0	60.4	1	60.5	
Vehicle Noise:	69	0.4	67.6		64.7		59	.8	68.4	4	68.9	
Centerline Distance	ce to Noise Co	ontour (in feet	t)									
				70 a	IBA	65	dBA	6	0 dBA	55	dBA	

Ldn:

CNEL:

78

84

168

181

779

838

362

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: w/o O St.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					S	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	24,200 v	vehicles						Autos:	15		
• •	r Percentage:	10%				Med	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	2,420 \	vehicles			Hea	avy Tru	cks (3+	Axles):	15		
V	ehicle Speed:	55 r	mph		V	'ehicle I	liv					
Near/Far La	ane Distance:	52 f	eet				cleType		Day	Evening	Night	Daily
Site Data								Autos:	77.5%	J	9.6%	_
	arrier Height:	0.0	feet			Мє	edium T		84.8%		10.3%	
Barrier Type (0-V	•	0.0	ieei			F	leavy T	rucks:	86.5%		10.8%	
• • •	ist. to Barrier:	100.0	feet									
Centerline Dist		100.0			Ν	loise So				eet)		
Barrier Distance			feet				Auto		2.000			
Observer Height			feet			Mediun		_	.000			
ŭ	Pad Elevation:		feet			Heav	y Truck	:s: 8	3.006	Grade Ad	justment	: 0.0
Ro	oad Elevation:		feet		L	ane Equ	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.09					Auto	s: 96	6.607			
	Left View:	-90.0	degrees	6		Mediur	n Truck	s: 96	6.566			
	Right View:	90.0	degrees	6		Heav	y Truck	rs: 96	8.608			
FHWA Noise Mod	del Calculation	18										
VehicleType	REMEL	Traffic	Flow	Distan	се	Finite	Road	Fres	snel	Barrier Att	en Bei	m Atten
Autos	71.78	3	1.02		-4.39	I	-1.20		-4.87	0.0	000	0.000
Medium Trucks	82.40) .	-16.22		-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks	86.40		-20.18		-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	nout Top	o and b	arrier a	ttenu	ıation)						
VehicleType	Leq Peak Ho	ur L	eq Day	Le	q Ev	ening	Leq	Night		Ldn	C	NEL
Autos	: 67	7.2	6	5.3		63.5		57	.5	66.1	1	66.7
Medium Trucks	: 60	0.6	59	9.1		52.7		51	.2	59.6	3	59.9
Heavy Trucks	60	0.6	59	9.2		50.2		51	.4	59.8	3	59.9
Vehicle Noise	: 68	8.8	6	7.0		64.1		59	.2	67.7	7	68.2
Centerline Distar	ice to Noise C	ontour (in feet)	1								
					70 di	BA	65	dBA	6	60 dBA	55	dBA

71

76

152

164

Ldn:

CNEL:

707

761

328

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: e/o O St.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Con	ditions (Hard	l = 10, Sc	oft = 15)					
Average Daily Traffic (Adt): Peak Hour Percentage:	10%			dium Trucks (,	15					
Peak Hour Volume:	2,680 vehicles	S	He	avy Trucks (3	+ Axles):	15					
Vehicle Speed:	55 mph		Vehicle	Mix							
Near/Far Lane Distance:	52 feet		Veh	icleType	Day	Evening	Night	Daily			
Site Data				Autos:	77.5%	12.9%	9.6%	97.42%			
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			edium Trucks: Heavy Trucks:			10.3% 10.8%	1.84% 0.74%			
Centerline Dist. to Barrier:	100.0 feet	-	Noise So	ource Elevation	ons (in fe	eet)					
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet 0.0 feet			m Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0			
Road Elevation:	0.0 feet	-	Lane Eq	uivalent Dista	ance (in	feet)					
Road Grade:	0.0%		<u>-</u>	Autos: 9	6.607						
Left View:	-90.0 degree	es	Mediu	m Trucks: 9	6.566						
Right View:	90.0 degree		Heav	y Trucks: 9	6.608						
FHWA Noise Model Calculation	ns										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten			
Autos: 71.78	1.46	-4.3	39	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 82.40	-15.78	-4.3	39	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks: 86.40	-19.74	-4.3	39	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise Levels (with	hout Topo and	barrier atte	nuation)								
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL			
Autos: 6	7.6	65.7	64.0	5	7.9	66.5	5	67.2			
Medium Trucks: 6	1.0	59.5	53.2	5	1.6	60.	1	60.3			
Heavy Trucks: 6	1.1	59.6	50.6	5	1.9	60.2	2	60.3			
Vehicle Noise: 6	9.2	67.5	64.5	5	9.6	68.2	2	68.7			
Centerline Distance to Noise C	Contour (in feet))									

70 dBA

76

81

Ldn:

CNEL:

65 dBA

163

175

60 dBA

351

378

55 dBA

757

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy. Number: 8141 Road Segment: w/o D St. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				·	Site Con	ditions	(Hard	= 10, So	ft = 15)			
Average Daily	Traffic (Adt):	26,200 ve	hicles					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15			
Peak H	lour Volume:	2,620 ve	hicles		He	avy Tru	cks (3+	Axles):	15			
Ve	ehicle Speed:	55 m	ph	,	Vehicle l	Miy						
Near/Far La	ne Distance:	52 fe	et			icleType	9	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		•	97.42%	
Ra	rrier Height:	0.0 fc	oot		Ме	edium T	rucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W		0.0	CCI		F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%	
• • •	ist. to Barrier:	100.0 fe	eet									
Centerline Dist.		100.0 fe		<u> </u>	Noise So			•	eet)			
Barrier Distance	to Observer:	0.0 fe				Auto		2.000				
Observer Height	(Above Pad):	5.0 fe	eet			n Truck	_	1.000	Crada Ad	iuotmont		
•	ad Elevation:	0.0 fe	eet		неач	y Truck	(S.)	3.006	Grade Adj	justinent.	0.0	
Ro	ad Elevation:	0.0 fe	eet		Lane Eq	uivalen	t Dista	nce (in f	eet)			
	Road Grade:	0.0%				Auto	s: 96	6.607				
	Left View:	-90.0 d	legrees		Mediui	n Truck	rs: 96	6.566				
	Right View:	90.0 d	legrees		Heav	y Truck	rs: 96	6.608				
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic F	low D	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	71.78	3	1.36	-4.39	9	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	82.40) -1	5.88	-4.39	9	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40) -1	9.83	-4.39	9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo	and barr	ier atten	uation)							
VehicleType	Leq Peak Ho	ur Led	q Day	Leq E	vening	Leq	Night		Ldn	CI	VEL	
Autos:	6	7.5	65.6		63.9		57	.8	66.4	1	67.1	
Medium Trucks:	60	0.9	59.4		53.1		51	.5	60.0)	60.2	
Heavy Trucks:	6	1.0	59.5		50.5		51	.8	60.1	1	60.2	
Vehicle Noise:	69	9.1	67.4		64.4		59	.5	68.1	1	68.6	
Centerline Distan	ce to Noise C	ontour (in	feet)	I	ı							
				70 c	dBA	65	dBA	6	0 dBA	55	dBA	

75

80

Ldn:

CNEL:

161

173

746

802

346

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: e/o D St.

Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS									
Highway Data					Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	23,600 vehi	cles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,360 vehi	cles		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		_	Vehicle I	Miy					
Near/Far La	ane Distance:	52 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 fee	•		Me	edium T	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 fee	t								
Centerline Dist.		100.0 fee		1	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 fee				Auto		2.000			
Observer Height	(Above Pad):	5.0 fee	t			n Truck	_	.000	Crada Ad	iuotmont	
_	Pad Elevation:	0.0 fee	t		неач	y Truck	(S: E	3.006	Grade Adj	justinent.	0.0
Ro	ad Elevation:	0.0 fee	t	I	Lane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 deg	grees		Mediui	n Truck	rs: 96	6.566			
	Right View:	90.0 deg	grees		Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flo	N D	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3 0.	91	-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.	33	-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.	29	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo a	nd barr	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq L	Day	Leq Ev	vening	Leq	Night		Ldn	CI	VEL
Autos:	6	7.1	65.2		63.4		57	.4	66.0)	66.6
Medium Trucks:	60	0.5	59.0		52.6		51	.1	59.5	5	59.8
Heavy Trucks:	60	0.5	59.1		50.1		51	.3	59.7	7	59.8
Vehicle Noise:	68	8.7	66.9		64.0		59	.1	67.6	3	68.1
Centerline Distan	ce to Noise C	ontour (in f	eet)		1						
				70 c	dBA	65	dBA	6	0 dBA	55	dBA

70

75

150

161

323

347

695

748

Ldn:

CNEL:

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy
Road Segment: w/o Great Park Blvd East
Number: 8141
Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NC	DISE MO	DDE	L INPUT	S	
Highway Data				Site Cor	nditions (F	Hard = 10	0, So	oft = 15)		
Average Daily	Traffic (Adt): 2	23,900 vehicles	3			Αι	ıtos:	15		
Peak Hour	Percentage:	10%		Me	edium Truc	ks (2 Ax	les):	15		
Peak H	lour Volume:	2,390 vehicles	3	He	avy Truck	s (3+ Ax	les):	15		
Ve	hicle Speed:	55 mph		Vehicle	Miv					
Near/Far La	ne Distance:	52 feet			icleType	D	ay	Evening	Night	Daily
Site Data					AL	itos: 77	7.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0 feet		М	edium Tru	cks: 84	4.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			Heavy Tru	cks: 86	5.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet		Noise S	ource Ele	vations	(in fo	not)		
Centerline Dist.	to Observer:	100.0 feet		140/36 30	Autos:					
Barrier Distance	to Observer:	0.0 feet		Modiu	Autos. m Trucks:					
Observer Height	(Above Pad):	5.0 feet						Grade Adj	iustmont	. 0.0
P	ad Elevation:	0.0 feet		пеал	/y Trucks:	8.00	О	Grade Auj	usuneni	0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent L	Distance	(in f	feet)		
	Road Grade:	0.0%			Autos:	96.60	7			
	Left View:	-90.0 degree	es	Mediu	m Trucks:	96.56	6			
	Right View:	90.0 degree	es	Heav	/y Trucks:	96.60	8			
FHWA Noise Mod	el Calculations	S								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	1	Barrier Att	en Ber	m Atten
Autos:	71.78	0.96	-4	.39	-1.20	-4	.87	0.0	000	0.000
Medium Trucks:	82.40	-16.28	-4	.39	-1.20	-4	.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.23	-4	.39	-1.20	-5	5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)						
VehicleType	Leq Peak Hou	r Leq Day	Leq	Evening	Leq N	light		Ldn	C	VEL
Autos:	67	1	65.2	63.5		57 4		66 1		66.7

Unmitigated Nois	e Levels (withou	it Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	67.1	65.2	63.5	57.4	66.1	66.7
Medium Trucks:	60.5	59.0	52.7	51.1	59.6	59.8
Heavy Trucks:	60.6	59.1	50.1	51.4	59.7	59.8
Vehicle Noise:	68.7	67.0	64.0	59.1	67.7	68.2

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	70	151	326	701							
CNEL:	75	163	350	754							

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy
Road Segment: w/o B St
Number: 8141
Analyst: B. Lawson

SITE SPEC		NOISE MODEL INPUTS											
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic Peak Hour Percei	ntage:	10%				dium Tru	•	,					
Peak Hour Vo	lume:	2,710 vehicles	;		Hea	avy Truc	ks (3+	Axles):	15				
Vehicle S		55 mph		V	ehicle I	Иix							
Near/Far Lane Dist	ance:	52 feet			Vehi	icleType		Day	Evening	Night	Daily		
Site Data						A	lutos:	77.5%	12.9%	9.6%	97.42%		
Barrier H	eiaht:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-E	•	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to B	arrier:	100.0 feet		N	oise So	ource Ele	evatio	ns (in fe	eet)				
Centerline Dist. to Obs		100.0 feet				Autos		.000					
Barrier Distance to Obs		0.0 feet			Mediur	n Trucks	s: 4	.000					
Observer Height (Above	,	5.0 feet			Heav	y Trucks		.006	Grade Ad	iustment:	0.0		
Pad Elev		0.0 feet		_		-)				
Road Elev		0.0 feet			Lane Equivalent Distance (in feet)								
Road C		0.0%				Autos		6.607					
	View:	-90.0 degree	S			n Trucks		5.566					
Right	View:	90.0 degree	S		Heav	y Trucks	s: 96	5.608					
FHWA Noise Model Cald	ulations												
VehicleType REi	MEL	Traffic Flow	Dista	ance	Finite		Fres		Barrier Att	en Ber	m Atten		
Autos:	71.78	1.51		-4.39		-1.20		<i>-4.</i> 87	0.0	000	0.000		
Medium Trucks:	82.40	-15.73		-4.39	39 -1.20			<i>-4.97</i> 0.000		000	0.000		
Heavy Trucks:	86.40	-19.69		-4.39		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Leve	ls (witho	ut Topo and I	barrier	attenu	ation)								
VehicleType Leq P	eak Houi	Leq Day	ı	Leq Eve	ening	Leq I	Night		Ldn	CI	VEL		
Autos:	67.	7 6	35.8		64.0		58	.0	66.6	6	67.2		
Medium Trucks:	61.	1 .	9.6		53.2		51.	.7	60.1	l	60.4		
Heavy Trucks:	61.	1	9.7		50.7		51	51.9		3	60.4		
Vehicle Noise:	69.	3 (67.5		64.6		59.	7	68.2)	68.7		

70 dBA

76

82

Ldn:

CNEL:

65 dBA

164

177

60 dBA

354

381

55 dBA

763

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy
Road Segment: e/o B St
Number: 8141
Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data				5	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	20,400 vehicle:	3					Autos:	15				
Peak Hou	r Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15				
Peak I	Hour Volume:	2,040 vehicles	3		He	avy Truc	cks (3+	Axles):	15				
Ve	Vehicle Speed: 55 mph				Vehicle Mix								
Near/Far La	ane Distance:	52 feet				icleType	,	Day	Evening	Night	Daily		
Site Data	Site Data						Autos:	77.5%		9.6%	,		
	arrier Height:	0.0 feet			M	edium Tı		84.8%		10.3%			
Barrier Type (0-V	_	0.0				Heavy Tr		86.5%		10.8%	0.74%		
• • •	ist. to Barrier:	100.0 feet											
Centerline Dist.		100.0 feet		1	Voise So	ource El			eet)				
Barrier Distance	0.0 feet				Autos		2.000						
Observer Height		5.0 feet				m Trucks		.000					
_	Pad Elevation:	0.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	iustment	: 0.0		
Road Elevation: 0.0 feet			ı	Lane Equivalent Distance (in feet)									
710	Road Grade: 0.0%				Autos: 96.607								
	Left View:	-90.0 degree	25		Medium Trucks: 96.566								
	Right View:	90.0 degree			Heavy Trucks: 96.608								
FHWA Noise Mod													
VehicleType	REMEL	Traffic Flow	Dist	ance		Road	Fres		Barrier Att		m Atten		
Autos.	71.78	0.27		-4.39)	-1.20		-4.87	0.0	000	0.000		
Medium Trucks.		-16.96		-4.39		-1.20 <i>-4.97</i>			000	0.000			
Heavy Trucks.	86.40	-20.92		-4.39)	-1.20 <i>-5.16</i>		0.0	0.000 0.000				
Unmitigated Nois	se Levels (with	out Topo and	barrie	r atten	uation)								
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	rening	Leq	Night		Ldn	C	NEL		
Autos.	66	5.5	64.6		62.8	56.7		.7	65.4		66.0		
Medium Trucks.	Medium Trucks: 59.8 58.3			52.0 50.4			.4	58.9		59.1			
Heavy Trucks.	Heavy Trucks: 59.9 58.5			49.4 50.7			59.0	59.0 59.2					
Vehicle Noise.	68	3.0	66.3		63.3		58	.4	67.0)	67.5		
Centerline Distan	ice to Noise Co	ontour (in feet)										
Contenine Distan	100 10 110136 00	ontour (mreet)	,	70 c	IBA	65.	dBA	6	60 dBA	55	dBA		
			Ldn:	63			36		293		31		
				-			-						

CNEL:

68

146

315

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: n/o Barranca Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (A	dt): 2	1,500 vehicles	3					Autos:	15				
Peak Hour Percenta	ge:	10%			Me	dium Tru	ucks (2	Axles):	15				
Peak Hour Volume: 2,150 vehicles					Heavy Trucks (3+ Axles): 15								
Vehicle Spe	ed:	55 mph		,	Vehicle Mix								
Near/Far Lane Distan	ce:	52 feet				icleType	,	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%			97.42%		
Barrier Heig	ıht:	0.0 feet			Me	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Ber		0.0			ŀ	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barr	•	100.0 feet											
Centerline Dist. to Observ		100.0 feet		1	Noise So			•	eet)				
Barrier Distance to Observer:		0.0 feet				Auto		2.000					
		5.0 feet			Mediui	n Truck	s: 4	1.000					
Observer Height (Above Pa Pad Elevati	•	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment.	0.0		
Road Elevati		0.0 feet			Lane Eq	uivaleni	t Dista	nce (in	feet)				
Road Gra		0.0 feet 0.0%		-		Auto		6.607					
Left Vi		-90.0 degrees			Medium Trucks: 96.566								
Right Vi		90.0 degree				y Truck		5.608					
rugiti vi	J VV .	30.0 degree	,3		71001	y Traom	o. o.	3.000					
FHWA Noise Model Calcul	ations	;											
VehicleType REME	L	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 7	1.78	0.50		-4.39	9	-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 8	2.40	-16.74		-4.39	9	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 8	6.40	-20.69		-4.39	9	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels	(witho	out Topo and	barri	er atten	uation)								
VehicleType Leq Pea	k Houi	r Leq Day		Leq E	vening	Leq	Night		Ldn	CI	VEL		
Autos:				63.0 57.0		.0	65.6		66.2				
Medium Trucks:	60.	1 !	58.6		52.2		50	.7	59.1	1	59.4		
Heavy Trucks:	60.	1	58.7		49.7		50	.9	59.3	3	59.4		
Vehicle Noise:	68.	3 (66.5		63.6		58	.7	67.2	2	67.7		

70 dBA

65

70

Ldn: CNEL: 65 dBA

141

151

60 dBA

303

326

55 dBA

654

703

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: s/o Barranca Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I		NOISE MODEL INPUTS								
Highway Data			Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt):	13,700 vehicles	3			Autos:	15				
Peak Hour Percentage:	10%		Med	dium Trucks	(2 Axles):	15				
Peak Hour Volume:	1,370 vehicles	S	Hea	avy Trucks ((3+ <i>Axles</i>):	15				
Vehicle Speed:	55 mph		Vehicle I	Лix						
Near/Far Lane Distance:	52 feet			cleType	Day	Evening	Night	Daily		
Site Data				Auto	•	_	9.6%			
Barrier Height:	0.0 feet		Ме	edium Truck	s: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet		W-' O-	= 1		4)				
Centerline Dist. to Observer:	100.0 feet		Noise So	urce Eleva		eet)				
Barrier Distance to Observer:	0.0 feet			Autos:	2.000					
Observer Height (Above Pad):	5.0 feet			n Trucks:	4.000	Crada Ad				
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0		
Road Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
Road Grade:	0.0%			Autos:	96.607					
Left View:	-90.0 degree	es	Mediur	n Trucks:	96.566					
Right View:	90.0 degree	es	Heav	y Trucks:	96.608					
FHWA Noise Model Calculation	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos: 71.7	8 -1.46	-4.3	9	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -18.69	-4.3	9	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	0 -22.65	-4.3	9	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)							
VehicleType Leq Peak He	our Leq Day	Leq E	vening	Leq Nigh	nt	Ldn	CI	VEL		
Autos: 6	64.7	62.8	61.1 55		55.0	63.6		64.2		
Medium Trucks: 5	8.1	56.6	50.2		48.7	57.2	2	57.4		
Heavy Trucks: 5	8.2	56.7	47.7		48.9		3	57.4		
Vehicle Noise:	66.3	64.5	61.6		56.7	65.3	3	65.7		

70 dBA

48

52

Ldn:

CNEL:

65 dBA

104

112

60 dBA

225

242

55 dBA

484

521

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: n/o Rockfield Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DAT	4			N	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	23,200 vehic	eles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,320 vehic	eles		He	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mph		,	Vehicle I	Mix					
Near/Far La	ne Distance:	52 feet				icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	•	9.6%	-
Rai	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0	•		ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	•	100.0 feet			V-: 0:			(i f.	-41		
Centerline Dist.		100.0 feet		1	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet			1.4 I'	Auto		2.000			
Observer Height (5.0 feet				m Truck	_	.000	0 - 4 - 4 - 4		0.0
• ,	ad Elevation:	0.0 feet			Heav	y Truck	s: E	3.006	Grade Ad	iustment.	0.0
	ad Elevation:	0.0 feet		I	Lane Eq	uivalen	t Dista	nce (in t	feet)		
	Road Grade:	0.0%				Auto	s: 96	6.607	<u>-</u>		
	Left View:	-90.0 deg	rees		Mediui	m Truck	s: 96	6.566			
	Right View:	90.0 deg			Heav	y Truck	s: 96	6.608			
FHWA Noise Mode	el Calculation	•									
VehicleType	REMEL	Traffic Flov	v D	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.8		-4.39		-1.20		-4.87		000	0.000
Medium Trucks:	82.40	-16.4	1 1	-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.3	36	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo ar	nd barr	rier atten	uation)						
VehicleType	Leq Peak Hou			Leg Ev		Leq	Night		Ldn	CI	VEL
Autos:	67	·.0	65.1	-	63.4		57	.3	65.9)	66.5
Medium Trucks:	60	.4	58.9	1	52.5		51	.0	59.5	5	59.7
Heavy Trucks:	60	.4	59.0	1	50.0		51	.2	59.6	6	59.7
Vehicle Noise:	68	3.6	66.8		63.9		59	.0	67.6	6	68.0
Centerline Distant	ce to Noise Co	ontour (in fe	et)								
				70 c	IBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

69

74

148

159

688

740

319

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Marine Wy.

Road Segment: s/o Rockfield Bl.

Number: 8141

Analyst: B. Lawson

Site Data	SITE	SPECIFIC I	NPUT D	ATA		NOISE MODEL INPUTS						
Peak Hour Percentage:	Highway Data			-		Site Co	nditions	(Hard =	= 10, Sc	oft = 15)		
Peak Hour Volume: Vehicle Speed: Near/Far Lane Distance: 55 mph Site Data	Average Daily	Traffic (Adt):	23,900 \	ehicles/					Autos:	15		
Vehicle Speed: 55 mph Near/Far Lane Distance: 52 feet Vehicle Mix Vehicle Type Day Evening Night Data Site Data Autos: 77.5% 12.9% 9.6% 97.4 Nearier Type (0-Wall, 1-Berm): 0.0 Nearier Distance to Observer: 0.0 Nearier Distance (in feet) Noise Source Elevations (in feet) Noise Source Elevations (in feet) Nearier Type (0-Wall, 1-Berm): 0.0 N						M	ledium Tru	icks (2	Axles):	15		
Near/Far Lane Distance: 52 feet VehicleType Day Evening Night Data	Peak F	lour Volume:	2,390 \	ehicles/		Н	leavy Truc	ks (3+	Axles):	15		
Near/Far Lane Distance: 52 feet VehicleType Day Evening Night Day Day Day Night Day Property Day Property Day Property Day Property Day Property Day Property Day Day Property Day	Ve	hicle Speed:	55 r	mph		Vehicle	Mix					
Site Data	Near/Far La	ne Distance:	52 f	eet					Day	Evening	Night	Daily
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Centerline Dist. to Observer: 0.0 feet Centerline Distance to Observer: 0.0 feet Centerline Distance to Observer: 0.0 feet Centerline Distance Ce	Site Data						A	lutos:		_		97.42%
Barrier Type (0-Wall, 1-Berm): 0.0 Heavy Trucks: 86.5% 2.7% 10.8% 0.7	Ba	rrier Heiaht·	0.0	feet		٨	Лedium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Noise Source Elevations (in feet) Centerline Dist. to Observer: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Pad Elevations Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet)		_		1001			Heavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Autos: 96.607 Autos: 96.566 Heavy Trucks: 96.566 Heavy Trucks: 96.608	• • • •	,		feet		Noine (Parmas Fl		/:- £	41		
Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Heavy Trucks: 96.566 Heavy Trucks: 96.608 FHWA Noise Model Calculations Vehicle Type REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Att Autos: 71.78 0.96 -4.39 -1.20 -4.87 0.000 0.						Noise S			•	eet)		
Observer Height (Above Pad): Pad Elevation: O.0 feet Road Elevation: O.0 feet Road Grade: O.0% Autos: 96.607 Lane Equivalent Distance (in feet) Road Grade: Neft View: Pool of degrees Right View: Pool of degrees Right View: Pool of degrees Right View: Pool of degrees Reduced Patricial P	Barrier Distance	to Observer:										
Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 96.607 Left View: -90.0 degrees Medium Trucks: 96.566 Right View: 90.0 degrees Finite Road Fresnel Barrier Atten Berm Att FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Att Autos: 71.78 0.96 -4.39 -1.20 -4.87 0.000 0. Medium Trucks: 82.40 -16.28 -4.39 -1.20 -4.97 0.000 0. Heavy Trucks: 86.40 -20.23 -4.39 -1.20 -5.16 0.000 0. Unmitigated Noise Levels (without Topo and barrier attenuation) Leq Roight Ldn CNEL Autos: 67.1 65.2 63.5 57.4 66.1 6 Medium Trucks: 60.5 59.0 52.7 51.1										0		. 0.0
Road Elevation: 0.0 feet Road Grade: 0.0% Autos: 96.607 Left View: -90.0 degrees Heavy Trucks: 96.566 Right View: 90.0 degrees Heavy Trucks: 96.608 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 71.78 0.96 -4.39 -1.20 -4.87 0.000 0. Medium Trucks: 82.40 -16.28 -4.39 -1.20 -4.97 0.000 0. Heavy Trucks: 86.40 -20.23 -4.39 -1.20 -5.16 0.000 0. Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 67.1 65.2 63.5 57.4 66.1 66.1 Medium Trucks: 60.5 59.0 52.7 51.1 59.6 59.6 Medium Trucks: 60.5 59.0 52.7 51.1 59.6 59.0 Stance (in feet) Autos: 96.607 Autos: 96.607 Autos: 96.507 51.1 59.6 59.0 Autos: 67.1 65.2 63.5 57.4 66.1 66.1 66.1 Medium Trucks: 60.5 59.0 52.7 51.1 59.6 59.0 Autos: 67.1 65.2 63.5 57.4 66.1 66.1 Autos: 60.5 59.0 52.7 51.1 59.6 59.0 Autos: 60.5 59.0 52.7 51.1 59.6 Autos: 60.5 60.5 60.5 60.5 60.5 Autos: 60.5 60.5 60.5 Autos: 60.5 60.5 60.5		•				Hea	avy Trucks	s: 8	.006	Grade Ad	justment	: 0.0
Road Grade: 0.0%	Ro	ad Elevation:				Lane Equivalent Distance (in feet)						
Left View: Pop. 0 degrees Medium Trucks: 96.566 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 71.78 0.96 -4.39 -1.20 -4.87 0.000 0. Medium Trucks: 82.40 -16.28 -4.39 -1.20 -4.97 0.000 0. Heavy Trucks: 86.40 -20.23 -4.39 -1.20 -5.16 0.000 0. Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 67.1 65.2 63.5 57.4 66.1 6 Medium Trucks: 60.5 59.0 52.7 51.1 59.6 5		Road Grade:										
Right View: 90.0 degrees Heavy Trucks: 96.608 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Att Autos: 71.78 0.96 -4.39 -1.20 -4.87 0.000 0.0 Medium Trucks: 82.40 -16.28 -4.39 -1.20 -4.97 0.000 0.0 Heavy Trucks: 86.40 -20.23 -4.39 -1.20 -5.16 0.000 0.0 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 67.1 65.2 63.5 57.4 66.1 66.1 Medium Trucks: 60.5 59.0 52.7 51.1 59.6 59.6					S	Medi	um Trucks	s: 96	.566			
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Attended Autos: 71.78 0.96 -4.39 -1.20 -4.87 0.000 0.000 Medium Trucks: 82.40 -16.28 -4.39 -1.20 -4.97 0.000 0.000 Heavy Trucks: 86.40 -20.23 -4.39 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 67.1 65.2 63.5 57.4 66.1 66.1 Medium Trucks: 60.5 59.0 52.7 51.1 59.6 58.5		Right View:		-		Hea	avy Trucks	s: 96	.608			
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 71.78 0.96 -4.39 -1.20 -4.87 0.000 0. Medium Trucks: 82.40 -16.28 -4.39 -1.20 -4.97 0.000 0. Heavy Trucks: 86.40 -20.23 -4.39 -1.20 -5.16 0.000 0. Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 67.1 65.2 63.5 57.4 66.1 6 Medium Trucks: 60.5 59.0 52.7 51.1 59.6 5	FHWA Noise Mod	el Calculatio	ns									
Medium Trucks: 82.40 -16.28 -4.39 -1.20 -4.97 0.000 0.000 Heavy Trucks: 86.40 -20.23 -4.39 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 67.1 65.2 63.5 57.4 66.1 66.1 Medium Trucks: 60.5 59.0 52.7 51.1 59.6 58.8				Flow	Distance	Finit	e Road	Fres	nel	Barrier Att	en Bei	m Atten
Heavy Trucks: 86.40 -20.23 -4.39 -1.20 -5.16 0.000 0. Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 67.1 65.2 63.5 57.4 66.1 6 Medium Trucks: 60.5 59.0 52.7 51.1 59.6 5	Autos:	71.78	3	0.96	-4.3	39	-1.20		-4.87	0.0	000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)VehicleTypeLeq Peak HourLeq DayLeq EveningLeq NightLdnCNELAutos:67.165.263.557.466.166.1Medium Trucks:60.559.052.751.159.658.6	Medium Trucks:	82.40) .	-16.28	-4.3	39	-1.20		-4.97	0.0	000	0.000
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 67.1 65.2 63.5 57.4 66.1 6 Medium Trucks: 60.5 59.0 52.7 51.1 59.6 5	Heavy Trucks:	86.40) .	-20.23	-4.3	39	-1.20		-5.16	0.0	000	0.000
Autos: 67.1 65.2 63.5 57.4 66.1 6 Medium Trucks: 60.5 59.0 52.7 51.1 59.6 5	Unmitigated Nois	e Levels (with	hout Top	o and b	parrier atte	nuation)					
Medium Trucks: 60.5 59.0 52.7 51.1 59.6	VehicleType	Leq Peak Ho	our L	eq Day	Leq E	Evening	Leq	Night		Ldn	C	NEL
	Autos:	6	7.1	6	5.2	63.	5	57.	4	66.	1	66.7
Heavy Trucks: 60.6 59.1 50.1 51.4 59.7	Medium Trucks:	6	0.5	5	9.0	52.	7	51.	1	59.6	6	59.8
Treavy Tracks	Heavy Trucks:	6	0.6	5	9.1	50.	1	51.	4	59.7	7	59.8
Vehicle Noise: 68.7 67.0 64.0 59.1 67.7 6	Vehicle Noise:	6	8.7	6	67.0	64.	0	59.	1	67.7	7	68.2

70 dBA

70

75

Ldn:

CNEL:

65 dBA

151

163

60 dBA

326

350

55 dBA

701

754

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Meridian Number: 8141
Road Segment: n/o Alton Pkwy. Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA				NOISI	MODE	L INPUT	S	
Highway Data			S	ite Cond	ditions (Hard	l = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	1,000 vehicle	es				Autos:	15		
Peak Hour Percentage:	10%			Med	lium Trucks (2 Axles):	15		
Peak Hour Volume:	100 vehicle	es		Hea	vy Trucks (3	+ Axles):	15		
Vehicle Speed:	55 mph		V	'ehicle N	fiy				
Near/Far Lane Distance:	52 feet				cleType	Day	Evening	Night	Daily
Site Data				V 01110	Autos:		-	9.6%	,
	0.0 foot			Me	dium Trucks:			10.3%	1.84%
Barrier Height:	0.0 feet 0.0			_	eavy Trucks:			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 100.0 feet								
Centerline Dist. to Observer:	100.0 feet		N	loise So	urce Elevati	ons (in fe	eet)		
Barrier Distance to Observer:	0.0 feet				Autos:	2.000			
Observer Height (Above Pad):	5.0 feet			Medium	n Trucks:	4.000			
Pad Elevation:	0.0 feet			Heavy	/ Trucks:	8.006	Grade Adj	iustment:	0.0
Road Elevation:	0.0 feet		L	ane Fau	ivalent Dist	ance (in t	feet)		
Road Grade:	0.0%			u = qu		96.607			
Left View:	-90.0 degre	200		Medium		96.566			
Right View:	90.0 degre					96.608			
rught view.	Jo.o degre	.03		7.001)	rraono.	.0.000			
FHWA Noise Model Calculation	ns		,						
VehicleType REMEL	Traffic Flow	Dista	ance	Finite I	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 71.78	3 -12.82		-4.39		-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.40	-30.06		-4.39		-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.40	-34.02		-4.39		-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier	attenu	iation)					
VehicleType Leq Peak Ho			Leq Eve		Leq Night		Ldn	CI	VEL
Autos: 5	3.4	51.5	-	49.7	4	3.6	52.3	3	52.9
Medium Trucks: 4	6.8	45.2		38.9	3	7.3	45.8	3	46.0
ivi c ululli i luchs. 4		45.4		36.3	3	7.6	45.9	.	46.1
	6.8	45.4		00.0		1.0	40.8	<u>, </u>	40.1
Heavy Trucks: 4	6.8 4.9	53.2		50.2		5.4	53.9		54.4
Heavy Trucks: 4	4.9	53.2							

Ldn:

CNEL:

8

9

18

20

39

42

85

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Modjeska Number: 8141 Road Segment: n/o Irvine Bl. Analyst: B. Lawson

SITE SPECIFIC I			NOISE MODEL INPUTS							
Highway Data				Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	14,000 vehicles	s					Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tru	ucks (2	Axles):	15		
Peak Hour Volume:	1,400 vehicles	S		He	avy Trud	cks (3+	Axles):	15		
Vehicle Speed:	35 mph		-	Vehicle l	Viy					
Near/Far Lane Distance:	20 feet		_		icleType	,	Day	Evening	Night	Daily
Site Data						Autos:	77.5%		9.6%	-
Barrier Height:	0.0 feet			Ме	edium Tı		84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0 reet 0.0				leavy Ti		86.5%		10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet									
Centerline Dist. to Observer:	100.0 feet		1	Noise Sc				eet)		
Barrier Distance to Observer:	0.0 feet				Autos		2.000			
Observer Height (Above Pad):	5.0 feet				n Truck		.000			
Pad Elevation:	0.0 feet			Heav	y Trucks	s: 8	3.006	Grade Adj	iustment.	0.0
Road Elevation:	0.0 feet		1	Lane Eq	uivalent	t Dista	nce (in i	feet)		
Road Grade:	0.0%				Autos).544			
Left View:	-90.0 degree	es		Mediur	n Trucks		9.504			
Right View:	90.0 degree			Heav	y Trucks	s: 99	9.544			
· ·										
FHWA Noise Model Calculation										
VehicleType REMEL	Traffic Flow	Di	stance	Finite		Fres	L	Barrier Att		m Atten
Autos: 64.30			-4.59		-1.20		<i>-4.</i> 87		000	0.000
Medium Trucks: 75.75			-4.59		-1.20		<i>-4.</i> 97		000	0.000
Heavy Trucks: 81.57	-20.59		-4.59	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barri	er atten	uation)						
VehicleType Leq Peak Ho	our Leq Day	/	Leq Ev	/ening	Leq	Night		Ldn	CI	VEL
Autos: 5	9.1	57.2		55.4		49	.4	58.0)	58.6
Medium Trucks: 5	3.3	51.8		45.5		43	.9	52.4	1	52.6
Heavy Trucks: 5	5.2	53.8		44.7		46	.0	54.3	3	54.5
Vehicle Noise: 6	1.3	59.6		56.2		51	.8	60.3	3	60.8
Centerline Distance to Noise C	Contour (in feet)								
			70 c	dBA .	65	dBA	6	60 dBA	55	dBA

23

24

Ldn: CNEL:

49

52

105

112

226

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: e/o (s/o) Lake Forest

Number: 8141

Analyst: B. Lawson

SITE SPECII	FIC INF	PUT DATA	NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic (A <i>dt):</i> 31	,400 vehicles						Autos:	15		
Peak Hour Percent	age:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak Hour Volu	ıme: 3	3,140 vehicles			He	avy Truc	ks (3+	Axles):	15		
Vehicle Sp		55 mph		V	ehicle l	Иix					
Near/Far Lane Dista	nce:	88 feet			Veh	icleType		Day	Evening	Night	Daily
Site Data						A	lutos:	77.5%	12.9%	9.6%	97.42%
Barrier He	iaht:	0.0 feet			Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Be	•	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Ba	,	100.0 feet		N	oise Sc	ource Ele	evatio	ns (in fe	eet)		
Centerline Dist. to Obse	rver:	100.0 feet				Autos		.000			
Barrier Distance to Obse	rver:	0.0 feet			Mediur	n Trucks		.000			
Observer Height (Above F	Pad):	5.0 feet				y Trucks		.006	Grade Ad	iustment	0.0
Pad Eleva	tion:	0.0 feet			Heav	y Trucks	s. o	.000	Orado Maj	jadarrorit.	0.0
Road Eleva	tion:	0.0 feet		Li	ane Eq	uivalent	Distar	ice (in i	feet)		
Road Gr	ade:	0.0%				Autos	s: 89	.850			
Left \	/iew:	-90.0 degree	S		Mediur	n Trucks	s: 89	.805			
Right \	/iew:	90.0 degree	S		Heav	y Trucks	s: 89	.850			
FHWA Noise Model Calcu	lations										
VehicleType REM	EL	Traffic Flow	Distanc	се	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	2.15	-	3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.09	-	3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.05	-	3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels	(withou	ut Topo and I	parrier at	tenu	ation)						
VehicleType Leq Pe	ak Hour	Leq Day	Le	q Eve	ening	Leq I	Night		Ldn	CI	VEL
Autos:	68.8	6	6.9		65.1		59.	1	67.7	7	68.3
Medium Trucks:	62.2	? 6	60.7		54.3		52.	8	61.2	2	61.5
Heavy Trucks:	62.2	?6	8.08		51.8		53.	0	61.4	4	61.5
Vehicle Noise:	70.4	6	8.6		65.7		60.	8	69.3	3	69.8

70 dBA

90

97

Ldn:

CNEL:

65 dBA

195

210

60 dBA

420

452

55 dBA

905

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: e/o (s/o) Ridge Route

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				S	ite Cond	ditions	(Hard =	10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	38,800 vehicle	:S					Autos:	15			
Peak Hour	Percentage:	10%			Med	lium Tru	ıcks (2 i	Axles):	15			
Peak H	our Volume:	3,880 vehicle	:S		Hea	vy Truc	cks (3+)	Axles):	15			
Ve	hicle Speed:	55 mph		V	ehicle N	liv						
Near/Far La	ne Distance:	88 feet				cleType		Day	Evening	Night	Daily	
Site Data					70///		Autos:	77.5%	J		97.42%	
	rier Height:	0.0 feet			Me	dium Tı	rucks:	84.8%		10.3%	1.84%	
Barrier Type (0-W	•	0.0 feet 0.0			Н	eavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dis	•	100.0 feet										
Centerline Dist.		100.0 feet		N	oise So				eet)			
Barrier Distance		0.0 feet				Autos		000				
Observer Height (5.0 feet			Medium			000				
• ,	ad Elevation:	0.0 feet			Heavy	/ Trucks	s: 8.	006	Grade Ad	iustment.	: 0.0	
	ad Elevation:	0.0 feet		L	ane Equ	ivalent	Distan	ce (in	feet)			
	Road Grade:	0.0%				Autos		850				
,	Left View:	-90.0 degre	es		Medium			805				
	Right View:	90.0 degre				/ Trucks		850				
	g	00.0 d0g.0	-		,							
FHWA Noise Mode	el Calculation	ıs										
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite I	Road	Fresi	nel	Barrier Att	en Ber	m Atten	
Autos:	71.78	3.07		-3.92		-1.20		<i>-4.</i> 87	0.0	000	0.000	
Medium Trucks:	82.40	-14.17		-3.92		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	86.40	-18.13		-3.92		-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and	barrie	er attenu	ation)							
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Eve	ening	Leq	Night		Ldn	CI	NEL	
Autos:	69	9.7	67.8		66.1	-	60.0)	68.6	6	69.2	
Medium Trucks:	63	3.1	61.6		55.2		53.7	7	62.2	2	62.4	
Heavy Trucks:	63	3.1	61.7		52.7		53.9	9	62.3	3	62.4	

	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	104	224	483	1,042
CNEL:	112	241	520	1,121

66.6

61.7

70.3

69.5

70.7

Vehicle Noise:

71.3

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: w/o (n/o) El Toro Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Con	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily Traffic (Adt).	43,900 vehicle	s				Autos:	15				
Peak Hour Percentage.			Me	dium Tru	ıcks (2	Axles):	15				
Peak Hour Volume.	4,390 vehicle	S	He	avy Truc	ks (3+	Axles):	15				
Vehicle Speed.	55 mph		Vehicle i	Mix							
Near/Far Lane Distance	88 feet			icleType		Day	Evening	Night	Daily		
Site Data			Veri		Autos:	77.5%		9.6%			
			Λ./.	edium Tr		84.8%		10.3%	1.84%		
Barrier Height				Heavy Tr		86.5%		10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm)			,	icavy II	ucns.	00.576	2.1 /0	10.076	0.7470		
Centerline Dist. to Barrier			Noise So	ource El	evatio	ns (in fe	eet)				
Centerline Dist. to Observer				Autos	s: 2	2.000					
Barrier Distance to Observer			Mediu	m Trucks	s: 4	.000					
Observer Height (Above Pad)			Heav	y Trucks	s: 8	3.006	Grade Ad	justment.	0.0		
Pad Elevation			. –	• • •			.				
Road Elevation			Lane Eq				reet)				
Road Grade				Autos		9.850					
Left View	: -90.0 degre	es		m Trucks		9.805					
Right View	90.0 degre	es	Heav	y Trucks	s: 89	9.850					
FHWA Noise Model Calculation	ons										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos: 71.7	78 3.60	-3.9	2	-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 82.4	-13.64	-3.9	2	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	10 -17.59	-3.9	2	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wi	thout Topo and	barrier atter	nuation)								
VehicleType Leq Peak F	lour Leq Day	/ Leq E	vening	Leq	Night		Ldn	CI	VEL		
Autos:	70.3	68.4	66.6		60	.5	69.2	2	69.8		
Medium Trucks:	63.6	62.1	55.8		54	.2	62.7	7	62.9		
Heavy Trucks:	63.7	62.3	53.2		54	.5	62.8	3	63.0		
Vehicle Noise:	71.8	70.1	67.1		62	.2	70.8	3	71.3		
Centerline Distance to Noise	Contour (in feet	·)									

70 dBA

113

122

Ldn:

CNEL:

65 dBA

244

262

60 dBA

525

565

55 dBA

1,131

1,217

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: e/o (s/o) El Toro Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA				N	NOISE	MODE	L INPUT	S	
Highway Data			S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	44,800 vehicle	es					Autos:	15		
Peak Hour Percentage:				Me	dium Tr	ucks (2	? Axles):	15		
Peak Hour Volume:	4,480 vehicle	es		He	avy Tru	cks (3+	- Axles):	15		
Vehicle Speed:	55 mph		V	'ehicle l	Miv					
Near/Far Lane Distance:	88 feet		_		icleType	2	Day	Evening	Night	Daily
Site Data				VOIII		Autos:	77.5%	•	9.6%	•
	0.0 (1			Me	edium T		84.8%		10.3%	1.84%
Barrier Height:					leavy T		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:									10.070	0
Centerline Dist. to Observer:			٨	loise Sc	urce E	levatio	ns (in fe	eet)		
Barrier Distance to Observer:					Auto		2.000			
Observer Height (Above Pad):				Mediur	n Truck	s: 4	4.000			
Pad Elevation:				Heav	y Truck	s: 8	3.006	Grade Adj	iustment.	0.0
Pad Elevation. Road Elevation:			1	ane Fai	uivalen	t Dista	nce (in i	feet)		
Road Grade:				.ano 24	Auto		9.850			
Left View:		200		Mediur	n Truck		9.805			
Right View:	•				y Truck		9.850			
ragni view.	90.0 degre	562		ricav	y Truck	.3. 0	0.000			
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Dis	tance	Finite	Road	Fre	snel	Barrier Atte	en Ber	m Atten
Autos: 71.7	8 3.69)	-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -13.55	5	-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -17.50)	-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	l barrie	er attenu	ıation)						
VehicleType Leq Peak H			Leq Ev		Leq	Night		Ldn	CI	VEL
Autos:	70.3	68.5	<u> </u>	66.7		60).6	69.3	3	69.9
Medium Trucks:	63.7	62.2		55.9		54	1.3	62.8	3	63.0
Heavy Trucks:	63.8	62.3		53.3		54	l.6	62.9)	63.0
Vehicle Noise:	71.9	70.2		67.2		62	2.3	70.9)	71.4
Centerline Distance to Noise	Contour (in fee	t)								
	,		70 d	BA	65	dBA	6	60 dBA	55	dBA
		Ldn:	11:	5	2	47		532	1,	146

CNEL:

123

266

1,233

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: b/w Glenwood/Indian Creek and Laguna Hills

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS							
Highway Data				Sit	te Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	41,400 vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak H	lour Volume:	4,140 vehicles	3		He	avy Truc	cks (3+	- Axles):	15		
Ve	hicle Speed:	55 mph		Ve	hicle l	Mix					
Near/Far La	ne Distance:	88 feet		•		icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	•		97.42%
	rrier Height:	0.0 feet			Ме	edium Tr	rucks:	84.8%		10.3%	
Barrier Type (0-W	•	0.0			F	leavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet									
Centerline Dist.		100.0 feet		No	ise Sc			ns (in fe	eet)		
Barrier Distance		0.0 feet				Autos		2.000			
Observer Height		5.0 feet				n Trucks		4.000		_	
•	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjusti						iustment	: 0.0
	ad Elevation:	0.0 feet		La	ne Eq	uivalent	Dista	nce (in	feet)		
	Road Grade:	0.0%				Autos		9.850			
	Left View:	-90.0 degree	es		Mediur	n Trucks	s: 8	9.805			
	Right View:	90.0 degree			Heav	y Trucks	s: 8	9.850			
FHWA Noise Mod											•
VehicleType	REMEL	Traffic Flow	Distanc		Finite		Fre		Barrier Att		rm Atten
Autos:	71.78	3.35		3.92		-1.20		-4.87		000	0.000
Medium Trucks:	82.40	-13.89		3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-17.85	-3	3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier att	tenua	tion)						
VehicleType	Leq Peak Hou	ır Leq Day	Leq	_j Eve	ning	Leq	Night		Ldn	С	NEL
Autos:	70	.0	68.1		66.3		60	.3	68.9)	69.5
Medium Trucks:	63	.4	61.9	55.5 54.0 62.4				1	62.7		

Vehicle Noise:	71.6 69.	8 66.	9 62	2.0 70.	5 71.0
Centerline Distance to	Noise Contour (in feet)				
		70 dBA	65 dBA	60 dBA	55 dBA
	Ldi	n: 109	234	505	1,088
	CNE	<i>L:</i> 117	252	543	1,170

53.0

54.2

62.6

62.7

62.0

Heavy Trucks:

63.4

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: s/o Laguna Hills Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS					
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)		
Average Daily Traffic (Adt):	30,300 vehicles	3			Autos:	15		
Peak Hour Percentage:	10%		Med	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	3,030 vehicles	S	Hea	avy Trucks (3+ <i>Axles):</i>	15		
Vehicle Speed:	55 mph		Vehicle I	Vix				
Near/Far Lane Distance:	88 feet			cleType	Day	Evening	Night	Daily
Site Data				Autos		_	9.6%	
Barrier Height:	0.0 feet		Ме	edium Trucks	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Trucks	s: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		W-1 0-	51	· · · · ·	4)		
Centerline Dist. to Observer:	100.0 feet		Noise So	urce Elevat		eet)		
Barrier Distance to Observer:	0.0 feet			Autos:	2.000			
Observer Height (Above Pad):	5.0 feet			n Trucks:	4.000	Crada Ad	lia.tma a m.t	
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
Road Elevation:	0.0 feet		Lane Equ	uivalent Dis	tance (in	feet)		
Road Grade:	0.0%			Autos:	89.850			
Left View:	-90.0 degree	es	Mediur	n Trucks:	89.805			
Right View:	90.0 degree	es	Heav	y Trucks:	89.850			
FHWA Noise Model Calculatio	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 1.99	-3.9)2	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -15.25	-3.9	2	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -19.20	-3.9)2	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)					
VehicleType Leq Peak He	our Leq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL
Autos: 6	88.7	66.8	65.0		58.9	67.6	6	68.2
Medium Trucks: 6	2.0	60.5	54.2	;	52.6	61.1	1	61.3
Heavy Trucks:6	62.1	60.7	51.6		52.9	61.2	2	61.3
Vehicle Noise: 7	0.2	68.5	65.5		60.6	69.2	2	69.7

70 dBA

88

95

Ldn:

CNEL:

65 dBA

190

205

60 dBA

410

441

55 dBA

883

950

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Moulton Pkwy.

Road Segment: s/o Alicia Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPE	CIFIC INF	PUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Cond	litions (Ha	ard = 10, Sc	oft = 15)		
Average Daily Traft	fic (Adt): 26	6,100 vehicles	3			Autos:	15		
Peak Hour Perd	centage:	10%		Med	lium Truck	s (2 Axles):	15		
Peak Hour	Volume: 2	2,610 vehicles	3	Hea	vy Trucks	(3+ Axles):	15		
	Speed:	55 mph		Vehicle M	lix				
Near/Far Lane D	istance:	88 feet		Vehic	eleType	Day	Evening	Night	Daily
Site Data					Auto	os: 77.5%	12.9%	9.6%	97.42%
Barrier	Height:	0.0 feet		Me	dium Truci	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall,	•	0.0		H	eavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to	,	100.0 feet		Noise So	urce Flev	ations (in fe	oet)		
Centerline Dist. to O	bserver:	100.0 feet		110/30 001	Autos:	2.000	,,,,		
Barrier Distance to O	bserver:	0.0 feet		Modium	Trucks:	4.000			
Observer Height (Abo	ve Pad):	5.0 feet					Grade Adj	iustmont:	0.0
Pad E	levation:	0.0 feet		неаvy	Trucks:	8.006	Grade Auj	usimeni.	0.0
Road E	levation:	0.0 feet	-	Lane Equ	ivalent Di	istance (in i	feet)		
Road	d Grade:	0.0%			Autos:	89.850			
Le	eft View:	-90.0 degree	es	Medium	Trucks:	89.805			
Rig	nht View:	90.0 degree		Heavy	Trucks:	89.850			
FHWA Noise Model Ca	alculations								
VehicleType F	REMEL	Traffic Flow	Distance	Finite F	Road	Fresnel	Barrier Att	en Beri	m Atten
Autos:	71.78	1.34	-3.9	92	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.89	-3.9	92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.85	-3.9	92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Le	vels (witho	ut Topo and I	barrier atte	nuation)					
VehicleType Leq	Peak Hour	Leq Day	Leq E	vening	Leq Nig	ht	Ldn	CI	VEL
Autos:	68.0) (66.1	64.3		58.3	66.9)	67.5
Medium Trucks:	61.4	4 5	59.9	53.5		52.0	60.4	ļ.	60.7
Heavy Trucks:	61.4	4 6	0.0	51.0		52.2	60.6	6	60.7
Vehicle Noise:	69.6	6 (67.8	64.9		60.0	68.5	5	69.0

70 dBA

80

86

Ldn:

CNEL:

65 dBA

172

185

60 dBA

371

399

55 dBA

800

860

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl. Number: 8141
Road Segment: w/o Bake Pkwy. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOI	SE MOD	EL INPUT	S	
Highway Data			Site Cor	ditions (Ha	ard = 10, S	oft = 15)		
Average Daily Traffic (Adt):	16,600 vehicle	es			Autos	: 15		
Peak Hour Percentage:	•		Me	dium Truck	s (2 Axles)	: 15		
Peak Hour Volume:	1,660 vehicle	s	He	avy Trucks	(3+ Axles)	: 15		
Vehicle Speed:	55 mph		Vehicle	Mix				
Near/Far Lane Distance:	52 feet				Day	Evening	Night	Doily
Site Data			ven	icleType Auto		Evening // 12.9%	9.6%	<i>Daily</i> 97.42%
				Auto edium Truck			10.3%	1.84%
Barrier Height:							10.3%	0.74%
Barrier Type (0-Wall, 1-Berm):			'	Heavy Truck	ks: 86.59	/o 2.1%	10.6%	0.74%
Centerline Dist. to Barrier.			Noise S	ource Eleva	ations (in	feet)		
Centerline Dist. to Observer.				Autos:	2.000			
Barrier Distance to Observer:			Mediu	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
Pad Elevation.						•		
Road Elevation:			Lane Eq	uivalent Di		teet)		
Road Grade:				Autos:	96.607			
Left View.	3 -			m Trucks:	96.566			
Right View:	90.0 degre	es	Heav	y Trucks:	96.608			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road I	Fresnel	Barrier Att	ten Ber	m Atten
Autos: 71.7	78 -0.62	-4	.39	-1.20	<i>-4.</i> 87	0.0	000	0.000
Medium Trucks: 82.4	-17.86	-4	.39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	-21.82	-4	.39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	y Leq	Evening	Leq Nig	ht	Ldn	CI	VEL
Autos:	65.6	63.7	61.9		55.8	64.	5	65.1
Medium Trucks:	59.0	57.4	51.1		49.5	58.0	0	58.2
Heavy Trucks:	59.0	57.6	48.5		49.8	58.	1	58.3
Vehicle Noise:	67.1	65.4	62.4		57.6	66.	1	66.6
Centerline Distance to Noise	Contour (in feet	t)						

70 dBA

55

59

Ldn:

CNEL:

65 dBA

119

127

60 dBA

255

275

55 dBA

550

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl. Number: 8141 Road Segment: e/o Bake Pkwy. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA				N	IOISE	MODE	L INPUTS	S	
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	19,700 vehicl	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	1,970 vehicl	es		He	avy Trud	cks (3+	Axles):	15		
Ve	hicle Speed:	50 mph		-	Vehicle i	Wiy					
Near/Far La	ne Distance:	70 feet				icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
	rrier Height:	0.0 feet			М	edium Ti		84.8%		10.3%	
Barrier Type (0-W	•	0.0				leavy T		86.5%		10.8%	
Centerline Dis		100.0 feet									
Centerline Dist.		100.0 feet		1	Noise So				eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height (5.0 feet				n Truck		1.000			
• ,	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Adj	iustment	: 0.0
	ad Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0%				Auto		3.723	<u> </u>		
·	Left View:	-90.0 degr	ees		Mediu	n Truck		3.680			
	Right View:	90.0 degr			Heav	y Truck	s: 93	3.723			
FHWA Noise Mode				:	Finite.	Dand			Dannian A44	D	A (/ a
VehicleType	REMEL	Traffic Flow		istance	Finite	-1.20	Fres		Barrier Atte		m Atten
Autos: Medium Trucks:	70.20 81.00			-4.20 -4.19		-1.20		-4.87 -4.97	0.0 0.0		0.000
Heavy Trucks:	85.38			-4.13 -4.20		-1.20		-4.97 -5.16	0.0		0.000
						-1.20		-5.16	0.0	,00	0.000
Unmitigated Noise	· · · · · · · · · · · · · · · · · · ·										
VehicleType	Leq Peak Ho		•		vening	Leq	Night		Ldn		NEL
Autos:		5.3	63.4		61.7		55		64.2		64.9
Medium Trucks:		3.9	57.4		51.0		49		58.0		58.2
Heavy Trucks:		9.3	57.9		48.9		50		58.5		58.6
Vehicle Noise:	67	7.0	65.3		62.2		57	.5	66.0)	66.5
Centerline Distance	ce to Noise C	ontour (in fee	et)								
				70 d	dBA	65	dBA	6	60 dBA	55	dBA

54

58

Ldn: CNEL: 117

125

251

270

542

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl. Number: 8141
Road Segment: w/o Ridge Route Dr. Analyst: B. Lawson

SITE SI	PECIFIC IN	IPUT DATA			NO	ISE MODE	L INPUT	S	
Highway Data				Site Cor	ditions (H	ard = 10, Sc	oft = 15)		
Average Daily Tr	raffic (Adt): 2	26,700 vehicles	3			Autos:	15		
Peak Hour P	ercentage:	10%		Ме	dium Truck	s (2 Axles):	15		
Peak Hou	ur Volume:	2,670 vehicles	3	He	avy Trucks	(3+ Axles):	15		
Vehi	icle Speed:	50 mph		Vehicle	Mix				
Near/Far Lane	e Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data					Aut	os: 77.5%	12.9%	9.6%	97.42%
Barri	ier Height:	0.0 feet		M	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wal	•	0.0		ı	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Dist.	to Barrier:	100.0 feet		Noisa S	ource Flev	ations (in fe	not)		
Centerline Dist. to	Observer:	100.0 feet		NOISE S	Autos:	2.000			
Barrier Distance to	Observer:	0.0 feet		Modiu	m Trucks:	4.000			
Observer Height (Al	bove Pad):	5.0 feet			ry Trucks:	8.006	Grade Ad	iustment	. 0.0
Pad	l Elevation:	0.0 feet						, actimom.	0.0
Road	l Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)		
Ro	oad Grade:	0.0%			Autos:	93.723			
	Left View:	-90.0 degree	es .	Mediu	m Trucks:	93.680			
F	Right View:	90.0 degree	es .	Heav	y Trucks:	93.723			
FHWA Noise Model	Calculations	S							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20	1.86	-4.	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-15.38	-4.	19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-19.34	-4.	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise L	Levels (with	out Topo and I	barrier atte	nuation)					
VehicleType L	eq Peak Hou	ır Leq Day	Leq	Evening	Leq Nig	ght	Ldn	CI	VEL
Autos:	66	.7	64.8	63.0		56.9	65.6	6	66.2

Ullillingated Nois	e Levels (Withou	it ropo and ban	iei atteriuatiori)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	66.7	64.8	63.0	56.9	65.6	66.2
Medium Trucks:	60.2	58.7	52.4	50.8	59.3	59.5
Heavy Trucks:	60.6	59.2	50.2	51.4	59.8	59.9
Vehicle Noise:	68.4	66.6	63.6	58.8	67.3	67.8

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn: ¯	66	143	308	663						
CNEL:	71	154	331	713						

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl. Number: 8141
Road Segment: e/o Ridge Route Dr. Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NO	ISE MODE	L INPUT	S	
Highway Data				Site Con	ditions (H	ard = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 2	6,800 vehicles	3			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Truck	ks (2 Axles):	15		
Peak H	lour Volume:	2,680 vehicles	S	He	avy Trucks	(3+ Axles):	15		
Ve	hicle Speed:	50 mph		Vehicle	Miy				
Near/Far Lai	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data					Aut	os: 77.5%	12.9%	9.6%	97.42%
Bai	rrier Height:	0.0 feet		M	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0		I	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Dis	,	100.0 feet		Noise S	ouroo Elov	ations (in f	204)		
Centerline Dist.	to Observer:	100.0 feet		Noise 30		2.000	eei)		
Barrier Distance	to Observer:	0.0 feet		Madiu	Autos: m Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet			y Trucks:	4.000 8.006	Grade Ad	iustment	
Pa	ad Elevation:	0.0 feet		rieav	ry Trucks.	0.000	Grade Adj	usunone	. 0.0
Roa	ad Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)		
I	Road Grade:	0.0%			Autos:	93.723			
	Left View:	-90.0 degree	es	Mediu	m Trucks:	93.680			
	Right View:	90.0 degree	es	Heav	y Trucks:	93.723			
FHWA Noise Mode	el Calculations	;							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20	1.87	-4.2	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-15.37	-4.′	19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-19.32	-4.2	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (witho	out Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Hou	, ,	Leq E	vening	Leq Nig	ght	Ldn	Ci	NEL
Autos:	66.	7 (64.8	63.0		57.0	65.6	3	66.2

Ullillingated Nois	e Levels (Withou	it ropo and ban	iei atteriuationij			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	66.7	64.8	63.0	57.0	65.6	66.2
Medium Trucks:	60.2	58.7	52.4	50.8	59.3	59.5
Heavy Trucks:	60.7	59.2	50.2	51.5	59.8	59.9
Vehicle Noise:	68.4	66.6	63.6	58.8	67.3	67.8

Centerline Distance to Noise Contour (in feet)									
	70 dBA	65 dBA	60 dBA	55 dBA					
Ldn:	66	143	309	665					
CNFI ·	71	154	332	714					

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: e/o El Toro Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NC	ISE I	ИODE	L INPUT	S	
Highway Data			Site Con	ditions (F	Hard =	10, Sc	oft = 15)		
Average Daily Traffic (Adt):	28,800 vehicles	;				Autos:	15		
Peak Hour Percentage:	10%		Me	dium Truc	ks (2 A	Axles):	15		
Peak Hour Volume:	2,880 vehicles	;	He	avy Truck	s (3+ A	Axles):	15		
Vehicle Speed:	50 mph		Vehicle i	Miy					
Near/Far Lane Distance:	70 feet			icleType		Day	Evening	Night	Daily
Site Data					itos:	77.5%		9.6%	
Barrier Height:	0.0 feet		M	edium Tru	cks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		I	Heavy Tru	cks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:			Noiso S	ource Ele	vation	c (in f	201		
Centerline Dist. to Observer:	100.0 feet		NOISE SC			3 (<i>III 1</i> 6 000	et)		
Barrier Distance to Observer:	0.0 feet		Madiu	Autos: m Trucks:					
Observer Height (Above Pad):	5.0 feet					000	Crada Ad	iuotmont:	
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.	006	Grade Ad	iustinent.	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent E	Distan	ce (in t	feet)		
Road Grade:	0.0%			Autos:	93.	723			
Left View:	-90.0 degree	s	Mediu	m Trucks:	93.	680			
Right View:	•		Heav	y Trucks:	93.	723			
FHWA Noise Model Calculation	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresr	nel	Barrier Att	en Ber	m Atten
Autos: 70.2	0 2.19	-4.2	0	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 81.0	0 -15.05	-4.1	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 85.3	8 -19.01	-4.2	0	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and I	barrier atten	uation)						
VehicleType Leq Peak He	our Leq Day	Leq E	vening	Leq N	ight		Ldn	CI	VEL
Autos: 6	67.0	55.1	63.3		57.3	3	65.9	9	66.5
Medium Trucks: 6	60.6	59.0	52.7		51.1		59.6	6	59.8
Heavy Trucks:6	51.0 5	59.6	50.5		51.8	3	60.1	<u> </u>	60.2
Vehicle Noise:	88.7	66.9	63.9		59.1		67.7	7	68.1
Centerline Distance to Noise	Contour (in feet)								

70 dBA

70

75

Ldn:

CNEL:

65 dBA

150

161

60 dBA

324

348

55 dBA

698

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl.

Road Segment: s/o Los Alisos Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA			N	OISE MO	DE	L INPUT	S	
Highway Data				Site Co	nditions	(Hard = 10), Sc	oft = 15)		
Average Daily	Traffic (Adt):	24,200 vehicle	es			Au	tos:	15		
Peak Hour	Percentage:	10%		M	edium Tru	icks (2 Axi	es):	15		
Peak H	lour Volume:	2,420 vehicle	es	Н	eavy Truc	ks (3+ Axi	es):	15		
Ve	ehicle Speed:	50 mph		Vehicle	Miy					
Near/Far La	ne Distance:	70 feet			hicleType	Di	ay	Evening	Night	Daily
Site Data				70			رد 7.5%		9.6%	•
		0.0 foot		Λ	, Лedium Tı		.0 % 1.8%		10.3%	1.84%
	rrier Height:	0.0 feet 0.0			Heavy Ti		6.5%		10.8%	0.74%
Barrier Type (0-W Centerline Di	•	0.0 100.0 feet								011 170
Centerline Di		100.0 feet		Noise S	Source El	evations (in fe	eet)		
Barrier Distance		0.0 feet			Autos	s: 2.00	0			
				Media	um Trucks	s: 4.00	0			
Observer Height		5.0 feet		Hea	vy Truck	s: 8.00	6	Grade Ad	justment.	0.0
	ad Elevation: ad Elevation:	0.0 feet		I ano F	าแบ่งอไอกเ	Distance	(in i	foot)		
		0.0 feet		Lanc L	Autos		•	iccij		
	Road Grade:	0.0%		Modi	Auto: um Truck:					
	Left View:	-90.0 degre			am Truck: avy Truck:					
	Right View:	90.0 degre	es	Пес	ivy Trucks	5. 93.12	3			
FHWA Noise Mod	lel Calculation	าร								
VehicleType	REMEL	Traffic Flow	Distance	e Finite	e Road	Fresnel		Barrier Att	en Ber	m Atten
Autos:	70.20	1.43	-4	1.20	-1.20	-4	.87	0.0	000	0.000
Medium Trucks:	81.00	-15.81	-4	l.19	-1.20	-4	.97	0.0	000	0.000
Heavy Trucks:	85.38	-19.76	-4	1.20	-1.20	-5	.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	barrier att	enuation))					
VehicleType	Leq Peak Ho	our Leq Day	y Leq	Evening	Leq	Night		Ldn	CI	VEL
Autos:	6	6.2	64.3	62.6	3	56.5		65.1	1	65.7
Medium Trucks:	5	9.8	58.3	51.9	9	50.4		58.8	3	59.1
Heavy Trucks:	6	0.2	58.8	49.8	3	51.0		59.4	4	59.5
Vehicle Noise:	6	7.9	66.2	63.	1	58.3		66.9	9	67.4

70 dBA

62

67

Ldn: CNEL: 65 dBA

134

144

60 dBA

288

310

55 dBA

621

667

Sunday,	May 20,	2012	

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Muirlands Bl. Number: 8141
Road Segment: e/o Alicia Pkwy. Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NO	ISE MOD	EL INPUT	S			
Highway Data			Site Con	ditions (H	ard = 10,	Soft = 15)				
Average Daily Traffic (Adt):	19,900 vehicles	S			Auto	s: 15				
Peak Hour Percentage:	10%		Ме	dium Truck	s (2 Axles	s): 15				
Peak Hour Volume:	1,990 vehicles	S	He	avy Trucks	(3+ Axles	s): 15				
Vehicle Speed:	50 mph		Vehicle	Miv						
Near/Far Lane Distance:	70 feet			icleType	Day	Evening	Night	Daily		
Site Data				Aut	-	J	9.6%	_		
Barrier Height:	0.0 feet		М	edium Truc			10.3%			
Barrier Type (0-Wall, 1-Berm):	0.0			Heavy Truc	ks: 86.5	% 2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:	100.0 feet									
Centerline Dist. to Observer:	100.0 feet		Noise S	ource Elev	•	feet)				
Barrier Distance to Observer:	0.0 feet			Autos:	2.000					
Observer Height (Above Pad):	5.0 feet			m Trucks:	4.000	0 / 1		0.0		
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	ijustment	: 0.0		
Road Elevation:	0.0 feet		Lane Eq	uivalent D	istance (i	n feet)				
Road Grade:	0.0%		Autos: 93.723							
Left View:	-90.0 degree	es	Mediu	m Trucks:	93.680					
Right View:	90.0 degree		Heav	y Trucks:	93.723					
FHWA Noise Model Calculatio	ns									
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier At	ten Bei	m Atten		
Autos: 70.20	0 0.58	-4	.20	-1.20	-4.8	7 0.	000	0.000		
Medium Trucks: 81.0	0 -16.66	-4	.19	-1.20	-4.9	7 0.	000	0.000		
Heavy Trucks: 85.3	8 -20.61	-4	.20	-1.20	-5.1	6 0.	000	0.000		
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	enuation)							
VehicleType Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq Nig	ght	Ldn	C	NEL		
Autos: 6	5.4	63.5	61.7		55.7	64.	3	64.9		
Medium Trucks: 5	58.9	57.4	51.1		49.5	58.	0	58.2		
Heavy Trucks: 5	59.4	57.9	48.9		50.2	58.	5	58.6		
Vehicle Noise: 6	57.1	65.3	62.3		57.5	66.	0	66.5		
Centerline Distance to Noise (Contour (in feet)								

ļ , , , , , , , , , , , , , , , , , , ,				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	55	117	253	545
CNEL:	59	126	272	586

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Oak Cyn./Laguna Cyn. Rd. Number: 8141
Road Segment: w/o Sand Canyon. Av. Number: 8141
Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				N	NOISE N	10DE	L INPUT	S	
Highway Data				3	Site Con	ditions	(Hard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,400 vehicle	s				,	Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2 A	xles):	15		
Peak H	lour Volume:	640 vehicle	s		He	avy Tru	cks (3+ A	xles):	15		
Ve	hicle Speed:	35 mph		,	/ehicle l	Miv					
Near/Far La	ne Distance:	20 feet				icleType	۵ .	Day	Evening	Night	Daily
Site Data					V GI I			77.5%	J		97.42%
	vviov Hoimbt.	0.0 feet			Me	edium T		84.8%		10.3%	
ва Barrier Type (0-W	rrier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Centerline Di		0.0 100.0 feet									
Centerline Dist.		100.0 feet		^	loise So	ource E	levations	s (in f	eet)		
Barrier Distance		0.0 feet				Auto		000			
		5.0 feet			Mediui	m Truck	s: 4.0	000			
Observer Height	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.0	006	Grade Adj	iustment	: 0.0
	ad Elevation: ad Elevation:	0.0 feet		,	ane Fo	uivalen	t Distand	e (in	feet)		
	au Elevalion. Road Grade:	0.0%		_	ano Eq	Auto			1001)		
	Left View:				Modiu	אנוט m Truck					
		-90.0 degre				ry Truck					
	Right View:	90.0 degre	es		Heav	y IIuck	S. 99.0)44			
FHWA Noise Mod	el Calculation	s		l .							
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fresn	el	Barrier Att	en Bei	m Atten
Autos:	64.30	-2.80		-4.59)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	75.75	-20.04		-4.59)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	81.57	-23.99		-4.59)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	er atteni	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	C	NEL
Autos:	55	.7	53.8		52.1		46.0		54.6	3	55.2
Medium Trucks:	49	.9	48.4		42.1		40.5		49.0)	49.2
Heavy Trucks:	51	.8	50.4		41.3		42.6		50.9)	51.1

Sunday,	May	20,	2012

Vehicle Noise:

57.9

Centerline Distance to Noise Contour (in feet)

56.2

Ldn: CNEL: 52.8

70 dBA

13

14

48.4

65 dBA

29

31

56.9

60 dBA

62

67

57.4

55 dBA

134

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Orchard Hills/PA 1 Loop Number: 8141
Road Segment: n/o Portola Pkwy. Analyst: B. Lawson

SITE SPECIFI	CINP	UT DATA				ı	VOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily Traffic (Ad	lt): 6	5,900 vehicles	S					Autos:	15		
Peak Hour Percentag	je:	10%			Me	dium Ti	rucks (2	Axles):	15		
Peak Hour Volun	ne:	690 vehicles	3		He	avy Tru	icks (3+	Axles):	15		
Vehicle Spee	ed:	35 mph		_	Vehicle I	Miv					
Near/Far Lane Distand	e:	20 feet				icleTyp	e	Day	Evening	Night	Daily
Site Data					V 0111		Autos:	77.5%		•	97.42%
	L4.	0.0 foot			Me	edium 7		84.8%		10.3%	1.84%
Barrier Heig		0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berr Centerline Dist. to Barri	,	0.0 100.0 feet									011 170
Centerline Dist. to Observ		100.0 feet		I	Noise So	ource E	levatio	ns (in fe	et)		
Barrier Distance to Observ		0.0 feet				Auto	os: 2	2.000			
Observer Height (Above Pa		5.0 feet			Mediui	n Truck	rs: 4	1.000			
Pad Elevation	•	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Adj	justment:	0.0
Road Elevation		0.0 feet		,	Lane Eq	uivalen	t Dista	nce (in t	eet)		
Road Grad		0.0 feet 0.0%		-	zano zy	Auto		9.544	000		
Left Vie		-90.0 degree	20		Mediu	n Truck		9.504			
Right Vie		90.0 degree				y Truck		9.544			
Might vie	vv.	90.0 deglet	55		ricav	y ITUCI	.o. o.	7.544			
FHWA Noise Model Calcula	tions										
VehicleType REME	-	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 6	1.30	-2.47		-4.59	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 7	5.75	-19.71		-4.59	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 8	1.57	-23.67		-4.59	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (withou	ut Topo and	barri	ier atten	uation)						
VehicleType Leq Peak				Leg Ev		Leg	Night		Ldn	CI	VEL
Autos:	56.0) ;	54.1		52.4	<u> </u>	46	.3	54.9	9	55.6
Medium Trucks:	50.3		48.7		42.4		40	.8	49.3	3	49.5
Heavy Trucks:	52.1	;	50.7		41.7		42	.9	51.3	3	51.4
Vehicle Noise:	58.3	;	56.5		53.1		48	.7	57.3	3	57.7
Centerline Distance to Nois	e Con	tour (in feet))								
		· · · · ·		70 c	dBA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

14

15

30

33

66

70

141

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Pacifica Number: 8141
Road Segment: w/o Fortune Dr. Analyst: B. Lawson

Average Daily Traffic (Adt): 10,600 vehicles Autos: 15 Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15 Peak Hour Volume: 1,060 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 52 feet Vehicle Mix Site Data Autos: 77.5% 12.9% 9.6% Barrier Height: 0.0 feet Autos: 77.5% 12.9% 9.6% Barrier Type (0-Wall, 1-Berm): 0.0 Gent Centerline Dist. to Barrier: 100.0 feet Autos: 2.000 Barrier Distance to Observer: 0.0 feet Autos: 96.607 Barrier Distance to Observer: 0.0 feet Autos: 96.608 Barrier Distance to Observer: 0.0 feet Autos: 96.608 Barrier Type (0-Wall, 1-Berm): 0.0 feet Autos: 96.608 Barrier Type (0-Wall, 1-B	Daily 97.42% 1.84% 0.74%
Peak Hour Percentage: 10% Peak Hour Volume: 1,060 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 52 feet Vehicle Mix Vehicle Type Day Evening Night	97.42% 1.84%
Peak Hour Volume: 1,060 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 52 feet Vehicle Mix Vehicle Type Day Evening Night	97.42% 1.84%
Vehicle Speed: 55 mph Near/Far Lane Distance: 52 feet Site Data Autos: 77.5% 12.9% 9.6% Barrier Height: 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% Barrier Type (0-Wall, 1-Berm): 0.0 Medium Trucks: 86.5% 2.7% 10.8% Centerline Dist. to Barrier: 100.0 feet Heavy Trucks: 86.5% 2.7% 10.8% Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Medium Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608	97.42% 1.84%
Near/Far Lane Distance: 52 feet Vehicle Mix	97.42% 1.84%
Near/Far Lane Distance: 52 feet VehicleType Day Evening Night	97.42% 1.84%
Site Data Autos: 77.5% 12.9% 9.6%	97.42% 1.84%
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Road Grade: Road Grade: Right View: Road Grade: Road	
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Centerline Dist. to Observer: Observer Height (Above Pad): Autos: Observer Height (Above Pad): Autos: Centerline Dist. to Observer: Observer: Observer: Autos: Observer: Observer Height (Above Pad): Autos: Centerline Dist. to Observer: Observer: Observer: Observer Height (Above Pad): Autos: Contention: Observer: Observer: Observer Height (Above Pad): Observer Height (Above Pad): Autos: Contention: Observer: Obse	0.74%
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.566 Heavy Trucks: 96.608	
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.566 Heavy Trucks: 96.608	
Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608	
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.566 Heavy Trucks: 96.608	
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Heavy Trucks: 8.006 Grade Adjustment. Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608	
Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees Road Elevation: 0.0 feet Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608	0.0
Road Grade: 0.0% Autos: 96.607 Left View: -90.0 degrees Medium Trucks: 96.566 Right View: 90.0 degrees Heavy Trucks: 96.608	
Left View: -90.0 degrees Medium Trucks: 96.566 Right View: 90.0 degrees Heavy Trucks: 96.608	
Right View: 90.0 degrees Heavy Trucks: 96.608	
FHWA Noise Model Calculations	
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Ben	m Atten
Autos: 71.78 -2.57 -4.39 -1.20 -4.87 0.000	0.000
Medium Trucks: 82.40 -19.81 -4.39 -1.20 -4.97 0.000	0.000
Heavy Trucks: 86.40 -23.76 -4.39 -1.20 -5.16 0.000	0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)	
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn Cl	VEL
Autos: 63.6 61.7 60.0 53.9 62.5	
Medium Trucks: 57.0 55.5 49.1 47.6 56.1	63.1
Heavy Trucks: 57.0 55.6 46.6 47.8 56.2	63.1 56.3
Vehicle Noise: 65.2 63.4 60.5 55.6 64.2	

70 dBA

41

44

Ldn:

CNEL:

65 dBA

88

95

60 dBA

189

204

55 dBA 408

439

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Pacifica Number: 8141
Road Segment: w/o (n/o) Alton Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site 0	Conditions	(Hard =	= 10, Sc	oft = 15)			
	Traffic (Adt): Percentage: Hour Volume:	7,200 vehicle 10% 720 vehicle			Medium Ti Heavy Tru	•	,	15 15 15			
Near/Far La	ehicle Speed: ane Distance:	55 mph 52 feet			c le Mix VehicleTyp		Day	Evening	Night	Daily	
Site Data						Autos:	77.5%		9.6%		
Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 feet 0.0			Medium 1 Heavy 1		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%	
Centerline D	ist. to Barrier:	100.0 feet		Noise	Source E	levatio	ns (in fe	eet)			
Ro	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree	es	Me H Lane Me	justment.	0.0					
	Right View:	90.0 degree	es	Н	leavy Truck	ks: 96	.608				
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Distanc	e Fii	nite Road	Fres	nel	Barrier Att	en Ber	m Atten	
Autos:				4.39	-1.20		-4.87		000	0.000	
Medium Trucks:		_		4.39	-1.20		-4.97		000	0.000	
Heavy Trucks:	86.40	-25.44	-4	4.39	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barrier at	tenuatio	on)						
VehicleType	Leq Peak Hot	ur Leq Day	/ Led	g Evenin	g Leq	Night		Ldn	CI	VEL	
Autos:	61	1.9	60.0	5	8.3	52.	2	60.8	3	61.4	
Medium Trucks:			53.8		7.5	45.		54.4		54.6	
Heavy Trucks:			53.9		4.9	46.		54.5	5	54.6	
Vehicle Noise:	63	3.5	61.8	5	8.8	53.	9	62.5	5	63.0	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	32	68	146	315
CNEL:	34	73	157	339

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Road Segment: e/o El Toro Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT	DATA			NC	DISE N	IODE	L INPUT	S	
Highway Data				Site Con	ditions (F	lard =	10, Sc	oft = 15)		
Average Daily Traffic (Adt, Peak Hour Percentage Peak Hour Volume Vehicle Speed	e: 10 e: 3,630) vehicles)%) vehicles) mph			dium Truc avy Truck Mix	ks (2 A	,			
Near/Far Lane Distance	e: 70) feet			icleType		Day	Evening	Night	Daily
Site Data							77.5%		9.6%	
Barrier Height Barrier Type (0-Wall, 1-Berm, Centerline Dist. to Barrie Centerline Dist. to Observe Barrier Distance to Observe Observer Height (Above Pad, Pad Elevation Road Elevation Road Grade Left View): 0. r: 100. r: 100. r: 0.): 5. n: 0. e: 0. r: 0.	.0 feet .0 feet .0 feet .0 feet .0 feet .0 feet .0 feet .0% .0 degrees	s	Mediun Heav Lane Eq	edium Tru Heavy Tru Durce Ele Autos: Trucks: Trucks: Uivalent L Autos: Trucks: Trucks:	2.0 2.0 4.0 8.0 Distano 93.1	000 000 006 ce (in 1 723	2.7% eet) Grade Adj	10.3% 10.8% justment.	1.84% 0.74%
FHWA Noise Model Calculate	ions									
VehicleType REMEL	Traft	ic Flow	Distance	Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten
<i>Autos:</i> 70.		3.19	-4.2		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 81.		-14.05	-4.1		-1.20		-4.97		000	0.000
Heavy Trucks: 85.		-18.00	-4.2		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w		-	1							
VehicleType Leq Peak I		Leq Day		vening	Leq N	<u> </u>		Ldn		VEL
Autos:	68.0		6.1	64.3		58.3		66.9		67.5
Medium Trucks:	61.6		0.1	53.7		52.1		60.6		60.8
Heavy Trucks:	62.0	6	0.6	51.5		52.8		61.1	<u> </u>	61.3
Vehicle Noise:	69.7	6	7.9	64.9		60.1		68.7	7	69.1

70 dBA

81

87

Ldn:

CNEL:

65 dBA

175

188

60 dBA

378

406

55 dBA

814

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Road Segment: w/o Los Alisos Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT	DATA				r	NOISE	MODE	L INPUT	S	
Highway Data						Site Cor	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	30,900	vehicles	S					Autos:	15		
Peak Hour	Percentage:	10	%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	3,090	vehicles	S		He	avy Tru	cks (3+	- Axles):	15		
Ve	ehicle Speed:	55	mph			Vehicle	Mix					
Near/Far La	ne Distance:	88	feet				icleType	Э	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	_
Ba	rrier Height:	0.0) feet			M	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0				ı	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:) feet			Noise S	ourco E	lovatio	ns (in fo	201		
Centerline Dist.	to Observer:	100.0) feet			NOISE S	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0) feet			Modiu	Auto m Truck		4.000 4.000			
Observer Height	(Above Pad):	5.0) feet					_		Grade Ad	liustmant	
P	ad Elevation:	0.0) feet			пеач	y Truck	is. (3.006	Grade Auj	justin o nt	. 0.0
Ro	ad Elevation:	0.0) feet			Lane Eq	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0	0%				Auto	s: 8	9.850			
	Left View:	-90.0) degree	es		Mediu	m Truck	s: 8	9.805			
	Right View:	90.0) degree	es		Heav	y Truck	s: 8	9.850			
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traffi	c Flow	Di	istance	Finite	Road	Fre	snel	Barrier Att	en Bei	m Atten
Autos:	71.78		2.08		-3.9	2	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40		-15.16		-3.9	2	-1.20		<i>-4</i> .97	0.0	000	0.000
Heavy Trucks:	86.40		-19.12		-3.9	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out To	po and	barri	ier atter	nuation)						
VehicleType	Leq Peak Ho	ur	Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	68	3.7		66.8		65.1		59	0.0	67.6	6	68.2
Medium Trucks:	62	2.1		60.6		54.3		52	2.7	61.2	2	61.4
Heavy Trucks:	62	2.2	(60.7		51.7		52	2.9	61.3	3	61.4
Vehicle Noise:	70	0.3		68.6		65.6		60).7	69.3	3	69.8
Centerline Distan	ce to Noise C	ontour	(in feet)								
					70	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

89

96

193

207

415

447

895

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Road Segment: e/o Los Alisos Bl.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	46,900 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	4,690 vehicles	S	He	avy Trucks (3+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Miv				
Near/Far Lane Distance:	88 feet			icleType	Day	Evening	Night	Daily
Site Data			VEII	Autos			9.6%	97.42%
			1/4	Autos edium Trucks			10.3%	1.84%
Barrier Height:				Heavy Trucks			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm):			,	leavy Trucks	. 00.070	2.1 /0	10.070	0.7470
Centerline Dist. to Barrier:			Noise So	ource Elevat	ions (in f	eet)		
Centerline Dist. to Observer:				Autos:	2.000			
Barrier Distance to Observer:			Mediui	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation:			Lana Fa	uivalent Dis	tanco (in	foot)		
Road Elevation:			Lane Eq			ieei)		
Road Grade:			Madiu		89.850			
Left View:					89.805			
Right View:	90.0 degree	es	Heav	y Trucks:	89.850			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fi	resnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 3.89	-3	.92	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -13.35	-3	.92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -17.30	-3	.92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Nigh	t	Ldn	CI	VEL
Autos:	70.5	68.6	66.9	(8.08	69.5	5	70.1
Medium Trucks:	3.9	62.4	56.1		54.5	63.0)	63.2
Heavy Trucks:	64.0	62.5	53.5	ţ	54.8	63.1	1	63.2
Vehicle Noise:	72.1	70.4	67.4		62.5	71.′	1	71.6
Centerline Distance to Noise	Contour (in feet)						

70 dBA

118

127

Ldn:

CNEL:

65 dBA

255

274

60 dBA

549

590

55 dBA

1,182

1,272

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia
Road Segment: w/o Alicia Pkwy.

Number: 8141
Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DA	ATA				I	IOISE	MODE	L INPUT	S	
Highway Data					S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	36,400 v	ehicles						Autos:	15		
Peak Hour	Percentage:	10%				Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	3,640 v	ehicles			He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 m	nph		V	ehicle l	Wix					
Near/Far La	ne Distance:	88 fe	eet				icleType)	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	_
Ra	rrier Height:	0.0	feet			Ме	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0	.001			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0	feet		N/	laisa Sa	urco E	lovatio	ns (in fe	no+1		
Centerline Dist.	to Observer:	100.0	feet		/4	UISE SC	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0	feet			Modium	Auto n Truck		1.000			
Observer Height	(Above Pad):	5.0 1	feet					_		Grade Adj	iustmant	
P	ad Elevation:	0.0	feet			пеач	y Truck	S. (3.006	Grade Auj	iusiiri c iri.	0.0
Ro	ad Elevation:	0.0	feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%	, 0				Auto	s: 89	9.850			
	Left View:	-90.0	degrees			Mediur	n Truck	s: 89	9.805			
	Right View:	90.0	degrees			Heav	y Truck	s: 89	9.850			
FHWA Noise Mod	el Calculation	s										
VehicleType	REMEL	Traffic I	Flow	Dista	nce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78		2.79		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	_	14.45		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	_	18.41		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo	o and ba	rrier a	attenu	ation)						
VehicleType	Leq Peak Hou	ır Le	eq Day	L	eq Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	69	.4	67	.5		65.8		59	.7	68.4	1	69.0
Medium Trucks:	62	8	61	.3		55.0		53	.4	61.9	9	62.1
Heavy Trucks:	62	9	61	.4		52.4		53	.7	62.0)	62.1
Vehicle Noise:	71	.0	69	.3		66.3		61	.4	70.0)	70.5
Centerline Distan	ce to Noise Co	ontour (i	n feet)			,						
					70 dE	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

100

107

215

231

463

498

998

1,074

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Paseo de Valencia

Road Segment: e/o Alicia Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL IN				L INPUT	INPUTS		
Highway Data				Site	e Condition	ns (Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	14,000 vehicle	es				Autos:	15			
Peak Hour	Percentage:	10%			Medium	Trucks (2	Axles):	15			
Peak H	lour Volume:	1,400 vehicle	es		Heavy	Trucks (3+	Axles):	15			
Ve	ehicle Speed:	50 mph		Vel	hicle Mix						
Near/Far La	ane Distance:	70 feet			VehicleT	уре	Day	Evening	Night	Daily	
Site Data						Autos:	77.5%	12.9%	9.6%	97.42%	
Ba	rrier Height:	0.0 feet			Mediur	n Trucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-V	_	0.0			Heav	y Trucks:	86.5%	2.7%	10.8%	0.74%	
• • •	ist. to Barrier:	100.0 feet		Noi	ise Source	e Elevatio	ns (in fa	pet)			
Centerline Dist.	to Observer:	100.0 feet		7107			2.000	<i></i>			
Barrier Distance	to Observer:	0.0 feet			^ ∕ledium Tri		1.000				
Observer Height	(Above Pad):	5.0 feet					3.006	Grade Ad	iustmant	0.0	
P	ad Elevation:	0.0 feet			Heavy Tr	ucks. c	5.006	Orace Au	justinent.	0.0	
Ro	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0%			Α	utos: 93	3.723				
	Left View:	-90.0 degre	es	Λ	∕ledium Tr	ucks: 93	3.680				
	Right View:	90.0 degre			Heavy Tr	ucks: 93	3.723				
FHWA Noise Mod	lel Calculation	1S									
VehicleType	REMEL	Traffic Flow	Distanc	e l	Finite Roa	d Fres	snel	Barrier Att	en Ber	m Atten	
Autos:	70.20	-0.95	-4	1.20	-1.	20	-4.87	0.0	000	0.000	
Medium Trucks:	81.00	-18.19	-2	1.19	-1.	20	-4.97	0.0	000	0.000	
Heavy Trucks:	85.38	-22.14	-2	1.20	-1.	20	-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrier att	enuat	tion)						
VehicleType	Leq Peak Ho	ur Leq Da	y Leq	Even	ing L	.eq Night		Ldn	CI	VEL	
Autos:	6	3.9	62.0		60.2	54	.1	62.8	3	63.4	
Medium Trucks:	5	7.4	55.9		49.6	48	.0	56.5	5	56.7	
Heavy Trucks:	5	7.8	56.4		47.4	48	.6	57.0)	57.1	
Vehicle Noise:	6	5.6	63.8		60.8	56	5.0	64.5	5	65.0	

70 dBA

43

46

Ldn:

CNEL:

65 dBA

93

100

60 dBA

200

215

55 dBA

431

463

Sunday,	May	20,	2012

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Jamboree Rd.

Number: 8141

Analyst: B. Lawson

SITE S Highway Data	SPECIFIC IN	IPUT DATA		S	Site Con				L INPUTS	S	
Average Daily	Traffic (Δdt):	15 800 vehicle	e		ne oon	artions	(mara	Autos:	15		
• •	Percentage:	10%	3		Me	dium Tr	rucks (2	Axles):			
	our Volume:	1,580 vehicle	9				•	· Axles):			
	hicle Speed:	50 mph	3				0/10 (01	7000).			
Near/Far Lar	•	70 feet		ν	ehicle l						
iveai/i ai Lai	ie Distance.	70 1661			Vehi	cleType	Э	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Bar	rier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	st. to Barrier:	100.0 feet		^	Noise Source Elevations (in feet)						
Centerline Dist. t	to Observer:	100.0 feet		-	10,00 00	Auto		2.000	<i></i>		
Barrier Distance t	to Observer:	0.0 feet			Mediur	ח Truck Truck	_	1.000			
Observer Height (/	Above Pad):	5.0 feet		Heavy Trucks: 8.006 Grade Adj					iustment	. 0 0	
Pa	nd Elevation:	0.0 feet			Ticav	y Truck	.s. (5.000	Orado riaj	aotimoni.	0.0
Roa	nd Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in	feet)		
F	Road Grade:	0.0%				Auto	s: 90	3.723			
	Left View:	-90.0 degree	es		Mediur	n Truck	s: 90	3.680			
	Right View:	90.0 degree	es		Heav	y Truck	rs: 90	3.723			
FHWA Noise Mode	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Atte	en Ber	m Atten
Autos:	70.20	-0.42		-4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-17.66		-4.19		-1.20		<i>-4</i> .97	0.0	000	0.000
Heavy Trucks:	85.38	-21.62		-4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Ho	ur Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	64	1.4	62.5		60.7		54	.7	63.3	3	63.9
Medium Trucks:	57	7.9	56.4		50.1		48	.5	57.0)	57.2

Vehicle Noise:	66.1	64.3	61.3	56.5	65.0	65.5
Centerline Distance to	Noise Contour (in fee	t)				
			70 dBA	65 dBA	60 dBA	55 dBA
		Ldn:	47	101	217	467
	C	NEL:	50	108	233	502

56.9

47.9

49.2

57.5

57.6

Heavy Trucks:

58.4

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o SR-261 SB Ramps

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS				S			
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Peak Hou	Traffic (Adt): Percentage: Hour Volume:	26,500 vehicle 10% 2,650 vehicle				dium Tro avy Truo	•	,			
Near/Far La	ehicle Speed: ane Distance:	60 mph 76 feet		V	ehicle I Vehi	icleType		Day	Evening	Night	Daily
	rrier Height:	0.0 feet				r edium Ti Heavy Ti		77.5% 84.8% 86.5%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%
	ist. to Barrier:	0.0 100.0 feet		N		ource E				10.0%	0.74%
Centerline Dist. Barrier Distance Observer Height F	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet				Auto m Truck ry Truck	s: 4	.000 .000 .006	Grade Ad	iustment	. 0.0
Ro	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
	Road Grade: Left View: Right View:	0.0% -90.0 degre 90.0 degre				Auto m Truck ry Truck	s: 92	547 504 547			
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22	2 1.03		-4.11		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.21	-	-4.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:				-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	•	-						ı			
VehicleType	Leq Peak Ho		·	q Eve	ening	Leq	Night		Ldn		VEL
Autos:	_	8.9	67.0		65.3		59.		67.8		68.4
Medium Trucks:		2.2	60.7		54.3		52.		61.2		61.4
Heavy Trucks:		1.8	60.4		51.4		52.		61.0		61.1
Vehicle Noise:	7	0.4	68.6		65.8		60.	8	69.4	1	69.9

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	91	196	422	909
CNEL:	98	211	454	979

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o SR-261 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DA	ATA			N	OISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	21,900 v	ehicles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak H	lour Volume:	2,190 v	ehicles		He	avy Truc	ks (3+	Axles):	15		
Ve	ehicle Speed:	60 m	nph		Vehicle I	Wix					
Near/Far La	ne Distance:	76 fe	eet			icleType		Day	Evening	Night	Daily
Site Data							lutos:	77.5%		9.6%	-
Ra	rrier Height:	0.0 1	feet		Me	edium Tr	ucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			F	leavy Tr	ucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 f	feet		Noise So	ourco El	ovatio	ns (in fo	not)		
Centerline Dist.	to Observer:	100.0 f	feet		NOISE SC	Autos		.000	et)		
Barrier Distance	to Observer:	0.0 f	feet		Madiu	Autos n Trucks		.000			
Observer Height	(Above Pad):	5.0 f	feet						Grade Adj	iustmant	
P	ad Elevation:	0.0 f	feet		неач	y Trucks	s.	.006	Grade Auj	usimeni.	0.0
Ro	ad Elevation:	0.0 f	feet		Lane Eq	uivalent	Distar	nce (in t	feet)		
	Road Grade:	0.0%	, D			Autos	s: 92	2.547			
	Left View:	-90.0	degrees		Mediui	n Trucks	s: 92	2.504			
	Right View:	90.0	degrees		Heav	y Trucks	s: 92	2.547			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic F	Flow D	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	73.22		0.20	-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		17.03	-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-2	20.99	-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo	and barr	rier atten	uation)						
VehicleType	Leq Peak Ho	ur Le	eq Day	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	68	3.1	66.2		64.4		58	.4	67.0)	67.6
Medium Trucks:	61	.3	59.8	}	53.5		51.	.9	60.4	1	60.6
Heavy Trucks:	61	.0	59.6		50.6		51.	.8	60.2	2	60.3
Vehicle Noise:	69	9.6	67.8	}	64.9		60	.0	68.5	5	69.0
Centerline Distan	ce to Noise C	ontour (ii	n feet)							1	
				70 (dBA	65 (dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

80

86

172

186

371

400

800

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Culver Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NC	DISE N	/IODE	L INPUT	S		
Highway Data			Site Cor	nditions (l	Hard =	10, Sc	oft = 15)			
Average Daily Traffic (Adt):	23,300 vehicle	S			,	Autos:	15			
Peak Hour Percentage:	· ·		Me	edium Truc	cks (2 A	xles):	15			
Peak Hour Volume:	2,330 vehicle	S	He	Heavy Trucks (3+ Axles): 15						
Vehicle Speed:	60 mph		Vehicle	Mix						
Near/Far Lane Distance:	76 feet					Dov	Evening	Night	Doily	
Site Date			ven	nicleType		<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	Daily	
Site Data				Au ledium Tru						
Barrier Height:						84.8%		10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm).			1	Heavy Tru	icks.	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier.			Noise S	ource Ele	vations	s (in fe	eet)			
Centerline Dist. to Observer.				Autos:	2.0	000				
Barrier Distance to Observer.			Mediu	m Trucks:	4.0	000				
Observer Height (Above Pad).				vy Trucks:		006	Grade Ad	justment.	0.0	
Pad Elevation.			,							
Road Elevation.			Lane Eq	uivalent l			feet)			
Road Grade.	0.0%			Autos:						
Left View.	-90.0 degre	es	Mediu	m Trucks:	92.5	504				
Right View.	90.0 degre	es	Hear	vy Trucks:	92.5	547				
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road	Fresn	el	Barrier Att	en Ber	m Atten	
Autos: 73.2	22 0.47	-4	4.11	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 83.6	68 -16.77	-4	4.11	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 87.3	-20.72	-4	4.11	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier at	tenuation)							
VehicleType Leq Peak H	lour Leq Day	/ Led	g Evening	Leq N	light		Ldn	CI	VEL	
Autos:	68.4	66.5	64.7		58.7	•	67.3	3	67.9	
Medium Trucks:	61.6	60.1	1 53.7 52.2 60.				60.7	7	60.9	
Heavy Trucks:	61.3	59.9	50.8 52.1 60.4					60.6		
Vehicle Noise:	69.9	68.1	65.2		60.3		68.8	3	69.3	
Centerline Distance to Noise	Contour (in feet)								

70 dBA

83

90

Ldn:

CNEL:

65 dBA

180

194

60 dBA

387

417

55 dBA

834

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Jeffrey Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			Site Cond	itions (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	10% 2,600 vehicle			ium Trucks (2 vy Trucks (3+	,	15 15 15		
Vehicle Speed: Near/Far Lane Distance:	60 mph 76 feet		Vehicle Mi	i x leType	Day	Evening	Night	Daily
Site Data				Autos:	77.5%	12.9%	9.6%	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 feet 0.0 100.0 feet			dium Trucks: eavy Trucks:	84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Observer:	100.0 feet		Noise Sou	ırce Elevatio	ns (in fe	eet)		
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	0.0 feet 5.0 feet 0.0 feet		Medium Heavy	Trucks:	2.000 4.000 3.006	Grade Adj	iustment:	0.0
Road Elevation:	0.0 feet		Lane Equivalent Distance (in feet)					
Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree		Medium Heavy	Trucks: 92	2.547 2.504 2.547			
FHWA Noise Model Calculatio	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite R	Road Fres	snel	Barrier Att	en Ber	m Atten
Autos: 73.2	2 0.95	-4	.11	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 83.6	8 -16.29	-4	.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 87.3	3 -20.24	-4	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier att	enuation)					
VehicleType Leq Peak He	our Leq Day	Leq	Evening	Leq Night		Ldn	CI	VEL
Autos: 6	8.9	67.0	65.2	59).1	67.8	3	68.4
Medium Trucks: 6	52.1	60.6	54.2	52	2.7	61.1	l	61.4
Heavy Trucks:6	31.8	60.3	51.3 52.6 60.9)	61.0
Vehicle Noise: 7	70.3	68.6	65.7	60	7	69.3	3	69.8

70 dBA

90

97

Ldn:

CNEL:

65 dBA

193

208

60 dBA

416

449

55 dBA

897

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Sand Canyon. Av.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S			
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)				
Average Daily Traffic (Adt):	27,700 vehicle	S			Autos:	15				
Peak Hour Percentage:	10%		Me	dium Trucks	(2 Axles):	15				
Peak Hour Volume:	2,770 vehicle	S	Heavy Trucks (3+ Axles): 15							
Vehicle Speed:	55 mph		Vehicle I	Miv						
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data			Veri	Autos		J	9.6%	-		
			1.//	edium Trucks			10.3%	1.84%		
Barrier Height:	0.0 feet			leavy Trucks			10.8%	0.74%		
Barrier Type (0-Wall, 1-Berm):			,	reavy rracke	. 00.070	2.170	10.070	0.7 4 70		
Centerline Dist. to Barrier:			Noise So	ource Elevati	ions (in f	eet)				
Centerline Dist. to Observer:				Autos:	2.000					
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000					
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0		
Pad Elevation:	0.0 feet		Long Equipolant Distance (in fact)							
Road Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
Road Grade:			Modiu		96.607 96.566					
Left View:	3 -				96.608					
Right View:	90.0 degree	es	пеач	y Trucks.	90.000					
FHWA Noise Model Calculation	ns		1							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten		
Autos: 71.7	8 1.60	-4.	39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks: 82.4	0 -15.64	-4.	39	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks: 86.4	0 -19.59	-4.	39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)							
VehicleType Leq Peak H	our Leq Day	/ Leq	Evening	Leq Night	!	Ldn	CI	VEL		
Autos:	37.8	65.9	64.1	5	58.1	66.7	7	67.3		
Medium Trucks:	31.2	59.7	53.3	5	51.8	60.2	2	60.5		
Heavy Trucks:	31.2	59.8	50.8 52.0 60.4							
Vehicle Noise:	69.4	67.6	64.7		59.8	68.3	3	68.8		
Centerline Distance to Noise	Contour (in feet)	,							

70 dBA

77

83

Ldn:

CNEL:

65 dBA

167

179

60 dBA

359

386

55 dBA

774

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Sand Canyon. Av.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	d=10, So	oft = 15)		
Average Daily Traffic (Adt):	23,200 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks ((2 Axles):	15		
Peak Hour Volume:	2,320 vehicles	s	He	avy Trucks (3	3+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Miv				
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data			1011	Autos	•		9.6%	97.42%
	0.0 feet		Me	edium Trucks			10.3%	1.84%
Barrier Height:				Heavy Trucks			10.8%	0.74%
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:								011 170
Centerline Dist. to Observer:			Noise So	ource Elevati	ons (in f	eet)		
Barrier Distance to Observer:				Autos:	2.000			
			Mediui	m Trucks:	4.000			
Observer Height (Above Pad):			Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation: Road Elevation:			Lane Equivalent Distance (in feet)					
Road Elevation. Road Grade:			Lune Ly		96.607	1001)		
Left View:			Modiu		96.566			
					96.608			
Right View:	90.0 degree	es	rieav	y Trucks.	90.000			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 0.83	-4	.39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -16.41	-4	.39	-1.20	<i>-4</i> .97	0.0	000	0.000
Heavy Trucks: 86.4	0 -20.36	-4	.39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	our Leq Day	Leq	Evening	Leq Night	1	Ldn	CI	VEL
Autos: 6	67.0	65.1	63.4	5	57.3	65.9	9	66.5
Medium Trucks: 6	60.4	58.9	52.5	5	51.0	59.5	5	59.7
Heavy Trucks: 6	60.4	59.0	50.0	5	51.2	59.6	6	59.7
Vehicle Noise:	8.6	66.8	63.9	5	9.0	67.6	3	68.0
Centerline Distance to Noise	Contour (in feet)						

70 dBA

69

74

Ldn:

CNEL:

65 dBA

148

159

60 dBA

319

343

55 dBA

688

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Ridge Valley

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS					
Highway Data			Site Con	ditions (H	ard = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	24,500 vehicles	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Truck	s (2 Axles):	15		
Peak Hour Volume:	2,450 vehicles	S	He	avy Trucks	(3+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Miy				
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data				Aut	•		9.6%	97.42%
Barrier Height:	0.0 feet		Ме	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		F	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet							
Centerline Dist. to Observer:	100.0 feet		Noise So		ations (in f	eet)		
Barrier Distance to Observer:	0.0 feet			Autos:	2.000 4.000			
Observer Height (Above Pad):	5.0 feet		Mediui					
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Road Elevation:				uivalent D	istance (in	feet)		
Road Grade:	0.0%			Autos:	96.607	,		
Left View:	-90.0 degree	25	Mediui	n Trucks:	96.566			
Right View:	90.0 degree			y Trucks:	96.608			
FHWA Noise Model Calculation								
VehicleType REMEL	Traffic Flow	Distance	Finite			Barrier Att		m Atten
Autos: 71.78	3 1.07	-4.3	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.40	-16.17	-4.3	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.40	-20.13	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier atter	nuation)					
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Nig	ght	Ldn	CI	VEL
Autos: 6	7.3	65.4	63.6		57.5	66.2	2	66.8
Medium Trucks: 6	0.6	59.1	52.8		51.2	59.7	7	59.9
Heavy Trucks: 6	0.7	59.3	50.2		51.5	59.8	3	60.0
Vehicle Noise: 6	8.8	67.1	64.1		59.2	67.8	3	68.3

70 dBA

71

77

Ldn:

CNEL:

65 dBA

154

165

60 dBA

331

356

55 dBA

713

767

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Ridge Valley

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	25,400 vehic	les					Autos:	15			
Peak Hour Percentage:		10%			Medium Trucks (2 Axles): 15							
Peak Hour Volume:		2,540 vehicles			Heavy Trucks (3+ Axles): 15							
Vehicle Speed:		55 mph		-	Vehicle I	Miy						
Near/Far La	Near/Far Lane Distance:		52 feet			icleType	9	Day	Evening	Night	Daily	
Site Data						Autos:	77.5%		9.6%			
Ra	0.0 feet 0.0			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Height: Barrier Type (0-Wall, 1-Berm):				F	leavy T	Trucks: 86.5		2.7%	10.8%	0.74%		
Centerline Dist. to Barrier:		100.0 feet		.	Noise Ca	roo F	lovotio	no (in fo	n41			
Centerline Dist. to Observer:		100.0 feet				Noise Source Elevations (in feet)						
Barrier Distance to Observer:		0.0 feet		Autos: 2.000 Medium Trucks: 4.000								
Observer Height (Above Pad):		5.0 feet										
Pad Elevation:		0.0 feet			Heavy Trucks: 8.006 Grade Adjustment: 0.0						0.0	
Road Elevation:		0.0 feet			Lane Equivalent Distance (in feet)							
Road Grade:		0.0%			Autos: 96.607							
Left View:		-90.0 degrees			Medium Trucks: 96.566							
Right View:		90.0 degrees			Heavy Trucks: 96.608							
FHWA Noise Mod	del Calculation	18										
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos.	71.78	1.2	1.23		9	-1.20	-4.87		0.0	000	0.000	
Medium Trucks: 82.40		-16.01		-4.39		-1.20	-4.97		0.0	000	0.000	
Heavy Trucks.	Heavy Trucks: 86.40		-19.97		-4.39			-5.16	0.0	000	0.000	
Unmitigated Nois	se Levels (with	nout Topo an	d barr	ier atten	uation)							
VehicleType	Leq Peak Ho	ur Leq Day		Leq Evening		Leq	Night		Ldn	CI	VEL	
Autos.	Autos: 67		4 65.5		63.7		57.7		66.3		66.9	
Medium Trucks: 6		.8 59.3			52.9		51.4		59.8		60.1	
Heavy Trucks: 6		59.4			50.4		51.6		60.0		60.1	
Vehicle Noise: 69		.0 67.2			64.3		59.4		68.0		68.4	
Centerline Distan	ice to Noise C	ontour (in fe	et)									
				70 c	BA	65	dBA	6	0 dBA	55	dBA	

73

79

157

169

Ldn:

CNEL:

730

786

339

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: b/w Silverado and Portola Springs

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NO	ISE MODE	L INPUT	S	
Highway Data			Site Con	ditions (H	ard = 10, Se	oft = 15)		
Average Daily Traffic (Adt):	27,100 vehicle	S			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Truck	ks (2 Axles):	15		
Peak Hour Volume:	2,710 vehicle	s	He	avy Trucks	(3+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle	Miy				
Near/Far Lane Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data				Aut		_	9.6%	_
	0.0 feet		М	edium Truc			10.3%	1.84%
Barrier Height: Barrier Type (0-Wall, 1-Berm).				Heavy Truc			10.8%	0.74%
Centerline Dist. to Barrier.								
Centerline Dist. to Observer.			Noise So	ource Elev	ations (in f	eet)		
Barrier Distance to Observer.				Autos:	2.000			
			Mediu	m Trucks:	4.000			
Observer Height (Above Pad). Pad Elevation.			Heav	y Trucks:	8.006	Grade Adj	iustment:	0.0
Road Elevation.			I ano Fo	uivalent N	istance (in	foot)		
			Lanc Lq	Autos:	96.607	1001)		
Road Grade.			Madiu	m Trucks:				
Left View.					96.566			
Right View.	90.0 degre	es	неач	y Trucks:	96.608			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos: 71.7	'8 1.51	-4.3	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	-15.73	-4.3	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	-19.69	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	nuation)					
VehicleType Leq Peak H	lour Leq Day	/ Leq E	vening	Leq Ni	ght	Ldn	CI	VEL
Autos:	67.7	65.8	64.0 58.0				6	67.2
Medium Trucks:	61.1	59.6	53.2		51.7	60.1		60.4

	Vehicle I ype	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
	Autos:	67.7	65.8	64.0	58.0	66.6	67.2
	Medium Trucks:	61.1	59.6	53.2	51.7	60.1	60.4
	Heavy Trucks:	61.1	59.7	50.7	51.9	60.3	60.4
	Vehicle Noise:	69.3	67.5	64.6	59.7	68.2	68.7
Γ	Contorline Distan	ce to Noise Cont	our (in foot)				

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	76	164	354	763
CNFI ·	82	177	381	820

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Portola Springs

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DAT	A			7	NOISE	MODE	L INPUT	S	
Highway Data				3	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	23,500 vehi	cles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,350 vehi	cles		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		,	/ehicle l	Miy					
Near/Far La	ane Distance:	52 feet		_		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 fee			Ме	edium T	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 fee	t								
Centerline Dist.		100.0 fee			Voise So			•	eet)		
Barrier Distance	to Observer:	0.0 fee				Auto		2.000			
Observer Height	(Above Pad):	5.0 fee	t			n Truck	_	1.000	Crada Ad	iuotmont	0.0
_	Pad Elevation:	0.0 fee	t		Heav	y Truck	is: E	3.006	Grade Adj	justinent.	0.0
Ro	Road Elevation: 0.0 feet					uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 deg	rees		Mediui	n Truck	rs: 96	6.566			
	Right View:	90.0 deg	rees		Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flor	N Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3 0.	89	-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.	35	-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.	31	-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo a	nd barr	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq [Day	Leq Ev	ening/	Leq	Night		Ldn	CI	VEL
Autos:	6	7.1	65.2		63.4		57	.4	66.0)	66.6
Medium Trucks:	60	0.5	59.0		52.6		51	.0	59.5	5	59.7
Heavy Trucks:	60	0.5	59.1		50.0		51	.3	59.6	6	59.8
Vehicle Noise:	68	8.7	66.9		63.9		59	.1	67.6	<u></u>	68.1
Centerline Distan	ce to Noise C	ontour (in fe	eet)		ı						
				70 a	<i>IBA</i>	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

69

75

149

161

322

346

693

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Alton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOIS	L INPUT	S		
Highway Data				Site Conditions (Hard = 10, Soft = 15)					
	Traffic (Adt): Percentage: Hour Volume:	4,600 vehicle 10% 460 vehicle			edium Trucks eavy Trucks	•	15		
	ehicle Speed: ane Distance:	50 mph 70 feet		Vehicle Veh	Mix nicleType Auto	Day s: 77.5%	Evening 12.9%	Night 9.6%	Daily 97.42%
Barrier Type (0-V	*	0.0 feet 0.0			edium Truck Heavy Truck	s: 84.8%	4.9%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. Barrier Distance Observer Height P Ro	to Observer: (Above Pad): Pad Elevation: Pad Elevation: Road Grade: Left View: Right View:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723					
VehicleType Autos: Medium Trucks: Heavy Trucks:	70.20 81.00	Traffic Flow -5.78 -23.02 -26.98	-4	Finite .20 .19	Road F -1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	en Ber 000 000 000	0.000 0.000 0.000
Unmitigated Nois VehicleType	Leq Peak Hou	ır Leq Day	/ Leq	Evening	Leq Nigl		Ldn		VEL
Autos: Medium Trucks: Heavy Trucks:	52 53	2.6 3.0	57.1 51.1 51.6	55.4 44.7 42.5		49.3 43.2 43.8	57.9 51.6 52.2	6 2	58.5 51.9 52.3
Vehicle Noise:	60)./	59.0	55.9		51.1	59.7	<i>(</i>	60.2

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn: ¯	21	44	95	205
CNEL:	22	48	102	221

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Alton Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt):	21,900 vehicle:	S					Autos:	15		
Peak Hour	Percentage:	10%			Med	lium Tru	ucks (2	Axles):	15		
Peak H	lour Volume:	2,190 vehicles	s		Hea	vy Truc	cks (3+	- Axles):	15		
Ve	hicle Speed:	55 mph		V	ehicle N	liy					
Near/Far La	ne Distance:	88 feet		-		cleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%			97.42%
Ra	rrier Height:	0.0 feet			Me	dium Tı	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			Н	eavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet			0-		4	C C	4)		
Centerline Dist.		100.0 feet		N	oise So			•	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height	(Above Pad):	5.0 feet			Medium			4.000	0		. 0.0
•	ad Elevation:	0.0 feet			Heavy	/ Trucks	s: 8	3.006	Grade Ad	justment	. 0.0
Ro	ad Elevation:	0.0 feet		Li	ane Equ	ivalent	t Dista	nce (in	feet)		
	Road Grade:	0.0%				Autos	s: 8	9.850			
	Left View:	-90.0 degree	es		Medium	Trucks	s: 8	9.805			
	Right View:	90.0 degree			Heavy	/ Truck	s: 8	9.850			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite I	Road	Fre	snel	Barrier Att	en Be	m Atten
Autos:	71.78	0.58		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-16.66		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20.61		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	' L	eq Eve	ening	Leq	Night		Ldn	С	NEL
Autos:	67	7.2	65.3		63.6		57	.5 <u> </u>	66.1	1	66.7
Medium Trucks:	60		59.1		52.8		51	.2	59.7	7	59.9
Heavy Trucks:	60).7	59.2		50.2		51	.5	59.8	3	59.9

Vehicle Noise:	68.8 6	7.1	64.1	59.2 67	.8 68.3
Centerline Distance to	Noise Contour (in feet)				
		70 dBA	65 dBA	60 dBA	55 dBA
	L	dn: 71	153	330	711
	CN	EL: 77	165	355	765

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Lake Forest Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT D	ATA				7	NOISE I	MODE	L INPUT	S	
Highway Data					Site Conditions (Hard = 10, Soft = 15)							
Average Daily	Traffic (Adt):	31,700	vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%	6			Me	dium Tr	rucks (2)	Axles):	15		
Peak H	lour Volume:	3,170	vehicles	3		He	avy Tru	cks (3+ /	Axles):	15		
Ve	hicle Speed:	55	mph		1/	'ehicle l	Miv					
Near/Far La	ne Distance:	88	feet		•		icleType	۵	Day	Evening	Night	Daily
Site Data						V GI II		Autos:	77.5%	J		97.42%
		0.0	61			Me	edium T		84.8%		10.3%	
	rrier Height:	0.0	feet				leavy T		86.5%		10.8%	
Barrier Type (0-W Centerline Di	,	100.0										
Centerline Dist.		100.0			Noise Source Elevations (in feet)							
Barrier Distance			feet				Auto	os: 2.	000			
						Mediui	m Truck	rs: 4.	000			
Observer Height	ad Elevation:		feet			Heav	y Truck	rs: 8.	006	Grade Adj	justment	: 0.0
	ad Elevation: ad Elevation:		feet		,	ane Fa	uivalen	t Distan	co (in	foot)		
			feet		_	anc Ly	Auto		850	iccij		
	Road Grade:	0.0				Modiuu	Auto m Truck		805			
	Left View:		degree						850			
	Right View:	90.0	degree	es		пеач	y Truck	is. 69.	000			
FHWA Noise Mod	el Calculation	าร										
VehicleType	REMEL	Traffic	Flow	Dista	ance	Finite	Road	Fresi	nel	Barrier Att	en Bei	rm Atten
Autos:	71.78	3	2.19		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40)	-15.05		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40)	-19.01		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Top	o and	barrier	attenu	ıation)						
VehicleType	Leq Peak Ho	our L	.eq Day	· I	Leq Ev	ening	Leq	Night		Ldn	С	NEL
Autos:	6	8.8	(66.9		65.2		59.		67.7	7	68.4
Medium Trucks:	6	2.2	(60.7		54.4		52.8	3	61.3	3	61.5
Heavy Trucks:	6	2.3	(8.06		51.8		53.1	<u> </u>	61.4	4	61.5

Vehicle Noise:

70.4

Centerline Distance to Noise Contour (in feet)

68.7

Ldn: CNEL: 65.7

70 dBA

91

98

60.8

65 dBA

196

211

69.4

60 dBA

423

455

69.9

55 dBA

910

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: w/o Glenn Ranch Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (H	ard = 10, So	oft = 15)				
Average Daily	Traffic (Adt): 4	9,500 vehicle	s			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Truck	ks (2 Axles):	15				
Peak H	lour Volume:	4,950 vehicle	s	He	avy Trucks	(3+ Axles):	15				
Ve	hicle Speed:	55 mph		Vehicle i	Miv						
Near/Far La	ne Distance:	88 feet			icleType	Day	Evening	Night	Daily		
Site Data					Aut	os: 77.5%	12.9%		97.42%		
Ra	rrier Height:	0.0 feet		М	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0		ŀ	Heavy Truc	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Di	,	100.0 feet		Noise Co		ations (in f	41				
Centerline Dist.	to Observer:	100.0 feet		Noise So		ations (in fe	eet)				
Barrier Distance	to Observer:	0.0 feet		N 4 = =15	Autos:	2.000					
Observer Height ((Above Pad):	5.0 feet			m Trucks:	4.000	Crada Adii	uotmont			
•	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Adjı	usuneni.	0.0		
Roa	ad Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)				
	Road Grade:	0.0%			Autos:	89.850					
	Left View:	-90.0 degre	es	Mediu	m Trucks:	89.805					
	Right View:	90.0 degre	es	Heav	y Trucks:	89.850					
FHWA Noise Mod	el Calculations	3									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten		
Autos:	71.78	4.12	-3.	92	-1.20	-4.87	0.0	00	0.000		
Medium Trucks:	82.40	-13.11	-3.	92	-1.20	-4.97	0.0	00	0.000		
Heavy Trucks:	86.40	-17.07	-3.	92	-1.20	-5.16	0.0	00	0.000		
Unmitigated Noise	e Levels (with	out Topo and	barrier atte	nuation)							
VehicleType	Leq Peak Hou	r Leq Day	/ Leq	Evening	Leq Nig	ght	Ldn	CI	VEL		
Autos:	70.	8	68.9	67.1		61.1	69.7		70.3		

ommagatoa moro	o zovolo (manoa	it rope and ban	ior accorraacion,			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	70.8	68.9	67.1	61.1	69.7	70.3
Medium Trucks:	64.2	62.7	56.3	54.8	63.2	63.4
Heavy Trucks:	64.2	62.8	53.7	55.0	63.4	63.5
Vehicle Noise:	72.4	70.6	67.6	62.8	71.3	71.8
	VehicleType Autos: Medium Trucks: Heavy Trucks:	VehicleType Leq Peak Hour Autos: 70.8 Medium Trucks: 64.2 Heavy Trucks: 64.2	VehicleTypeLeq Peak HourLeq DayAutos:70.868.9Medium Trucks:64.262.7Heavy Trucks:64.262.8	Autos: 70.8 68.9 67.1 Medium Trucks: 64.2 62.7 56.3 Heavy Trucks: 64.2 62.8 53.7	VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Autos: 70.8 68.9 67.1 61.1 Medium Trucks: 64.2 62.7 56.3 54.8 Heavy Trucks: 64.2 62.8 53.7 55.0	VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn Autos: 70.8 68.9 67.1 61.1 69.7 Medium Trucks: 64.2 62.7 56.3 54.8 63.2 Heavy Trucks: 64.2 62.8 53.7 55.0 63.4

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	123	264	569	1,225
CNEL:	132	284	612	1.318

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: e/o Glenn Ranch Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT [DATA			NOISE MODEL INPUTS						
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	34,600	vehicles	3					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	3,460	vehicles	3		He	avy Tru	icks (3+	Axles):	15		
Ve	hicle Speed:	55	mph			Vehicle l	Wix					
Near/Far La	ne Distance:	88	feet				icleType	e	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	,
	rrier Height:	0.0	feet			Ме	edium 7		84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0				H	leavy T	rucks:	86.5%		10.8%	0.74%
Centerline Di	•	100.0										
Centerline Dist.		100.0				Noise So			•	eet)		
Barrier Distance) feet				Auto		2.000			
Observer Height (feet				n Truck	_	.000			
	ad Elevation:) feet			Heav	y Truck	rs: 8	3.006	Grade Ad	iustment:	0.0
	ad Elevation:) feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0				<u> </u>	Auto		9.850	,		
,	Left View:) degree	25		Mediui	n Truck		9.805			
	Right View:		degree			Heav	y Truck	rs: 89	9.850			
FHWA Noise Mod	el Calculatio	าร										
VehicleType	REMEL	Traffic	Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3	2.57		-3.9	2	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40)	-14.67		-3.9	2	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40)	-18.63		-3.9	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout To	po and	barrie	er atten	uation)						
VehicleType	Leq Peak Ho	our I	Leq Day	,	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	6	9.2	(67.3		65.6		59	.5	68.1		68.7
Medium Trucks:	6:	2.6	(61.1		54.7		53	.2	61.7	7	61.9
Heavy Trucks:	6	2.6	(61.2		52.2		53	.4	61.8	3	61.9
Vehicle Noise:	7	0.8		69.0		66.1		61	.2	69.8	3	70.2

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	97	208	448	965						
CNEL:	104	224	482	1,038						

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy. East

Road Segment: s/o SR-241 SB Ramps

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NC	ISE I	MODE	L INPUT	S	
Highway Data			Site Con	ditions (F	Hard =	10, So	ft = 15)		
Average Daily Traffic (Adt):	34,700 vehicle	S				Autos:	15		
Peak Hour Percentage:	10%		Me	dium Truc	ks (2 /	Axles):	15		
Peak Hour Volume:	3,470 vehicle	S	He	avy Truck	s (3+ /	Axles):	15		
Vehicle Speed:	55 mph		Vehicle I	Miv					
Near/Far Lane Distance:	88 feet			icleType		Day	Evening	Night	Daily
Site Data			V 0/1		ıtos:	77.5%		9.6%	,
	0.0 foot		Me	edium Tru		84.8%		10.3%	1.84%
Barrier Height:	0.0 feet 0.0			Heavy Tru		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 100.0 feet							. 0.070	011 170
Centerline Dist. to Observer:	100.0 feet		Noise So	ource Elev	vation	s (in fe	et)		
Barrier Distance to Observer:	0.0 feet			Autos:		000			
			Mediui	m Trucks:	4.	000			
Observer Height (Above Pad): Pad Elevation:	5.0 feet		Heav	y Trucks:	8.	006	Grade Ad	justment.	0.0
Road Elevation:	0.0 feet 0.0 feet		Lane Equivalent Distance (in feet)						
Road Grade:	0.0 feet 0.0%		Lanc Lq	Autos:		850			
Left View:	-90.0 degre	00	Mediu	m Trucks:		805			
Right View:	90.0 degre			y Trucks:		850			
Night view.	90.0 degre	69	ricav	y Trucks.	00.	000			
FHWA Noise Model Calculation	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road	Fresr	nel	Barrier Att	en Ber	m Atten
Autos: 71.78	3 2.58	-3.	92	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.40	-14.66	-3.	92	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.40	-18.61	-3.	92	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)						
VehicleType Leq Peak Ho	our Leq Day	/ Leq	Evening	Leq N	ight		Ldn	CI	VEL
Autos: 6	9.2	67.3	65.6		59.5	5	68.1	1	68.7
Medium Trucks: 6	2.6	61.1	54.8		53.2	2	61.7	7	61.9
Heavy Trucks: 6	2.7	61.2	52.2		53.5	5	61.8	3	61.9
Vehicle Noise: 7	0.8	69.1	66.1		61.2	2	69.8	3	70.3
Centerline Distance to Noise C	Contour (in feet)							

70 dBA

97

104

Ldn:

CNEL:

65 dBA

208

224

60 dBA

449

483

55 dBA

967

1,040

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy.

Road Segment: s/o Rancho Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT D	ATA		NOISE MODEL INPUTS							
Highway Data					S	ite Con	ditions	(Hard:	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	59,700	vehicles	6					Autos:	15		
Peak Hour	Percentage:	10%	6			Med	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	5,970	vehicles	5		Hea	avy Tru	cks (3+	Axles):	15		
Ve	hicle Speed:	55	mph		V	ehicle N	/lix					
Near/Far La	ne Distance:	88	feet				cleType	Э	Day	Evening	Night	Daily
Site Data								Autos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0	feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0				H	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	st. to Barrier:	100.0			A.	laina Ca		la	/: f-	-41		
Centerline Dist.	to Observer:	100.0	feet		N	oise So			•	et)		
Barrier Distance			feet				Auto		.000			
Observer Height			feet			Mediun	n Truck		.000			
•	ad Elevation:		feet			Heav	y Truck	s: 8	.006	Grade Ad	justment.	: 0.0
	ad Elevation:		feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0					Auto		0.850	,		
	Left View:		degree	20		Mediun			0.805			
	Right View:		degree				y Truck		0.850			
	Night view.	90.0	uegree	75		ricav.	y Truck	3. 00	7.000			
FHWA Noise Mod	lel Calculation	าร			I							
VehicleType	REMEL	Traffic	Flow	Distai	nce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	3	4.94		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40)	-12.30		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40)	-16.26		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Top	oo and i	barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	our L	.eq Day	· L	eq Eve	ening	Leq	Night		Ldn	CI	NEL
Autos:	7	1.6	(69.7		67.9		61	.9	70.5	5	71.1
Medium Trucks:	6	5.0	6	63.5		57.1		55	.6	64.0)	64.3
Heavy Trucks:	6	5.0	6	63.6		54.6		55	.8	64.2	2	64.3
Vehicle Noise:	7:	3.2	-	71.4		68.5		63	.6	72.′	1	72.6

70 dBA

139

149

Ldn:

CNEL:

65 dBA

299

322

60 dBA

644

693

55 dBA

1,388

1,493

Sunday, M	lay 20, 2012
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Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Portola Pkwy./S. Margarita Pkwy.

Road Segment: e/o El Toro Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Conditions	(Hard = 10, S	oft = $1\overline{5}$)	-		
Average Daily	Traffic (Adt):	50,000 vehicle	S		Autos	15			
Peak Hour	Percentage:	10%		Medium Tr	rucks (2 Axles).	15			
Peak H	lour Volume:	5,000 vehicle	S	Heavy Tru	cks (3+ Axles).	15			
Ve	ehicle Speed:	55 mph		Vehicle Mix					
Near/Far La	ane Distance:	88 feet		VehicleType	e Day	Evening	Night	Daily	
Site Data					Autos: 77.5%	J	9.6%	97.42%	
				Medium T			10.3%	1.84%	
	rrier Height:	0.0 feet		Heavy T			10.8%	0.74%	
Barrier Type (0-W		0.0		ricavy i	100.57	2.1 /0	10.076	0.7470	
	ist. to Barrier:	100.0 feet		Noise Source E	levations (in f	eet)			
Centerline Dist.	to Observer:	100.0 feet		Auto	s: 2.000				
Barrier Distance	to Observer:	0.0 feet		Medium Truck					
Observer Height	(Above Pad):	5.0 feet		Heavy Trucks: 8.006 Grade Adjustment					
P	ad Elevation:	0.0 feet		Ticavy Truck	0.000			0.0	
Ro	ad Elevation:	0.0 feet		Lane Equivalen	t Distance (in	feet)			
	Road Grade:	0.0%		Auto	s: 89.850				
	Left View:	-90.0 degre	es	Medium Truck	rs: 89.805				
	Right View:	90.0 degre	es	Heavy Truck	rs: 89.850				
FHWA Noise Mod									
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Atte	n Ber	m Atten	
Autos:	71.78	4.17	-3.9	2 -1.20	-4.87	0.00	00	0.000	
Medium Trucks:	82.40	-13.07	-3.9	2 -1.20	-4.97	0.00	00	0.000	
Heavy Trucks:	86.40	-17.03	-3.9	2 -1.20	-5.16	0.00	00	0.000	
Unmitigated Nois	e Levels (with	hout Topo and	barrier atter	nuation)					
VehicleType	Leq Peak Ho	ur Leq Day	/ Leq E	vening Leq	Night	Ldn	CNEL		
Autos:	70	0.8	68.9	67.2	67.2 61.1 69			70.3	
Medium Trucks:	64	4.2	62.7	56.3	54.8	63.3		63.5	

VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	70.8	68.9	67.2	61.1	69.7	70.3
Medium Trucks:	64.2	62.7	56.3	54.8	63.3	63.5
Heavy Trucks:	64.2	62.8	53.8	55.0	63.4	63.5
Vehicle Noise:	72.4	70.6	67.7	62.8	71.4	71.8
Cantarlina Distan	ce to Noise Cont	our (in foot)				

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	123	266	573	1,233						
CNEL:	133	286	616	1,327						

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Portola Springs Number: 8141
Road Segment: s/o Portola Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA				r	NOISE	MODE	L INPUT	S	
Highway Data				9,	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,400 vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak F	lour Volume:	640 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		1	/ehicle l	Mix					
Near/Far La	ane Distance:	52 feet				icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	_
	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%		10.3%	
Barrier Type (0-V	_	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		_				/: f			
Centerline Dist.		100.0 feet			Voise So				eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	_	1.000	0		. 0.0
-	ad Elevation:	0.0 feet			Heav	y Truck	s: E	3.006	Grade Ad	justment	: 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 degree	es		Mediui	m Truck	rs: 96	6.566			
	Right View:	90.0 degree	es		Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-4.76		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-22.00		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-25.95		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier atteni	uation)						
VehicleType	Leq Peak Hou	r Leq Day	,	Leq Ev	rening	Leq	Night		Ldn	C	NEL
Autos:	61	.4	59.5		57.8		51	.7	60.3	3	60.9
Medium Trucks:	54	.8	53.3		46.9		45	.4	53.9	9	54.1
Heavy Trucks:	54	.8	53.4		44.4		45	.6	54.0)	54.1
Vehicle Noise:	63	.0	61.2		58.3		53	.4	62.0)	62.4
Centerline Distan	ce to Noise Co	ontour (in feet))								
				70 a	IBA	65	dBA	6	60 dBA	55	dBA

29

31

Ldn: CNEL: 63

68

135

145

291

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Quail Hill Pkwy.

Road Segment: e/o Shady Canyon Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions ((Hard =	: 10, Sc	oft = 15)		
Average Daily	Traffic (Adt): 1	19,600 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	icks (2	Axles):	15		
Peak F	lour Volume:	1,960 vehicle	s		He	avy Truc	ks (3+ .	Axles):	15		
Ve	hicle Speed:	55 mph		1	/ehicle l	Miv					
Near/Far La	ne Distance:	52 feet				icleType		Day	Evening	Night	Daily
Site Data					V 011		utos:	77.5%		9.6%	-
	vviav Haiarbt.	0.0 foot			Me	edium Tr		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet 0.0				Heavy Tr		86.5%		10.8%	0.74%
Barrier Type (0-W Centerline Di		0.0 100.0 feet							,0	. 0.070	011 170
Centerline Di		100.0 feet		٨	loise So	ource Ele	evation	s (in fe	eet)		
Barrier Distance		0.0 feet				Autos		000			
					Mediui	n Trucks	s: 4.	000			
Observer Height	(Above Pau). ad Elevation:	5.0 feet			Heav	y Trucks	s: 8.	006	Grade Adj	iustment.	0.0
-	ad Elevation: ad Elevation:	0.0 feet 0.0 feet		1	ane Fo	uivalent	Distan	ce (in t	feet)		
	Road Grade:	0.0 feet 0.0%		-	.u.10	Autos		.607	001)		
	Left View:	-90.0 degree	00		Mediu	n Trucks		.566			
	Right View:	90.0 degree				ry Trucks		.608			
	ragni view.	30.0 degree	53		11001	y Traono	. 50	.000			
FHWA Noise Mod	el Calculation	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fresi	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.10		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-17.14		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21.09		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	rening	Leq I	Vight		Ldn	CI	VEL
Autos:	66	.3	64.4		62.6		56.	6	65.2	2	65.8
Medium Trucks:	59	.7	58.2		51.8		50.	3	58.7	7	59.0
Heavy Trucks:	59	.7	58.3		49.3		50.	5	58.9	9	59.0
Vehicle Noise:	67	.9	66.1		63.1		58.	3	66.8	3	67.3
Centerline Distan	ce to Noise Co	ontour (in feet)								
		<u> </u>		70 d	<i>IBA</i>	65 d	BA .	6	i0 dBA	55	dBA

Ldn:

CNEL:

61

66

132

142

285

307

614

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Rancho Pkwy. S Number: 8141
Road Segment: w/o Bake Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				ľ	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, So	oft = 15)		
Average Daily	Traffic (Adt):	10,200 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak I	Hour Volume:	1,020 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		V	/ehicle l	Miy					
Near/Far La	ane Distance:	70 feet		_		icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
	nrrier Height:	0.0 feet			Me	edium 7		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0 feet				leavy 7		86.5%		10.8%	0.74%
- ' '	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		۸	loise So			ns (in fe	eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	-	.000	0 - 4 - 4 - 4		0.0
•	Pad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	iustment:	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0%				Auto	s: 93	3.723			
	Left View:	-90.0 degre	es		Mediu	m Truck	ks: 93	3.680			
	Right View:	90.0 degre	es		Heav	y Truck	rs: 93	3.723			
FHWA Noise Mod	lel Calculation	S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	70.20	-2.32		-4.20)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-19.56		-4.19)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-23.52		-4.20)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	_	5	60.6		58.8		52	.8	61.4	1	62.0
Medium Trucks:	56	.0	54.5		48.2		46	.6	55.1		55.3
Heavy Trucks:	56	.5	55.0		46.0		47	.3	55.6	3	55.7
Vehicle Noise:	64	.2	62.4		59.4		54	.6	63.1	I	63.6
Centerline Distan	ce to Noise Co	ontour (in feet)								
				70 di	BA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

35

38

75

81

162

174

349

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Rancho Pkwy.

Road Segment: w/o Lake Forest Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d=10, So	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	29,600 vehicles 10% 2,960 vehicles			dium Trucks (avy Trucks (3		15		
Vehicle Speed: Near/Far Lane Distance:	50 mph 70 feet		Vehicle l	· ·	Day	Evening	Night	Daily
Site Data				Autos		-	-	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer:	100.0 feet 100.0 feet		ŀ	edium Trucks Heavy Trucks Durce Elevati Autos:	: 86.5%	2.7%	10.3% 10.8%	1.84% 0.74%
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation: Road Elevation:	5.0 feet 0.0 feet		Heav	m Trucks: yy Trucks: uivalent Dist	4.000 8.006	Grade Ad	iustment:	0.0
Road Grade: Left View: Right View:	0.0% -90.0 degree			m Trucks:	93.723 93.680 93.723			
FHWA Noise Model Calculation	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos: 70.2 Medium Trucks: 81.0 Heavy Trucks: 85.3	0 -14.93	-4.2 -4.2	19	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	000	0.000 0.000 0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	nuation)					
VehicleType Leq Peak H	our Leq Day	Leq E	vening	Leq Night	L	Ldn	CI	VEL
Medium Trucks:	60.7	65.2 59.2	63.4 52.8	5	57.4 51.3	66.0 59.7	7	66.6 60.0
		59.7 67.1	50.6 64.0		51.9 59.2	60.2 67.8		60.4 68.2
Centerline Distance to Noise	Contour (in feet))						

70 dBA

71

76

Ldn:

CNEL:

65 dBA

153

164

60 dBA

330

354

55 dBA

710

Sunday,	May	20,	2012

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Rancho Pkwy.

Road Segment: e/o Lake Forest Dr.

Number: 8141

Analyst: B. Lawson

SITE S	SITE SPECIFIC INPUT DATA							NOISE MODEL INPUTS								
Highway Data					S	ite Con	ditions ((Hard	= 10, Sc	oft = 15)						
		10 ⁹ 2,000			V		dium Tru avy Truc	•	,							
Near/Far Lan	ne Distance:	70	feet				icleType		Day	Evening	Night	Daily				
Site Data								utos:	77.5%		9.6%	_				
Barrier Type (0-Wa Centerline Dist. to Centerline Dist. to Barrier Distance to Observer Height (A Pa Roa	t. to Barrier: to Observer: to Observer:	0.0 100.0 100.0 0.0 5.0 0.0 0.0 0.0) feet) feet) feet) feet) feet) feet			Mediui Heav ane Eq Mediui	edium Tra Heavy Tra Durce Ele Autos In Trucks Uivalent Autos In Trucks	evatio 2: 2 2: 4 2: 8 Dista 3: 93 3: 93	2.000 1.000 3.006	2.7% eet) Grade Adj	10.3% 10.8% justment	1.84% 0.74%				
FHWA Noise Mode	el Calculation	15														
VehicleType	REMEL		c Flow	Distand	се	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten				
Autos:	70.20)	0.60	-	4.20		-1.20		-4.87	0.0	000	0.000				
Medium Trucks: Heavy Trucks:	81.00 85.38		-16.64 -20.59		4.19 4.20		-1.20 -1.20		-4.97 -5.16		000 000	0.000 0.000				
Unmitigated Noise	Levels (with	hout To	po and b	arrier at	tenu	ation)										
VehicleType	Leq Peak Ho	ur	Leq Day	Le	q Eve	ening	Leq l	Vight		Ldn	CI	VEL				
Autos:	6	5.4	6	3.5		61.7		55	.7	64.3	3	64.9				
Medium Trucks:	_	9.0		7.5		51.1		49	_	58.0	-	58.2				
Heavy Trucks:	5	9.4	5	8.0		48.9		50	.2	58.5	5	58.7				
Vehicle Noise:		7.1		5.4		62.3		57	.5	66.′	1	66.5				
Centerline Distance	e to Noise C	ontour	(in feet)													

70 dBA

55

59

Ldn:

CNEL:

65 dBA

118

127

60 dBA

254

273

55 dBA

547

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Research Dr. Number: 8141 Road Segment: e/o ICD Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions	(Hard	= 10, So	ft = 15)				
Average Daily Traffic ((Adt): 8	3,900 vehicles	3					Autos:	15				
Peak Hour Percent	tage:	10%			Me	dium Ti	rucks (2	Axles):	15				
Peak Hour Vol	ume:	890 vehicles	3		He	avy Tru	icks (3+	Axles):	15				
Vehicle Sp	peed:	55 mph		V	/ehicle l	Miv							
Near/Far Lane Dista	ance:	52 feet				icleTyp	e	Day	Evening	Night	Daily		
Site Data					VOIII		Autos:	77.5%		•	97.42%		
	ialat.	0.0 foot			Me	edium 7		84.8%		10.3%	1.84%		
Barrier He	•	0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%		
Barrier Type (0-Wall, 1-Be Centerline Dist. to Ba	,	100.0 feet									011 170		
Centerline Dist. to Obse		100.0 feet		٨	loise Sc	ource E	levatio	ns (in fe	et)				
Barrier Distance to Obse		0.0 feet				Auto	os: 2	2.000					
Observer Height (Above I		5.0 feet			Mediui	n Truck	ks: 4	1.000					
Pad Eleva	•	0.0 feet			Heav	y Truck	ks: 8	3.006	Grade Adj	justment:	0.0		
Road Eleva		0.0 feet		1	ane Fo	uivalen	t Dista	nce (in f	eet)				
Road G		0.0 Teet 0.0%		_	.4710 29	Auto		6.607	000				
	raue. View:	-90.0 degree			Mediu	n Truck		6.566					
Right \		90.0 degree				y Truck		6.608					
Night	VIGVV.	90.0 deglet	55		ricav	y Truck		0.000					
FHWA Noise Model Calcu	ulations												
VehicleType REM	1EL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	71.78	-3.33		-4.39		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-20.57		-4.39)	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	86.40	-24.52		-4.39)	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels	s (withou	ut Topo and	barri	er attenu	uation)								
	ak Hour			Leq Ev		Leg	Night		Ldn	CI	VEL		
Autos:	62.9) (61.0	<u> </u>	59.2		53	.1	61.8	3	62.4		
Medium Trucks:	56.2	2	54.7		48.4		46	.8	55.3	3	55.5		
Heavy Trucks:	56.3	3	54.9		45.8		47	.1	55.4	4	55.6		
Vehicle Noise:	64.4		62.7		59.7		54	.8	63.4	4	63.9		
Centerline Distance to No	oise Cor	ntour (in feet))										
		·		70 d	BA	65	dBA	6	0 dBA	55	dBA		

36

39

Ldn:

CNEL:

78

84

168

181

363

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Research Dr.

Road Segment: w/o (n/o) Bake Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (F	dard = 10, Se	oft = 15)				
Average Daily	Traffic (Adt):	11,800 vehicles	3			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Truc	ks (2 Axles):	15				
Peak H	lour Volume:	1,180 vehicles	3	He	avy Truck	s (3+ Axles):	15				
Ve	ehicle Speed:	55 mph		Vehicle i	Mix						
Near/Far La	ne Distance:	52 feet			icleType	Day	Evening	Night	Daily		
Site Data					• • •	tos: 77.5%		9.6%	-		
Ra	rrier Height:	0.0 feet		Me	edium Tru	cks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0		H	leavy Tru	cks: 86.5%	2.7%	10.8%	0.74%		
Centerline Di	st. to Barrier:	100.0 feet		Noise So	ource Elev	vations (in f	eet)				
Centerline Dist.	to Observer:	100.0 feet			Autos:	2.000					
Barrier Distance	to Observer:	0.0 feet		Mediu	m Trucks:	4.000					
Observer Height	(Above Pad):	5.0 feet			y Trucks:	8.006	Grade Ad	iustment.	0.0		
P	ad Elevation:	0.0 feet									
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent E	Distance (in	feet)				
	Road Grade:	0.0%			Autos:	96.607					
	Left View:	-90.0 degree	es	Mediu	m Trucks:	96.566					
	Right View:	90.0 degree	es	Heav	y Trucks:	96.608					
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distance	Finite		Fresnel	Barrier Att	en Ber	m Atten		
Autos:	71.78	-2.10	-4.3	39	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	82.40	-19.34	-4.3	39	-1.20	<i>-4.</i> 97	0.0	000	0.000		
Heavy Trucks:	86.40	-23.30	-4.3	39	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and I	barrier atte	nuation)							
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Ni	ight	Ldn	CI	VEL		
Autos:	64	.1 (62.2	60.4		54.4	63.0)	63.6		
Medium Trucks:	57	7.5	56.0	49.6		48.1	56.5	5	56.7		
Heavy Trucks:	57	'.5 t	56.1	47.0		48.3	56.7	7	56.8		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	44	94	203	438

47

60.9

56.1

102

64.6

219

65.1

471

63.9

CNEL:

Vehicle Noise:

65.7

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Research Dr.

Road Segment: n/o Lake Forest Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Con	ditions (Hard	d = 10, Sc	oft = 15)					
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	12,100 vehicles 10% 1,210 vehicles			dium Trucks (avy Trucks (3	•						
Vehicle Speed: Near/Far Lane Distance:	55 mph 52 feet		Vehicle i		Day	Evening	Night	Daily			
Site Data				Autos.			-	97.42%			
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 feet 0.0 100.0 feet		I	edium Trucks. Heavy Trucks. Durce Elevati	86.5%	2.7%	10.3% 10.8%	1.84% 0.74%			
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet 0.0 feet		Mediu	Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	iustment:	0.0			
Road Elevation:	0.0 feet	•	Lane Eq	uivalent Dist	ance (in	feet)					
Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree			m Trucks:	96.607 96.566 96.608						
FHWA Noise Model Calculation	ns										
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten			
Autos: 71.7	8 -1.99	-4.3	39	-1.20	-4.87	0.0	000	0.000			
Medium Trucks: 82.4 Heavy Trucks: 86.4		-4.0 -4.0		-1.20 -1.20	-4.97 -5.16		000	0.000			
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	nuation)								
VehicleType Leq Peak He	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL			
		62.3	60.5		4.5	63.1		63.7			
		56.1	49.7		8.2			56.9			
Heavy Trucks: 5	57.6	56.2	47.2	4	8.4	56.8	3	56.9			
Vehicle Noise:	65.8	64.0	61.1	5	6.2	64.7	7	65.2			
Centerline Distance to Noise	Contour (in feet))									

70 dBA

45

48

Ldn:

CNEL:

65 dBA

96

103

60 dBA

207

222

55 dBA

445

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o Trabuco Rd.

Number: 8141

Analyst: B. Lawson

SITE S		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (H	lard = 10, Sc	oft = 15)		
Average Daily 7	Traffic (Adt):	9,000 vehicles	3			Autos:	15		
Peak Hour I	Percentage:	10%		Me	dium Truc	ks (2 Axles):	15		
Peak Ho	our Volume:	900 vehicles	;	He	avy Truck	s (3+ Axles):	15		
Veh	nicle Speed:	50 mph		Vehicle I	Mix				
Near/Far Lan	ne Distance:	70 feet			icleType	Day	Evening	Night	Daily
Site Data						tos: 77.5%		_	97.42%
Barr	rier Height:	0.0 feet		Ме	edium Truc	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wa	•	0.0		F	leavy Truc	cks: 86.5%	2.7%	10.8%	0.74%
Centerline Dis		100.0 feet		Noise Ca	ouros Els	rationa (in f	2041		
Centerline Dist. to	o Observer:	100.0 feet		Noise St		ations (in fo	eet)		
Barrier Distance to	o Observer:	0.0 feet		Madium	Autos:	2.000			
Observer Height (A	Above Pad):	5.0 feet			m Trucks:	4.000	Grade Ad	iuotmont	
• .	d Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Auj	usimeni.	0.0
Roa	d Elevation:	0.0 feet		Lane Eq	uivalent D	Distance (in	feet)		
F	Road Grade:	0.0%			Autos:	93.723			
	Left View:	-90.0 degree	s	Mediui	m Trucks:	93.680			
	Right View:	90.0 degree	es.	Heav	y Trucks:	93.723			
FHWA Noise Mode	l Calculations								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20	-2.87	-4.	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-20.10	-4.	19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-24.06	-4.	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	Levels (witho	ut Topo and I	barrier atte	enuation)					
VehicleType	Leq Peak Hour	Leq Day	Leq	Evening	Leq Ni	ight	Ldn	CI	VEL
Autos:	61.9	9 6	60.0	58.3		52.2	60.8	3	61.4
Medium Trucks:	55.5	5 5	54.0	47.6		46.1	54.5	5	54.8
Heavy Trucks:	55.9	9 5	54.5	45.5		46.7	55.1		55.2
Vehicle Noise:	63.6	6 6	61.9	58.8		54.1	62.6	3	63.1

70 dBA

32

35

Ldn:

CNEL:

65 dBA

69

74

60 dBA

149

160

55 dBA

321

345

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: n/o Jeronimo Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIF		NOISE MODEL INPUTS									
Highway Data				S	ite Con	ditions ((Hard =	= 10, Sc	oft = 15)		
Average Daily Traffic (A Peak Hour Percenta Peak Hour Volu Vehicle Spe	age: ime:	,100 vehicles 10% 710 vehicles 50 mph			He	dium Tru avy Truc	•	,			
Near/Far Lane Distar		70 feet		V	ehicle l						
	100.	70 1001			Vehi	icleType		Day	Evening	Night	Daily
Site Data							utos:	77.5%		9.6%	
Barrier Hei ç Barrier Type (0-Wall, 1-Be	rm):	0.0 feet 0.0				edium Tr Ieavy Tr		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Bar		100.0 feet		N	oise Sc	urce Ele	evatio	ns (in fe	eet)		
Centerline Dist. to Obser Barrier Distance to Obser Observer Height (Above P Pad Eleva	rver: Pad):	100.0 feet 0.0 feet 5.0 feet 0.0 feet				Autos n Trucks y Trucks	s: 4	.000 .000 .006	Grade Ad	justment:	0.0
Road Elevai		0.0 feet		L	ane Eq	uivalent	Distar	nce (in i	feet)		
Road Gra Left V Right V	iew:	0.0% -90.0 degree 90.0 degree				Autos n Trucks y Trucks	s: 93	3.723 3.680 3.723			
FHWA Noise Model Calcul	lations										
VehicleType REMI	EL 7	Traffic Flow	Distan	ce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	-3.90		-4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-21.13		-4.19		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-25.09		-4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels	(withou	ıt Topo and k	arrier a	ttenu	ation)						
VehicleType Leq Pea	ak Hour	Leq Day	Le	q Eve	ening	Leq I	Vight		Ldn	CI	VEL
Autos:	60.9	5	9.0		57.2		51.	.2	59.8	3	60.4
Medium Trucks:	54.5	5	3.0		46.6		45.	.1	53.5	5	53.8
Heavy Trucks:	54.9	5	3.5		44.4		45.	.7	54.0)	54.2
Vehicle Noise:	62.6	6	0.9		57.8		53.	0	61.6	3	62.0

70 dBA

27

29

Ldn: CNEL: 65 dBA

59

63

60 dBA

127

137

55 dBA

274

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o Jeronimo Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS								
Highway Data				Site Con	ditions (Ha	ard = 10, Sc	oft = 15)					
Average Daily	Traffic (Adt):	10,100 vehicles	5			Autos:	15					
Peak Hour	r Percentage:	10%		Me	dium Truck	s (2 Axles):	15					
Peak H	Hour Volume:	1,010 vehicles	S	He	avy Trucks	(3+ Axles):	15					
	ehicle Speed:	50 mph		Vehicle I	Vix							
Near/Far La	ane Distance:	70 feet		Veh	icleType	Day	Evening	Night	Daily			
Site Data					Auto	os: 77.5%	12.9%	9.6%	97.42%			
Ва	rrier Height:	0.0 feet		Me	edium Truc	ks: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-V	•	0.0		ŀ	leavy Truc	ks: 86.5%	2.7%	10.8%	0.74%			
Centerline D	ist. to Barrier:	100.0 feet		Noise Sc	ource Flev	ations (in fe	2et)					
Centerline Dist.	to Observer:	100.0 feet		710/00 00	Autos:	2.000	<i></i>					
Barrier Distance	to Observer:	0.0 feet		Mediu	n Trucks:	4.000						
Observer Height	(Above Pad):	5.0 feet			ry Trucks:	8.006	Grade Ad	iustment [.]	0.0			
P	Pad Elevation:	0.0 feet		i icav	y Trucks.	0.000	Orado riaj	judimoni.	0.0			
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Di	istance (in	feet)					
	Road Grade:	0.0%			Autos:	93.723						
	Left View:	-90.0 degree	es	Mediui	m Trucks:	93.680						
	Right View:	90.0 degree	es	Heav	y Trucks:	93.723						
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	70.20	-2.37	-4.2	20	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	81.00	-19.60	-4.′	19	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	85.38	-23.56	-4.2	20	-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)								
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	Evening	Leq Nig	ght	Ldn	CI	VEL			
Autos:	62	2.4	60.5	58.8		52.7	61.3	3	62.0			
Medium Trucks:	56	5.0	54.5	48.1		46.6	55.0)	55.3			
Heavy Trucks:	56	5.4	55.0	46.0 47.2 55.6			3	55.7				
Vehicle Noise:	64	·.1	62.4	59.3 54.6 63.1					63.6			

70 dBA

35

37

Ldn:

CNEL:

65 dBA

75

80

60 dBA

161

173

55 dBA

347

373

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr. Number: 8141 Road Segment: s/o Muirlands Bl. Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS						
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	8,000 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak H	lour Volume:	800 vehicle	S		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	50 mph		,	Vehicle I	Wix					
Near/Far La	ne Distance:	70 feet				icleType		Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	_
	rrier Height:	0.0 feet			Ме	edium Tı		84.8%		10.3%	
Barrier Type (0-W	•	0.0 1661				leavy Ti		86.5%		10.8%	
Centerline Di		100.0 feet									
Centerline Dist.		100.0 feet		1	Noise So				eet)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height (5.0 feet				n Truck		1.000			
	ad Elevation:	0.0 feet			Heav	y Trucks	s: 8	3.006	Grade Ad	justment	: 0.0
	ad Elevation:	0.0 feet		1	Lane Eq	uivalent	Dista	nce (in i	feet)		
	Road Grade:	0.0%				Autos		3.723			
	Left View:	-90.0 degree	es		Mediui	n Trucks		3.680			
	Right View:	90.0 degree			Heav	y Trucks	s: 93	3.723			
FIUMA Notes Man	- 										
FHWA Noise Mod	el Calculation REMEL	s Traffic Flow		istance	Finite	Pood	Fres	nol	Barrier Att	on Pou	m Atten
VehicleType Autos:	70.20	-3.38	וט	-4.20		-1.20	ries	-4.87		000 000	0.000
Medium Trucks:	81.00	-20.62		-4.19		-1.20		-4.97		000	0.000
Heavy Trucks:		-24.57		-4.20		-1.20		-5.16		000	0.000
			_			1.20		0.70			0.000
Unmitigated Noise	•						N.P L. (1.1.		N 151
VehicleType Autos:	Leq Peak Hou		, 59.5	Leq E	vening 57.8	Leq	Night 51	7	Ldn		<i>NEL</i> 60.9
Medium Trucks:			53.5		57.6 47.1		45		60.3 54.0		54.3
Heavy Trucks:	55 55		54.0		47.1		45 46		54.0 54.6		54.3 54.7
Vehicle Noise:			61.4		58.3		53		62.		62.6
					50.5			.0	02.		02.0
Centerline Distant	ce to Noise Co	ontour (in feet	<i>)</i>	70 c	dBA	65	dBA	6	60 dBA	55	dBA
			L						·		

30

32

Ldn:

CNEL:

64

69

138

148

297

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o Rockfield B.

Number: 8141

Analyst: B. Lawson

SITE	SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS								
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)										
	Traffic (Adt): Percentage: our Volume:	18,000 veh 10% 1,800 veh				dium Tru avy Truc	•	,							
	hicle Speed:	50 mpl 70 feet	h	V	'ehicle l	-	·	Day	Evening	Night	Daily				
Site Data							utos:	77.5%	_	9.6%					
Barrier Type (0-W Centerline Dist Centerline Dist. Barrier Distance Observer Height (Pa	st. to Barrier: to Observer: to Observer:	0.0 fee 0.0 100.0 fee 100.0 fee 0.0 fee 0.0 fee 0.0 fee 0.0% -90.0 de 90.0 de	et et et et et et et		Mediui Heav ane Eq	edium Tra Heavy Tra Autos In Trucks In Trucks In Trucks In Trucks In Trucks	evation 2 2 2 2 2 2 3 4 3 5 4 6 6 6 7 7 8 7 8 8 9 8 9 8 9 9 9 9 9 9 9 9 9 9	.000	eet) Grade Ad	10.3% 10.8% justment:	1.84% 0.74%				
FHWA Noise Mode	el Calculation	18													
VehicleType	REMEL	Traffic Flo	ow D	istance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten				
Autos: Medium Trucks:	70.20 81.00		.14 .09	-4.20 -4.19		-1.20 -1.20		-4.87 -4.97		000	0.000				
Heavy Trucks:	85.38			-4.20		-1.20		-5.16	0.0	000	0.000				
Unmitigated Noise	•			1											
	Leq Peak Ho		-	Leq Ev		Leq I			Ldn		VEL				
Autos:		5.0	63.1		61.3		55.		63.9		64.5				
Medium Trucks:		8.5	57.0		50.6		49.1		57.6		57.8				
Heavy Trucks:		3.9	57.5		48.5		49.		58.′		58.2				
Vehicle Noise:	66	6.6	64.9)	61.8		57.	.1	65.6	6	66.1				

70 dBA

51

55

Ldn:

CNEL:

65 dBA

110

118

60 dBA

237

254

55 dBA

510

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: s/o (w/o) Avenida Carlota

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I		NOISE MODEL INPUTS							
Highway Data			Site Con	ditions (Har	d = 10, So	oft = 15)			
Average Daily Traffic (Adt):	14,900 vehicles	S			Autos:	15			
Peak Hour Percentage:	10%		Ме	dium Trucks	(2 Axles):	15			
Peak Hour Volume:	1,490 vehicles	S	He	avy Trucks (3	3+ Axles):	15			
Vehicle Speed:	50 mph		Vehicle I	Mix					
Near/Far Lane Distance:	70 feet			icleType	Day	Evening	Night	Daily	
Site Data			Veri	Autos			9.6%	97.42%	
			1.1	Autos edium Trucks			10.3%	1.84%	
Barrier Height:	0.0 feet			J aium Trucks J eavy Trucks			10.8%	0.74%	
Barrier Type (0-Wall, 1-Berm):	0.0		,	leavy Trucks	. 00.576	2.1 /0	10.076	0.7476	
Centerline Dist. to Barrier:	100.0 feet		Noise So	ource Elevati	ions (in fe	eet)			
Centerline Dist. to Observer:	100.0 feet			Autos:	2.000				
Barrier Distance to Observer:	0.0 feet		Mediui	m Trucks:	4.000				
Observer Height (Above Pad):	5.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0	
Pad Elevation:	0.0 feet		Lano Fa	uivalent Dist	tanco (in	foot)			
Road Elevation:	0.0 feet		Lane Ly		93.723	ieei)			
Road Grade:	0.0%		Modiu		93.723 93.680				
Left View:	-90.0 degree				93.723				
Right View:	90.0 degree	es	пеач	y Trucks.	93.723				
FHWA Noise Model Calculatio	ns								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten	
Autos: 70.2	0 -0.68	-4.	20	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 81.0	0 -17.92	-4.	19	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 85.3	8 -21.87	-4.	20	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wit	hout Topo and	barrier atte	nuation)						
VehicleType Leq Peak Ho	our Leq Day	Leq I	Evening	Leq Night	!	Ldn	CI	VEL	
Autos: 6	54.1	62.2	60.5	5	54.4	63.0)	63.6	
Medium Trucks: 5	57.7	56.2	49.8	4	18.3	56.7	7	57.0	
Heavy Trucks: 5	8.1	56.7	47.7 48.9 57.3				57.4		
Vehicle Noise:	55.8	64.1	61.0		56.2	64.8	3	65.3	
Centerline Distance to Noise (Contour (in feet)	,						

70 dBA

45

48

Ldn:

CNEL:

65 dBA

97

104

60 dBA

209

224

55 dBA

450

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr. Number: 8141 Road Segment: s/o (w/o) Moulton Pkwy. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	ATA			NOISE MODEL INPUTS						
Highway Data				S	Site Conditions	(Hard	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	11,100 ve	ehicles				Autos:	15				
Peak Hour	Percentage:	10%			Medium Ti	rucks (2	Axles):	15				
Peak H	lour Volume:	1,110 ve	ehicles		Heavy Tru	icks (3+	Axles):	15				
Ve	ehicle Speed:	50 m	nph	1	ehicle Mix							
Near/Far La	ne Distance:	70 fe	eet	-	VehicleTyp	е	Day	Evening	Night	Daily		
Site Data						Autos:	77.5%	J	9.6%	-		
Ra	rrier Height:	0.0 1	foot		Medium 7	rucks:	84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	_	0.0	CCL		Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Di		100.0 f	eet				<i>(*</i> f	4)				
Centerline Dist.		100.0 f			loise Source E			eet)				
Barrier Distance		0.0 f			Auto	_	2.000					
Observer Height		5.0 f			Medium Truck	ks: 4	1.000					
	ad Elevation:	0.0 f			Heavy Truck	ks: 8	3.006	Grade Adj	iustment:	0.0		
	ad Elevation:	0.0 f		L	ane Equivalen	t Dista	nce (in i	feet)				
	Road Grade:	0.0%			Auto		3.723	,				
	Left View:		degrees		Medium Truck		3.680					
	Right View:		degrees		Heavy Truck		3.723					
FHWA Noise Mod												
VehicleType	REMEL	Traffic F		Distance	Finite Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	70.20)	-1.96	-4.20	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	81.00) -	19.19	-4.19	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	3 -2	23.15	-4.20	-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo	and ba	arrier attenu	ıation)							
VehicleType	Leq Peak Ho	ur Le	q Day	Leq Ev	ening Leq	Night		Ldn	CI	VEL		
Autos:	6:	2.9	61	.0	59.2	53	.1	61.8	3	62.4		
Medium Trucks:	50	6.4	54	.9	48.5	47	.0	55.5	5	55.7		

Ullillingated Nois	e Levels (Withou	it ropo and barr	iei attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	62.9	61.0	59.2	53.1	61.8	62.4
Medium Trucks:	56.4	54.9	48.5	47.0	55.5	55.7
Heavy Trucks:	56.8	55.4	46.4	47.6	56.0	56.1
Vehicle Noise:	64.5	62.8	59.8	55.0	63.5	64.0

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	37	80	171	369
CNFL:	40	86	184	397

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Ridge Route Dr.

Road Segment: e/o Bake Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Har	d = 10, So	oft = 15)				
	Traffic (Adt): Percentage: Hour Volume:	9,500 vehicle 10% 950 vehicle			dium Trucks avy Trucks (:	'	15				
Near/Far La	ehicle Speed: une Distance:	50 mph 70 feet		Vehicle I	icleType	Day	Evening	Night	Daily		
Site Data Barrier Type (0-W	rrier Height:	0.0 feet 0.0			Autos edium Trucks Heavy Trucks	: 84.8%	4.9%	9.6% 10.3% 10.8%	97.42% 1.84% 0.74%		
Centerline Di Centerline Dist. Barrier Distance Observer Height Po Ro	st. to Barrier: to Observer: to Observer:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0 degree		Mediul Heav Lane Eq		2.000 4.000 8.006	Grade Ad	ijustment:	0.0		
	Right View:	90.0 degree				93.723					
FHWA Noise Mod VehicleType	ei Calculation REMEL	s Traffic Flow	Distance	Finite	Road Fi	esnel	Barrier Att	en Ber	m Atten		
Autos: Medium Trucks: Heavy Trucks:	70.20 81.00	-2.63 -19.87 -23.83	-4. -4.	20	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	000	0.000 0.000 0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	enuation)							
VehicleType	Leq Peak Hou	ır Leq Day	/ Leq	Evening	Leq Nigh	t	Ldn	CI	VEL		
Autos: Medium Trucks:	55	5.7	60.3 54.2	58.5 47.9	4	52.5 46.3	61.1 54.8	3	61.7 55.0		
Heavy Trucks: Vehicle Noise:			54.7 62.1	45.7 59.1		46.9 54.3	55.3 62.8		55.4 63.3		

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	33	72	155	333
CNEL:	36	77	166	358

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Ridge Valley

Road Segment: s/o Portola Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			Site Cor	ditions (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	9,800 vehicles 10% 980 vehicles			dium Trucks (i avy Trucks (3-	,			
Vehicle Speed:	55 mph		Vehicle	Mix				
Near/Far Lane Distance:	52 feet		Veh	icleType	Day	Evening	Night	Daily
Site Data				Autos:	77.5%	12.9%	9.6%	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			edium Trucks: Heavy Trucks:	84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Barrier:	100.0 feet		Noise S	ource Elevation	ons (in fe	eet)		
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet 0.0 feet			m Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent Dista	ance (in i	feet)		
Road Grade: Left View: Right View:	0.0% -90.0 degree 90.0 degree			m Trucks: 9	6.607 6.566 6.608			
FHWA Noise Model Calculatio								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Att	en Ber	m Atten
Autos: 71.78	3 -2.91	-4.3	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	-20.15	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	-24.10	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and I	barrier atte	nuation)					
VehicleType Leq Peak Ho	our Leq Day	Leq I	Evening	Leq Night		Ldn	CI	VEL
Autos: 6	3.3	61.4	59.6	5	3.6	62.2	2	62.8
Medium Trucks: 5	6.7	55.2	48.8	4	7.2	55.7	7	55.9
Heavy Trucks: 5	6.7	55.3	46.2	4	7.5	55.8	3	56.0
Vehicle Noise: 6	4.9	63.1	60.1	5	5.3	63.8	3	64.3
Centerline Distance to Noise C	Contour (in feet)							

70 dBA

39

42

Ldn: CNEL: 65 dBA

83

90

60 dBA

180

193

55 dBA

387

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: e/o Marine Wy

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				1	NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	100 vehicle	s					Autos:	15		
,	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	10 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		-	Vehicle I	Miv					
Near/Far La	ane Distance:	52 feet				icleType	۵	Day	Evening	Night	Daily
Site Data					V 0111		Autos:	77.5%	J	9.6%	,
	uuisu Haisılatı	0.0 foot			Me	edium T		84.8%		10.3%	1.84%
	rrier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-V	vaп, т-вепп). ist. to Barrier:	0.0 100.0 feet									011 170
Centerline Dist.		100.0 feet		1	Noise Sc	ource E	levatio	ns (in fe	et)		
Barrier Distance		0.0 feet				Auto		.000			
		5.0 feet			Mediur	n Truck	rs: 4	.000			
Observer Height	(Above Pau). Pad Elevation:				Heav	y Truck	rs: 8	.006	Grade Ad	justment	: 0.0
-	ad Elevation: ad Elevation:	0.0 feet 0.0 feet		-	Lane Eq	uivalen	t Distai	nce (in t	eet)		
	Road Grade:	0.0 Teet 0.0%		F	zano zy	Auto		6.607	001)		
	Left View:				Modiur	n Truck		5.566			
	Right View:	-90.0 degree				ry Truck		5.608			
	Right view.	90.0 degree	es		Heav	y IIuch	is. 30	.000			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	-22.82		-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-40.06		-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-44.02		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leg Peak Hou			Leg Ev		Leq	Night		Ldn	C	NEL
Autos:	43	.4	41.5	-	39.7		33	.6	42.3	3	42.9
Medium Trucks:	36	.8	35.2		28.9		27	.3	35.8	3	36.0
Heavy Trucks:	36	.8	35.4		26.3		27	.6	35.9	9	36.1
Vehicle Noise:	44	.9	43.2		40.2		35	.4	43.9	9	44.4
Centerline Distan	ce to Noise Co	ontour (in feet)								
		•		70 c	<i>IBA</i>	65	dBA	6	0 dBA	55	dBA

2

2

4

Ldn:

CNEL:

18

20

8

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: e/o Sterling

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA				ſ	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	100 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	rucks (2	Axles):	15		
Peak H	lour Volume:	10 vehicles	S		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		V	/ehicle l	Mix					
Near/Far La	ne Distance:	52 feet		-		icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	Ū	9.6%	•
	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	•	0.0			ŀ	Heavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • • •	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet		^	loise So			•	eet)		
Barrier Distance		0.0 feet				Auto	_	2.000			
Observer Height	(Above Pad):	5.0 feet				m Truck	_	.000	Cuada Ad	li a t ma a m t	
_	ad Elevation:	0.0 feet			Heav	y Truck	(S: E	3.006	Grade Ad	justment	. 0.0
Ro	ad Elevation:	0.0 feet		L	.ane Eq	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 96	6.566			
	Right View:	90.0 degree	es		Heav	y Truck	rs: 96	8.608			
FHWA Noise Mod	lel Calculations	;									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Bei	m Atten
Autos:	71.78	-22.82		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-40.06		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-44.02		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (witho	out Topo and	barri	ier attenu	uation)						
VehicleType	Leq Peak Hou	r Leq Day	,	Leq Ev	rening	Leq	Night		Ldn	C	NEL
Autos:		4	41.5		39.7		33	.6	42.3	3	42.9
Medium Trucks:			35.2		28.9		27		35.8		36.0
Heavy Trucks:		8 :	35.4		26.3		27	.6	35.9	9	36.1
Vehicle Noise:	44.	9	43.2		40.2		35	.4	43.9	9	44.4
Centerline Distan	ce to Noise Co	ntour (in feet))								
				70 d	BA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

2

2

4

4

8

9

18

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: w/o Bake Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Har	d=10, S	oft = 15)		
Average Daily Traffic (Adt)	. 7,600 vehicle	es			Autos:	15		
Peak Hour Percentage	•		Ме	dium Trucks	(2 Axles).	15		
Peak Hour Volume	: 760 vehicle	s	He	avy Trucks (3	3+ Axles).	15		
Vehicle Speed	: 55 mph		Vehicle I	N <i>lis</i> e				
Near/Far Lane Distance	52 feet				Day	Funning	Niaht	Doily
Site Date			ven	icleType	Day	Evening	Night	Daily
Site Data			A 4.	Autos Autos Trusks			9.6%	
Barrier Height				edium Trucks			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)			ļ ,	Heavy Trucks	: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier			Noise So	ource Elevati	ions (in f	eet)		
Centerline Dist. to Observer				Autos:	2.000			
Barrier Distance to Observer	: 0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad)	5.0 feet			y Trucks:	8.006	Grade Ad	justment:	0.0
Pad Elevation								
Road Elevation	: 0.0 feet		Lane Eq	uivalent Dist		feet)		
Road Grade	: 0.0%				96.607			
Left View	: -90.0 degre	es	Mediui		96.566			
Right View	: 90.0 degre	es	Heav	y Trucks:	96.608			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fr	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	78 -4.01	-4.	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	40 -21.25	-4.	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	40 -25.21	-4.	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	ithout Topo and	barrier atte	nuation)					
VehicleType Leq Peak F	lour Leq Day	y Leq I	Evening	Leq Night	<u> </u>	Ldn	CI	VEL
Autos:	62.2	60.3	58.5	5	52.5	61.1	1	61.7
Medium Trucks:	55.6	54.1	47.7	4	16.1	54.6	6	54.8
Heavy Trucks:	55.6	54.2	45.1 46.4			54.7		54.9
Vehicle Noise:	63.8	62.0	59.0		54.2	62.7	7	63.2
Centerline Distance to Noise	Contour (in feet	t)						

70 dBA

33

35

Ldn:

CNEL:

65 dBA

70

76

60 dBA

152

163

55 dBA

327

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: w/o Lake Forest Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE	MODE	L INPUT	S		
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt)	: 15,600 vehicle	es			Autos:	15			
Peak Hour Percentage	: 10%		Me	dium Trucks (2	2 Axles):	15			
Peak Hour Volume	: 1,560 vehicle	es	Heavy Trucks (3+ Axles): 15						
Vehicle Speed	: 55 mph		Vehicle I	Miy					
Near/Far Lane Distance	52 feet			icleType	Day	Evening	Night	Daily	
Site Data				Autos:	77.5%		9.6%	97.42%	
Barrier Height	: 0.0 feet		Me	edium Trucks:	84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm)			F	leavy Trucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier					/: 6				
Centerline Dist. to Observer			Noise Sc	ource Elevatio	•	eet)			
Barrier Distance to Observer					2.000				
Observer Height (Above Pad)					4.000	0 , 4 ,		0.0	
Pad Elevation			Heav	y Trucks:	8.006	Grade Ad	iustment:	0.0	
Road Elevation			Lane Eq	uivalent Dista	nce (in	feet)			
Road Grade				Autos: 9	6.607				
Left View	: -90.0 degre	es	Mediur	n Trucks: 9	6.566				
Right View	_		Heav	y Trucks: 9	6.608				
FHWA Noise Model Calculati	ons								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Att	en Ber	m Atten	
Autos: 71.	78 -0.89	-4.	.39	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 82.4	40 -18.13	-4.	.39	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 86.	40 -22.09	-4.	.39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (w.	ithout Topo and	l barrier atte	enuation)						
VehicleType Leq Peak F	lour Leq Da	y Leq	Evening	Leq Night		Ldn	CI	VEL	
Autos:	65.3	63.4	61.6	55	5.6	64.2	2	64.8	
Medium Trucks:	58.7	57.2	50.8	49	9.3	57.7	7	58.0	
Heavy Trucks:	58.7	57.3	48.3 49.5			57.9		58.0	
Vehicle Noise:	66.9	65.1	62.2	57	7.3	65.8	3	66.3	
Centerline Distance to Noise	Contour (in fee	t)							

70 dBA

53

57

Ldn:

CNEL:

65 dBA

114

122

60 dBA

245

264

55 dBA

528

Sunday, May 20, 2012	
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Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: w/o Ridge Route Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
	Traffic (Adt): Percentage: Hour Volume:	23,900 vehic 10% 2,390 vehic				dium Tru avy Truc	•	,			
Near/Far La	ehicle Speed: ane Distance:	50 mph 70 feet		ν	'ehicle I Vehi	cleType		Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%		9.6%	
Barrier Type (0-V	•	0.0 feet 0.0				edium Tr łeavy Tr		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline Di	ist. to Barrier:	100.0 feet		٨	loise So	urce El	evatio	ns (in fe	eet)		
Barrier Distance Observer Height P Ro	Centerline Dist. to Observer: arrier Distance to Observer: server Height (Above Pad): Pad Elevation: Road Elevation: Road Grade: Left View: 90.0 degrees 90.0 degrees			L	Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723						0.0
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	70.20	1.3	8	-4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-15.8	6	-4.19		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-19.8	2	-4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo an	d barri	er attenu	ıation)						
VehicleType	Leq Peak Ho	our Leq D	ay	Leq Ev	ening	Leq	Night		Ldn	C	VEL
Autos:	60	6.2	64.3		62.5		56	.5	65.1	1	65.7
Medium Trucks:	59	9.7	58.2		51.9		50	.3	58.8	3	59.0
Heavy Trucks:	60	0.2	58.7		49.7		51.	.0	59.3	3	59.4
Vehicle Noise:	6	7.9	66.1		63.1		58	.3	66.8	3	67.3

Ldn:

CNEL:

70 dBA

62

66

65 dBA

133

143

60 dBA

286

307

55 dBA

616

662

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: e/o Ridge Route Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	NOISE MODEL INPUTS								
Highway Data	Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	10%			dium Trucks (avy Trucks (3		15			
Vehicle Speed: Near/Far Lane Distance:	50 mph		Vehicle l	· ·	Day	Evening	Night	Daily	
Site Data				Autos		-	-	97.42%	
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 100.0 feet 0.0 feet 5.0 feet 0.0 feet		Noise So Medium Heav	edium Trucks Heavy Trucks Durce Elevati Autos: m Trucks: ry Trucks:	60ns (in for 2.000 4.000 8.006	eet) Grade Adj	10.3% 10.8% justment:	1.84% 0.74% 0.0	
Road Elevation: Road Grade: Left View: Right View:	es es	Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723							
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance			esnel	Barrier Att		m Atten	
Autos: 70.2 Medium Trucks: 81.0 Heavy Trucks: 85.3	0 -15.84	-4.2 -4.1 -4.2	19	-1.20 -1.20 -1.20	-4.87 -4.97 -5.16	0.0	000 000 000	0.000 0.000 0.000	
Unmitigated Noise Levels (with	thout Topo and	barrier atte	nuation)						
VehicleType Leq Peak H		•	ening	Leq Night	1	Ldn		CNEL	
		64.3 58.3			56.565.150.358.8			65.7 59.0	
		58.8 66.1	49.7 51.0 59.3 63.1 58.3 66.9					59.5 67.3	
Centerline Distance to Noise	Contour (in feet)							

70 dBA

62

66

Ldn:

CNEL:

65 dBA

133

143

60 dBA

287

308

55 dBA

618

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Rockfield Bl.

Road Segment: e/o El Toro Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data		Site Conditions (Hard = 10, Soft = 15)											
	Traffic (Adt): Percentage: our Volume:	20,000 vo 10% 2,000 vo				dium Tru avy Truc	•	,					
	hicle Speed:	50 m 70 fe	nph	,	Vehicle I	•	· ·	Day	Evening	Night	Daily		
Site Data							utos:	77.5%	_	9.6%			
Barrier Height: 0.0 feet Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Grade: 0.0% Left View: -90.0 degrees Right View: 90.0 degrees					Medium Trucks: 84.8% 4.9% 10.3% 1.849 Heavy Trucks: 86.5% 2.7% 10.8% 0.749 Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Lane Equivalent Distance (in feet) Autos: 93.723 Medium Trucks: 93.680 Heavy Trucks: 93.723								
FHWA Noise Mode	el Calculatio	าร											
VehicleType	REMEL	Traffic F	-low	Distance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	70.20)	0.60	-4.20)	-1.20		-4.87	0.0	000	0.000		
Medium Trucks: Heavy Trucks:	81.00 85.38		16.64 20.59	-4.19 -4.20		-1.20 -1.20		-4.97 -5.16		000	0.000		
Unmitigated Noise	e Levels (with	hout Topo	and b	arrier atten	uation)								
VehicleType	Leq Peak Ho	ur Le	q Day	Leq E		Leq I			Ldn		VEL		
Autos:		5.4	63	3.5	61.7		55.		64.3		64.9		
Medium Trucks:		59.0 57.5			51.1 49.6			58.0		58.2			
Heavy Trucks:	5	9.4	58	3.0	48.9 50.2			.2	58.5	5	58.7		
Vehicle Noise:	6	7.1	65	5.4	62.3		57	.5	66.	1	66.5		

70 dBA

55

59

Ldn:

CNEL:

65 dBA

118

127

60 dBA

254

273

55 dBA

547

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Roosevelt Number: 8141
Road Segment: w/o Jeffrey Rd. Analyst: B. Lawson

SITE SPECIFIC	INPL	JT DATA				N	IOISE	MODE	L INPUT	S			
Highway Data						Site Conditions (Hard = 10, Soft = 15)							
Average Daily Traffic (Adt): 10,3	300 vehicles	3					Autos:	15				
Peak Hour Percentage) <i>:</i>	10%		Medium Trucks (2 Axles): 15									
Peak Hour Volume	e: 1,0	030 vehicles		Heavy Trucks (3+ Axles): 15									
Vehicle Speed	d:	55 mph		,	/ehicle l	Wiy							
Near/Far Lane Distance	e <i>:</i>	52 feet		-		icleType	,	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%	Ū	9.6%			
Barrier Heigh	٠.	0.0 feet			Ме	edium T		84.8%		10.3%	1.84%		
Barrier Type (0-Wall, 1-Berm		0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Barrie		0.0 00.0 feet											
Centerline Dist. to Observe		00.0 feet		/	Voise So			•	eet)				
Barrier Distance to Observe		0.0 feet				Auto		2.000					
Observer Height (Above Pad		5.0 feet				n Truck		.000					
Pad Elevation		0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	iustment	: 0.0		
Road Elevation: 0.0 feet					Lane Equivalent Distance (in feet)								
Road Grade						Autos: 96.607							
Left View		90.0 degree	25		Medium Trucks: 96.566								
Right View		90.0 degree	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
	,	oo.o dog.oc	,,			,							
FHWA Noise Model Calculat	ions												
VehicleType REMEL		raffic Flow	Dis	tance	Finite		Fres		Barrier Att	en Ber	m Atten		
Autos: 71	78	-2.69		-4.39)	-1.20		-4.87	0.0	000	0.000		
Medium Trucks: 82	40	-19.93		-4.39)	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks: 86	40	-23.89		-4.39)	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (w	ithout	Topo and	barrie	er atten	uation)								
VehicleType Leq Peak	Hour	Leq Day	,	Leq Ev				Ldn	C	NEL			
Autos:	63.5				, ,		53	3.8 62.4		1	63.0		
Medium Trucks:	56.9	9 55.4			49.0 47		7.5 55.9		9	56.2			
Heavy Trucks:	56.9		55.5		46.5 47.7		.7	7 56.1		56.2			
Vehicle Noise:	65.1		63.3		60.4		55	.5	64.0)	64.5		
Centerline Distance to Noise	Conto	our (in feet))										

70 dBA

40

43

Ldn:

CNEL:

65 dBA

86

93

60 dBA

186

200

55 dBA 400

Sunday, May 20, 2012	
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Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Roosevelt Number: 8141 Road Segment: e/o Jeffrey Rd. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (A	dt): 20	0,800 vehicles	6					Autos:	15				
Peak Hour Percenta	ige:	10%			Me	dium Tr	ucks (2	Axles):	15				
Peak Hour Volu	me: 2	2,080 vehicles	3		He	avy Tru	cks (3+	Axles):	15				
Vehicle Spe	ed:	55 mph		,	Vehicle I	Miv							
Near/Far Lane Distar	nce:	52 feet				icleType	2	Day	Evening	Night	Daily		
Site Data					V 011		Autos:	77.5%		9.6%	-		
		0.0 foot			Me	edium T		84.8%		10.3%	1.84%		
Barrier Heig		0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%		
Barrier Type (0-Wall, 1-Be Centerline Dist. to Bar	•	100.0 feet											
Centerline Dist. to Obser	-	100.0 feet		1	Voise So	ource E	levatio	ns (in fe	eet)				
Barrier Distance to Obser		0.0 feet				Auto	s: 2	.000					
Observer Height (Above P		5.0 feet			Mediui	m Truck	s: 4	.000					
Pad Elevat	,	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	iustment.	0.0		
Road Elevat		0.0 feet		1	Lane Equivalent Distance (in feet)								
Road Grade: 0.0%					Autos: 96.607								
Left V		-90.0 degree	20		Medium Trucks: 96.566								
Right Vi		90.0 degree			Heavy Trucks: 96.608								
, ug.n. v.	· · · ·	oo.o dogiot	,,			,							
FHWA Noise Model Calcul	ations												
VehicleType REME	EL '	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
	71.78	0.36		-4.39	9	-1.20		<i>-4.</i> 87	0.0	000	0.000		
Medium Trucks:	32.40	-16.88		-4.39	9	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	36.40	-20.84		-4.39	9	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels	(withou	ut Topo and	barri	ier atten	uation)								
VehicleType Leq Pea	k Hour	Leq Day		Leg Ev	ening	Leq	Night		Ldn	CI	VEL		
Autos:	66.5	5 (64.6	-	62.9		56.	8	65.4	1	66.1		
Medium Trucks:	59.9) ;	58.4		52.1		50.	5	59.0)	59.2		
Heavy Trucks:	60.0) !	58.5		49.5		50.	8	59.1	I	59.2		
Vehicle Noise:	68.1		66.4		63.4		58.	5	67.1		67.6		
Centerline Distance to No.	ise Cor	ntour (in feet))										
				70 a	IBA	65	dBA	ϵ	60 dBA	55	dBA		

Ldn:

CNEL:

64

69

138

148

297

319

639

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Roosevelt Number: 8141
Road Segment: w/o Sand Canyon Av. Analyst: B. Lawson

SITE S	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Ha	rd = 10, So	oft = 15)						
Average Daily T	raffic (Adt): 8	3,600 vehicles	3			Autos:	15						
Peak Hour F	Percentage:	10%		Me	dium Trucks	(2 Axles):	15						
Peak Ho	ur Volume:	860 vehicles	3	He	avy Trucks ((3+ <i>Axles</i>):	15						
	icle Speed:	55 mph		Vehicle l	Mix								
Near/Far Land	e Distance:	52 feet		Veh	icleType	Day	Evening	Night	Daily				
Site Data					Auto	s: 77.5%	12.9%	9.6%	97.42%				
Barr	ier Height:	0.0 feet		Me	edium Truck	s: 84.8%	4.9%	10.3%	1.84%				
Barrier Type (0-Wa	•	0.0		ŀ	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%				
Centerline Dist		100.0 feet		Noisa Sa	ource Eleva	tions (in f	not)						
Centerline Dist. to	Observer:	100.0 feet		NOISE SC	Autos:	2.000	(10 1)						
Barrier Distance to	Observer:	0.0 feet		Madiu	n Trucks:	4.000							
Observer Height (A	bove Pad):	5.0 feet					Grade Ad	iustmont					
Pac	d Elevation:	0.0 feet		неач	ry Trucks:	8.006	Grade Au	justinent.	0.0				
Road	d Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)						
R	oad Grade:	0.0%			Autos:	96.607							
	Left View:	-90.0 degree	es	Mediui	m Trucks:	96.566							
	Right View:	90.0 degree		Heav	y Trucks:	96.608							
FHWA Noise Model	Calculations												
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten				
Autos:	71.78	-3.48	-4.3	9	-1.20	-4.87	0.0	000	0.000				
Medium Trucks:	82.40	-20.72	-4.3	9	-1.20	-4.97	0.0	000	0.000				
Heavy Trucks:	86.40	-24.67	-4.3	9	-1.20	-5.16	0.0	000	0.000				
Unmitigated Noise	Levels (witho	ut Topo and I	barrier atter	nuation)									
VehicleType L	.eq Peak Hour	Leq Day	Leq E	vening	Leq Nigh	nt	Ldn	CI	VEL				
Autos:	62.7	7	8.06	59.0		53.0	61.6	6	62.2				
Medium Trucks:	56.1	5	54.6	48.2		46.7	55.	1	55.4				
Heavy Trucks:	56.1		54.7	45.7		46.9	55.3	3	55.4				
Vehicle Noise:	64.3	3 (62.5	59.6		54.7	63.2	2	63.7				

70 dBA

35

38

Ldn:

CNEL:

65 dBA

76

82

60 dBA

165

177

55 dBA

355

382

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: n/o Irvine Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions (Hard = 10, \$	Soft = 15)					
Average Daily	Traffic (Adt): 2	26,800 vehicles	3				Auto	s: 15					
Peak Hour	Percentage:	10%			Med	dium Trud	cks (2 Axles) <i>:</i> 15					
Peak F	lour Volume:	2,680 vehicles	3		Hea	avy Truck	ks (3+ Axles) <i>:</i> 15					
Ve	ehicle Speed:	55 mph		V	ehicle N	/liy							
Near/Far La	ne Distance:	52 feet				cleType	Day	Evening	Night	Daily			
Site Data							utos: 77.5		9.6%				
Ra	rrier Height:	0.0 feet			Me	dium Tru	ıcks: 84.8	% 4.9%	10.3%	1.84%			
Barrier Type (0-W		0.0			H	leavy Tru	ıcks: 86.5	% 2.7%	10.8%	0.74%			
	st. to Barrier:	100.0 feet			: C-	512		f4\					
Centerline Dist.		100.0 feet		N	oise So		vations (in	reet)					
Barrier Distance	to Observer:	0.0 feet			1.4 l'	Autos:							
Observer Height		5.0 feet				n Trucks:		Crada Ad	lia.tma a m.t	. 0 0			
	ad Elevation:	0.0 feet			Heav	y Trucks:	8.006	Grade Ad	justment.	0.0			
Ro	ad Elevation:	0.0 feet		L	ane Equ	ıivalent l	Distance (ii	feet)					
	Road Grade:	0.0%				Autos:	96.607						
	Left View:	-90.0 degree	es		Mediun	n Trucks:	96.566						
	Right View:	90.0 degree	es		Heav	y Trucks:	96.608						
FHWA Noise Mod	lel Calculations	S											
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	71.78	1.46		-4.39		-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	82.40	-15.78		-4.39		-1.20	-4.97	7 0.0	000	0.000			
Heavy Trucks:	86.40	-19.74		-4.39		-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (witho	out Topo and	barrier a	attenu	ation)								
VehicleType	Leq Peak Hou	r Leq Day	L	eq Eve	ening	Leq N	light	Ldn	CI	VEL			
Autos:	67.	.6	65.7		64.0		57.9	66.	5	67.2			
Medium Trucks:	61.	.0	59.5		53.2		51.6	60.	1	60.3			
Heavy Trucks:	61.	.1	59.6		50.6		51.9	60.2	2	60.3			
Vehicle Noise:	69.	.2	67.5		64.5		59.6	68.2	2	68.7			

Centerline Distance to Noise Contour (in feet)			
	70 dBA	65 dBA	60 dBA

 70 dBA
 65 dBA
 60 dBA
 55 dBA

 Ldn:
 76
 163
 351
 757

 CNEL:
 81
 175
 378
 814

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: s/o Irvine Bl.

Number: 8141

Analyst: B. Lawson

SITE S	SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS							
Highway Data					Site Cor	ditions	(Hard	= 10, Se	oft = 15)				
Average Daily	Traffic (Adt):	31,900 vehicles	3					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	2 Axles):	15				
Peak He	our Volume:	3,190 vehicles	3		He	avy Tru	cks (3+	- Axles):	15				
Vel	hicle Speed:	60 mph			Vehicle	Miy							
Near/Far Lar	ne Distance:	76 feet				icleType	9	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%		9.6%	_		
	rier Height:	0.0 feet			M	edium T		84.8%		10.3%			
Barrier Type (0-Wa	•	0.0 reet 0.0				Heavy T		86.5%		10.8%			
Centerline Dis	•	0.0 100.0 feet											
Centerline Dist. t		100.0 feet			Noise S	ource E		•	eet)				
Barrier Distance t		0.0 feet				Auto		2.000					
Observer Height (5.0 feet				m Truck		4.000		_			
• .	nd Elevation:	0.0 feet			Heav	y Truck	s:	8.006	Grade Ad	justmen	t: 0.0		
	nd Elevation:	0.0 feet			Lane Eq	uivalen	t Dista	nce (in	feet)				
Road Grade: 0.0%					•	Auto		2.547					
	Left View:	-90.0 degree	es		Mediu	m Truck		2.504					
	Right View:	90.0 degree			Heavy Trucks: 92.547								
FHWA Noise Mode	el Calculation	ıs											
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fre	snel	Barrier Att	en Be	rm Atten		
Autos:	73.22	1.84		-4.1	1	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	83.68	-15.40		-4.1	1	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	87.33	-19.36		-4.1	1	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	Levels (with	out Topo and	barrie	er atter	nuation)								
VehicleType	Leq Peak Ho			Leq E	vening	Leq	Night		Ldn		NEL		
Autos:	69	0.7	67.8		66.1		60	0.0	68.6	6	69.3		
Medium Trucks:	63	3.0	61.5		55.1		53	3.6	62.0	0	62.3		
Heavy Trucks:	62	2.7	61.2		52.2		53	3.4	61.8	3	61.9		
Vehicle Noise:	71	.2	69.5		66.6		61	1.6	70.2	2	70.7		
Centerline Distance	e to Noise C	ontour (in feet,)										
			Ldn:		dBA		dBA	(60 dBA		dBA		
			1	03 222				477	1	,028			

CNEL:

111

239

514

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av. Number: 8141
Road Segment: n/o Trabuco Rd. Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS											
Highway Data			Site Cor	nditions (Hai	d = 10, S	oft = 15)							
Average Daily Traffic (Adt).	28,000 vehicle	S			Autos.	15							
Peak Hour Percentage.	10%		Me	edium Trucks	(2 Axles).	15							
Peak Hour Volume.	2,800 vehicle	S	He	eavy Trucks (3+ Axles).	15							
Vehicle Speed.	60 mph		Vehicle	Mix									
Near/Far Lane Distance	76 feet			nicleType	Day	Evening	Night	Daily					
Site Data			Veri	Autos		J	9.6%	•					
			Λ.	edium Trucks			10.3%	1.84%					
Barrier Height				ediam Trucks Heavy Trucks			10.3%	0.74%					
Barrier Type (0-Wall, 1-Berm)			1	Heavy Trucks	5. 00.07	0 2.1/0	10.0 /0	0.7470					
Centerline Dist. to Barrier			Noise S	ource Elevat	tions (in f	eet)							
Centerline Dist. to Observer				Autos:	2.000								
Barrier Distance to Observer			Mediu	m Trucks:	4.000								
Observer Height (Above Pad)			Heav	vy Trucks:	8.006	Grade Ad	justment:	0.0					
Pad Elevation							•						
Road Elevation			Lane Equivalent Distance (in feet)										
Road Grade	0.0%			Autos:	92.547								
Left View	-90.0 degre	es		m Trucks:	92.504								
Right View	90.0 degre	es	Hear	vy Trucks:	92.547								
FHWA Noise Model Calculation	ons												
VehicleType REMEL	Traffic Flow	Distanc	e Finite	Road F	resnel	Barrier Att	en Ber	m Atten					
Autos: 73.2	22 1.27	-2	l.11	-1.20	-4.87	0.0	000	0.000					
Medium Trucks: 83.6	68 -15.97	-2	l.11	-1.20	-4.97	0.0	000	0.000					
Heavy Trucks: 87.3	-19.92	-2	l.11	-1.20	-5.16	0.0	000	0.000					
Unmitigated Noise Levels (wi	thout Topo and	barrier att	enuation)		,								
VehicleType Leq Peak F	lour Leq Day	/ Leq	Evening	Leq Nigh	nt	Ldn	CI	VEL					
Autos:	69.2	67.3	65.5		59.5	68.′	1	68.7					
Medium Trucks:	62.4	60.9	54.5		53.0	61.5	5	61.7					
Heavy Trucks:	62.1	60.7	51.6		52.9	61.2	2	61.4					
Vehicle Noise:	70.7	68.9	66.0		61.1	69.6	ĵ	70.1					
Centerline Distance to Noise	Contour (in feet)											

70 dBA

94

102

Ldn:

CNEL:

65 dBA

203

219

60 dBA

438

471

55 dBA 943

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av. Number: 8141
Road Segment: s/o Trabuco Rd. Analyst: B. Lawson

SITE SPECIFIC		NOISE MODEL INPUTS									
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Ad): 50,200) vehicles	6					Autos:	15		
Peak Hour Percentag	e: 10)%			Me	dium Tr	ucks (2	2 Axles):	15		
Peak Hour Volum	e: 5,020) vehicles	6		He	avy Tru	cks (3+	+ Axles):	15		
Vehicle Spee	d: 65	5 mph		_	/ehicle	Wiv					
Near/Far Lane Distanc	e: 175	5 feet		-		icleType	2	Day	Evening	Night	Daily
Site Data					V 011		Autos:	77.5%	•	9.6%	
	4- 0	0 (M	edium T		84.8%		10.3%	1.84%
Barrier Heigh		.0 feet				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm Centerline Dist. to Barrie		.0 .0 feet									
Centerline Dist. to Observe		.0 feet		1	Voise So	ource E	levatio	ns (in fe	eet)		
Barrier Distance to Observe		.0 feet				Auto		2.000			
					Mediu	n Truck	s:	4.000			
Observer Height (Above Pad	•	.0 feet			Heav	y Truck	s:	8.006	Grade Adj	iustment	0.0
Pad Elevatio		.0 feet		,	ane Fa	uivalen	t Dieta	nce (in i	foot)		
Road Crade: 0.0%					-anc Lq	Auto		8.505	iccij		
	Road Grade: 0.0%				Modiu	Auto n Truck		8.423			
Left Vie		.0 degree				n Truck ry Truck		6.423 8.506			
Right Vie	v. 90.	.0 degree	es		Heav	y IIUCK	S. 4	0.500			
FHWA Noise Model Calculate	ions										
VehicleType REMEL	Traft	fic Flow	Dis	tance	Finite	Road	Fre	snel	Barrier Atte	en Ber	m Atten
Autos: 74	.55	3.46		0.09)	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 84	.86	-13.78		0.11	I	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 88	.18	-17.74		0.09)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (v	ithout To	opo and i	barrie	er atten	uation)						
VehicleType Leq Peak	Hour	Leq Day		Leq E	rening	Leq	Night		Ldn	CI	VEL
Autos:	76.9	7	75.0		73.2		67	7.2	75.8	3	76.4
Medium Trucks:	70.0	6	8.5		62.1		60).6	69.0)	69.3
Heavy Trucks:	69.3	6	67.9		58.9		60).1	68.5	5	68.6
Vehicle Noise:	78.3	-	76.5		73.7		68	3.7	77.3	3	77.7
Centerline Distance to Noise	Contou	r (in feet))								
				70 c	IBA	65	dBA	ϵ	60 dBA	55	dBA
		I	Ldn:	30	4	6	56		1,413	3,	044

CNEL:

328

707

1,523

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av. Number: 8141
Road Segment: s/o Roosevelt Analyst: B. Lawson

SITE		NOISE MODEL INPUTS										
Highway Data					S	ite Con	ditions	(Hard	= 10, So	oft = 15)		
Average Daily	Traffic (Adt):	53,000 v	ehicles						Autos:	15		
= -	r Percentage:	10%				Med	dium Tr	rucks (2	Axles):	15		
Peak I	Hour Volume:	5,300 v	ehicles			Hea	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	65 m	nph		1/4	ehicle I	liv					
Near/Far La	ane Distance:	175 fe	eet		,		cleType	e	Day	Evening	Night	Daily
Site Data								Autos:	77.5%	Ū	9.6%	_
	arrier Height:	0.0	foot			Мє	edium T		84.8%		10.3%	
Barrier Type (0-V	•	0.0	ieei			F	leavy T	rucks:	86.5%		10.8%	
• • •	ist. to Barrier:	100.0	feet									
Centerline Dist.		100.0			N	oise So			ns (in fe	eet)		
Barrier Distance		0.0					Auto		2.000			
Observer Height		5.0 1				Mediur		_	1.000			
J	Pad Elevation:	0.0				Heav	y Truck	rs: E	3.006	Grade Ad	justment	: 0.0
Ro	ad Elevation:		La	ane Equ	uivalen	t Dista	nce (in t	feet)				
	Road Grade:	0.0 f 0.0%					Auto	os: 48	3.505			
	Left View:	-90.0	degrees			Mediur	n Truck	rs: 48	3.423			
	Right View:		degrees		Heavy Trucks: 48.506							
FHWA Noise Mod	del Calculation	16										
VehicleType	REMEL	Traffic I	Flow	Distance	9	Finite	Road	Fres	snel	Barrier Att	en Bei	m Atten
Autos.	74.55	;	3.69	0	.09		-1.20		-4.87	0.0	000	0.000
Medium Trucks.	84.86	; -·	13.54	0	.11		-1.20		-4.97	0.0	000	0.000
Heavy Trucks.	88.18	-	17.50	0	.09		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	nout Topo	o and ba	rrier att	enu	ation)						
VehicleType	Leq Peak Ho	ur Le	eq Day	Leq	Eve	ening	Leq	Night		Ldn	C	NEL
Autos.	7	7.1	75	.2		73.5		67	.4	76.0)	76.6
Medium Trucks.	70	0.2	68	.7		62.4		60	.8	69.3	3	69.5
Heavy Trucks.	69	9.6		59.1		60	.4	68.7	7	68.8		
Vehicle Noise	78	8.5	76	.8		73.9		68	.9	77.5	5	78.0
Centerline Distan	ice to Noise C	ontour (i	n feet)									
				7	0 dE	BA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

316

340

680

733

1,465

1,579

3,156

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: n/o I-5 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA						NOISE MODEL INPUTS							
Highway Data						Site Cor	nditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	62,000) vehicles	3					Autos:	15			
Peak Hour	Percentage:	1(0%			Me	edium Tr	rucks (2	Axles):	15			
Peak H	Hour Volume:	6,200) vehicles	S		He	eavy Tru	icks (3+	Axles):	15			
Ve	ehicle Speed:	65	5 mph			Vehicle	Miv						
Near/Far La	ane Distance:	175	5 feet				nicleType	e	Day	Evening	Night	Daily	
Site Data						V 07		Autos:	77.5%	_	9.6%	-	
	vrior Usinht.		0 foot			Μ	ledium T		84.8%		10.3%		
Barrier Type (0-V	rrier Height:		.0 feet .0				Heavy T		86.5%		10.8%		
	ist. to Barrier:		.0 .0 feet										
Centerline Dist.			.0 feet			Noise S			•	eet)			
Barrier Distance			.0 feet				Auto		2.000				
Observer Height			.0 feet				ım Truck		1.000		-		
ŭ	ad Elevation:	_	.0 feet			Hea	vy Truck	rs: 8	3.006	Grade Ad	justment	: 0.0	
_	ad Elevation:		.0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)			
	Road Grade:		.0%			•	Auto		3.505				
	Left View:		.0 degree	25		Mediu	ım Truck		3.423				
	Right View:		.0 degree			Hea	vy Truck	rs: 48	3.506				
FHWA Noise Mod													
VehicleType	REMEL		fic Flow	Di	stance		Road	Fres		Barrier Att		m Atten	
Autos:			4.38		0.0		-1.20		-4.87		000	0.000	
Medium Trucks:		-	-12.86		0.1		-1.20		-4.97		000	0.000	
Heavy Trucks:	88.18	3	-16.82		0.0)9	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (wit	hout T	opo and	barri	ier attei	nuation)							
VehicleType	Leq Peak Ho	our	Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL	
Autos:	7	7.8	•	75.9		74.2		68	.1	76.7	7	77.3	
Medium Trucks:	7	0.9		69.4		63.0)	61	.5	70.0)	70.2	
Heavy Trucks:	7	0.3	(8.86		59.8	}	61	.0	69.4	4	69.5	
Vehicle Noise:	7	9.2		77.4		74.6	;	69	.6	78.2	2	78.7	
Centerline Distan	ce to Noise C	ontou	r (in feet)									
			. ,		70	dBA	65	dBA	6	60 dBA	55	dBA	
						-		-		-		-	

Ldn:

CNEL:

350

378

755

814

1,626

1,753

3,503

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: b/w I-5 SB Ramps and Burt Rd.

Number: 8141

Analyst: B. Lawson

SITE		NOISE MODEL INPUTS										
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	52,900 vehicles	3			Autos:	15					
Peak Hour	Percentage:	10%		Me	dium Trucks	(2 Axles).	15					
Peak F	Hour Volume:	5,290 vehicles	3	He	avy Trucks (3+ <i>Axles).</i>	15					
Ve	ehicle Speed:	60 mph		Vehicle I	Mix							
Near/Far La	ane Distance:	76 feet			icleType	Day	Evening	Night	Daily			
Site Data					Autos		_	9.6%	-			
Ra	rrier Height:	0.0 feet		Me	edium Trucks	s: 84.8%	4.9%	10.3%	1.84%			
Barrier Type (0-V	•	0.0		ŀ	leavy Trucks	s: 86.5%	2.7%	10.8%	0.74%			
• • • •	ist. to Barrier:	100.0 feet		M-1 0		· / · - /	' 4\					
Centerline Dist.		100.0 feet		Noise So	ource Elevat		eet)					
Barrier Distance		0.0 feet			Autos:	2.000						
Observer Height	(Above Pad):	5.0 feet			m Trucks:	4.000	0 - 4 - 4 - 4		0.0			
Pad Elevation: 0.0 feet				Heav	y Trucks:	8.006	Grade Ad	justment:	0.0			
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent Dis	tance (in	feet)					
	Road Grade:	0.0%		Autos: 92.547								
	Left View:	-90.0 degree	es	Mediui	m Trucks:	92.504						
	Right View:	90.0 degree	es	Heavy Trucks: 92.547								
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten			
Autos:	73.22	4.03	-4.	11	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	83.68	-13.20	-4.	11	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	87.33	-17.16	-4.	11	-1.20	-5.16	0.0	000	0.000			
Unmitigated Nois	e Levels (with	hout Topo and	barrier atte	nuation)								
VehicleType	Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL			
Autos:	7	1.9	70.0	68.3		62.2	70.8	3	71.4			
Medium Trucks:	6	5.2	63.7	57.3		55.8	64.2	2	64.4			
Heavy Trucks:	6	4.9	63.4	54.4)	64.1						

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	144	310	669	1,441
CNEL:	155	334	720	1,552

68.8

72.4

63.8

72.9

71.7

73.4

Vehicle Noise:

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av. Number: 8141
Road Segment: b/w Burt Rd. and Oak Cyn./Laguna Cyn. Rd. Analyst: B. Lawson

	SPECIFIC IN	NPUT DATA			NOISE MODEL INPUTS					
Highway Data					Site Con	ditions (Har	d = 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	53,800 vehicl	es				Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Trucks	(2 Axles):	15		
Peak H	lour Volume:	5,380 vehicl	es		He	avy Trucks (3+ Axles):	15		
Ve	hicle Speed:	60 mph		,	Vehicle l	Vix				
Near/Far La	ne Distance:	76 feet				icleType	Day	Evening	Night	Daily
Site Data						Autos	: 77.5%	12.9%	9.6%	97.42%
Bai	rrier Height:	0.0 feet			Me	edium Trucks	: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			F	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%
Centerline Dis	•	100.0 feet			Noisa Sa	ource Elevat	ions (in fa	not)		
Centerline Dist.	to Observer:	100.0 feet			10/30 00	Autos:	2.000	,		
Barrier Distance	to Observer:	0.0 feet			Mediu	n Trucks:	4.000			
Observer Height (Above Pad):	5.0 feet				ry Trucks:	8.006	Grade Adj	iustment:	0.0
Pa	ad Elevation:	0.0 feet							dott/10/16.	0.0
Roa	I	Lane Eq	uivalent Dis	tance (in t	feet)					
1	Road Grade:	0.0%				Autos:	92.547			
	Left View:	-90.0 degr	ees		Mediui	m Trucks:	92.504			
	Right View:	90.0 degre	ees		Heavy Trucks: 92.547					
FHWA Noise Mode	el Calculation	18								
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road Fr	esnel	Barrier Atte	en Ber	m Atten
Autos:	73.22	4.1	1	-4.11	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-13.13	3	-4.11	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-17.09	9	-4.11	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	d barr	ier atten	uation)					
VehicleType	Leq Peak Ho	ur Leq Da	ay	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL
Autos:	72	2.0	70.1		68.3	(62.3	70.9)	71.5
Medium Trucks:	65	5.2	63.7		57.4	!	55.8	64.3	3	64.5
Heavy Trucks:	64	4.9	63.5		54.5	;	55.7	64.1		64.2
Vehicle Noise:	73	3.5	71.7		68.8		63.9	72.5	5	72.9
Centerline Distant	ce to Noise C	ontour (in fee	et)							
				70 c	dBA	65 dBA	ϵ	60 dBA	55	dBA

Ldn:

CNEL:

146

157

314

338

676

728

1,457

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: n/o ICD

Number: 8141

Analyst: B. Lawson

	SPECIFIC I	NPUT DA	TA		NOISE MODEL INPUTS							
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	43,200 ve	hicles					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	? Axles):	15			
Peak H	lour Volume:	4,320 ve	hicles		He	avy Tru	icks (3+	- Axles):	15			
Ve	ehicle Speed:	60 m _l	ph		Vehicle i	Mix						
Near/Far La	ne Distance:	76 fe	et			icleType	e	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%		9.6%		
	uviou Hoimbt.	0.0 fe			M	edium 7		84.8%		10.3%	1.84%	
Barrier Type (0-W	rrier Height:	0.0	eet			-leavy T		86.5%		10.8%		
	ist. to Barrier:	100.0 fe	act									
Centerline Dist.		100.0 fe			Noise Source Elevations (in feet)							
Barrier Distance		0.0 fe				Auto		2.000				
Observer Height		5.0 fe			Mediu	m Truck	rs: 4	4.000				
•	ad Elevation:	0.0 fe			Heav	ry Truck	rs: 8	3.006	Grade Ad	justment	: 0.0	
	ad Elevation:	0.0 fe			Lane Eq	uivalen	t Dista	nce (in f	feet)			
			Auto		2.547							
Road Grade: 0.0% Left View: -90.0 degrees					Mediu	m Truck		2.504				
	Right View:	90.0 d	_			ry Truck		2.547				
	rugiti view.	30.0 u	cgiccs		716avy 11aono. 32.041							
FHWA Noise Mod	lel Calculatio	ns										
VehicleType	REMEL	Traffic F	low L	Distance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten	
Autos:	73.22	2	3.15	-4.1	1	-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	83.68	3 -1	4.08	-4.1	1	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	3 -1	8.04	-4.1	1	-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (wit	hout Topo	and bar	rier atter	nuation)							
VehicleType	Leg Peak Ho		Day		vening	Lea	Night		Ldn	C	NEL	
Autos:	•	1.1	69.		67.4	- 1		.3	70.0		70.6	
Medium Trucks:	6	4.3	62.		56.4		54	1.9	63.3	3	63.6	
Heavy Trucks:	6	4.0	62.	6	53.5		54	1.8	63.1	1	63.2	
Vehicle Noise:	7	2.5	70.	8	67.9		62	2.9	71.5	5	72.0	
Centerline Distan	ce to Noise C	Contour (in	feet)									
		<u>.</u>		70	dBA	65	dBA	6	60 dBA	55	dBA	
					26	271			584	1,	259	
			O			_	120 271			_		

CNEL:

136

292

629

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av. Number: 8141
Road Segment: s/o Waterworks Wy. Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT D	DATA				r	NOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	38,900	vehicles	6					Autos:	15		
Peak Hour	Percentage:	10%	6			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	3,890	vehicles	6		He	avy Tru	cks (3+	- Axles):	15		
Ve	ehicle Speed:	60	mph			Vehicle I	Mix					
Near/Far La	ne Distance:	76	feet				icleType	Э	Day	Evening	Night	Daily
Site Data								Autos:	77.5%		9.6%	-
Ra	rrier Height:	0.0	feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0				ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
	st. to Barrier:	100.0				Noise So	ouroo E	lovatio	ns (in f	201		
Centerline Dist.	to Observer:	100.0	feet			NOISE SC	Auto		2.000	(C I)		
Barrier Distance	to Observer:	0.0	feet			Modiu	Auto m Truck		4.000 4.000			
Observer Height	(Above Pad):	5.0	feet					_		Grade Ad	liustmont	. 0.0
P	ad Elevation:	0.0	feet			неач	y Truck	S. C	3.006	Grade Auj	jusimem	. 0.0
Ro	ad Elevation:	0.0	feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:	0.0	%				Auto	s: 9:	2.547			
	Left View:	-90.0	degree	es		Mediu	m Truck	rs: 9:	2.504			
	Right View:	90.0	degree	es		Heav	y Truck	rs: 91	2.547			
FHWA Noise Mod	lel Calculation	ıs										
VehicleType	REMEL	Traffic	Flow	Di	stance	Finite	Road	Fre	snel	Barrier Att	en Bei	m Atten
Autos:	73.22		2.70		-4.1	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68		-14.54		-4.1	1	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33		-18.50		-4.1	1	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Top	oo and i	barri	ier atter	nuation)						
VehicleType	Leq Peak Ho	ur L	.eq Day		Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	70).6	(8.7		66.9		60	.9	69.5	5	70.1
Medium Trucks:	63	3.8	6	52.3		56.0		54	.4	62.9	9	63.1
Heavy Trucks:	63	3.5	(52.1		53.1		54	.3	62.7	7	62.8
Vehicle Noise:	72	2.1		70.3		67.4		62	2.5	71.0)	71.5
Centerline Distan	ce to Noise C	ontour ((in feet))							1	
					70	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

117

126

253

272

545

587

1,174

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av. Number: 8141
Road Segment: s/o Barranca Pkwy. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE	MODE	L INPUT	S		
Highway Data			Site Con	ditions (Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt).	39,300 vehicle	s			Autos:	15			
Peak Hour Percentage.	•		Me	dium Trucks (2	2 Axles):	15			
Peak Hour Volume.	3,930 vehicle	s	Heavy Trucks (3+ Axles): 15						
Vehicle Speed.	60 mph		Vehicle Mix						
Near/Far Lane Distance.	•				Dou	Fuening	Niaht	Doily	
Site Date			veni	icleType	Day 50/	Evening	Night	Daily	
Site Data			A 4.	Autos:	77.5%		9.6%	97.42%	
Barrier Height				edium Trucks:	84.8%		10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm)			F	leavy Trucks:	86.5%	2.7%	10.8%	0.74%	
Centerline Dist. to Barrier			Noise So	ource Elevation	ons (in fe	eet)			
Centerline Dist. to Observer				Autos:	2.000				
Barrier Distance to Observer	0.0 feet		Mediui		4.000				
Observer Height (Above Pad)	5.0 feet				8.006	Grade Adj	iustment:	0.0	
Pad Elevation	0.0 feet								
Road Elevation	0.0 feet		Lane Eq	uivalent Dista		feet)			
Road Grade	0.0%				2.547				
Left View	-90.0 degre	es	Mediui	n Trucks: 9	2.504				
Right View	90.0 degre	es	Heav	ry Trucks: 9	2.547				
FHWA Noise Model Calculation	ons								
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Att	en Ber	m Atten	
Autos: 73.2	22 2.74	-4.	11	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 83.6	68 -14.49	-4.	11	-1.20	<i>-4.97</i>	0.0	000	0.000	
Heavy Trucks: 87.3	-18.45	-4.	11	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)						
VehicleType Leq Peak F	lour Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL	
Autos:	70.7	68.8	67.0	60	0.9	69.6	3	70.2	
Medium Trucks:	63.9	62.4	56.0	54	4.5	62.9)	63.2	
Heavy Trucks:	63.6	62.1	53.1	54	1.4	62.7	7	62.8	
Vehicle Noise:	72.1	70.4	67.5	62	2.5	71.1		71.6	
Centerline Distance to Noise	Contour (in feet	')							

70 dBA

118

127

Ldn:

CNEL:

65 dBA

255

274

60 dBA

549

591

55 dBA 1,182

Sunday, Ma	ay 20, 2012
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Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Sand Canyon. Av.

Road Segment: b/w Alton Pkwy.and I-405 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NO	ISE MODE	L INPUT	S		
Highway Data				Site Conditions (Hard = 10, Soft = 15)						
Average Daily	Traffic (Adt): 4	11,500 vehicles				Autos:	15			
Peak Hour	Percentage:	10%		Me	dium Truc	ks (2 Axles):	15			
Peak H	lour Volume:	4,150 vehicles		He	avy Truck	s (3+ Axles):	15			
Ve	hicle Speed:	60 mph		Vehicle I	Vix					
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily	
Site Data						tos: 77.5%	•	9.6%	-	
Rai	rrier Height:	0.0 feet		Ме	edium True	cks: 84.8%	4.9%	10.3%	1.84%	
Barrier Type (0-W	•	0.0		F	leavy Tru	cks: 86.5%	2.7%	10.8%	0.74%	
Centerline Dis	st. to Barrier:	100.0 feet		Noise So	ource Elev	vations (in f	eet)			
Centerline Dist.	to Observer:	100.0 feet			Autos:	2.000	/			
Barrier Distance	to Observer:	0.0 feet		Mediui	n Trucks:	4.000				
Observer Height ((Above Pad):	5.0 feet			y Trucks:	8.006	Grade Adj	iustment:	0.0	
Pa	ad Elevation:	0.0 feet								
Roa	ad Elevation:	0.0 feet		Lane Eq	uivalent E	Distance (in	feet)			
	Road Grade:	0.0%			Autos:	92.547				
	Left View:	-90.0 degree	s	Mediui	n Trucks:	92.504				
	Right View:	90.0 degree	s	Heav	y Trucks:	92.547				
FHWA Noise Mode	el Calculation	S								
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten	
Autos:	73.22	2.98	-4.1	1	-1.20	-4.87	0.0	000	0.000	
Medium Trucks:	83.68	-14.26	-4.1	1	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-18.21	-4.1	1	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and I	barrier atte	nuation)						
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Ni	ight	Ldn	CI	VEL	
Autos:	70	.9 6	9.0	67.2		61.2	69.8	3	70.4	
Medium Trucks:	64	.1 6	62.6	56.2		54.7	63.2	2	63.4	
Heavy Trucks:	63	.8 6	62.4	53.3		54.6	62.9)	63.1	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	123	264	569	1,226
CNEL:	132	284	613	1,320

67.7

62.8

71.3

71.8

70.6

Vehicle Noise:

72.4

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Santa Maria Av. Number: 8141
Road Segment: s/o Moulton Pkwy. Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Conditions (Hard = 10, Soft = 15)					
Average Daily Traffic (Adt):	8,900 vehicles	3			Autos:	15		
Peak Hour Percentage:	10%		Med	lium Trucks ((2 Axles):	15		
Peak Hour Volume:	890 vehicles	S	Hea	vy Trucks (3	3+ Axles):	15		
Vehicle Speed:	50 mph		Vehicle M	lix				
Near/Far Lane Distance:	70 feet			cleType	Day	Evening	Night	Daily
Site Data				Autos		_	9.6%	97.42%
Barrier Height:	0.0 feet		Me	dium Trucks.	: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0		Н	eavy Trucks	: 86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		W-' O-	-	· · · · · · · · · · · · · · · · · · ·	4)		
Centerline Dist. to Observer:	100.0 feet		Noise So	urce Elevati		eet)		
Barrier Distance to Observer:	0.0 feet			Autos:	2.000 4.000			
Observer Height (Above Pad):	5.0 feet		Medium 		0.0			
Pad Elevation:	0.0 feet		Heavy	/ Trucks:	8.006	Grade Ad	justment.	0.0
Road Elevation:	0.0 feet		Lane Equ	ivalent Dist	ance (in	feet)		
Road Grade:	0.0%			Autos:	93.723			
Left View:	-90.0 degree	es	Medium	Trucks:	93.680			
Right View:	90.0 degree	es	Heavy	Trucks:	93.723			
FHWA Noise Model Calculation	าร							
VehicleType REMEL	Traffic Flow	Distance	Finite I	Road Fro	esnel	Barrier Att	en Ber	m Atten
Autos: 70.20	-2.91	-4.2	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 81.00	-20.15	-4.1	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 85.38	3 -24.11	-4.2	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier atter	nuation)					
VehicleType Leq Peak Ho	ur Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL
Autos: 6	1.9	60.0	58.2	5	2.2	60.8	3	61.4
Medium Trucks: 5	5.5	53.9	47.6	4	6.0	54.5	5	54.7
Heavy Trucks: 5	5.9	54.5	45.4	4	6.7	55.0)	55.1
Vehicle Noise: 6	3.6	61.8	58.8	5	54.0	62.6	<u> </u>	63.0

70 dBA

32

34

Ldn:

CNEL:

65 dBA

69

74

60 dBA

148

159

55 dBA

319

343

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Santa Maria Av. Number: 8141
Road Segment: e/o Laguna Canyon Rd. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS							
Highway Data				Site Con	ditions (Ha	ard = 10, S	oft = 15)				
Average Daily	Traffic (Adt):	6,000 vehicles	S			Autos:	15				
Peak Hour	Percentage:	10%		Me	dium Truck	s (2 Axles).	15				
Peak H	lour Volume:	600 vehicles	S	He	avy Trucks	(3+ Axles).	15				
Ve	hicle Speed:	45 mph		Vehicle Mix							
Near/Far La	ne Distance:	36 feet			icleType	Day	Evening	Night	Daily		
Site Data					Auto			9.6%			
Ra	rrier Height:	0.0 feet		Me	edium Truci	ks: 84.8%	4.9%	10.3%	1.84%		
Barrier Type (0-W	•	0.0		H	leavy Truci	ks: 86.5%	2.7%	10.8%	0.74%		
Centerline Di	,	100.0 feet		Naina Ca	= [1	- ti /i t	4				
Centerline Dist.	to Observer:	100.0 feet		Noise Sc	ource Eleva	•	eet)				
Barrier Distance		0.0 feet			Autos:	2.000 4.000					
Observer Height		5.0 feet		Mediui			iustmont: 00				
•	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjust							
	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0%			Autos:	98.412					
	Left View:	-90.0 degree	es	Mediui	m Trucks:	98.372					
	Right View:	90.0 degree		Heav	y Trucks:	98.413					
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten		
Autos:	68.46	-4.17	-4.5	51	-1.20	-4.87	0.0	000	0.000		
Medium Trucks:	79.45	-21.41	-4.5	51	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks:	84.25	-25.36	-4.5	51	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier atter	nuation)							
VehicleType	Leq Peak Hou	ur Leq Day	Leq E	vening	Leq Nig	ht	Ldn	CI	VEL		
Autos:	58	3.6	56.7	54.9		48.9	57.5	5	58.1		
Medium Trucks:	52	2.3	50.8	44.5		42.9	51.4	4	51.6		
Heavy Trucks:	53	3.2	51.8	42.7		44.0	52.3	3	52.4		
Vehicle Noise:	00).4	58.7	55.5		50.8	59.4	4	59.8		

70 dBA

20

21

Ldn: CNEL: 65 dBA

42

45

60 dBA

91

98

55 dBA

196

210

Sunday,	May	20,	2012

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Santiago Canyon Rd. Number: 8141
Road Segment: e/o SR-241 NB Ramp Analyst: B. Lawson

SITE SPECIFIC	INPUT	DATA			NO	ISE I	MODE	L INPUT	S	
Highway Data				Site Con	ditions (F	lard =	10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 23,600) vehicles	6				Autos:	15		
Peak Hour Percentage)%		Me	dium Truc	ks (2 A	Axles):	15		
Peak Hour Volume	: 2,360) vehicles	3	Heavy Trucks (3+ Axles): 15						
Vehicle Speed	: 50) mph		Vehicle Mix						
Near/Far Lane Distance	: 70) feet					Day	Funning	Niaht	Doily
Site Data				ven	icleType	ıtoo i	Day	Evening	Night	Daily
Site Data						itos:	77.5%		9.6%	
Barrier Height		0 feet			edium Tru		84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)				,	Heavy Tru	CKS:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrie		0 feet		Noise So	ource Elev	vation	s (in fe	eet)		
Centerline Dist. to Observe		0 feet			Autos:	2.	000			
Barrier Distance to Observe	<i>:</i> 0.	0 feet		Mediu	m Trucks:		000			
Observer Height (Above Pad	: 5.	0 feet			y Trucks:		006	Grade Ad	justment.	0.0
Pad Elevation	•	0 feet								
Road Elevation	: 0.	0 feet		Lane Eq	uivalent E			feet)		
Road Grade	<i>:</i> 0.	0%			Autos:	93.	723			
Left View	: -90.	0 degree	es	Mediu	m Trucks:	93.	680			
Right View	<i>:</i> 90.	0 degree	es	Heav	y Trucks:	93.	723			
FHWA Noise Model Calculati	ons									
VehicleType REMEL	Traff	ic Flow	Distance	Finite	Road	Fresr	nel	Barrier Att	en Ber	m Atten
<i>Autos:</i> 70.	20	1.32	-4.	20	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 81.	00	-15.92	-4.	19	-1.20		<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks: 85.	38	-19.87	-4.	20	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout To	opo and l	barrier atte	nuation)						
VehicleType Leq Peak I	lour	Leq Day	Leq	Evening	Leq Ni	ight		Ldn	CI	VEL
Autos:	66.1	6	64.2	62.5		56.4	1	65.0)	65.6
Medium Trucks:	59.7	Ę	58.2	51.8		50.3	3	58.7	7	59.0
Heavy Trucks:	60.1	Ę	58.7	49.7		50.9	9	59.3	3	59.4
Vehicle Noise:	67.8	(66.1	63.0		58.2	2	66.8	3	67.3
Centerline Distance to Noise	Contoui	r (in feet)								

70 dBA

61

66

Ldn:

CNEL:

65 dBA

132

141

60 dBA

284

305

55 dBA

611

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Scientific Wy.

Road Segment: s/o ICD

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOISE	MODE	L INPUT	S	
Highway Data			Site Cor	ditions (Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume: Vehicle Speed:	10% 170 vehicles 55 mph		Me He Vehicle					
Near/Far Lane Distance:	52 feet		Veh	icleType	Day	Evening	Night	Daily
Site Data				Autos:	77.5%	12.9%	9.6%	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 100.0 feet		ı	edium Trucks: Heavy Trucks: Durce Elevatio	84.8% 86.5% ons (in fe	2.7%	10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	0.0 feet 5.0 feet		Mediu	Autos: m Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent Dista	nce (in i	feet)		
Road Grade: Left View: Right View:	-90.0 degree			m Trucks: 9	6.607 6.566 6.608			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	snel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 -10.52	-4.3	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -27.76	-4.3	39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -31.71	-4.3	39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barrier atte	nuation)					
VehicleType Leq Peak H	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL
Autos:	55.7	53.8	52.0	4	5.9	54.6	3	55.2
Medium Trucks:	1 9.1	47.5	41.2	39	9.6	48.1	1	48.3
Heavy Trucks:	1 9.1 4	47.7	38.6 39.9 48.2					
Vehicle Noise:	57.2	55.5	52.5	4	7.7	56.2	2	56.7
Centerline Distance to Noise	Contour (in feet))						

70 dBA

12

13

Ldn:

CNEL:

65 dBA

26

28

60 dBA

56

60

55 dBA

120

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Spectrum Number: 8141
Road Segment: w/o Fortune Dr. Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA				ľ	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, Sc	ft = 15)		
Average Daily	Traffic (Adt):	3,000 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak I	lour Volume:	300 vehicles	S		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	35 mph		V	/ehicle l	Miy					
Near/Far La	ane Distance:	20 feet		•		icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.6%	-
	nrrier Height:	0.0 feet			Me	edium 7		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0 reet 0.0				leavy 7		86.5%		10.8%	0.74%
- ' '	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		۸	loise So			ns (in fe	et)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	-	1.000	0 - 4 - 4 - 4		0.0
•	Pad Elevation:	0.0 feet			Heav	y Truck	rs: E	3.006	Grade Ad	justment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	os: 99	9.544			
	Left View:	-90.0 degree	es		Mediu	m Truck	ks: 99	9.504			
	Right View:	90.0 degree	es		Heav	y Truck	rs: 99	9.544			
FHWA Noise Mod	lel Calculations	S									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	64.30	-6.09		-4.59)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	75.75	-23.33		-4.59)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	81.57	-27.28		-4.59)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL
Autos:	_		50.5		48.8		42		51.3	3	51.9
Medium Trucks:			45.1		38.8		37		45.7		45.9
Heavy Trucks:			47.1		38.0		39	.3	47.6		47.8
Vehicle Noise:	54	.6	52.9		49.5		45	.1	53.6	6	54.1
Centerline Distant	ce to Noise Co	ontour (in feet)								
				70 d	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

8

9

17

19

38

40

81

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Sterling Number: 8141
Road Segment: b/w Rockfield BI and Barrana Pkwy Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS								
Highway Data				Site Con	ditions (Ha	ard = 10, S	oft = 15)					
Average Daily	Traffic (Adt):	100 vehicles				Autos:	15					
Peak Hour	Percentage:	10%		Me	dium Truck	s (2 Axles):	15					
Peak H	lour Volume:	10 vehicles	;	Hea	avy Trucks	(3+ Axles):	15					
Ve	hicle Speed:	35 mph		Vehicle I	Miv							
Near/Far La	ne Distance:	20 feet			icleType	Day	Evening	Night	Daily			
Site Data					Auto			9.6%	,			
	rrier Height:	0.0 feet		Me	edium Truci			10.3%	1.84%			
Barrier Type (0-W	_	0.0 reet 0.0			leavy Truci			10.8%	0.74%			
Centerline Dis	•	100.0 feet										
Centerline Dist.		100.0 feet		Noise Sc		ations (in f	eet)					
Barrier Distance		0.0 feet			Autos:	2.000						
Observer Height (5.0 feet		Mediur	n Trucks:	4.000						
,	ad Elevation:	0.0 feet		Heavy Trucks: 8.006 Grade Adjustment: 0.0								
	ad Elevation:	0.0 feet		Lane Eq	uivalent Di	stance (in	feet)					
	Road Grade:	0.0%			Autos:	99.544	,					
•	Left View:	-90.0 degree	9	Mediur	n Trucks:	99.504						
	Right View:	90.0 degree			y Trucks:	99.544						
	rugin viow.	oo.o degree			,	00.0						
FHWA Noise Mode	el Calculations	3										
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten			
Autos:	64.30	-20.86	-4.5	9	-1.20	-4.87	0.0	000	0.000			
Medium Trucks:	75.75	-38.10	-4.5	9	-1.20	-4.97	0.0	000	0.000			
Heavy Trucks:	81.57	-42.05	-4.5	9	-1.20	-5.16	0.0	000	0.000			
Unmitigated Noise	e Levels (witho	out Topo and k	barrier atten	uation)								
VehicleType	Leq Peak Hou	r Leq Day	Leq E	vening	Leq Nig	ıht	Ldn	CI	VEL			
Autos:	37.	7 3	35.8	34.0 27.9 36.6				37.2				
Medium Trucks:	31.	9 3	30.4	24.0		22.5	30.9)	31.1			
Heavy Trucks:	33.	7 3	32.3	23.3		24.5	32.9)	33.0			

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	1	2	4	8
CNEL:	1	2	4	9

34.7

30.3

38.9

39.3

38.2

39.9

Vehicle Noise:

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Technology Dr.

Road Segment: e/o Barranca Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	l = 10, Sc	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume:	10%			dium Trucks (avy Trucks (3	•			
Vehicle Speed: Near/Far Lane Distance:	•		Vehicle Veh	Mix icleType	Day	Evening	Night	Daily
Site Data				Autos.	-		-	97.42%
Barrier Height: Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier: Centerline Dist. to Observer:	0.0 100.0 feet		I	edium Trucks. Heavy Trucks.	86.5% ons (in fe	2.7%	10.3% 10.8%	1.84% 0.74%
Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	0.0 feet 5.0 feet		Heav	Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Adj	iustment:	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent Dist		feet)		
Road Grade: Left View: Right View:	-90.0 degree			m Trucks:	96.607 96.566 96.608			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 0.36	-4.3	39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4 Heavy Trucks: 86.4		-4.3 -4.3		-1.20 -1.20	-4.97 -5.16		000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	nuation)					
VehicleType Leq Peak H	our Leq Day	Leq E	Evening	Leq Night		Ldn	CI	VEL
		64.6	62.9		6.8	65.4		66.1
		58.4	52.1		0.5	59.0		59.2
,		58.5	49.5		50.8 59.1			59.2
Vehicle Noise:	68.1	66.4	63.4	5	8.5	67.1	1	67.6
Centerline Distance to Noise	Contour (in feet)						

70 dBA

64

69

Ldn:

CNEL:

65 dBA

138

148

60 dBA

297

319

55 dBA

639

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Technology Dr.

Road Segment: w/o Barranca Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	CINP	UT DATA				1	VOISE	MODE	L INPUT	S	
Highway Data					Site Cor	nditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Ad	t): 16	,100 vehicles	3					Autos:	15		
Peak Hour Percentag	e:	10%			Me	edium Tr	rucks (2	2 Axles):	15		
Peak Hour Volum	e: 1	,610 vehicles	3		He	eavy Tru	icks (3+	- Axles):	15		
Vehicle Spee	d:	55 mph			Vehicle	Miv					
Near/Far Lane Distand	e:	52 feet				nicleType	Δ	Day	Evening	Night	Daily
Site Data					VGI		Autos:	77.5%		9.6%	-
		0011			1/1	ledium T		84.8%		10.3%	1.84%
Barrier Heigl		0.0 feet				Heavy T		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Bern	•	0.0				ricavy i	raono.	00.070	2.170	10.070	0.7 4 70
Centerline Dist. to Barrio		100.0 feet			Noise S	ource E	levatio	ns (in fe	eet)		
Centerline Dist. to Observe		100.0 feet				Auto	os:	2.000			
Barrier Distance to Observe		0.0 feet			Mediu	ım Truck	rs:	4.000			
Observer Height (Above Pa	•	5.0 feet			Hea	vy Truck	(S:	8.006	Grade Adj	iustment	0.0
Pad Elevatio Road Elevatio		0.0 feet 0.0 feet			Lane Eq	nuivalen	t Dieta	nce (in	foot)		
Road Grade: 0.0%					Larie Lq	Auto		6.607	iccij		
Road Grac Left Vie		-90.0 degree			Modiu	m Truck		6.566			
Right Vie		90.0 degree				vy Truck		6.608			
Night vie	vv.	90.0 degree	, 5		rica	vy IIuch	io. J	0.000			
FHWA Noise Model Calcula	tions										
VehicleType REMEL	. 7	Traffic Flow	Di	istance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos: 71	.78	-0.75		-4.3	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82	2.40	-17.99		-4.3	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86	5.40	-21.95		-4.3	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (vithou	ut Topo and	barri	ier atter	nuation)						
VehicleType Leg Peak		Leq Day			vening	Lea	Night		Ldn	CI	VEL
Autos:	65.4		63.5	•	61.8	-		5.7	64.3		64.9
Medium Trucks:	58.8		57.3		51.0)	49	9.4	57.9)	58.1
Heavy Trucks:	58.9		57.4		48.4		49	9.6	58.0)	58.1
Vehicle Noise:	67.0	(65.2		62.3	}	57	7.4	66.0)	66.4
Centerline Distance to Nois	e Con	tour (in feet))								
		. ,		70	dBA	65	dBA	6	60 dBA	55	dBA
		I	Ldn:	5	54	1	16		250	5	39

CNEL:

58

269

125

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Technology Dr.

Road Segment: e/o Laguna Canyon Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NOISE MODEL INPUTS							
Highway Data				S	ite Conditio	ns (Hard	d = 10, Sc	oft = 15)			
Average Daily	Traffic (Adt): 1	7,100 vehicles	S				Autos:	15			
Peak Hour	Percentage:	10%			Medium	Trucks (2 Axles):	15			
Peak H	lour Volume:	1,710 vehicles	S		Heavy T	rucks (3	+ Axles):	15			
Ve	hicle Speed:	50 mph		W	ehicle Mix						
Near/Far La	ne Distance:	50 feet		•	VehicleType Day			Evening	Night	Daily	
Site Data					Autos: 77.5% 12.9%					97.42%	
	uuiau Ilaiadat.	0.0 foot			Medium				10.3%		
	rrier Height:	0.0 feet 0.0				Trucks			10.8%	0.74%	
Barrier Type (0-W Centerline Di		0.0 100.0 feet								011 170	
Centerline Dist.		100.0 feet		N	Noise Source Elevations (in feet)						
Barrier Distance		0.0 feet			Au	itos:	2.000				
					Medium Tru	cks:	4.000				
Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet			Heavy Tru	cks:	8.006	Grade Ad	iustment	: 0.0			
	ad Elevation: ad Elevation:	0.0 feet		1 2	ane Equivale	ent Dist	ance (in	feet)			
	au ⊑ievaliori. Road Grade:	0.0 Teet 0.0%			•		96.871	1001)			
	Road Grade. Left View:				Medium Tru		96.830				
		-90.0 degree			Heavy Tru		96.871				
	Right View:	90.0 degree	es		Heavy Hu	uns.	90.07 I				
FHWA Noise Mod	el Calculations	S		I							
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite Road	' Fre	esnel	Barrier Att	en Ber	m Atten	
Autos:	70.20	-0.08		-4.41	-1.2	0	-4.87	0.0	000	0.000	
Medium Trucks:	81.00	-17.32		-4.41	-1.2	0	-4.97	0.0	000	0.000	
Heavy Trucks:	85.38	-21.27		-4.41	-1.2	0	-5.16	0.0	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and	barrier a	attenu	ation)						
VehicleType	Leq Peak Hou	r Leq Day	' Le	eq Eve	ening Le	eq Night		Ldn	C	NEL	
Autos:	64.	.5	62.6		60.8	5	4.8	63.4	1	64.0	
Medium Trucks:	58.	.1	56.6		50.2).2 48.7		57.1	I	57.4	
Heavy Trucks:	58.	.5	57.1		48.0	4	9.3	57.6	3	57.8	

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	48	103	221	477
CNEL:	51	110	238	512

61.4

64.5

65.2

56.6

65.6

Vehicle Noise:

66.2

ect Name: 2012 Great Park GPA/ZC Scenario: Post 2030 - 2012 Modified Project (Option 2)

Road Name: Toledo Wy. Number: 8141 Road Segment: e/o Alton Pkwy. Analyst: B. Lawson

SITE S	SPECIFIC IN	PUT DATA				1	VOISE	MODE	L INPUT	S	
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,300 vehicles	3					Autos:	15		
	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak He	our Volume:	630 vehicles	3		He	avy Tru	icks (3+	Axles):	15		
Vel	hicle Speed:	55 mph		V	/ehicle l	Miv					
Near/Far Lar	ne Distance:	52 feet		V		icleType	Δ	Day	Evening	Night	Daily
Site Data					VCIII		Autos:	77.5%		•	97.42%
		0.0 (1			1/16	edium T		84.8%		10.3%	1.84%
	rier Height:	0.0 feet				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-Wa		0.0				louvy i	raono.	00.070	2.7 70	10.070	0.7 4 70
Centerline Dis		100.0 feet		٨	loise Sc	ource E	levatio	ns (in fe	eet)		
Centerline Dist. t		100.0 feet				Auto	os: 2	2.000			
Barrier Distance t		0.0 feet			Mediui	n Truck	rs: 4	1.000			
Observer Height (/	,	5.0 feet			Heav	y Truck	rs: 8	3.006	Grade Adj	justment:	0.0
	nd Elevation:	0.0 feet		,	one Fa	uivalan	4 Dioto	nce (in f	ina4)		
	nd Elevation:	0.0 feet			arie Eq				eei)		
F	Road Grade:	0.0%				Auto		5.607			
	Left View:	-90.0 degree				n Truck		5.566			
	Right View:	90.0 degree	es		неач	y Truck	(S: 96	6.608			
FHWA Noise Mode	el Calculations	<u> </u>									
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-4.83		-4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-22.07		-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-26.02		-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (witho	out Topo and	barri	er attenu	uation)						
	Leq Peak Hou			Leq Ev		Leq	Night		Ldn	CI	VEL
Autos:	61.	4 :	59.5	•	57.7		51	.6	60.3	3	60.9
Medium Trucks:	54.	7 :	53.2		46.9		45	.3	53.8	3	54.0
Heavy Trucks:	54.	8 :	53.4	3.4 44.3 45.6 53.9					9	54.1	
Vehicle Noise:	62.	9 (61.2		58.2		53	.3	61.9	9	62.4
Centerline Distance	e to Noise Co	ntour (in feet))								
				70 d	BA	65	dBA	6	0 dBA	55	dBA

29

31

Ldn: CNEL: 62

67

134

144

288

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Toledo Wy.

Road Segment: w/o Lake Forest Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NOISE MODEL INPUTS						
Highway Data				S	ite Cor	nditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	6,200 vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%			Me	edium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	620 vehicles	5		Heavy Trucks (3+ Axles): 15						
Ve	ehicle Speed:	50 mph		V	ehicle	Miv					
Near/Far La	ne Distance:	70 feet				icleType	Э	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	12.9%	9.6%	97.42%
Ra	rrier Height:	0.0 feet			M	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			I	Heavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	st. to Barrier:	100.0 feet		M	laisa Si	ource E	levatio	ns (in fa	not)		
Centerline Dist.	to Observer:	100.0 feet		/*	0136 30	Auto		2.000			
Barrier Distance	to Observer:	0.0 feet			Modiu	Auic m Truck		.000			
Observer Height	(Above Pad):	5.0 feet				m Truck ∕y Truck	_	3.006	Grade Ad	iustment	
P	ad Elevation:	0.0 feet			Tical	y Huch	.s. C	5.000	Orado Maj	uoumom	. 0.0
Ro	ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0%				Auto	s: 93	3.723			
	Left View:	-90.0 degree	es		Mediu	m Truck	rs: 93	3.680			
	Right View:	90.0 degree	es		Heav	/y Truck	(s: 93	3.723			
FHWA Noise Mod	lel Calculations	S									
VehicleType	REMEL	Traffic Flow	Distanc	се	Finite	Road	Fres	snel	Barrier Atte	en Bei	m Atten
Autos:	70.20	-4.48	-	4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	81.00	-21.72	-	4.19		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 85.38 -25.68 -4				-4.20 -1.20 -5.16 0.000					0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier at	tenu	ation)						
VehicleType	Leq Peak Hou	r Leq Day	Le	q Eve	ening	Leq	Night		Ldn	C	NEL

Unmitigated Nois	e Levels (withou	t Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	60.3	58.4	56.7	50.6	59.2	59.8
Medium Trucks:	53.9	52.4	46.0	44.5	52.9	53.2
Heavy Trucks:	54.3	52.9	43.8	45.1	53.4	53.6
Vehicle Noise:	62.0	60.3	57.2	52.4	61.0	61.5

Centerline Distance to Noise Contour (in feet)										
	70 dBA	65 dBA	60 dBA	55 dBA						
Ldn:	25	54	116	251						
CNEL:	27	58	125	269						

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Toledo Wy.

Road Segment: w/o Ridge Route Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily	Traffic (Adt):	6,900 vehicle	s					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tri	ucks (2	Axles):	15			
Peak H	lour Volume:	690 vehicle	S		He	avy Trud	cks (3+	Axles):	15			
Ve	hicle Speed:	45 mph		1/	ehicle l	Miv						
Near/Far La	ne Distance:	36 feet		7		icleType	<u>, </u>	Day	Evening	Night	Daily	
Site Data					V GI I		Autos:	77.5%	•		97.42%	
					Λ./.	, edium Ti		84.8%		10.3%	1.84%	
	rrier Height:	0.0 feet				Heavy Ti		86.5%		10.8%		
Barrier Type (0-W	•	0.0			,	icavy ii	ruono.	00.070	2.1 /0	10.070	0.7 4 70	
Centerline Di		100.0 feet		N	oise Sc	ource El	levatio	ns (in fe	eet)			
Centerline Dist.		100.0 feet				Auto	s: 2	2.000				
Barrier Distance		0.0 feet			Mediui	m Truck	s: 4	1.000				
Observer Height	,	5.0 feet			Heav	y Truck	s: 8	3.006	Grade Adj	iustment	: 0.0	
	ad Elevation:	0.0 feet		1.	ono Fa	, ii roloni	4 Diata	noo (in i	faat)			
	ad Elevation:	0.0 feet		L	ane Eq	uivalent			ieet)			
	Road Grade:	0.0%				Auto	-	3.412				
	Left View:	-90.0 degre				m Truck		3.372				
	Right View:	90.0 degre	es		Heav	y Truck	s: 98	3.413				
FHWA Noise Mod	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	snel	Barrier Att	en Bei	m Atten	
Autos:	68.46	-3.56		-4.51		-1.20		-4.87	0.0	000	0.000	
Medium Trucks:	79.45	-20.80		-4.51		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	84.25	-24.76		-4.51		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barrie	er attenu	ation)							
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Eve	ening	Leq	Night		Ldn	C	NEL	
Autos:	59	0.2	57.3		55.5		49	.5	58.1		58.7	
Medium Trucks:	52	2.9	51.4		45.1		43	.5	52.0)	52.2	

Heavy Trucks:	53.8	52.4	43.3	44.6	52.9	53.1				
Vehicle Noise:	61.0	59.3	56.1	51.4	60.0	60.4				
Centerline Distance to Noise Contour (in feet)										
			70 dBA	65 dBA	60 dBA	55 dBA				
		Ldn:	22	46	100	215				
		CNEL:	23	50	107	231				

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Toledo Wy.

Road Segment: e/o Ridge Route Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Con	ditions (H	ard = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	8,000 vehicles	S			Autos:	15		
Peak Hour	Percentage:	10%		Me	dium Truck	ks (2 Axles):	15		
Peak H	lour Volume:	800 vehicles	S	Hea	avy Trucks	s (3+ Axles):	15		
Ve	ehicle Speed:	50 mph	-	Vehicle I	Miy				
Near/Far La	ne Distance:	70 feet	_		cleType	Day	Evening	Night	Daily
Site Data					Aut		_	9.6%	,
	vrior Hoiabti	0.0 feet		Ме	edium Truc			10.3%	1.84%
Barrier Type (0-W	rrier Height:	0.0 reet 0.0		ŀ	leavy Truc			10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet							
Centerline Dist.		100.0 feet	_	Noise Sc		ations (in f	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
Observer Height		5.0 feet		Mediur	n Trucks:	4.000			
•	(Above Fau). ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment.	0.0
Road Elevation: 0.0 feet		_	I ane For	uivalent D	istance (in	feet)			
	Road Grade:	0.0 Teet 0.0%		Luno Ly	Autos:	93.723	1001)		
	Left View:			Modiur	n Trucks:	93.680			
		-90.0 degree			y Trucks:	93.723			
	Right View:	90.0 degree	es	Heav	y Trucks.	93.723			
FHWA Noise Mod	lel Calculation	s	I						
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	70.20	-3.38	-4.2	20	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	81.00	-20.62	-4.1	19	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	85.38	-24.57	-4.2	20	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier atte	nuation)					
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Ni	ght	Ldn	CI	VEL
Autos:	61	.4	59.5	57.8		51.7	60.3	3	60.9
Medium Trucks:	55	.0	53.5	47.1		45.6	54.0)	54.3
Heavy Trucks:	55	.4	54.0	45.0		46.2	54.6	3	54.7
Vehicle Noise:	63	.1	61.4	58.3		53.5	62.	1	62.6

70 dBA

30

32

Ldn:

CNEL:

65 dBA

64

69

60 dBA

138

148

55 dBA 297

319

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: b/w Culver Dr. and I-5 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT I	DATA		NOISE MODEL INPUTS							
Highway Data					S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	38,700	vehicles	s					Autos:	15		
Peak Hour	Percentage:	109	%			Me	dium Tru	ucks (2	Axles):	15		
Peak H	lour Volume:	3,870	vehicles	S		He	avy Trud	cks (3+	Axles):	15		
	ehicle Speed:	55	mph		ν	'ehicle l	Vix					
Near/Far La	ne Distance:	52	feet			Vehi	icleType	,	Day	Evening	Night	Daily
Site Data								Autos:	77.5%	12.9%	9.6%	97.42%
Ba	rrier Height:	0.0	feet			Me	edium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0				F	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0	feet			loisa Sc	ource El	lovatio	ns (in fa	not)		
Centerline Dist.	to Observer:	100.0	feet		^	ioise sc	Autos		.000	,c ()		
Barrier Distance	to Observer:	0.0	feet			Modium	Auto: n Truck:		.000			
Observer Height	(Above Pad):	5.0	feet							Grada Ad	iustmant	. 0 0
P	ad Elevation:	0.0	feet		Heavy Trucks: 8.006 Grade Adjustment:						. 0.0	
Ro	ad Elevation:	0.0	feet		Lane Equivalent Distance (in feet)							
	Road Grade:	0.0	1%				Autos	s: 96	6.607			
	Left View:	-90.0	degree	es		Mediur	n Trucks	s: 96	5.566			
	Right View:	90.0	degree	es		Heav	y Truck	s: 96	8.608			
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL		Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	3	3.05		-4.39	l	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40)	-14.18		-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40)	-18.14		-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout To	po and	barrier	er attenuation)							
VehicleType	Leq Peak Ho		Leq Day		Leq Ev		Leg	Night		Ldn	C	NEL
Autos:	69	9.2		67.3		65.6	•	59	.5	68.1	1	68.7
Medium Trucks:	62	2.6		61.1		54.8		53	.2	61.7	7	61.9
Heavy Trucks:	62	2.7		61.2		52.2		53	.5	61.8	3	61.9
Vehicle Noise:	70	8.0		69.1		66.1		61	.2	69.8	3	70.3

70 dBA

97

104

Ldn: CNEL: 65 dBA

208

224

60 dBA

449

483

55 dBA

967

1,040

Sunday.	May	20	2012
Sunday.	iviav	ZU.	2012

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o I-5 NB Ramps

Number: 8141

Analyst: B. Lawson

SITE	TE SPECIFIC INPUT DATA NOISE MODEL INPUTS										
Highway Data					Site Con	ditions	(Hard :	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	21,800 veh	icles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak H	lour Volume:	2,180 veh	icles		He	avy Trud	cks (3+	Axles):	15		
Ve	hicle Speed:	55 mp	h	,	Vehicle I	Wix					
Near/Far La	ne Distance:	52 fee	t			icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
	rrier Height:	0.0 fe	ot		Me	edium Ti	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W		0.0	GL		ŀ	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dis	,	100.0 fe	et					<i>(</i> ; •			
Centerline Dist.		100.0 fee		1	Noise So			•	eet)		
Barrier Distance		0.0 fe			Autos: 2.000						
Observer Height (5.0 fe			Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0						
• ,	ad Elevation:	0.0 fe			Heav	y Trucks	s: 8	.006	Grade Adj	iustment.	0.0
Roa	ad Elevation:	0.0 fe		I	Lane Eq	uivalent	Dista	nce (in f	eet)		
			Autos	s: 96	6.607						
	Left View:	-90.0 de	grees		Mediui	n Trucks	s: 96	5.566			
	Right View:	90.0 de	grees		Heav	y Truck	s: 96	8.608			
FHWA Noise Mode	el Calculation	e									
VehicleType	REMEL	Traffic Flo	ow Di	istance	Finite	Road	Fres	nel	Barrier Atte	en Ber	m Atten
Autos:	71.78		.56	-4.39		-1.20		-4.87		000	0.000
Medium Trucks:	82.40	-16	5.68	-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-20	.63	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo á	and barr	ier atten	uation)						
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNE							VEL				
Autos:	66	5.7	64.9		63.1		57	.0	65.7	7	66.3
Medium Trucks:	60	.1	58.6		52.3		50	.7	59.2	2	59.4
Heavy Trucks:	60	.2	58.7		49.7		51	.0	59.3	3	59.4
Vehicle Noise:	68	3.3	66.6		63.6		58	.7	67.3	3	67.8
Centerline Distance	ce to Noise Co	ontour (in	feet)								
				70 c	dBA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

66

71

142

153

306

329

660

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: w/o Jeffrey Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS						
Highway Data				9	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	19,300 vehicle	es					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	1,930 vehicle	es		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		1	/ehicle l	Miy					
Near/Far La	ne Distance:	52 feet				icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 feet			Ме	edium 7	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-W	_	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		<i>r</i>	Voise So			•	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		2.000			
Observer Height	(Above Pad):	5.0 feet				n Truck	_	1.000	0	" 	
•	ad Elevation:	0.0 feet			Heav	y Truck	(S. E	3.006	Grade Ad	justment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade: 0.0% Autos:						os: 96	6.607			
	Left View:	-90.0 degre	es		Mediui	n Truck	rs: 96	6.566			
	Right View:	90.0 degre	es		Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.03	3	-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-17.21		-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21.16	;	-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barr	ier atten	uation)						
VehicleType	VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL							VEL			
Autos:	66	6.2	64.3		62.6		56	.5	65.1	1	65.7
Medium Trucks:	59	9.6	58.1		51.7		50	.2	58.7	7	58.9
Heavy Trucks:	59	9.6	58.2		49.2		50	.4	58.8	3	58.9
Vehicle Noise:	67	7.8	66.0		63.1		58	.2	66.8	3	67.2
Centerline Distan	ce to Noise C	ontour (in fee	t)		ı						
				70 a	<i>IBA</i>	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

61

65

131

141

282

304

608

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o Jeffrey Rd.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS							
Highway Data			;	Site Con	ditions	(Hard	= 10, Sc	oft = 15)			
Average Daily Traffic (Adt):	19,500 vehicle	S					Autos:	15			
Peak Hour Percentage:	10%			Me	dium Tr	rucks (2	2 Axles):	15			
Peak Hour Volume:	1,950 vehicle	S		He	avy Tru	icks (3+	+ Axles):	15			
Vehicle Speed:	55 mph			/ehicle	Miv						
Near/Far Lane Distance:	52 feet				icleType	Δ	Day	Evening	Night	Daily	
Site Data				V C//		Autos:	77.5%		9.6%		
	0.0.61			M	edium T		84.8%		10.3%		
Barrier Height:	0.0 feet				Heavy T		86.5%		10.8%		
Barrier Type (0-Wall, 1-Berm):	0.0								10.070	0.7 170	
Centerline Dist. to Barrier: Centerline Dist. to Observer:	100.0 feet		1	Noise Source Elevations (in feet)							
	100.0 feet			Autos: 2.000							
Barrier Distance to Observer:	0.0 feet			Mediu	m Truck	rs: 4	4.000				
Observer Height (Above Pad):	5.0 feet			Heav	y Truck	rs:	8.006	Grade Ad	justment	: 0.0	
Pad Elevation: Road Elevation:	0.0 feet			ane Fo	uivalen	t Dista	nce (in	feet)			
Road Grade:	0.0 feet 0.0%		-	Laric Lq	Auto		6.607	1001)			
Road Grade. Left View:				Modiu	Auto m Truck		6.566				
Right View:	-90.0 degree				y Truck		6.608				
Right view.	90.0 degree	28		Heav	y IIuch	is. 3	0.000				
FHWA Noise Model Calculatio	ns										
VehicleType REMEL	Traffic Flow	Dist	tance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten	
Autos: 71.7	0.08		-4.39	9	-1.20		-4.87	0.0	000	0.000	
Medium Trucks: 82.4	-17.16		-4.39)	-1.20		-4.97	0.0	000	0.000	
Heavy Trucks: 86.4	21.12		-4.39)	-1.20		-5.16	0.0	000	0.000	
Unmitigated Noise Levels (wit	hout Topo and	barrie	r atten	uation)							
VehicleType Leq Peak Ho			Leq E		Leq	Night		Ldn	C	NEL	
Autos: 6	6.3	64.4		62.6		56	6.5	65.2	2	65.8	
Medium Trucks: 5	9.7	58.1		51.8		50).2	58.7	7	58.9	
Heavy Trucks: 5	9.7	58.3		49.2		50).5	58.8	3	59.0	
Vehicle Noise:	7.8	66.1		63.1		58	3.3	66.8	3	67.3	
Centerline Distance to Noise (Contour (in feet)									
	•		70 c	IBA	65	dBA	6	60 dBA	55	dBA	
		Ldn:	6	1	1	32		284	6	612	

CNEL:

66

306

142

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o Sand Canyon

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA	\			N	IOISE	MODE	L INPUT	S	
Highway Data				;	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	25,500 vehic	les					Autos:	15		
Peak Hou	r Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak I	Hour Volume:	2,550 vehic	les		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		,	Vehicle l	Wiy					
Near/Far La	ane Distance:	52 feet				icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	
Ra	arrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
, ,	ist. to Barrier:	100.0 feet									
Centerline Dist.		100.0 feet			Noise So				eet)		
Barrier Distance	to Observer:	0.0 feet				Auto		2.000			
Observer Height		5.0 feet				n Truck	_	1.000	Crada Ad	li ratmant	
F	Pad Elevation:	0.0 feet			Heav	y Truck	S. C	3.006	Grade Ad	justrient	0.0
Ro	oad Elevation:	0.0 feet		1	Lane Eq	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 deg	rees		Mediur	n Truck	s: 96	5.566			
	Right View:	90.0 deg	rees		Heav	y Truck	s: 96	6.608			
FHWA Noise Mod	del Calculation	าร									
VehicleType	REMEL	Traffic Flow	/ Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos.	71.78	3 1.2	24	-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks.	82.40	-16.0	0	-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks.	86.40	-19.9	5	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	se Levels (with	hout Topo an	d barr	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Leq D	ay	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos.	67	7.4	65.5		63.8		57	.7	66.3	3	66.9
Medium Trucks.	60	8.0	59.3		52.9		51	.4	59.9	9	60.1
Heavy Trucks.	60	0.9	59.4		50.4		51	.6	60.0)	60.1
Vehicle Noise.	69	9.0	67.2		64.3		59	.4	68.0	0	68.4
Centerline Distan	ice to Noise C	ontour (in fe	et)								
				70 c	dBA	65	dBA	6	60 dBA	55	dBA

73

79

158

170

340

366

Ldn:

CNEL:

732

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o Bake Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA		NOISE MODEL INPUTS					
Highway Data			Site Con	ditions (Hard	l = 10, Sc	oft = 15)		
Average Daily Traffic (Adt).	27,900 vehicle	S			Autos:	15		
Peak Hour Percentage.			Me	dium Trucks (2 Axles):	15		
Peak Hour Volume.	2,790 vehicle	s	He	avy Trucks (3	+ Axles):	15		
Vehicle Speed.	55 mph		Vehicle I	Miss				
Near/Far Lane Distance.	88 feet				Dov	Funning	Niaht	Doilu
Site Date			ven	icleType	Day	Evening	Night	Daily
Site Data			A 4.	Autos:			9.6%	
Barrier Height				edium Trucks:			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)			, , , , , , , , , , , , , , , , , , ,	leavy Trucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier			Noise So	ource Elevati	ons (in f	eet)		
Centerline Dist. to Observer				Autos:	2.000			
Barrier Distance to Observer	0.0 feet		Mediui	m Trucks:	4.000			
Observer Height (Above Pad)	5.0 feet				8.006	Grade Ad	iustment:	0.0
Pad Elevation	0.0 feet							
Road Elevation	0.0 feet		Lane Eq	uivalent Dist	•	feet)		
Road Grade	0.0%				39.850			
Left View	-90.0 degre	es	Mediui	m Trucks: 8	39.805			
Right View	90.0 degre	es	Heav	ry Trucks: 8	89.850			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	78 1.63	-3	.92	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	10 -15.60	-3	.92	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	10 -19.56	-3	.92	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak F	lour Leq Day	y Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	68.3	66.4	64.6	5	8.6	67.2	2	67.8
Medium Trucks:	61.7	60.2	53.8	5	2.3	60.7	7	61.0
Heavy Trucks:	61.7	60.3	51.3	5	2.5	60.9	9	61.0
Vehicle Noise:	69.9	68.1	65.2	6	0.3	68.8	3	69.3
Centerline Distance to Noise	Contour (in feet	t)						

70 dBA

84

90

Ldn:

CNEL:

65 dBA

180

194

60 dBA

388

417

55 dBA

836

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: b/w Lake Forest Dr.and Ridge Route Dr.

Number: 8141

Analyst: B. Lawson

Medium Trucks: 82.40 -14.53 -3.92 -1.20 -4.97 0.000 0.000 Heavy Trucks: 86.40 -18.49 -3.92 -1.20 -5.16 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 69.4 67.5 65.7 59.6 68.3 68.9 Medium Trucks: 62.8 61.2 54.9 53.3 61.8 62.0 Heavy Trucks: 62.8 61.4 52.3 53.6 61.9 62.1	SITE	SPECIFIC I	NPUT D	ATA		NOISE MODEL INPUTS								
Peak Hour Percentage: 10% Medium Trucks (2 Axles): 15	Highway Data			-		Site Cor	nditions	(Hard =	= 10, Sc	oft = $\overline{15}$)				
Peak Hour Volume: 3,570 vehicles Vehicle Speed: 55 mph Near/Far Lane Distance: 88 feet Vehicle Mix Vehicle Type Day Evening Night Daily Near/Far Lane Distance: Noise Source Elevations Noise Near/Far Lane Dist. to Barrier: 100.0 feet Heavy Trucks: 8.4.8% 4.9% 10.3% 1.84% Heavy Trucks: 8.6.5% 2.7% 10.8% 0.74% Noise Source Elevations Night Noise Source Elevations Night Noise Source Elevations Night Noise Source Elevations Night N	Average Daily	Traffic (Adt):	35,700	vehicles	3				Autos:	15				
Vehicle Speed: Near/Far Lane Distance: 55 mph Near/Far Lane Distance: Wehicle Mix Vehicle Type Day Evening Night Daily Site Data Autos: 77.5% 12.9% 9.6% 97.42% Barrier Height: Barrier Height: Page Interest Type (0-Wall, 1-Berm): 0.0 feet Medium Trucks: 84.8% 4.9% 10.3% 1.84% 14.9% 10.3% 1.84% 14.9% 10.0% 1.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9% 10.0% 14.84% 14.9%						Me	edium Tru	icks (2	Axles):	15				
Near/Far Lane Distance: 88 feet Vehicle Type Day Evening Night Daily	Peak F	lour Volume:	3,570	vehicles	3	Heavy Trucks (3+ Axles): 15								
Near/Far Lane Distance: 88 feet VehicleType Day Evening Night Daily	Ve	hicle Speed:	55	mph		Vehicle	Mix							
Barrier Height: 0.0 feet 0.0 feet 0.0 feet 0.0 Centerline Dist. to Barrier: 100.0 feet 100.0 feet Centerline Dist. to Observer: 100.0 feet Near/Far La	ne Distance:	88 1	feet					Day	Evening	Night	Daily			
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Centerline Dist. to Observer: 0.0 feet Centerline Dist. to Observer: 0.0 feet Centerline Distance (in feet) Centerli	Site Data							Autos:		-		97.42%		
Heavy Trucks: 86.5% 2.7% 10.8% 0.74%	Ba	rrier Heiaht:	0.0	feet		M	ledium Tr	ucks:	84.8%	4.9%	10.3%	1.84%		
Centerline Dist. to Barrier: 100.0 feet Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Centerline Dist. to Observer: 0.0 feet Barrier Distance to Observer: 0.0 feet Centerline Distance Centerline Dista		_		1001			Heavy Tr	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Dist. to Observer: 100.0 feet Barrier Distance to Observer: 0.0 feet Distance to Observer: 0.0	• • • •	,		feet		Noise C	ouros El	ovotion	o (in f	2041				
Medium Trucks: 4.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustment: 0.0 Heavy Trucks: 8.006	Centerline Dist.	to Observer:	100.0	feet		Noise 3			•	eet)				
Observer Height (Above Pad): 5.0 feet Heavy Trucks: 8.006 Grade Adjustment: 0.0 Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 89.850 Left View: -90.0 degrees Medium Trucks: 89.850 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 71.78 2.70 -3.92 -1.20 -4.87 0.000 0.000 Medium Trucks: 82.40 -14.53 -3.92 -1.20 -4.87 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Ni	Barrier Distance	to Observer:	0.0	feet		N / = = 1:-								
Pad Elevation: 0.0 feet Heavy Trucks: 8.006 Grade Adjustment. 0.0 Road Grade: 0.0% Lane Equivalent Distance (in feet) Road Grade: 0.0% Autos: 89.850 FHWA Noise Model Calculations VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier Atten Berm Atten Autos: 71.78 2.70 -3.92 -1.20 -4.97 0.000 0.000 Medium Trucks: 86.40 -18.49 -3.92 -1.20 -4.97 0.000 0.000 Unmitigated Noise Levels (without Topo and barrier attenuation) VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn CNEL Autos: 69.4 67.5														

70 dBA

99

106

Ldn:

CNEL:

65 dBA

212

228

60 dBA

457

492

55 dBA 985

1,060

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: w/o El Toro Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT I	DATA		NOISE MODEL INPUTS								
Highway Data					Site Co	nditions (Hard	= 10, Sc	oft = 15)				
Peak Hou	Traffic (Adt): r Percentage: Hour Volume:	109				edium Truc eavy Truck	•	,					
V	ehicle Speed: ane Distance:	55	mph feet		Vehicle		.0 (01	Day	Evening	Night	Daily		
Site Data						A	utos:	77.5%	12.9%	9.6%	97.42%		
Barrier Type (0-V	•	0.0				ledium Tru Heavy Tru		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%		
	ist. to Barrier:) feet		Noise S	ource Ele	vatio	ns (in fe	eet)				
Centerline Dist Barrier Distance Observer Height	to Observer:	0.0 5.0) feet) feet) feet) feet			Autos. ım Trucks. vy Trucks.	: 4	2.000 1.000 3.006	Grade Ad	justment	: 0.0		
	ad Elevation:) feet		Lane Ed	quivalent	Dista	nce (in i	feet)				
	Road Grade: Left View: Right View:		0% 0 degrees 0 degrees			Autos: ım Trucks: vy Trucks:	: 89	9.850 9.805 9.850					
FHWA Noise Mod	del Calculatio	ns											
VehicleType	REMEL	_	Flow	Distance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos	71.78	3	3.19	-3.	92	-1.20		-4.87	0.0	000	0.000		
Medium Trucks	82.40)	-14.05	-3.	92	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks	86.40)	-18.01	-3.	92	-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	se Levels (wit	hout To	po and b	arrier atte	nuation)								
VehicleType	Leq Peak Ho	our I	Leq Day	Leq	Evening	Leq N	light		Ldn	C	NEL		
Autos	: 6	9.8	6	7.9	66.2	<u> </u>	60	.1	68.7	7	69.4		
Medium Trucks	: 6	3.2	6	1.7	55.4	ļ.	53	.8	62.3	3	62.5		
Heavy Trucks	:6	3.3	6	1.8	52.8	3	54	.1	62.4	4	62.5		
Vehicle Noise		1.4		9.7	66.7	,	61	.8	70.4	4	70.9		
Centerline Distar	ice to Noise (Contour	(in feet)										

70 dBA

106

114

Ldn:

CNEL:

65 dBA

229

246

60 dBA

493

530

55 dBA

1,061

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: e/o El Toro Rd.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT D	ATA		NOISE MODEL INPUTS							
Highway Data					Site Con	ditions (Ha	rd = 10, Sc	oft = 15)				
Peak Hou Peak	r Traffic (Adt): r Percentage: Hour Volume:	10% 2,360 v	ehicles			dium Trucks avy Trucks (,	15				
	ehicle Speed: ane Distance:	50 n 70 fe	•		Vehicle I	Mix icleType	Day	Evening	Night	Daily		
Site Data						Auto	s: 77.5%	12.9%	9.6%	97.42%		
Barrier Type (0-V	•	0.0 0.0				edium Truck Heavy Truck			10.3% 10.8%	1.84% 0.74%		
Centerline L	ist. to Barrier:	100.0 100.0			Noise So	ource Eleva	tions (in f	eet)				
Barrier Distance Observer Height	e to Observer:	0.0 5.0 0.0	feet feet			Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	ijustment:	0.0		
	oad Elevation:	0.0			Lane Eq	uivalent Dis	tance (in	feet)				
	Road Grade: Left View: Right View:		% degrees degrees			Autos: m Trucks: ry Trucks:	93.723 93.680 93.723					
FHWA Noise Mod	del Calculatio	ns										
VehicleType	REMEL	Traffic	Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten		
Autos	70.20)	1.32	-4.2	.0	-1.20	-4.87	0.0	000	0.000		
Medium Trucks	<i>:</i> 81.00) -	15.92	-4.1	9	-1.20	-4.97	0.0	000	0.000		
Heavy Trucks	: 85.38	3 -	19.87	-4.2	0	-1.20	-5.16	0.0	000	0.000		
Unmitigated Nois	se Levels (wit	hout Top	o and ba	arrier atter	nuation)							
VehicleType	Leq Peak Ho	our Le	eq Day		vening	Leq Nigh	nt	Ldn	CI	VEL		
Autos	<i>:</i> 6	6.1	64	.2	62.5		56.4	65.0)	65.6		
Medium Trucks		9.7	58		51.8		50.3	58.7		59.0		
Heavy Trucks	:6	0.1	58	5.7	49.7		50.9	59.3	3	59.4		
Vehicle Noise		7.8	66	5.1	63.0		58.2	66.8	3	67.3		
Centerline Distar	nce to Noise C	Contour (i	n feet)									

70 dBA

61

66

Ldn:

CNEL:

65 dBA

132

141

60 dBA

284

305

55 dBA

611

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: n/o Alicia Pkwy.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS								
Highway Data				Site	Condition	s (Hard	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	26,400 vehicle	s				Autos:	15				
Peak Hour	Percentage:	10%			Medium T	rucks (2	Axles):	15				
Peak H	lour Volume:	2,640 vehicle	s		Heavy Trucks (3+ Axles): 15							
Ve	ehicle Speed:	50 mph		Voh	icle Mix							
Near/Far La	ne Distance:	70 feet		Veri	VehicleTyp	ne l	Day	Evening	Night	Daily		
Site Data					vornoieryp	Autos:	77.5%	_	9.6%	97.42%		
	io	0.0 foot			Medium		84.8%		10.3%	1.84%		
	rrier Height:	0.0 feet 0.0			Heavy		86.5%		10.8%	0.74%		
Barrier Type (0-W	ist. to Barrier:	0.0 100.0 feet								011 170		
Centerline Di		100.0 feet		Noi	se Source I	Elevatio	ns (in fe	eet)				
Barrier Distance		0.0 feet			Aut		2.000					
				N	ledium Truc	ks: 4	1.000					
Observer Height		5.0 feet		Heavy Trucks: 8.006 Grade Adjustme					justment:	0.0		
	ad Elevation: ad Elevation:	0.0 feet		Lane Equivalent Distance (in feet)								
		0.0 feet		Lan	Aut		3.723	iccij				
	Road Grade:	0.0%			אט. ledium Truc		3.680					
	Left View:	-90.0 degre			ledium Truc Heavy Truc		3.723					
	Right View:	90.0 degre	es		neavy IIuc	KS. 90	0.123					
FHWA Noise Mod	lel Calculation	าร										
VehicleType	REMEL	Traffic Flow	Distanc	e F	Finite Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	70.20	1.81	-4	4.20	-1.20)	-4.87	0.0	000	0.000		
Medium Trucks:	81.00	-15.43	-4	4.19	-1.20)	-4.97	0.0	000	0.000		
Heavy Trucks:	85.38	-19.39	-4	4.20	-1.20)	-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	hout Topo and	barrier at	tenuat	ion)							
VehicleType	Leq Peak Ho	our Leq Day	y Led	g Eveni	ing Led	q Night		Ldn	CI	VEL		
Autos:	6	6.6	64.7		62.9	56	.9	65.5	5	66.1		
Medium Trucks:	6	0.2	58.7		52.3	50	.8	59.2	2	59.5		
Heavy Trucks:	60	0.6	59.2	50.1 51.4				59.7	7	59.9		
Vehicle Noise:	6	8.3	66.6		63.5	58	.7	67.3	3	67.7		

Centerline Distance to Noise Contour (in feet)												
	70 dBA	65 dBA	60 dBA	55 dBA								
Ldn:	66	142	306	658								
CNEL:	71	152	328	707								

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Trabuco Rd.

Road Segment: s/o Alicia Pkwy.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC	INPUT	DATA				N	NOISE	MODE	L INPUT	S	
Highway Data				Sit	te Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	: 13,70	0 vehicles	6					Autos:	15		
Peak Hour Percentage	•	0%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume	: 1,37	0 vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Vehicle Speed	: 5	0 mph		Va	ehicle l	Mix					
Near/Far Lane Distance	: 7	0 feet		Ve			,	Dov	Evening	Night	Doily
Site Data					verii	icleType		<i>Day</i> 77.5%	Evening 12.9%	Night 9.6%	Daily
Site Data					1.1.	ر edium T	Autos:				
Barrier Height	_	0.0 feet						84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)		0.0			r	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier		0.0 feet		No	oise Sc	urce E	levatio	ns (in fe	eet)		
Centerline Dist. to Observe		0.0 feet				Auto	s: 2	2.000	· ·		
Barrier Distance to Observer		0.0 feet			Mediur	n Truck	s: 4	1.000			
Observer Height (Above Pad)		5.0 feet				y Truck		3.006	Grade Ad	justment.	0.0
Pad Elevation		0.0 feet		_		-					
Road Elevation	_	0.0 feet		La	ne Eq			nce (in i	feet)		
Road Grade	<i>:</i> 0	0.0%				Auto		3.723			
Left View	: -90	0.0 degree	es		Mediur	n Truck	-	3.680			
Right View	: 90	0.0 degree	es		Heav	y Truck	rs: 93	3.723			
FHWA Noise Model Calculati	ons										
VehicleType REMEL	Traf	ffic Flow	Distanc	е	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
<i>Autos:</i> 70.	20	-1.04	-4	4.20		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 81.	00	-18.28		4.19		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 85.	38	-22.24		4.20		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	ithout T	opo and i	barrier at	tenua	ation)						
VehicleType Leq Peak F	lour	Leq Day	Led	q Eve	ning	Leq	Night		Ldn	CI	VEL
Autos:	63.8	(61.9		60.1		54	.0	62.7	7	63.3
Medium Trucks:	57.3	į	55.8		49.5		47	.9	56.4	4	56.6
Heavy Trucks:	57.7	į	56.3		47.3		48	.5	56.9	9	57.0
Vehicle Noise:	65.5	(63.7		60.7		55	.9	64.4	4	64.9
Centerline Distance to Noise	Contou	ır (in feet))								

70 dBA

43

46

Ldn:

CNEL:

65 dBA

92

98

60 dBA

197

212

55 dBA

425

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Tustin Ranch Rd.

Road Segment: w/o Jamboree

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	ΙΤΑ			NO	ISE MOD	EL INPUT	S	
Highway Data					Site Con	ditions (H	ard = 10,	Soft = 15)		
Peak Hou	Traffic (Adt): r Percentage: Hour Volume:	11,700 ve 10% 1,170 ve				dium Truck avy Trucks	•	s): 15		
	ehicle Speed: ane Distance:	55 m 88 fe	•		Vehicle I Veh	Mix icleType	Day	Evening	Night	Daily
Site Data						Aut	os: 77.5	5% 12.9%	9.6%	97.42%
Barrier Type (0-V	•	0.0 f				edium Truc Heavy Truc			10.3% 10.8%	1.84% 0.74%
Centerline Dist	ist. to Barrier:	100.0 f			Noise Sc	ource Elev	ations (in	feet)		
Barrier Distance Observer Height	to Observer:	0.0 f 5.0 f 0.0 f	eet eet			Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	ljustment.	: 0.0
	ad Elevation:	0.0 f			Lane Eq	uivalent D	istance (i	n feet)		
	Road Grade: Left View: Right View:		legrees legrees			Autos: m Trucks: ry Trucks:	89.850 89.805 89.850			
FHWA Noise Mod	del Calculation	ns								
VehicleType	REMEL	Traffic F	low L	Distance	Finite	Road	Fresnel	Barrier At	ten Ber	m Atten
Autos	71.78	3 .	-2.14	-3.9	2	-1.20	-4.8	7 0.	000	0.000
Medium Trucks	: 82.40) -1	9.38	-3.9	2	-1.20	-4.9	7 0.	000	0.000
Heavy Trucks	86.40) -2	23.33	-3.9	2	-1.20	-5.1	6 0.	000	0.000
Unmitigated Nois	se Levels (with	hout Topo	and bar	rrier atten	uation)					
VehicleType	Leq Peak Ho	our Le	q Day	Leq E	vening	Leq Nig	ght	Ldn	CI	NEL
Autos	: 6	4.5	62.	6	60.9		54.8	63.	4	64.0
Medium Trucks	5	7.9	56.	4	50.0		48.5	57.	0	57.2
Heavy Trucks.	5	7.9	56.	5	47.5		48.7	57.	1	57.2
Vehicle Noise		6.1	64.	3	61.4		56.5	65.	1	65.5
Centerline Distar	ice to Noise C	Contour (ir	ı feet)							

70 dBA

47

50

Ldn:

CNEL:

65 dBA

101

109

60 dBA

217

234

55 dBA

468

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Tustin Ranch Rd. Number: 8141
Road Segment: s/o Portola Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				Si	ite Cond	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	31,400 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10%			Med	lium Tru	ucks (2	Axles):	15		
Peak H	lour Volume:	3,140 vehicles	S		Hea	avy Truc	cks (3+	- Axles):	15		
Ve	hicle Speed:	55 mph		V	ehicle N	liy					
Near/Far La	ne Distance:	88 feet		•		cleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%			97.42%
Ra	rrier Height:	0.0 feet			Me	dium Ti	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			Н	leavy Ti	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet			0-			(' f	4)		
Centerline Dist.		100.0 feet		N	oise So			•	eet)		
Barrier Distance		0.0 feet				Auto	_	2.000			
Observer Height ((Above Pad):	5.0 feet			Mediun		_	1.000	0		. 0.0
	ad Elevation:	0.0 feet			Heavy	/ Truck	s: {	3.006	Grade Ad	lustment	. 0.0
Ros	ad Elevation:	0.0 feet		La	ane Equ	iivalent	t Dista	nce (in i	feet)		
	Road Grade:	0.0%				Auto	s: 89	9.850			
	Left View:	-90.0 degree	es		Mediun	n Truck	s: 89	9.805			
	Right View:	90.0 degree			Heavy	/ Truck	s: 89	9.850			
FHWA Noise Mod	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite I	Road	Fres	snel	Barrier Att	en Bei	m Atten
Autos:	71.78	2.15		-3.92		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-15.09		-3.92		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-19.05		-3.92		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	ttenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	' Le	eq Eve	ening	Leq	Night		Ldn	С	NEL
Autos:	68	3.8	66.9		65.1		59	.1	67.7	7	68.3
Medium Trucks:	62	2.2	60.7		54.3		52	.8	61.2	2	61.5
Heavy Trucks:	62	2.2	60.8		51.8		53	.0	61.4	1	61.5

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	90	195	420	905
CNEL:	97	210	452	973

65.7

60.8

69.3

69.8

68.6

Vehicle Noise:

70.4

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Tustin Ranch Rd.

Road Segment: n/o La Colina Dr.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC I	NPUT D	ATA			NO	ISE MOI	EL INPUT	S	
Highway Data					Site Con	ditions (F	dard = 10,	Soft = 15)		
Average Daily	Traffic (Adt):	31,300 v	ehicles				Auto	s: 15		
Peak Hour	Percentage:	10%			Me	dium Truc	ks (2 Axle	s): 15		
Peak H	lour Volume:	3,130 v	ehicles		He	avy Truck	s (3+ Axle:	s): 15		
Ve	hicle Speed:	55 r	nph		Vehicle I	Mix				
Near/Far La	ne Distance:	88 f	eet			icleType	Day	Evening	Night	Daily
Site Data						• • •	tos: 77.5	J	9.6%	
	rrier Height:	0.0	foot		М	edium Tru			10.3%	1.84%
Barrier Type (0-W	•	0.0	ieei		ŀ	Heavy True	cks: 86.5		10.8%	
Centerline Dis		100.0	feet							
Centerline Dist.		100.0			Noise So		vations (in	r feet)		
Barrier Distance		0.0				Autos:	2.000			
Observer Height (5.0				m Trucks:	4.000			
_ ,	ad Elevation:	0.0			Heav	y Trucks:	8.006	Grade Ad	ljustment	: 0.0
	ad Elevation:	0.0			Lane Eq	uivalent E	Distance (i	n feet)		
	Road Grade:	0.09			-	Autos:	89.850			
	Left View:		degrees	;	Mediu	m Trucks:	89.805			
	Right View:		degrees		Heav	y Trucks:	89.850			
FHWA Noise Mode										
VehicleType	REMEL	Traffic		Distance	Finite		Fresnel	Barrier At		m Atten
Autos:	71.78		2.13	-3.		-1.20	-4.8		000	0.000
Medium Trucks:	82.40		15.11	-3.		-1.20	-4.9	_	000	0.000
Heavy Trucks:	86.40) -	19.06	-3.	92	-1.20	-5.1	6 0.	000	0.000
Unmitigated Noise	e Levels (with	hout Top	o and ba	arrier atte	nuation)					
VehicleType	Leq Peak Ho	ur Le	eq Day	Leq	Evening	Leq Ni	ight	Ldn	C	VEL
Autos:	6	8.8	66	5.9	65.1		59.1	67.	7	68.3
Medium Trucks:	6	2.2	60	0.7	54.3		52.8	61.	2	61.5
Heavy Trucks:	6	2.2	60	0.8	51.8		53.0	61.	4	61.5
Vehicle Noise:	7	0.4	68	3.6	65.7		60.8	69.	3	69.8
Centerline Distance	ce to Noise C	ontour (i	in feet)							

70 dBA

90

97

Ldn:

CNEL:

65 dBA

194

209

60 dBA

419

451

55 dBA

903

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Tustin Ranch Rd. Number: 8141 Road Segment: s/o Irvine Bl. Analyst: B. Lawson

SITE SPECIFIC	INPL	JT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt)	27,9	900 vehicles	3					Autos:	15		
Peak Hour Percentage		10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume	2,7	790 vehicles	3		He	avy Trud	cks (3+	Axles):	15		
Vehicle Speed	•	55 mph			Vehicle I	Wix					
Near/Far Lane Distance		88 feet				icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
Barrier Height		0.0 feet			Me	edium Ti		84.8%		10.3%	
Barrier Type (0-Wall, 1-Berm)		0.0 feet 0.0				leavy T		86.5%		10.8%	
Centerline Dist. to Barrier		0.0 00.0 feet									
Centerline Dist. to Observer		00.0 feet			Noise So				eet)		
Barrier Distance to Observer		0.0 feet				Auto		2.000			
Observer Height (Above Pad)		5.0 feet				n Truck		1.000			
Pad Elevation		0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0
Road Elevation		0.0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
Road Grade		0.0%			•	Auto		9.850			
Left View		90.0 degree	es.		Mediui	n Truck		9.805			
Right View		90.0 degree			Heav	y Truck	s: 89	9.850			
FHWA Noise Model Calculation											
VehicleType REMEL		raffic Flow	Di	stance	Finite		Fres		Barrier Att		m Atten
Autos: 71.		1.63		-3.9		-1.20		-4.87		000	0.000
Medium Trucks: 82.4		-15.60		-3.9		-1.20		<i>-4</i> .97		000	0.000
Heavy Trucks: 86.4	10	-19.56		-3.9	2	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	thout	t Topo and	barri	ier atter	nuation)						
VehicleType Leq Peak F	lour	Leq Day		Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	68.3	(66.4		64.6		58	.6	67.2	2	67.8
Medium Trucks:	61.7	(60.2		53.8		52	.3	60.7	7	61.0
Heavy Trucks:	61.7	(60.3		51.3		52	.5	60.9	9	61.0
Vehicle Noise:	69.9		68.1		65.2		60	.3	68.8	3	69.3
Centerline Distance to Noise	Cont	our (in feet)									
		-		70	dBA	65	dBA	6	60 dBA	55	dBA

84

90

Ldn:

CNEL:

180

194

388

417

836

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: University Dr.

Road Segment: b/w I-405 SB Ramps and Michelson Dr.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOISE	MODE	L INPUT	s	
Highway Data			Site Con	ditions (Hard	l = 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	60,100 vehicles	3			Autos:	15		
Peak Hour Percentage:	10%		Me	dium Trucks (2 Axles):	15		
Peak Hour Volume:	6,010 vehicles	6	He	avy Trucks (3	+ Axles):	15		
Vehicle Speed:	60 mph		Vehicle I	Miy				
Near/Far Lane Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data				Autos:	•	J	9.6%	•
Barrier Height:	0.0 feet		Me	edium Trucks:			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0 leet 0.0			leavy Trucks:			10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet							
Centerline Dist. to Observer:	100.0 feet		Noise So	ource Elevation	•	eet)		
Barrier Distance to Observer:	0.0 feet				2.000			
Observer Height (Above Pad):	5.0 feet				4.000			
Pad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Ad	justment:	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent Dista	ance (in i	feet)		
Road Grade:	0.0%				2.547			
Left View:	-90.0 degree	25	Mediu		2.504			
Right View:	90.0 degree				2.547			
FHWA Noise Model Calculation			T					
VehicleType REMEL	Traffic Flow	Distance				Barrier Att		m Atten
Autos: 73.22			.11	-1.20	-4.87		000	0.000
Medium Trucks: 83.68			.11	-1.20	-4.97		000	0.000
Heavy Trucks: 87.33	3 -16.61	-4.	.11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier atte	enuation)					
VehicleType Leq Peak Ho	our Leq Day	Leq	Evening	Leq Night		Ldn	CI	VEL
Autos: 7	2.5	70.6	68.8	6	2.8	71.4	1	72.0
Medium Trucks: 6	5.7	64.2	57.9	5	6.3	64.8	3	65.0
Heavy Trucks: 6	5.4	64.0	54.9	5	6.2	64.6	5	64.7
Vehicle Noise: 7	4.0	72.2	69.3	6	4.4	72.9	9	73.4
Centerline Distance to Noise C	Contour (in feet))						

70 dBA

157

169

Ldn:

CNEL:

65 dBA

338

364

60 dBA

728

784

55 dBA

1,569

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av.

Road Segment: w/o Jamboree

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NO	DISE MODE	L INPUT	s	
Highway Data				Site Con	ditions (Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt): 2	22,200 vehicle	S			Autos.	15		
Peak Hour	Percentage:	10%		Me	dium Trud	cks (2 Axles).	15		
Peak H	lour Volume:	2,220 vehicle	s	He	avy Truck	ks (3+ Axles).	15		
Ve	hicle Speed:	60 mph		Vehicle I	Miv				
Near/Far La	ne Distance:	76 feet			icleType	Day	Evening	Night	Daily
Site Data				V 077		utos: 77.5%		9.6%	
	rrior Hoimbt.	0.0 foot		Me	edium Tru			10.3%	1.84%
ва. Barrier Type (0-W	rrier Height:	0.0 feet 0.0			leavy Tru			10.8%	0.74%
Centerline Di		0.0 100.0 feet							
Centerline Dist.		100.0 feet		Noise So	ource Ele	vations (in f	eet)		
Barrier Distance		0.0 feet			Autos:	2.000			
				Mediui	n Trucks:	4.000			
Observer Height (,	5.0 feet		Heav	y Trucks:	8.006	Grade Adj	ustment.	0.0
	ad Elevation:	0.0 feet		I ano Fa	uivalent	Distance (in	foot)		
	ad Elevation:	0.0 feet		Lanc Lq	Autos:	•	iccij		
	Road Grade:	0.0%		Modium	Autos. n Trucks:				
	Left View:	-90.0 degree							
	Right View:	90.0 degree	es	пеач	y Trucks:	92.547			
FHWA Noise Mod	el Calculation	S							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	73.22	0.26	-4.	11	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.98	-4.	.11	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.93	-4.	11	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier atte	enuation)					
VehicleType	Leq Peak Hou	ır Leq Day	/ Leq	Evening	Leq N	light	Ldn	CI	VEL
Autos:	68	.2	66.3	64.5		58.4	67.1		67.7
Medium Trucks:	61	.4	59.9	53.5		52.0	60.4	ļ.	60.7
Heavy Trucks:	61	.1	59.7	50.6		51.9	60.2	2	60.4
Vehicle Noise:	69	.6	67.9	65.0		60.1	68.6	3	69.1
Cantarlina Diatan	oo to Noice Co	natarus /in fact							

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	81	174	375	808
CNEL:	87	187	404	870

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av. Number: 8141
Road Segment: e/o Jamboree Analyst: B. Lawson

SITE	SPECIFIC IN	NPUT DATA				ı	NOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	23,500 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak H	lour Volume:	2,350 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	60 mph		1	/ehicle l	Mix					
Near/Far La	ne Distance:	76 feet				icleTyp	е	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	J	•	97.42%
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	_	0.0			F	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di		100.0 feet			Voise So	ourco E	lovatio	ns (in fo	not)		
Centerline Dist.	to Observer:	100.0 feet		<u>'</u>	VUISE SC	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auic m Truck		1.000			
Observer Height	(Above Pad):	5.0 feet					_		Crada Ad	iuotmont	0.0
•	ad Elevation:	0.0 feet			неач	y Truck	(S. E	3.006	Grade Ad	justinent.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	os: 92	2.547			
	Left View:	-90.0 degre	es		Mediui	m Truck	ks: 92	2.504			
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	73.22	0.51		-4.11	1	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	83.68	-16.73		-4.11	l	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	87.33	-20.68		-4.11		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	er atten	uation)						
VehicleType	Leq Peak Hou	ur Leq Day	/	Leq Ev	ening/	Leq	Night		Ldn	CI	VEL
Autos:	68	3.4	66.5		64.8		58	.7	67.3	3	67.9
Medium Trucks:	61	1.6	60.1		53.8		52	.2	60.7	7	60.9
Heavy Trucks:	61	1.3	59.9		50.9		52	.1	60.5	5	60.6
Vehicle Noise:	69	9.9	68.1		65.2		60	.3	68.9	9	69.3
Centerline Distan	ce to Noise C	ontour (in feet)								
				70 a	<i>IBA</i>	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

84

90

181

195

389

419

839

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av. Number: 8141
Road Segment: w/o Culver Dr. Analyst: B. Lawson

Average Daily Traffic (Adt): 26,200 vet Peak Hour Percentage: 10% Peak Hour Volume: 2,620 vet Vehicle Speed: 55 mp Near/Far Lane Distance: 52 fee Site Data Barrier Height: 0.0 fe Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 fe	hicles oh et eet eet	Ve	Medium Trucks Heavy Trucks (Sehicle Mix VehicleType Autos Medium Trucks Heavy Trucks Dise Source Elevat	Autos: (2 Axles): 3+ Axles): Day : 77.5% : 84.8% : 86.5%	15 15 15 Evening 12.9% 4.9% 2.7%	Night 9.6% 10.3% 10.8%	Daily 97.42% 1.84% 0.74%	
Peak Hour Percentage: 10% Peak Hour Volume: 2,620 vel Vehicle Speed: 55 mp Near/Far Lane Distance: 52 fee Site Data Barrier Height: 0.0 fe Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 fe	hicles oh et eet eet	No	Heavy Trucks (Sehicle Mix VehicleType Autos Medium Trucks Heavy Trucks	(2 Axles): B+ Axles): Day : 77.5% : 84.8% : 86.5% ions (in fe	15 15 Evening 12.9% 4.9% 2.7%	9.6% 10.3%	97.42% 1.84%	
Peak Hour Volume: 2,620 velto Vehicle Speed: 55 mp Near/Far Lane Distance: 52 fee Site Data Barrier Height: 0.0 fee Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 fee	eet eet eet	No	Heavy Trucks (Sehicle Mix VehicleType Autos Medium Trucks Heavy Trucks	Day 77.5% 84.8% 86.5% ions (in fe	15 Evening 12.9% 4.9% 2.7%	9.6% 10.3%	97.42% 1.84%	
Vehicle Speed: 55 mp Near/Far Lane Distance: 52 fee Site Data Barrier Height: 0.0 fe Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 fe	eet eet eet	No	ehicle Mix VehicleType Autos Medium Trucks Heavy Trucks	Day : 77.5% : 84.8% : 86.5% ions (in fe	Evening 12.9% 4.9% 2.7%	9.6% 10.3%	97.42% 1.84%	
Near/Far Lane Distance: 52 fee Site Data Barrier Height: 0.0 fe Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 fe	eet eet eet	No	VehicleType Autos Medium Trucks Heavy Trucks Dise Source Elevat	77.5% 84.8% 86.5%	12.9% 4.9% 2.7%	9.6% 10.3%	97.42% 1.84%	
Site Data Barrier Height: 0.0 fe Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 fe	eet eet eet	No	VehicleType Autos Medium Trucks Heavy Trucks Dise Source Elevat	77.5% 84.8% 86.5%	12.9% 4.9% 2.7%	9.6% 10.3%	97.42% 1.84%	
Barrier Height: 0.0 fe Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 fe	eet eet		Medium Trucks Heavy Trucks Dise Source Elevat	: 84.8% : 86.5% ions (in fe	4.9% 2.7%	10.3%	1.84%	
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 fe	eet eet		Heavy Trucks Dise Source Elevat	: 86.5%	2.7%			
Barrier Type (0-Wall, 1-Berm): 0.0 Centerline Dist. to Barrier: 100.0 fe	eet eet		oise Source Elevat	ions (in fe		10.8%	0.74%	
Centerline Dist. to Barrier: 100.0 fe	eet eet			•	eet)			
0 1 11 51 1 1 01	eet			•	et)			
Centerline Dist. to Observer: 100.0 fe		1	Autos:					
Barrier Distance to Observer: 0.0 fe	.ot	1	Marking Turnelia					
Observer Height (Above Pad): 5.0 fe	; C ι		Medium Trucks:	4.000	Crada Adi	iuotmant	0.0	
Pad Elevation: 0.0 fe	et		Heavy Trucks:	8.006	Grade Adj	usimeni.	0.0	
Road Elevation: 0.0 fe	et	Lane Equivalent Distance (in feet)						
Road Grade: 0.0%			Autos:	96.607				
Left View: -90.0 de	egrees	1	Medium Trucks:	96.566				
Right View: 90.0 de	•		Heavy Trucks:	96.608				
FHWA Noise Model Calculations								
VehicleType REMEL Traffic Flo	low Distanc	се	Finite Road Fr	esnel	Barrier Atte	en Ber	m Atten	
Autos: 71.78	1.36 -	4.39	-1.20	-4.87	0.0	000	0.000	
Medium Trucks: 82.40 -15	5.88 -	4.39	-1.20	-4.97	0.0	000	0.000	
Heavy Trucks: 86.40 -19	9.83 -	4.39	-1.20	-5.16	0.0	000	0.000	
Unmitigated Noise Levels (without Topo	and barrier at	tenua	ation)					
VehicleType Leq Peak Hour Leq	Day Lee	q Ever	ning Leq Nigh	t	Ldn	CI	VEL	
Autos: 67.5	65.6		63.9	7.8	66.4	1	67.1	
Medium Trucks: 60.9	59.4		53.1	51.5	60.0)	60.2	
Heavy Trucks: 61.0	59.5		50.5	51.8	60.1		60.2	
Vehicle Noise: 69.1	67.4		64.4	59.5	68.1		68.6	

70 dBA

75

80

Ldn:

CNEL:

65 dBA

161

173

60 dBA

346

372

55 dBA

746

802

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av. Number: 8141 Road Segment: e/o Culver Dr. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DA	TA			7	NOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, So	ft = 15)		
Average Daily	Traffic (Adt):	25,900 ve	hicles					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	2,590 ve	hicles		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 m	oh	,	Vehicle l	Miy					
Near/Far La	ne Distance:	52 fee	et			icleType	9	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		•	97.42%
Ra	rrier Height:	0.0 fe	oot		Ме	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0	-CL		F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 fe	eet								
Centerline Dist.		100.0 fe		,	Noise So			•	eet)		
Barrier Distance	to Observer:	0.0 fe				Auto		2.000			
Observer Height	(Above Pad):	5.0 fe	eet			n Truck	_	1.000	Crada Ad	iuotmont	
•	ad Elevation:	0.0 fe	eet		Heav	y Truck	ís: E	3.006	Grade Adj	justinent.	0.0
Ro	ad Elevation:	0.0 fe	eet	I	Lane Eq	uivalen	t Dista	nce (in t	eet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 d	egrees		Mediui	n Truck	rs: 96	6.566			
	Right View:	90.0 d	egrees		Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic F	low D	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	3	1.31	-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40) -1	5.93	-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40) -1	9.88	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo	and barr	ier atten	uation)						
VehicleType	Leq Peak Ho	ur Led	n Day	Leq E	vening	Leq	Night		Ldn	CI	VEL
Autos:	6	7.5	65.6		63.8		57	.8	66.4	4	67.0
Medium Trucks:	60	0.9	59.4		53.0		51	.5	59.9	9	60.2
Heavy Trucks:	60	0.9	59.5		50.5		51	.7	60.1	1	60.2
Vehicle Noise:	69	9.1	67.3		64.4		59	.5	68.0)	68.5
Centerline Distan	ce to Noise C	ontour (in	feet)		ı						
				70 c	dBA	65	dBA	6	0 dBA	55	dBA

74

80

Ldn: CNEL: 159

171

343

369

740

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av. Number: 8141
Road Segment: e/o Yale Av. Analyst: B. Lawson

SITE SPECIFIC	INPU	JT DATA					NOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard	= 10, Sc	ft = 15)		
Average Daily Traffic (Adt)	13,0	000 vehicles	3					Autos:	15		
Peak Hour Percentage	•	10%			Me	dium Ti	rucks (2	Axles):	15		
Peak Hour Volume	1,3	300 vehicles	3		He	avy Tru	icks (3+	Axles):	15		
Vehicle Speed	•	55 mph		,	/ehicle l	Miv					
Near/Far Lane Distance	•	52 feet				icleTyp	e	Day	Evening	Night	Daily
Site Data					• • • • • • • • • • • • • • • • • • • •		Autos:	77.5%		•	97.42%
		0.0 foot			Me	edium 7		84.8%		10.3%	1.84%
Barrier Height		0.0 feet 0.0				leavy 7		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm) Centerline Dist. to Barrier		0.0 00.0 feet									011 170
Centerline Dist. to Observer		00.0 feet		^	Voise Sc	ource E	levatio	ns (in fe	et)		
Barrier Distance to Observer		0.0 feet				Auto	os: 2	2.000			
Observer Height (Above Pad)		5.0 feet			Mediui	n Truck	ks: 4	1.000			
Pad Elevation		0.0 feet			Heav	y Truck	ks: 8	3.006	Grade Adj	justment:	0.0
Road Elevation		0.0 feet		,	ane Fo	uivalen	nt Dista	nce (in f	eet)		
Road Grade		0.0 feet 0.0%		_	Larro Eq	Auto		6.607	000		
Left View		0.0 <i>7</i> 6 90.0 degree			Mediu	n Truck		6.566			
Right View		90.0 degree 90.0 degree				y Truck		5.608			
Night view	. :	o.o degree	;5		ricav	y ITUCI	10.	3.000			
FHWA Noise Model Calculati	ons										
VehicleType REMEL	Tra	affic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 71.	78	-1.68		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks: 82.	10	-18.92		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 86.	10	-22.88		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (w	thout	Topo and I	barri	er atteni	uation)						
VehicleType Leq Peak H		Leq Day		Leg Ev		Leg	Night		Ldn	CI	VEL
Autos:	64.5	(52.6	· · · · · ·	60.8	<u> </u>	54	.8	63.4	4	64.0
Medium Trucks:	57.9	Ę	56.4		50.0		48	.5	56.9	9	57.2
Heavy Trucks:	57.9	5	56.5		47.5		48	.7	57.1	1	57.2
Vehicle Noise:	66.1	(64.3		61.4		56	.5	65.0)	65.5
Centerline Distance to Noise	Conto	our (in feet))								
				70 a	IBA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

47

50

101

108

217

233

467

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Walnut Av./I-5 SB Ramps Number: 8141
Road Segment: w/o Jeffrey Rd. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA	l			I	IOISE	MODE	L INPUT	S	
Highway Data					Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	19,500 vehic	les					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	1,950 vehic	les		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		,	Vehicle I	Wix					
Near/Far La	ne Distance:	52 feet				icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%	-	9.6%	-
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W	•	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Di	•	100.0 feet		-	Noise So	urco E	lovatio	ns (in fo	not)		
Centerline Dist.	to Observer:	100.0 feet		1	VOISE SC	Auto		2.000	et)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auto n Truck		1.000			
Observer Height	(Above Pad):	5.0 feet					_		Grade Ad	iustmont	
P	ad Elevation:	0.0 feet			пеач	y Truck	S. C	3.006	Grade Auj	usunent	0.0
Ro	ad Elevation:	0.0 feet		I	Lane Eq	uivalen	t Dista	nce (in f	feet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 degr	ees		Mediui	n Truck	s: 96	6.566			
	Right View:	90.0 degr	ees		Heav	y Truck	s: 96	6.608			
FHWA Noise Mod	el Calculation	ıs									
VehicleType	REMEL	Traffic Flow	D	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	0.0	8	-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-17.1	6	-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-21.1	2	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo an	d barr	ier atten	uation)						
VehicleType	Leq Peak Hou	ur Leq Da	ay	Leq Ev	vening	Leq	Night		Ldn	CI	VEL
Autos:	66	5.3	64.4		62.6		56	.5	65.2	2	65.8
Medium Trucks:	59).7	58.1		51.8		50	.2	58.7	7	58.9
Heavy Trucks:	59).7	58.3		49.2		50	.5	58.8	3	59.0
Vehicle Noise:	67	7.8	66.1		63.1		58	.3	66.8	3	67.3
Centerline Distan	ce to Noise Co	ontour (in fe	et)	I	ı						
				70 c	dBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

61

66

132

142

612

659

284

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Warner Av. Number: 8141
Road Segment: w/o Paseo Westpark Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	ditions (Hard	d = 10, Sc	oft = 15)		
Average Daily Traffic (Adt).	10,900 vehicle	S			Autos:	15		
Peak Hour Percentage.			Ме	dium Trucks (2 Axles):	15		
Peak Hour Volume:	1,090 vehicle	S	He	avy Trucks (3	+ Axles):	15		
Vehicle Speed:	55 mph		Vehicle	Mix				
Near/Far Lane Distance.	•				Dov	Lunning	Niaht	Doily
Cita Data			ven	icleType	Day	Evening	Night	Daily
Site Data			.,	Autos.			9.6%	97.42%
Barrier Height				edium Trucks.			10.3%	1.84%
Barrier Type (0-Wall, 1-Berm)			'	Heavy Trucks.	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier			Noise So	ource Elevati	ons (in f	eet)		
Centerline Dist. to Observer	100.0 feet			Autos:	2.000	,		
Barrier Distance to Observer	0.0 feet		Mediu	m Trucks:	4.000			
Observer Height (Above Pad)	5.0 feet			y Trucks:	8.006	Grade Ad	iustment:	0.0
Pad Elevation	0.0 feet							
Road Elevation.	0.0 feet		Lane Eq	uivalent Dist	ance (in	feet)		
Road Grade.	0.0%			Autos:	96.607			
Left View	-90.0 degre	es	Mediu	m Trucks:	96.566			
Right View	90.0 degre	es	Heav	y Trucks:	96.608			
FHWA Noise Model Calculation	ons							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	78 -2.45	-4	.39	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	10 -19.69	-4	.39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	-23.64	-4	.39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wi	thout Topo and	barrier atte	enuation)					
VehicleType Leq Peak H	lour Leq Day	/ Leq	Evening	Leq Night		Ldn	CI	VEL
Autos:	63.7	61.8	60.1	5	4.0	62.6	6	63.2
Medium Trucks:	57.1	55.6	49.3	4	7.7	56.2	2	56.4
Heavy Trucks:	57.2	55.7	46.7	4	8.0	56.3	3	56.4
Vehicle Noise:	65.3	63.6	60.6	5	5.7	64.3	3	64.8
Centerline Distance to Noise	Contour (in feet)						

70 dBA

42

45

Ldn:

CNEL:

65 dBA

90

96

60 dBA

193

207

55 dBA

416

Scenario: Post 2030 - 2012 Modified Project (Option 2) ect Name: 2012 Great Park GPA/ZC

Road Name: Warner Av. Number: 8141 Road Segment: w/o Culver Dr. Analyst: B. Lawson

SITE SPECIFIC	INPUT DATA				N	OISE	MODE	L INPUT	S	
Highway Data			3	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	10,400 vehicle	es					Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tru	ıcks (2	Axles):	15		
Peak Hour Volume:	1,040 vehicle	es		He	avy Truc	ks (3+	Axles):	15		
Vehicle Speed:	55 mph		,	Vehicle I	Mix					
Near/Far Lane Distance:	52 feet				icleType		Day	Evening	Night	Daily
Site Data						lutos:	77.5%		9.6%	_
Barrier Height:	0.0 feet			Me	edium Tr		84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):					leavy Tr		86.5%		10.8%	0.74%
Centerline Dist. to Barrier:										
Centerline Dist. to Observer:				Voise Sc				eet)		
Barrier Distance to Observer:					Autos		2.000			
Observer Height (Above Pad):					n Trucks		.000			
Pad Elevation:				Heav	y Trucks	s: 8	3.006	Grade Adj	justment	: 0.0
Road Elevation:			L	Lane Eq	uivalent	Distar	nce (in i	feet)		
Road Grade:					Autos		6.607			
Left View:		es		Mediur	n Trucks		6.566			
Right View:				Heav	y Trucks	s: 96	8.608			
FHWA Noise Model Calculation					_					_
VehicleType REMEL	Traffic Flow		stance	Finite		Fres		Barrier Att		m Atten
Autos: 71.7			-4.39		-1.20		-4.87		000	0.000
Medium Trucks: 82.4			-4.39		-1.20		-4.97		000	0.000
Heavy Trucks: 86.4	0 -23.85	•	-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	thout Topo and	barri	ier atten	uation)						
VehicleType Leq Peak H	our Leq Da	У	Leq Ev	ening/	Leq	Night		Ldn		VEL
	63.5	61.6		59.9		53		62.4		63.0
	56.9	55.4		49.1		47		56.0		56.2
•	57.0	55.5		46.5		47		56.1		56.2
Vehicle Noise:	65.1	63.4		60.4		55	.5	64.1	1	64.6
Centerline Distance to Noise	Contour (in fee	t)								
			70 a	IBA	65 (dBA	6	60 dBA	55	dBA

40

43

Ldn:

CNEL:

87

93

187

201

403

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Warner Av. Number: 8141
Road Segment: b/w Culver Dr.and W. Yale Loop Analyst: B. Lawson

SITE	SPECIFIC II	NPUT DATA		NOISE MODEL INPUTS							
Highway Data				S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Peak Hour	Traffic (Adt): Percentage: Hour Volume:	11,200 vehicle 10% 1,120 vehicle				dium Tru avy Trud	•	,			
Near/Far La	ehicle Speed: ane Distance:	55 mph 52 feet		V	ehicle I Vehi	icleType	_	Day	Evening	Night	Daily
Site Data						-	Autos:	77.5%		9.6%	
Ba Barrier Type (0-V	rrier Height: Vall, 1-Berm):	0.0 feet 0.0				edium Ti Ieavy Ti		84.8% 86.5%		10.3% 10.8%	1.84% 0.74%
Centerline D	ist. to Barrier:	100.0 feet		N	oise Sc	ource El	levatio	ns (in fe	eet)		
Ro	to Observer:	100.0 feet 0.0 feet 5.0 feet 0.0 feet 0.0 feet 0.0% -90.0 degree		Noise Source Elevations (in feet) Autos: 2.000 Medium Trucks: 4.000 Heavy Trucks: 8.006 Grade Adjustmen Lane Equivalent Distance (in feet) Autos: 96.607 Medium Trucks: 96.566 Heavy Trucks: 96.608						iustment	0.0
FHWA Noise Mod	lel Calculation	าร									
VehicleType	REMEL	Traffic Flow	Distar	се	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	71.78	-2.33	,	-4.39		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-19.57	•	-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-23.52	2	-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout Topo and	l barrier a	ittenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	y Le	eq Eve	ening	Leq	Night		Ldn	CI	VEL
Autos:	6	3.9	62.0		60.2		54.	.1	62.8	3	63.4
Medium Trucks:		7.2	55.7		49.4		47.		56.3		56.5
Heavy Trucks:	5	7.3	55.9		46.8		48	.1	56.4	1	56.6
Vehicle Noise:	6	5.4	63.7		60.7		55	.8	64.4	4	64.9

Centerline Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	42	91	196	423
CNEL:	46	98	211	455

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: W. Yale Loop Number: 8141
Road Segment: s/o Barranca Pkwy. Analyst: B. Lawson

SITE S	SPECIFIC IN	PUT DATA				ſ	NOISE	MODE	L INPUT	S	
Highway Data				5	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily 1	Traffic (Adt):	6,500 vehicles	6					Autos:	15		
Peak Hour I	, ,	10%			Me	dium Tr	ucks (2	2 Axles):	15		
Peak Ho	our Volume:	650 vehicles	3		He	avy Tru	cks (3+	- Axles):	15		
Vel	nicle Speed:	55 mph		,	/ehicle l	Miv					
Near/Far Lar	ne Distance:	52 feet				icleType	2	Day	Evening	Night	Daily
Site Data					VEII		Autos:	77.5%	_	9.6%	_
					Λ // 4	edium T		84.8%		10.3%	1.84%
	rier Height:	0.0 feet				l eavy T		86.5%		10.3%	0.74%
Barrier Type (0-Wa	•	0.0				icavy i	ruono.	00.570	2.1 /0	10.070	0.7 4 70
Centerline Dis		100.0 feet		٨	loise Sc	urce E	levatio	ns (in fe	eet)		
Centerline Dist. t		100.0 feet				Auto	s: i	2.000			
Barrier Distance t		0.0 feet			Mediui	n Truck	s:	4.000			
Observer Height (A	•	5.0 feet			Heav	y Truck	s:	8.006	Grade Ad	justment.	0.0
	d Elevation:	0.0 feet		,	one Fa	uivalan	t Diete	nce (in i	footl		
	d Elevation:	0.0 feet			ane Ey			•	ieei)		
<i>F</i>	Road Grade:	0.0%			Modium	Auto n Truck		6.607			
	Left View:	-90.0 degree						6.566			
	Right View:	90.0 degree	es		неач	y Truck	(S. 9	6.608			
FHWA Noise Mode	el Calculations	3									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fre	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-4.69		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-21.93		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-25.89		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	r atteni	uation)						
VehicleType	Leq Peak Hou	r Leq Day		Leq Ev	ening	Leq	Night		Ldn	CI	NEL
Autos:	61.	5 ;	59.6		57.8		51	.8	60.4	4	61.0
Medium Trucks:	54.	9 :	53.4		47.0		45	5.5	53.9	9	54.2
Heavy Trucks:	54.	9 :	53.5		44.5		45	5.7	54.1	1	54.2
Vehicle Noise:	63.	1 (61.3		58.4		53	3.5	62.0)	62.5
Centerline Distanc	e to Noise Co	ntour (in feet))								
				70 d	BA	65	dBA	6	60 dBA	55	dBA
			Ldn:	29)	(63		137	2	94

CNEL:

32

68

147

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: W. Yale Loop Number: 8141
Road Segment: s/o Alton Pkwy. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				Г	VOISE	MODE	L INPUT	S	
Highway Data				S	Site Con	ditions	(Hard	= 10, So	oft = 15)		
Average Daily	Traffic (Adt):	12,300 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15		
Peak I	lour Volume:	1,230 vehicle	s		He	avy Tru	icks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		V	/ehicle l	Miy					
Near/Far La	ane Distance:	52 feet		_		icleType	e	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
	rrier Height:	0.0 feet			Me	edium 7		84.8%		10.3%	1.84%
Barrier Type (0-V	•	0.0 1661				leavy 7		86.5%		10.8%	0.74%
- ' '	ist. to Barrier:	100.0 feet		_							
Centerline Dist.		100.0 feet		۸	loise So			ns (in fe	et)		
Barrier Distance		0.0 feet				Auto		2.000			
Observer Height		5.0 feet				m Truck	-	.000	0 1- 4-1		0.0
•	ad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment.	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 degre	es		Mediu	m Truck	ks: 96	6.566			
	Right View:	90.0 degre	es		Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	lel Calculation	 S									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-1.92		-4.39)	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-19.16		-4.39)	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-23.12		-4.39)	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier attenu	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	rening	Leq	Night		Ldn	CI	VEL
Autos:	_	.3	62.4		60.6		54	.5	63.2	2	63.8
Medium Trucks:	57	.7	56.1		49.8		48	.2	56.7	7	56.9
Heavy Trucks:	57	.7	56.3		47.2		48	.5	56.8	3	57.0
Vehicle Noise:	65	.8	64.1		61.1		56	.3	64.8	3	65.3
Centerline Distan	ce to Noise Co	ontour (in feet)								
				70 d	BA	65	dBA	6	0 dBA	55	dBA

Ldn:

CNEL:

45

48

97

104

209

225

450

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Number: 8141
Road Segment: b/w Portola and Arborwood Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA			NOIS	E MODE	L INPUT	S	
Highway Data				Site Cond	ditions (Har	d = 10, S	oft = 15)		
Average Daily	Traffic (Adt):	6,000 vehicles				Autos:	15		
Peak Hou	Percentage:	10%		Med	dium Trucks	(2 Axles).	15		
Peak I	Hour Volume:	600 vehicles		Hea	avy Trucks (3	3+ Axles).	15		
Ve	ehicle Speed:	35 mph		Vehicle N	/liv				
Near/Far La	ane Distance:	20 feet			cleType	Day	Evening	Night	Daily
Site Data					Autos	77.5%	6 12.9%	9.6%	97.42%
	rrier Height:	0.0 feet		Me	dium Trucks	: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	_	0.0		Н	leavy Trucks	: 86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet		Noise Co	uraa Elavat	iono (in f	'aa4\		
Centerline Dist.	to Observer:	100.0 feet		Noise So	urce Elevat		eet)		
Barrier Distance	to Observer:	0.0 feet			Autos:	2.000			
Observer Height	(Above Pad):	5.0 feet			n Trucks:	4.000	Orada Ad		
ŭ	Pad Elevation:	0.0 feet		Heav	/ Trucks:	8.006	Grade Adj	usimeni	0.0
Ro	ad Elevation:	0.0 feet		Lane Equ	ivalent Dis	tance (in	feet)		
	Road Grade:	0.0%			Autos:	99.544			
	Left View:	-90.0 degree	s	Mediun	n Trucks:	99.504			
	Right View:	90.0 degree		Heavy	y Trucks:	99.544			
FHWA Noise Mod	lel Calculation	S							
VehicleType	REMEL	Traffic Flow	Distance	Finite I	Road Fr	resnel	Barrier Att	en Ber	m Atten
Autos:	64.30	-3.08	-4.5	9	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	75.75	-20.32	-4.5	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	81.57	-24.27	-4.5	9	-1.20	-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and I	parrier atter	nuation)					
VehicleType	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Nigh	t	Ldn	CI	VEL
Autos	55	Δ F	3.5	51.8		15 7	54.3	3	54 9

Unmitigated Nois	e Levels (withou	it Topo and barr	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	55.4	53.5	51.8	45.7	54.3	54.9
Medium Trucks:	49.6	48.1	41.8	40.2	48.7	48.9
Heavy Trucks:	51.5	50.1	41.0	42.3	50.7	50.8
Vehicle Noise:	57.7	55.9	52.5	48.1	56.6	57.1

Centerline Distance to Noise Contour (in feet)											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	13	28	60	129							
CNEL:	14	30	64	138							

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Number: 8141 Road Segment: b/w Park Pl. and Irvine Bl. Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA		NC	DISE MODE	L INPUT	S	
Highway Data				Site Conditions (I	Hard = 10, S	oft = 15)		
Average Daily	Traffic (Adt): 1	1,700 vehicles			Autos.	15		
Peak Hour	Percentage:	10%		Medium Truc	ks (2 Axles).	15		
Peak H	lour Volume:	1,170 vehicles		Heavy Truck	s (3+ Axles).	15		
Ve	hicle Speed:	55 mph	,	/ehicle Mix				
Near/Far La	ne Distance:	52 feet	<u> </u>	VehicleType	Day	Evening	Night	Daily
Site Data					itos: 77.5%		9.6%	
Rai	rrier Height:	0.0 feet		Medium Tru	cks: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-W		0.0		Heavy Tru	cks: 86.5%	2.7%	10.8%	0.74%
Centerline Dis	•	100.0 feet		Naine Course Fla	votiono (in t	'a a 4 l		
Centerline Dist.	to Observer:	100.0 feet	1	Noise Source Ele	•	eet)		
Barrier Distance	to Observer:	0.0 feet		Autos:	2.000			
Observer Height (Above Pad):	5.0 feet		Medium Trucks:	4.000	Crada Ad	iatmant	
• .	ad Elevation:	0.0 feet		Heavy Trucks:	8.006	Grade Ad	justment	0.0
Roa	ad Elevation:	0.0 feet	I	ane Equivalent L	Distance (in	feet)		
ı	Road Grade:	0.0%		Autos:	96.607			
	Left View:	-90.0 degrees		Medium Trucks:	96.566			
	Right View:	90.0 degrees		Heavy Trucks:	96.608			
FHWA Noise Mode	el Calculations	;						
VehicleType	REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	-2.14	-4.39	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-19.38	-4.39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-23.33	-4.39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (witho	out Topo and ba	arrier atten	uation)				
VehicleType	Leq Peak Hou	r Leq Day	Leq Ev	vening Leq N	ight	Ldn	CI	VEL
Autos:	64.	0 62	2.1	60.4	54.3	62.9	9	63.6
Medium Trucks:	57.	4 55	5.9	49.6	48.0	56.5	5	56.7

Ommingated Nois	e Levels (Withou	it ropo and ban	iei attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	64.0	62.1	60.4	54.3	62.9	63.6
Medium Trucks:	57.4	55.9	49.6	48.0	56.5	56.7
Heavy Trucks:	57.5	56.0	47.0	48.3	56.6	56.7
Vehicle Noise:	65.6	63.9	60.9	56.0	64.6	65.1

70 dBA											
	70 dBA	65 dBA	60 dBA	55 dBA							
Ldn:	44	94	202	436							
CNFI ·	47	101	218	469							

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Number: 8141
Road Segment: n/o Bryan Av. Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA			NOISI	MODE	L INPUT	S	
Highway Data			Site Cor	ditions (Hard	I = 10, Sc	oft = 15)		
Average Daily Traffic (Adt): Peak Hour Percentage: Peak Hour Volume: Vehicle Speed:	8,600 vehicles 10% 860 vehicles			dium Trucks (avy Trucks (3	,			
Near/Far Lane Distance:	55 mph 52 feet		Vehicle					
	52 1661		Veh	icleType	Day	Evening	Night	Daily
Site Data				Autos:			9.6%	
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0			edium Trucks: Heavy Trucks:			10.3% 10.8%	1.84% 0.74%
Centerline Dist. to Barrier:	100.0 feet		Noise S	ource Elevation	ons (in fe	eet)		
Centerline Dist. to Observer: Barrier Distance to Observer: Observer Height (Above Pad): Pad Elevation:	100.0 feet 0.0 feet 5.0 feet 0.0 feet			Autos: m Trucks: ry Trucks:	2.000 4.000 8.006	Grade Ad	justment:	0.0
Road Elevation:	0.0 feet		Lane Eq	uivalent Dista	ance (in i	feet)		
Road Grade:	0.0%			Autos: 9	96.607	-		
Left View: Right View:	-90.0 degree				96.566 96.608			
FHWA Noise Model Calculatio	ns							
VehicleType REMEL	Traffic Flow	Distance	Finite	Road Fre	esnel	Barrier Att	en Ber	m Atten
Autos: 71.7	8 -3.48	-4.3	9	-1.20	-4.87	0.0	000	0.000
Medium Trucks: 82.4	0 -20.72	-4.3	9	-1.20	-4.97	0.0	000	0.000
Heavy Trucks: 86.4	0 -24.67	-4.3	9	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise Levels (wit	hout Topo and	barrier atter	nuation)					
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening	Leq Night		Ldn	CI	VEL
Autos: 6	62.7	8.06	59.0	5	3.0	61.6	6	62.2
Medium Trucks: 5	66.1	54.6	48.2	4	6.7	55.1	1	55.4
Heavy Trucks: 5	6.1	54.7	45.7 46.9 55.3					
Vehicle Noise:	64.3	62.5	59.6	5	4.7	63.2	2	63.7
Centerline Distance to Noise (Contour (in feet)							

70 dBA

35

38

Ldn:

CNEL:

65 dBA

76

82

60 dBA

165

177

55 dBA

355

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Number: 8141
Road Segment: n/o Trabuco Rd. Analyst: B. Lawson

SITE	SPECIFIC II	NPUT	DATA				ı	NOISE	MODE	L INPUT	S	
Highway Data						Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	10,000) vehicles	3					Autos:	15		
Peak Hour	Percentage:	10	0%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	1,000) vehicles	3		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55	5 mph			Vehicle i	Miy					
Near/Far La	ne Distance:	52	2 feet				icleType	9	Day	Evening	Night	Daily
Site Data								Autos:	77.5%	_	9.6%	
	rrier Height:		.0 feet			М	edium T	rucks:	84.8%		10.3%	
Barrier Type (0-W		0				ŀ	leavy T	rucks:	86.5%		10.8%	
	ist. to Barrier:		.0 .0 feet									
Centerline Dist.			.0 feet			Noise So			•	eet)		
Barrier Distance			.0 feet				Auto		2.000			
Observer Height			.0 feet				m Truck		1.000			
•	ad Elevation:	_	.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment	: 0.0
-	ad Elevation:		.0 feet			Lane Eq	uivalen	t Dista	nce (in i	feet)		
	Road Grade:		.0%				Auto	s: 96	6.607	-		
	Left View:		.0 degree	es		Mediu	m Truck	rs: 96	6.566			
	Right View:		.0 degree			Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	1										_	_
VehicleType	REMEL		fic Flow	Di	stance	Finite		Fres		Barrier Att		m Atten
Autos:			-2.82		-4.3		-1.20		-4.87		000	0.000
Medium Trucks:			-20.06		-4.3	-	-1.20		-4.97		000	0.000
Heavy Trucks:	86.40)	-24.02		-4.3	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	hout T	opo and	barri	ier atter	nuation)						
VehicleType	Leq Peak Ho	ur	Leq Day	,	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	6:	3.4	(61.5		59.7		53	.6	62.3	3	62.9
Medium Trucks:	50	8.8	;	55.2		48.9		47	.3	55.8		56.0
Heavy Trucks:	50	6.8		55.4		46.3		47	.6	55.9	9	56.1
Vehicle Noise:	64	4.9		63.2		60.2		55	.4	63.9	9	64.4
Centerline Distan	ce to Noise C	ontou	r (in feet))								
			. ,		70	dBA	65	dBA	6	60 dBA	55	dBA
				_								

Ldn:

CNEL:

39

42

85

91

182

196

392

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Number: 8141
Road Segment: n/o Walnut Av. Analyst: B. Lawson

SITE SPECIFIC II	NPUT DATA				r	NOISE	MODE	L INPUT	S	
Highway Data			S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	13,400 vehicle	S					Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume:	1,340 vehicle	S		He	avy Tru	cks (3+	Axles):	15		
Vehicle Speed:	50 mph		1/	ehicle l	Miv					
Near/Far Lane Distance:	50 feet		_		icleType	2	Day	Evening	Night	Daily
Site Data				V 0///		Autos:	77.5%		9.6%	,
	0.0 foot			Me	edium T		84.8%		10.3%	1.84%
Barrier Height:	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%
Barrier Type (0-Wall, 1-Berm): Centerline Dist. to Barrier:	0.0 100.0 feet									011 170
Centerline Dist. to Observer:	100.0 feet		Ν	oise Sc	urce E	levatio	ns (in fe	eet)		
Barrier Distance to Observer:	0.0 feet				Auto		2.000			
				Mediur	n Truck	is: 4	1.000			
Observer Height (Above Pad): Pad Elevation:	5.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	justment.	0.0
Road Elevation:	0.0 feet 0.0 feet		Lane Equivalent Distance (in feet)							
Road Grade:	0.0 feet 0.0%		Autos: 96.871							
Left View:	-90.0 degre	00		Mediur	n Truck	-	5.830			
Right View:	90.0 degre				y Truck		6.871			
Night view.	90.0 degre	55		ricav	y Truck		5.07 1			
FHWA Noise Model Calculation	าร									
VehicleType REMEL	Traffic Flow	Distan	ce	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos: 70.20	-1.14		4.41		-1.20		-4.87	0.0	000	0.000
Medium Trucks: 81.00	-18.38		4.41		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 85.38	-22.33	•	4.41		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrier a	ttenu	ation)						
VehicleType Leq Peak Ho	our Leq Day	/ Le	q Ev	ening	Leq	Night		Ldn	CI	VEL
Autos: 6	3.5	61.6		59.8		53	.7	62.4	4	63.0
Medium Trucks: 5	7.0	55.5		49.1		47	.6	56.1	1	56.3
Heavy Trucks: 5	7.4	56.0	_	47.0		48	.2	56.6	3	56.7
Vehicle Noise: 6	5.1	63.4		60.4		55	.6	64.	1	64.6
Centerline Distance to Noise C	Contour (in feet)								

70 dBA

41

44

Ldn:

CNEL:

65 dBA

87

94

60 dBA

188

202

55 dBA 405

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Number: 8141
Road Segment: s/o Walnut Av. Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				ı	NOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	12,100 vehicle	s					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	lour Volume:	1,210 vehicle	s		He	avy Tru	cks (3+	Axles):	15		
Ve	ehicle Speed:	55 mph		_	Vehicle I	Mix					
Near/Far La	ne Distance:	52 feet				icleType	Э	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	-
Ba	rrier Height:	0.0 feet			М	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
• • •	ist. to Barrier:	100.0 feet		_	Voise So	ourco E	lovatio	ns (in f	201		
Centerline Dist.	to Observer:	100.0 feet			voise sc	Auto		2.000	(C I)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auto m Truck		1.000			
Observer Height	(Above Pad):	5.0 feet					_		Grade Ad	liustmant	. 0.0
P	ad Elevation:	0.0 feet			пеач	y Truck	.S. C	3.006	Grade Auj	justin o nt	. 0.0
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalen	t Dista	nce (in t	feet)		
	Road Grade:	0.0%				Auto	s: 96	6.607			
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 96	6.566			
	Right View:	90.0 degre	es		Heav	y Truck	rs: 96	6.608			
FHWA Noise Mod	lel Calculation	ıs									
VehicleType	REMEL	Traffic Flow	Di	istance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten
Autos:	71.78	-1.99		-4.39	9	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40	-19.23		-4.39	9	-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-23.19		-4.39	9	-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barr	ier atten	uation)						
VehicleType	Leq Peak Hou	ur Leq Day	/	Leq Ev	ening/	Leq	Night		Ldn	C	NEL
Autos:	64	1.2	62.3		60.5		54	.5	63.1	1	63.7
Medium Trucks:	57	7.6	56.1		49.7		48	.2	56.6	6	56.9
Heavy Trucks:	57	7.6	56.2		47.2		48	.4	56.8	3	56.9
Vehicle Noise:	65	5.8	64.0		61.1		56	.2	64.7	7	65.2
Centerline Distan	ce to Noise C	ontour (in feet)								
				70 a	iBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

45

48

207

222

96

103

445

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Number: 8141
Road Segment: b/w Deerfield Dr. and ICD Analyst: B. Lawson

SITE	SPECIFIC II	NPUT D	ATA				1	NOISE I	ИODE	L INPUT	S	
Highway Data					S	ite Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	12,900	vehicles	3					Autos:	15		
Peak Hour	Percentage:	10%	6			Me	dium Tr	rucks (2)	Axles):	15		
Peak H	lour Volume:	1,290	vehicles	3		He	avy Tru	cks (3+ /	Axles):	15		
Ve	hicle Speed:	55	mph		V	/ehicle l	Miv					
Near/Far La	ne Distance:	52	feet				icleType	۵	Day	Evening	Night	Daily
Site Data						V GI I		Autos:	77.5%	J		97.42%
	uuiau Haiadat.	0.0	foot			Me	edium T		84.8%		10.3%	
	rrier Height:	0.0	feet				Heavy T		86.5%		10.8%	
Barrier Type (0-W Centerline Di		100.0										
Centerline Dist.		100.0			٨	loise So	ource E	levation	s (in f	eet)		
Barrier Distance			feet				Auto	os: 2.	000			
Observer Height (Above Pad): 5.0 feet						Mediui	m Truck	rs: 4.	000			
,						Heav	y Truck	rs: 8.	006	Grade Adj	iustment	: 0.0
Pad Elevation: 0.0 feet Road Elevation: 0.0 feet					1	ane Fa	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0				uno 29	Auto		607	1001)		
	Left View:					Modiuu	m Truck		566			
			degree				y Truck		608			
	Right View:	90.0	degree	35		Heav	y IIuch	.s. 30.	000			
FHWA Noise Mod	el Calculation	าร										
VehicleType	REMEL	Traffic	Flow	Dista	ance	Finite	Road	Fresi	nel	Barrier Att	en Bei	m Atten
Autos:	71.78	3	-1.72		-4.39	١	-1.20		-4.87	0.0	000	0.000
Medium Trucks:	82.40)	-18.95		-4.39		-1.20		-4.97	0.0	000	0.000
Heavy Trucks:	86.40)	-22.91		-4.39		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise	e Levels (with	hout Top	oo and l	barrier	attenu	uation)						
VehicleType	Leq Peak Ho	our L	eq Day		Leq Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	6	4.5	(52.6		60.8		54.8	3	63.4	1	64.0
Medium Trucks:	5	7.9	5	56.3		50.0		48.4	1	56.9)	57.1
Heavy Trucks:	5	7.9		56.5		47.4		48.7	7	57.0)	57.2

Sunday,	May	20,	2012

Vehicle Noise:

66.0

Centerline Distance to Noise Contour (in feet)

64.3

Ldn:

CNEL:

61.3

70 dBA

46

50

56.5

65 dBA

100

108

65.0

60 dBA

216

232

65.5

55 dBA

465

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Yale Av. Number: 8141
Road Segment: b/w ICD and Yale Lp. Analyst: B. Lawson

SITE SP	ECIFIC IN	PUT DATA			NOI	SE MODE	L INPUT	S	
Highway Data				Site Con	ditions (Ha	ard = 10, S	oft = 15)		
Average Daily Tra	affic (Adt): 1	1,200 vehicle	S			Autos	: 15		
Peak Hour Pe	rcentage:	10%		Me	dium Truck	s (2 Axles)	: 15		
Peak Hou	r Volume:	1,120 vehicle	S	He	avy Trucks	(3+ Axles)	: 15		
Vehic	le Speed:	55 mph		Vehicle	Miy				
Near/Far Lane	Distance:	52 feet			icleType	Day	Evening	Night	Daily
Site Data					Auto		_	9.6%	,
Rarrio	er Height:	0.0 feet		М	edium Truci	ks: 84.8%		10.3%	1.84%
Barrier Type (0-Wall,	•	0.0		1	Heavy Truci	ks: 86.5%	6 2.7%	10.8%	0.74%
Centerline Dist.	,	100.0 feet		Noise C	ource Eleva	otiono (in t	in 04)		
Centerline Dist. to	Observer:	100.0 feet		Noise 3			eet)		
Barrier Distance to	Observer:	0.0 feet		A 4 a alia	Autos:	2.000			
Observer Height (Ab	ove Pad):	5.0 feet			m Trucks:	4.000	Crada Ad	livotmont	
• ,	Elevation:	0.0 feet		Heal	y Trucks:	8.006	Grade Ad	justment.	0.0
Road	Elevation:	0.0 feet		Lane Equivalent Distance (in feet)					
Roa	ad Grade:	0.0%			Autos:	96.607			
	Left View:	-90.0 degre	es	Mediu	m Trucks:	96.566			
R	ight View:	90.0 degre		Heav	y Trucks:	96.608			
FHWA Noise Model (Calculations	s							
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Att	en Ber	m Atten
Autos:	71.78	-2.33	-4	.39	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	82.40	-19.57	-4	.39	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	86.40	-23.52	-4	.39	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise L	evels (with	out Topo and	barrier att	enuation)					
VehicleType Le	eq Peak Hou	r Leq Day	/ Leq	Evening	Leq Nig	ght	Ldn	CI	VEL
Autos:	63.	.9	62.0	60.2		54.1	62.8	3	63.4
Medium Trucks:	57.	.2	55.7	49.4		47.8	56.3	3	56.5
Heavy Trucks:	57.	.3	55.9	46.8		48.1	56.4	4	56.6
Vehicle Noise:	65	.4	63.7	60.7		55.8	64.4	4	64.9
Centerline Distance	to Noise Co	ntour (in feet)						

Centernine Distance to Noise Contour (in feet)				
	70 dBA	65 dBA	60 dBA	55 dBA
Ldn:	42	91	196	423
CNEL:	46	98	211	455

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Thomas Number: 8141
Road Segment: n/o Muirlands Bl. Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA				N	IOISE	MODE	L INPUT	S	
Highway Data				9	Site Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	1,500 vehicles	S					Autos:	15		
Peak Hour	Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak H	Hour Volume:	150 vehicles	s		He	avy Trud	cks (3+	Axles):	15		
Ve	ehicle Speed:	40 mph		1	/ehicle l	Wix					
Near/Far La	ane Distance:	12 feet				icleType)	Day	Evening	Night	Daily
Site Data							Autos:	77.5%		9.6%	_
Ra	rrier Height:	0.0 feet			Me	edium T	rucks:	84.8%	4.9%	10.3%	1.84%
Barrier Type (0-V	•	0.0			ŀ	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
	ist. to Barrier:	100.0 feet			Voise So	roo E	lovotio	no (in f	2041		
Centerline Dist.	to Observer:	100.0 feet		<u>'</u>	voise sc	Auto		.000	ei)		
Barrier Distance	to Observer:	0.0 feet			Modiu	Auto n Truck		.000			
Observer Height	(Above Pad):	5.0 feet				y Truck		.006	Grade Ad	iustmant	. 0.0
P	ad Elevation:	0.0 feet			пеач	y Truck	s. o	.006	Orace Au	usunent	. 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distar	nce (in i	feet)		
	Road Grade:	0.0%				Auto	s: 99	.865			
	Left View:	-90.0 degree	es		Mediui	n Truck	s: 99	.825			
	Right View:	90.0 degree	es		Heav	y Truck	s: 99	.865			
FHWA Noise Mod	lel Calculation	s									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	66.51	-9.68		-4.61		-1.20		-4.87	0.0	000	0.000
Medium Trucks:	77.72	-26.92		-4.61		-1.20		<i>-4.</i> 97	0.0	000	0.000
Heavy Trucks:	82.99	-30.87		-4.61		-1.20		-5.16	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barri	ier atteni	uation)						
VehicleType	Leq Peak Hou	ır Leq Day	′	Leq Ev	rening	Leq	Night		Ldn	Ci	NEL
Autos:	51	.0	49.1		47.4		41.	.3	49.9	9	50.5
Medium Trucks:	45	.0	43.5		37.1		35	.6	44.0)	44.3
Heavy Trucks:	46	.3	44.9		35.9		37.	.1	45.5	5	45.6
Vehicle Noise:	53	.0	51.3		48.0		43	.5	52.0)	52.5
Centerline Distan	ce to Noise Co	ontour (in feet)		ı						
				70 a	IBA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

6

7

29

31

14

15

63

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Thomas Number: 8141
Road Segment: s/o Muirlands Bl. Analyst: B. Lawson

SITE S	PECIFIC IN	PUT DATA		NOISE MODEL INPUTS					
Highway Data				Site Cond	ditions (Ha	rd = 10, Sc	oft = 15)		
Average Daily T	raffic (Adt):	8,000 vehicles	3			Autos:	15		
Peak Hour F	Percentage:	10%		Med	dium Trucks	(2 Axles):	15		
Peak Ho	our Volume:	800 vehicles	3	Hea	avy Trucks ((3+ Axles):	15		
	icle Speed:	40 mph		Vehicle N	1ix				
Near/Far Lan	e Distance:	12 feet		Vehi	cleType	Day	Evening	Night	Daily
Site Data					Auto	s: 77.5%	12.9%	9.6%	97.42%
Barı	rier Height:	0.0 feet		Me	dium Truck	s: 84.8%	4.9%	10.3%	1.84%
Barrier Type (0-Wa	_	0.0		H	leavy Truck	s: 86.5%	2.7%	10.8%	0.74%
Centerline Dist	,	100.0 feet		Noisa Sa	urce Eleva	tions (in f	not)		
Centerline Dist. to	o Observer:	100.0 feet		NOISE SU		2.000			
Barrier Distance to	o Observer:	0.0 feet		Madium	Autos: n Trucks:				
Observer Height (A	Above Pad):	5.0 feet				4.000	Crada Ad	iuotmont	
	d Elevation:	0.0 feet		Heav	/ Trucks:	8.006	Grade Ad	justinent.	0.0
Road	d Elevation:	0.0 feet		Lane Equ	iivalent Dis	stance (in	feet)		
R	Road Grade:	0.0%			Autos:	99.865			
	Left View:	-90.0 degree	es	Mediun	n Trucks:	99.825			
	Right View:	90.0 degree		Heav	/ Trucks:	99.865			
FHWA Noise Mode	l Calculations	S							
VehicleType	REMEL	Traffic Flow	Distance	Finite	Road F	resnel	Barrier Att	en Ber	m Atten
Autos:	66.51	-2.41	-4.6	1	-1.20	-4.87	0.0	000	0.000
Medium Trucks:	77.72	-19.65	-4.6	1	-1.20	-4.97	0.0	000	0.000
Heavy Trucks:	82.99	-23.60	-4.6	1	-1.20	-5.16	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and I	barrier atter	nuation)					
VehicleType I	Leq Peak Hou	ır Leq Day	Leq E	vening	Leq Nigh	nt	Ldn	CI	VEL
Autos:	58.	.3 !	56.4	54.6		48.6	57.2	2	57.8
Medium Trucks:	52.	.3	50.8	44.4		42.8	51.3	3	51.5
Heavy Trucks:	53.	.6 .	52.2	43.1		44.4	52.7	7	52.9
Vehicle Noise:	60	.3	58.6	55.3		50.7	59.3	3	59.7

70 dBA

19

21

Ldn:

CNEL:

65 dBA

42

44

60 dBA

90

96

55 dBA

193

206

Centerline Distance to Noise Contour (in feet)

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: w/o "F" St.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	IPUT DATA				ľ	VOISE	MODE	L INPUT	S		
Highway Data				S	Site Con	ditions	(Hard	= 10, So	ft = 15)			
Average Daily	Traffic (Adt):	43,100 vehicle	:S					Autos:	15			
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15			
Peak I	Hour Volume:	4,310 vehicle	:S		He	avy Tru	icks (3+	Axles):	15			
Ve	ehicle Speed:	60 mph		V	/ehicle l	Miy						
Near/Far La	ane Distance:	76 feet		_		icleType	e	Day	Evening	Night	Daily	
Site Data							Autos:	77.5%	-	9.6%	-	
	nrrier Height:	0.0 feet			Me	edium 7		84.8%		10.3%	1.84%	
Barrier Type (0-V	•	0.0 1661				leavy 7		86.5%		10.8%	0.74%	
- ' '	ist. to Barrier:	100.0 feet		_								
Centerline Dist.		100.0 feet		۸	loise So			ns (in fe	et)			
Barrier Distance		0.0 feet				Auto		2.000				
Observer Height		5.0 feet				m Truck	-	.000	0 - 4 - 4 - 4		0.0	
•	Pad Elevation:	0.0 feet			Heav	y Truck	rs: E	3.006	Grade Ad	justment.	0.0	
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in f	eet)			
	Road Grade:	0.0%				Auto	os: 92	2.547				
	Left View:	-90.0 degre	es		Medium Trucks: 92.504							
	Right View:	90.0 degre	es		Heav	y Truck	ks: 92	2.547				
FHWA Noise Mod	lel Calculation	s										
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten	
Autos:		3.14		-4.11		-1.20		-4.87		000	0.000	
Medium Trucks:	83.68	-14.09		-4.11		-1.20		-4.97	0.0	000	0.000	
Heavy Trucks:	87.33	-18.05		-4.11		-1.20		-5.16	0.0	000	0.000	
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	uation)							
VehicleType	Leq Peak Hou	ır Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	CI	VEL	
Autos:	71	.1	69.2		67.4		61	.3	70.0)	70.6	
Medium Trucks:	64	.3	62.8		56.4		54	.9	63.3	3	63.6	
Heavy Trucks:	64	.0	62.5		53.5		54	.8	63.1	1	63.2	
Vehicle Noise:	72	5	70.8		67.9		62	.9	71.5	5	72.0	
Centerline Distan	ce to Noise Co	ontour (in feet	t)									
				70 d	BA	65	dBA	6	0 dBA	55	dBA	

Ldn:

CNEL:

126

135

271

292

583

628

1,257

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o "F" St.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily Tr	raffic (Adt): 71	,500 vehicles	3					Autos:	15				
Peak Hour Pe	ercentage:	10%			Me	dium Tr	ucks (2	Axles):	15				
Peak Hou	ur Volume: 7	7,150 vehicles	3		He	avy Tru	cks (3+	Axles):	15				
Vehic	cle Speed:	60 mph		V	/ehicle l	Miv							
Near/Far Lane	e Distance:	76 feet				icleType	è	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%		9.6%	•		
	ier Height:	0.0 feet			Me	edium T		84.8%		10.3%	1.84%		
Barrier Type (0-Wal	•	0.0 reet 0.0				leavy T		86.5%		10.8%	0.74%		
Centerline Dist.		100.0 feet											
Centerline Dist. to		100.0 feet		۸	loise So	ource E		•	eet)				
Barrier Distance to		0.0 feet				Auto		2.000					
Observer Height (Al		5.0 feet				n Truck	_	.000					
= :	l Elevation:	0.0 feet			Heav	y Truck	s: 8	3.006	Grade Ad	justment.	: 0.0		
	Elevation:	0.0 feet		L	ane Eq	uivalen	t Distai	nce (in f	eet)				
	pad Grade:	0.0%			-	Auto		2.547					
	Left View:	-90.0 degree	es		Mediui	n Truck		2.504					
F	Right View:	90.0 degree			Heav	y Truck	s: 92	2.547					
FHWA Noise Model					T					T-			
VehicleType		Traffic Flow	Dis	stance	Finite		Fres		Barrier Att		m Atten		
Autos:	73.22	5.34		-4.11		-1.20		-4.87		000	0.000		
Medium Trucks:	83.68	-11.90		-4.11		-1.20		<i>-4.</i> 97		000	0.000		
Heavy Trucks:	87.33	-15.85		-4.11		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise L	Levels (withou	ut Topo and	barri	er attenu	uation)								
VehicleType L	eq Peak Hour	Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL		
Autos:	73.2	-	71.4		69.6		63	.5	72.2	2	72.8		
Medium Trucks:	66.5	5 (65.0		58.6		57	.1	65.5	5	65.8		
Heavy Trucks:	66.2	2	64.7		55.7		57	.0	65.3	3	65.4		
Vehicle Noise:	74.7	,	73.0		70.1		65	.1	73.7	7	74.2		
Centerline Distance	to Noise Cor	ntour (in feet))										
				70 d	'BA	65	dBA	6	0 dBA	55	dBA		

Ldn:

CNEL:

176

190

379

409

818

880

1,761

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Irvine Bl.

Road Segment: e/o Fairbanks

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Con	ditions	(Hard :	= 10, So	ft = 15)				
Average Daily	Traffic (Adt):	43,700 veh	nicles					Autos:	15				
	Percentage:	10%			Med	dium Tr	ucks (2	Axles):	15				
Peak H	our Volume:	4,370 veh	nicles		Hea	avy Tru	cks (3+	Axles):	15				
Ve	hicle Speed:	60 mp	h		Vehicle I	Miv							
Near/Far Lai	ne Distance:	76 fee	t			cleType	,	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%	J	9.6%	,		
	rier Height:	0.0 fe	ot .		Ме	edium T		84.8%		10.3%	1.84%		
Barrier Type (0-W	•	0.0 16	El		F	leavy T	rucks:	86.5%		10.8%	0.74%		
Centerline Dis	,	100.0 fe	Ω t										
Centerline Dist.		100.0 fe		_	Noise So	urce E			eet)				
Barrier Distance		0.0 fe				Auto		.000					
Observer Height (5.0 fe				n Truck	_	.000					
• ,	ad Elevation:	0.0 fe			Heav	y Truck	s: 8	.006	Grade Ad	justment	: 0.0		
	ad Elevation:	0.0 fe			Lane Equ	uivalen	t Distar	nce (in f	eet)				
	Road Grade:	0.0%	0.			Auto	s: 92	2.547					
	Left View:	-90.0 de	earees		Medium Trucks: 92.504								
	Right View:	90.0 de	•		Heav	y Truck	s: 92	2.547					
FHWA Noise Mode						1							
VehicleType	REMEL	Traffic Flo		istance	Finite		Fres		Barrier Att		m Atten		
Autos:	73.22		3.20	-4.1		-1.20		-4.87		000	0.000		
Medium Trucks:	83.68		1.03	-4.1		-1.20		-4.97		000	0.000		
Heavy Trucks:	87.33	-17	7.99	-4.1	1	-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Topo a	and barr	ier atten	uation)								
VehicleType	Leq Peak Hou	ır Leq	Day	Leq E	vening	Leq	Night		Ldn	C	VEL		
Autos:	71	.1	69.2		67.4		61.	4	70.0)	70.6		
Medium Trucks:	64	.3	62.8		56.5		54.	.9	63.4	1	63.6		
Heavy Trucks:	64	.0	62.6		53.6		54	.8	63.2	2	63.3		
Vehicle Noise:	72	6	70.8		67.9		63	.0	71.5	5	72.0		
Centerline Distance	ce to Noise Co	ontour (in	feet)										
		•		70 (dBA	65	dBA	6	0 dBA	55	dBA		

Ldn:

CNEL:

127

137

273

294

589

634

1,268

Scenario: Post 2030 - 2012 Modified Project (Option 2) ct Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks Number: 8141
Road Segment: e/o Alton Pkwy. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA					NOISE MODEL INPUTS								
Highway Data					Site Con	ditions	(Hard :	= 10, Sc	ft = 15)				
Average Daily	Traffic (Adt):	8,100 vehicle	s					Autos:	15				
,	r Percentage:	10%			Me	dium Tr	rucks (2	Axles):	15				
Peak H	Hour Volume:	810 vehicle	s		He	avy Tru	cks (3+	Axles):	15				
Ve	ehicle Speed:	40 mph		,	Vehicle l	Miv							
Near/Far La	ane Distance:	12 feet				icleType	۵	Day	Evening	Night	Daily		
Site Data					VCIII		Autos:	77.5%	J	9.6%	,		
		0.0 (1			Me	edium T		84.8%		10.3%	1.84%		
	rrier Height:	0.0 feet				leavy T		86.5%		10.8%	0.74%		
Barrier Type (0-V		0.0				louvy i	raono.	00.070	2.7 70	10.070	0.7 170		
Centerline Di Centerline Dist.	ist. to Barrier:	100.0 feet 100.0 feet		1	Noise Sc	ource E	levatio	ns (in fe	eet)				
		0.0 feet				Auto		.000					
Barrier Distance					Mediur	n Truck	rs: 4	.000					
Observer Height	(Above Pau). Pad Elevation:	5.0 feet			Heav	y Truck	rs: 8	.006	Grade Ad	justment	0.0		
-	ad Elevation: ad Elevation:	0.0 feet 0.0 feet			Lane Eq	uivalen	t Distar	nce (in t	eet)				
	Road Grade:	0.0%		-	zano zy	Auto		.865	001)				
	Left View:				Modiur	n Truck		.825					
	Right View:	-90.0 degree				y Truck		.865					
	Right view.	90.0 degre	62		Heav	y ITUCK		.003					
FHWA Noise Mod	lel Calculation	s		I									
VehicleType	REMEL	Traffic Flow	Di	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten		
Autos:	66.51	-2.35		-4.6	1	-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	77.72	-19.59		-4.6	1	-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	82.99	-23.55		-4.6	1	-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barri	ier atten	uation)								
VehicleType	Leg Peak Hou			Leg E		Leq	Night		Ldn	C	VEL		
Autos:	58	3.3	56.4	· · ·	54.7		48.	.6	57.2	2	57.9		
Medium Trucks:	52	2.3	50.8		44.4		42.	.9	51.4	4	51.6		
Heavy Trucks:	53	5.6	52.2		43.2		44.	.4	52.8	3	52.9		
Vehicle Noise:	60).4	58.6		55.3		50	.8	59.3	3	59.8		
Centerline Distan	ce to Noise Co	ontour (in feet)										
				70 c	dBA	65	dBA	6	0 dBA	55	dBA		

19

21

Ldn:

CNEL:

42

45

90

97

194

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks Number: 8141
Road Segment: w/o Alton Pkwy. Analyst: B. Lawson

SITE SPECIFIC INPUT DATA				NOISE MODEL INPUTS								
Highway Data			S	Site Con	ditions	(Hard	= 10, So	ft = 15)				
Average Daily Traffic (Adt):	5,800 vehicle	s					Autos:	15				
Peak Hour Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15				
Peak Hour Volume:	580 vehicle	s		He	avy Tru	cks (3+	Axles):	15				
Vehicle Speed:	45 mph		V	/ehicle l	Miv							
Near/Far Lane Distance:	36 feet				icleType	2	Day	Evening	Night	Daily		
Site Data						Autos:	77.5%		•	97.42%		
	0.0 feet			Ме	edium T		84.8%		10.3%	1.84%		
Barrier Height: Barrier Type (0-Wall, 1-Berm):	0.0 feet 0.0				leavy T		86.5%		10.8%	0.74%		
Centerline Dist. to Barrier:	0.0 100.0 feet											
Centerline Dist. to Observer:	100.0 feet		۸	loise Sc			•	eet)				
Barrier Distance to Observer:	0.0 feet				Auto		2.000					
Observer Height (Above Pad):	5.0 feet				n Truck	_	.000					
Pad Elevation:	0.0 feet			Heav	y Truck	rs: 8	3.006	Grade Ad	iustment:	0.0		
Road Elevation:	0.0 feet		L	ane Eq	uivalen	t Distai	nce (in f	eet)				
Road Grade:	0.0%				Auto		3.412					
Left View:	-90.0 degre	es		Mediur	n Truck		3.372					
Right View:	90.0 degre			Heav	y Truck	s: 98	3.413					
					-							
FHWA Noise Model Calculation		ı										
VehicleType REMEL	Traffic Flow		stance	Finite		Fres		Barrier Att		m Atten		
Autos: 68.4			-4.51		-1.20		-4.87		000	0.000		
Medium Trucks: 79.4			-4.51		-1.20		-4.97		000	0.000		
Heavy Trucks: 84.2	5 -25.51		-4.51		-1.20		-5.16	0.0	000	0.000		
Unmitigated Noise Levels (wit	hout Topo and	barri	er attenu	uation)								
VehicleType Leq Peak He	our Leq Day	У	Leq Ev	ening	Leq	Night		Ldn	CI	VEL		
Autos: 5	8.4	56.5		54.8		48	.7	57.3	3	57.9		
Medium Trucks: 5	2.2	50.7		44.3		42	.8	51.2	2	51.5		
Heavy Trucks:5	3.0	51.6		42.6		43	.8	52.2	2	52.3		
Vehicle Noise:	0.3	58.5		55.4		50	.7	59.2	2	59.7		
Centerline Distance to Noise	Contour (in feet	t)										
			70 d	BA .	65	dBA	6	0 dBA	55	dBA		

Ldn:

CNEL:

19

21

41

44

89

95

192

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks Number: 8141
Road Segment: s/o Astor St. Analyst: B. Lawson

SITE SPECIFIC I		NOISE MODEL INPUTS								
Highway Data			S	ite Con	ditions	(Hard :	= 10, Sc	oft = 15)		
Average Daily Traffic (Adt):	4,100 vehicle	S					Autos:	15		
Peak Hour Percentage:	10%			Me	dium Tr	ucks (2	Axles):	15		
Peak Hour Volume:	410 vehicle	S		He	avy Trud	cks (3+	Axles):	15		
Vehicle Speed:	40 mph		V	/ehicle l	Wiy					
Near/Far Lane Distance:	12 feet		-		icleType)	Day	Evening	Night	Daily
Site Data						Autos:	77.5%	-	9.6%	-
Barrier Height:	0.0 feet			Me	edium T	rucks:	84.8%		10.3%	1.84%
Barrier Type (0-Wall, 1-Berm):	0.0			F	leavy T	rucks:	86.5%	2.7%	10.8%	0.74%
Centerline Dist. to Barrier:	100.0 feet		_							
Centerline Dist. to Observer:	100.0 feet		^	loise So			•	eet)		
Barrier Distance to Observer:	0.0 feet				Auto		.000			
Observer Height (Above Pad):	5.0 feet				m Truck		.000	0 1 - 4 -1		0.0
Pad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade Ad	justment:	0.0
Road Elevation:	0.0 feet		L	ane Eq	uivalen	t Distar	nce (in i	feet)		
Road Grade:	0.0%				Auto	s: 99	.865			
Left View:	-90.0 degre	es		Mediui	n Truck	s: 99	.825			
Right View:	90.0 degree	es		Heavy Trucks: 99.865						
FHWA Noise Model Calculation	ne									
VehicleType REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos: 66.5			-4.61		-1.20		-4.87		000	0.000
Medium Trucks: 77.72	2 -22.55		-4.61		-1.20		-4.97	0.0	000	0.000
Heavy Trucks: 82.99	-26.51		-4.61		-1.20		-5.16	0.0	000	0.000
Unmitigated Noise Levels (with	hout Topo and	barrie	er attenu	uation)						
VehicleType Leq Peak Ho			Leg Ev		Leg	Night		Ldn	CI	VEL
Autos: 5	5.4	53.5	· · · · · · · · · · · · · · · · · · ·	51.7	<u> </u>	45.	7	54.3	3	54.9
Medium Trucks: 4	9.4	47.8		41.5		39.	9	48.4	4	48.6
Heavy Trucks: 5	0.7	49.3		40.2		41.	5	49.8	3	50.0
Vehicle Noise: 5	7.4	55.7		52.4		47.	8	56.4	4	56.8
Centerline Distance to Noise C	Contour (in feet	•)								
			70 di	BA	65	dBA	6	60 dBA	55	dBA

Ldn:

CNEL:

12

13

27

28

57

61

123

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks

Road Segment: n/o Irvine Bl.

Number: 8141

Analyst: B. Lawson

SITE	SPECIFIC IN	PUT DATA			NOISE MODEL INPUTS								
Highway Data				S	ite Con	ditions	(Hard	= 10, Sc	oft = 15)				
Average Daily	Traffic (Adt):	100 vehicles	S					Autos:	15				
Peak Hour	Percentage:	10%			Me	dium Tı	rucks (2	Axles):	15				
Peak H	lour Volume:	10 vehicles	S		He	avy Tru	icks (3+	Axles):	15				
Ve	ehicle Speed:	45 mph		V	'ehicle l	Miy							
Near/Far La	ne Distance:	36 feet		-		icleTyp	е	Day	Evening	Night	Daily		
Site Data							Autos:	77.5%	-	•	97.42%		
Ra	rrier Height:	0.0 feet			Me	edium 7	rucks:	84.8%		10.3%	1.84%		
Barrier Type (0-W	_	0.0			ŀ	leavy 7	rucks:	86.5%	2.7%	10.8%	0.74%		
Centerline Di		100.0 feet		_									
Centerline Dist.		100.0 feet		۸	ioise Sc			ns (in fe	eet)				
Barrier Distance	to Observer:	0.0 feet				Auto		2.000					
Observer Height	(Above Pad):	5.0 feet				n Truck	_	1.000	Crada Ad				
•	ad Elevation:	0.0 feet			Heav	y Truck	rs: E	3.006	Grade Adj	ustment.	0.0		
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Dista	nce (in t	feet)				
	Road Grade:	0.0%				Auto	os: 98	3.412					
	Left View:	-90.0 degree	es		Mediui	n Truck	ks: 98	3.372					
	Right View:	90.0 degree	es		Heav	y Truck	rs: 98	3.413					
FHWA Noise Mod	lel Calculation	S											
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fres	snel	Barrier Att	en Ber	m Atten		
Autos:	68.46	-21.95		-4.51		-1.20		-4.87	0.0	000	0.000		
Medium Trucks:	79.45	-39.19		-4.51		-1.20		-4.97	0.0	000	0.000		
Heavy Trucks:	84.25	-43.15		-4.51		-1.20		-5.16	0.0	000	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barri	er attenu	ıation)								
VehicleType	Leq Peak Hou	ır Leq Day	,	Leq Ev	ening	Leq	Night		Ldn	CI	VEL		
Autos:	40	.8	38.9		37.1		31	.1	39.7	7	40.3		
Medium Trucks:	34	.5	33.0		26.7		25	.1	33.6	3	33.8		
Heavy Trucks:	35	.4	34.0		24.9		26	.2	34.5	5	34.7		
Vehicle Noise:	42	.6	40.9		37.7		33	.1	41.6	6	42.1		
Centerline Distan	ce to Noise Co	ontour (in feet)		1			1		1			
				70 d	BA	65	dBA	6	60 dBA	55	dBA		

1

1

Ldn:

CNEL:

3

3

6

6

13

Scenario: Post 2030 - 2012 Modified Project (Option 2) vct Name: 2012 Great Park GPA/ZC

Road Name: Fairbanks

Road Segment: w/o Irvine Bl.

Number: 8141

Analyst: B. Lawson

SITE SPECIFIC I	NPUT DATA		NOISE MODEL INPUTS								
Highway Data			Site Condition:	s (Hard = 10, S	oft = 15)						
Average Daily Traffic (Adt):	21,800 vehicles	3		Autos	: 15						
Peak Hour Percentage:	10%		Medium T	rucks (2 Axles)	: 15						
Peak Hour Volume:	2,180 vehicles	S	Heavy Tro	ucks (3+ Axles)	: 15						
Vehicle Speed:	40 mph		Vehicle Mix								
Near/Far Lane Distance:	12 feet		VehicleTyp	e Day	Evening	Night	Daily				
Site Data				Autos: 77.59	_	9.6%	-				
Barrier Height:	0.0 feet		Medium	Trucks: 84.89		10.3%	1.84%				
Barrier Type (0-Wall, 1-Berm):	0.0 leet 0.0		Heavy			10.8%	0.74%				
Centerline Dist. to Barrier:	100.0 feet										
Centerline Dist. to Observer:	100.0 feet		Noise Source L	•	feet)						
Barrier Distance to Observer:	0.0 feet		Aut								
Observer Height (Above Pad):	5.0 feet		Medium Truc								
Pad Elevation:	0.0 feet		Heavy Truc	ks: 8.006	Grade Ad	ljustment:	0.0				
Road Elevation:	0.0 feet		Lane Equivaler	nt Distance (in	feet)						
Road Grade:	0.0%		Autos: 99.865								
Left View:	-90.0 degree	es	Medium Trucks: 99.825								
Right View:	90.0 degree		Heavy Truc	ks: 99.865							
FHWA Noise Model Calculation	ns										
VehicleType REMEL	Traffic Flow	Distance	Finite Road	Fresnel	Barrier Att	ten Ber	m Atten				
Autos: 66.5	1 1.95	-4.6	1 -1.20	-4.87	0.0	000	0.000				
Medium Trucks: 77.72	2 -15.29	-4.6	1 -1.20	-4.97	0.0	000	0.000				
Heavy Trucks: 82.99	-19.25	-4.6	1 -1.20	-5.16	0.0	000	0.000				
Unmitigated Noise Levels (with	hout Topo and i	barrier atten	uation)								
VehicleType Leq Peak Ho	our Leq Day	Leq E	vening Led	q Night	Ldn	CI	VEL				
Autos: 6	2.6	60.7	59.0	52.9	61.	5	62.2				
Medium Trucks: 5	6.6	55.1	48.7	47.2	47.2 55.7		55.9				
Heavy Trucks: 5	7.9	56.5	47.5	48.7	57.	1	57.2				
Vehicle Noise: 6	4.7	62.9	59.6	55.1	63.0	6	64.1				

70 dBA

38

40

Ldn:

CNEL:

65 dBA

81

87

60 dBA

175

187

55 dBA

376

403

Centerline Distance to Noise Contour (in feet)

APPENDIX 8.1

Roadway Construction Noise Model (RCNM) Database





U.S. Department of Transportation

FHWA

Federal Highway Administration Roadway Construction Noise Model User's Guide

FHWA-HEP-05-054 DOT-VNTSC-FHWA-05-01 **Final Report** January 2006



Prepared for U.S. Department of Transportation Federal Highway Administration Office of Natural and Human Environment Washington, DC 20590 Prepared by
U.S. Department of Transportation
Research and Innovative Technology Administration
John A. Volpe National Transportation Systems Center
Acoustics Facility
Cambridge, MA 02142

Table 1. CA/T equipment noise emissions and acoustical usage factors database.

CA/T Noise Emission Reference Levels and Usage Factors						
ilename: EQUIPLST.xls revised: 7/26/05	Impact	Acoustical Use Factor	Spec 721.560 Lmax @ 50ft	Actual Measured Lmax @ 50ft	No. of Actua	
Equipment Description	Device ?	(%)	(dBA, slow)	(dBA, slow)	(Count)	
				(samples averaged)		
All Other Equipment > 5 HP	No	50	85	N/A	0	
Auger Drill Rig	No	20	85	84	36	
Backhoe	No	40	80	78	372	
Bar Bender	No	20	80	N/A	0	
Blasting	Yes	N/A	94	N/A	0	
Boring Jack Power Unit	No No	50 20	80 85	83 84	1 46	
Chain Saw Clam Shovel (dropping)					46	
Compactor (ground)	Yes No	20 20	93 80	87 83	57	
Compressor (air)	No	40	80	78	18	
Concrete Batch Plant	No	15	83	N/A	0	
Concrete Mixer Truck	No	40	85	79	40	
Concrete Pump Truck	No	20	82	81	30	
Concrete Saw	No	20	90	90	55	
Crane	No	16	85	81	405	
Dozer	No	40	85	82	55	
Drill Rig Truck	No	20	84	79	22	
Drum Mixer	No	50	80	80	1	
Dump Truck	No	40	84	76	31	
Excavator	No	40	85	81	170	
Flat Bed Truck	No	40	84	74	4	
Front End Loader	No	40	80	79	96	
Generator	No	50	82	81	19	
Generator (<25KVA, VMS signs)	No	50	70	73	74	
Gradall	No	40	85	83	70	
Grader	No	40	85	N/A	0	
Grapple (on backhoe)	No	40	85	87	1	
Horizontal Boring Hydr. Jack	No	25	80	82	6	
Hydra Break Ram	Yes	10	90	N/A	0	
Impact Pile Driver	Yes	20	95	101	11	
Jackhammer	Yes	20	85	89	133	
Man Lift	No	20	85	75	23	
Mounted Impact Hammer (hoe ram)	Yes	20	90	90	212	
Pavement Scarafier	No	20	85	90	2	
Paver	No	50	85	77	9	
Pickup Truck	No	40	55	75	1	
Pneumatic Tools	No	50	85	85	90	
Pumps	No	50	77	81	17	
Refrigerator Unit	No	100	82	73 79	3	
Rivit Buster/chipping gun	Yes	20	85		19 3	
Rock Drill Roller	No No	20 20	85 85	81 80	16	
Sand Blasting (Single Nozzle)	No	20	85	96	9	
Scraper	No	40	85	84	12	
Shears (on backhoe)	No	40	85	96	5	
Slurry Plant	No	100	78	78	1	
Slurry Trenching Machine	No	50	82	80	75	
Soil Mix Drill Rig	No	50	80	N/A	0	
Tractor	No	40	84	N/A	0	
Vacuum Excavator (Vac-truck)	No	40	85	85	149	
Vacuum Street Sweeper	No	10	80	82	19	
Ventilation Fan	No	100	85	79	13	
Vibrating Hopper	No	50	85	87	1	
Vibratory Concrete Mixer	No	20	80	80	1	
Vibratory Pile Driver	No	20	95	101	44	
Warning Horn	No	5	85	83	12	
Welder / Torch	No	40	73	74	5	

APPENDIX 8.2

Construction Related Noise Impact Calculations



Table 8.2_1

Demolition Construction Noise Levels¹

Equipment Type	Quantity	Usage Factor ²	Hours Of Operation ³	Reference Noise Level @ 50 Feet (dBA)	Cumulative Level @ 50 Feet (dBA)
Concrete/Industrial Saws	2	73%	5.8	90.0	91.6
Excavators	6	57%	4.6	85.0	90.3
Rubber Tire Dozers	4	59%	4.7	79.0	82.7
Cumulative Noise Levels 50 Feet (dBA)				94.4	

Nearest Receptor Location	Distance From Noise Source (In Feet) ⁴	Noise Reduction Due To Distance (dBA)	Construction Noise Level (dBA)
Residential Uses	100	-6.0	88.3

¹ Source: FHWA's Roadway Construction Noise Model, January 2006.

² Estimates the fraction of time each piece of equipment is operating at full power during a construction operation.

³ Represents the actual hours of peak construction equipment activity out of a typical 8 hour workday.

⁴ Distance from the nearest point of construction activity to the nearest receiver.

Table 8.2_2

Site Preparation Construction Noise Levels¹

Equipment Type	Quantity	Usage Factor ²	Hours Of Operation ³	Reference Noise Level @ 50 Feet (dBA)	Cumulative Level @ 50 Feet (dBA)
Rubber Tire Dozers	6	59%	4.7	79.0	84.5
Tractors/Loaders/Backhoes	8	55%	4.4	80.0	86.4
			Cumulative Noi	se Levels 50 Feet (dBA)	88.6

Nearest Receptor Location	Distance From Noise Source (In Feet) ⁴	Noise Reduction Due To Distance (dBA)	Construction Noise Level (dBA)
Residential Uses	100	-6.0	82.6

¹ Source: FHWA's Roadway Construction Noise Model, January 2006.

² Estimates the fraction of time each piece of equipment is operating at full power during a construction operation.

³ Represents the actual hours of peak construction equipment activity out of a typical 8 hour workday.

⁴ Distance from the nearest point of construction activity to the nearest receiver.

Table 8.2_3

Grading Construction Noise Levels¹

Equipment Type	Quantity	Usage Factor ²	Hours Of Operation ³	Reference Noise Level @ 50 Feet (dBA)	Cumulative Level @ 50 Feet (dBA)
Excavators	6	57%	4.6	85.0	90.3
Graders	3	61%	4.9	85.0	87.6
Rubber Tire Dozers	3	59%	4.7	79.0	81.5
Scrapers	6	72%	5.8	85.0	91.4
Tractors/Loaders/Backhoes	6	55%	4.4	80.0	85.2
Cumulative Noise Levels 50 Feet (dBA)					95.4

Nearest Receptor Location	Distance From Noise Source (In Feet) ⁴	Noise Reduction Due To Distance (dBA)	Construction Noise Level (dBA)
Residential Uses	100	-6.0	89.4

¹ Source: FHWA's Roadway Construction Noise Model, January 2006.

² Estimates the fraction of time each piece of equipment is operating at full power during a construction operation.

³ Represents the actual hours of peak construction equipment activity out of a typical 8 hour workday.

⁴ Distance from the nearest point of construction activity to the nearest receiver.

Table 8.2_4

Paving Construction Noise Levels¹

Equipment Type	Quantity	Usage Factor ²	Hours Of Operation ³	Reference Noise Level @ 50 Feet (dBA)	Cumulative Level @ 50 Feet (dBA)
Pavers	6	62%	5.0	77.0	82.7
Paving Equipment	6	53%	4.2	77.0	82.0
Rollers	6	56%	4.5	80.0	85.3
Cumulative Noise Levels 50 Feet (dBA)					88.3

Nearest Receptor Location	Distance From Noise Source (In Feet) ⁴	Noise Reduction Due To Distance (dBA)	Construction Noise Level (dBA)
Residential Uses	100	-6.0	82.3

¹ Source: FHWA's Roadway Construction Noise Model, January 2006.

² Estimates the fraction of time each piece of equipment is operating at full power during a construction operation.

³ Represents the actual hours of peak construction equipment activity out of a typical 8 hour workday.

⁴ Distance from the nearest point of construction activity to the nearest receiver.

Construction And Coating Noise Levels¹

Table 8.2_5

Equipment Type	Quantity	Usage Factor ²	Hours Of Operation ³	Reference Noise Level @ 50 Feet (dBA)	Cumulative Level @ 50 Feet (dBA)
Cranes	4	43%	3.0	81.0	82.8
Forklifts	12	30%	2.4	75.0	80.6
Generators Sets	4	74%	5.9	82.0	86.7
Tractors/Loaders/Backhoes	12	55%	3.9	80.0	87.6
Welders	4	45%	3.6	73.0	75.6
Air Compressors	4	48%	3.8	82.0	84.8
Cumulative Noise Levels 50 Feet (dBA) 92.3					92.3

Nearest Receptor Location	Distance From Noise Source (In Feet) ⁴	Noise Reduction Due To Distance (dBA)	Construction Noise Level (dBA)
Residential Uses	100	-6.0	86.3

¹ Source: FHWA's Roadway Construction Noise Model, January 2006.

² Estimates the fraction of time each piece of equipment is operating at full power during a construction operation.

³ Represents the actual hours of peak construction equipment activity out of a typical 8 hour workday.

⁴ Distance from the nearest point of construction activity to the nearest receiver.

APPENDIX 13.1

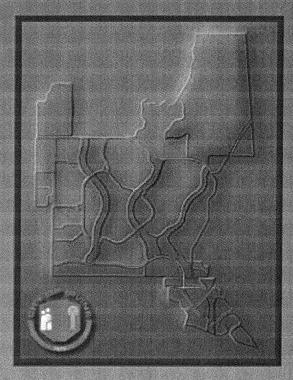
Reference Materials



FINAL

ENVIRONMENTAL IMPACT REPORT VOLUME I

ORANGE COUNTY GREAT PARK



FILE NOS: 47782-GA 47785-ZC

SCH# 2002101020

CERTIFIED MAY 27, 2003 IRVINE CITY COUNCIL RESOLUTION NO. 03-60

CITY OF IRVINE



Final

Program Environmental Impact Report Volume I

for the

Orange County Great Park (Annexation, General Plan Amendment, Zoning and Related Actions)

File Nos: 47782-GA

47785-ZC

SCH# 2002101020

Certified May 27, 2003 Irvine City Council Resolution No. 03-60

City of Irvine

Community Development Department One Civic Center Plaza Irvine, California 92623-9575 Contact: Glen Worthington (949) 724-6370

048178037.0003

5.4 Noise

An environmental noise assessment to determine the potential noise impacts of the proposed project prepared by Black and Veatch Corporation is provided as Appendix H in Volume II of this Final Program EIR. The report is summarized below and provides the basis for determining projects impacts.

Acoustical Terminology

Definitions

Sound is generated by the propagation of energy in the form of pressure waves. Being a wave phenomenon, sound is characterized by amplitude (sound level) and frequency (pitch). Sound amplitude is measured in decibels (dB) and sound frequency is measured in hertz (Hz). The decibel is the logarithmic ratio of a sound pressure to a reference sound pressure. Typically, zero dB corresponds to the threshold of human hearing. For reference, the sound pressure levels associated with common noise sources are shown in Figure 5.4-1. The standard unit of measure for frequency is Hz (cycles per second). The typical human ear can hear frequencies ranging from 20 Hz to 20,000 Hz.

At typical sound pressure levels, the human ear is more sensitive to sounds in the middle and high frequencies (1,000 to 8,000 Hz) than sounds in the low frequencies. Various weighting networks have been developed to simulate the frequency response of the human ear. The A-weighting network was developed to simulate the frequency response of the human ear to sounds at typical environmental levels. The A-weighting network emphasizes sounds in the middle to high frequencies and de-emphasizes sounds in the low frequencies. Most sound level instruments can apply these weighting networks automatically. Any sound level to which the A-weighting network has been applied is expressed in A-weighted decibels (dBA) and most community noise standards are expressed in decibels on the dBA scale. Noise levels of common sounds in the environment include office background noise at about 50 dBA, human speech at 10 feet (ft) at about 60-70 dBA, cars driving by at 50 feet at 65-70 dBA, trucks at 50ft at 75-80 dBA, and aircraft overflights a mile from the approach at about 95-100 dBA. Table 5.4-1 shows typical sound levels according to the A-weighted decibel scale.

People are exposed to sound on a daily basis. Sound is perceived as a normal part of the natural environment. People quickly adapt to most everyday sounds and barely notice its presence. Other sounds can be annoying or disturbing. For purposes of environmental assessment, noise is defined as unwanted sound. Noise in the urban environment typically is produced by transportation activities and stationary activities. Transportation noise includes noise from automobile and truck traffic, trains and airplanes. Stationary noise sources typically include heating, ventilation and air conditioning systems, manufacturing activities, industrial equipment, entertainment activities, yard care equipment, and outdoor activities. Stationary sources of a temporary nature include construction activities and agricultural operations.



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Prepared by:

John Kain, AICP Marlie Whiteman, PE Beth Dennis Charlene Hwang, PE Ina Cover

GREAT PARK NEIGHBORHOODS GENERAL PLAN AMENDMENT / ZONE CHANGE AND VTTM 17008 AMENDMENT

TRAFFIC IMPACT ANALYSIS

May 9, 2011

JN:07151-02 Prelim Rpt JK:MW:BD:IC:rd

ENVIRONMENTAL NOISE ASSESSMENT

Orange County Great Park Plan

City of Irvine General Plan Amendment, Pre-zoning, and Annexation

January 16, 2002

Prepared for:
City of Irvine, California

6.2 Impacts Related to Post-Construction Project Use

Post-construction project impacts include those noise impacts due to the operation and occupancy of the various land uses proposed for the project site. Noise sources include vehicle traffic generated by the project and stationary sources associated with the project land uses, such as commercial uses, and transportation facility uses. Noise impacts due to traffic generated by the project can be evaluated quantitatively by utilizing traffic volume studies. However, since the exact type, amount, and location of the project stationary noise sources are undetermined at this time, impacts due to stationary noise sources can only be evaluated qualitatively.

6.2.1 Project Generated Traffic

Traffic generated by the proposed project will influence the traffic noise levels in the surrounding areas. To quantify the traffic noise impact on the surrounding areas, the changes in traffic noise along the existing and proposed roadways surrounding the project site were determined based on the change in the average daily traffic volumes. The following traffic noise analyses are based on the traffic data presented in the *Orange County Great Park General Plan Amendment and Zone Change Traffic Impact Analysis* developed by Urban Crossroads, Inc. dated November 14, 2002 [Reference 17].

6.2.1.1 Traffic Noise Analysis Methodology

Under CEQA, consideration must be given to the magnitude of the increase and the existence of noise sensitive receptors in order to determine if the noise increase is a significant adverse environmental effect. Since CEQA does not define the magnitude of a significant increase, other applicable sources must be referenced. In general, a noise level increase of 3 dB is typically considered just barely perceptible while an increase of 5 dB is typically considered clearly noticeable [Reference 18]. CALTRANS defines a noise increase as substantial when the predicted noise levels with the project exceed the existing noise levels by 12 dB [Reference 8]. Additionally, CALTRANS has established a screening procedure that recommends further detailed traffic noise analysis when the ratio of the existing and future traffic volumes indicates a noise level increase equal to or greater than 3 dB [Reference 19]. In addition, Lake Forest has recently developed a document titled CEQA Significance Thresholds Guide which provides guidance for the preparation of environmental documents [Reference 20]. The guide specifies that traffic

noise is significant if the project causes a noise increase of 3 dB or more near a sensitive receptor and if the "future with project" noise level exceeds 65 dB CNEL.

Based on these standards and guidelines, this traffic noise screening analysis identified all project-related traffic noise level increases greater than 1.5 dB. This trigger level was established to remain conservative in comparison to the standards and guidelines discussed above. All project-related traffic noise level increases greater than 1.5 dB within residential areas were identified for further detailed traffic noise analysis.

6.2.1.2 Traffic Noise Increase

Table B-1 of Appendix B lists the changes in traffic noise for the Base Plan with and without the project for interim years 2007 and 2025 and for build-out year post-2025. Table B-2 shows similar data for the Overlay Plan. The future traffic noise level change is represented as 10 times the logarithm of the ratio of the future traffic volume to the existing traffic volume. The traffic noise change due solely to the project is the difference between the future change with and without the project. A negative change indicates a decrease in the traffic noise level and a positive change indicates an increase in the traffic noise level.

As shown in Table B-1 (Base Plan), the increase in the traffic noise levels due solely to the project-generated traffic ranges from -4.6 dB to 9.8 dB in the interim year 2007, -10.0 dB to 13.3 dB in the interim year 2025, and -1.7 dB to 13.1 dB in the build-out year post-2025. Specifically, eight roadway segments listed in Table B-1 are predicted to experience a traffic noise level increase greater than 1.5 dB due to the project in either the interim years 2007 and 2025 or in the build-out year post-2025. These roadway segments include the following.

Year 2007

- Trabuco Road from Jeffery Road to Sand Canyon Avenue
- Marine Way
- Jeronimo Road from Alton Parkway to Bake Parkway
- Barranca Parkway from Technology Drive to Alton Parkway
- Rockfield Boulevard from Bake Parkway to Lake Forest Drive
- Toledo Way from Alton Parkway to Bake Parkway

Year 2025

- Marine Way
- Jeronimo Road from Alton Parkway to Bake Parkway

HIGHWAY TRAFFIC NOISE ANALYSIS AND ABATEMENT POLICY AND GUIDANCE

by

U.S. Department of Transportation Federal Highway Administration Office of Environment and Planning Noise and Air Quality Branch Washington, D.C. June 1995 The law requires promulgation of traffic noise-level criteria for various land use activities. The law further provides that FHWA not approve the plans and specifications for a federally aided highway project unless the project includes adequate noise abatement measures to comply with the standards. The FHWA has developed and implemented regulations for the mitigation of highway traffic noise in federally-aided highway projects.

The FHWA regulations for mitigation of highway traffic noise in the planning and design of federally aided highways are contained in 23 CFR 772. The regulations require the following during the planning and design of a highway project: (1) identification of traffic noise impacts; (2) examination of potential mitigation measures; (3) the incorporation of reasonable and feasible noise mitigation measures into the highway project; and (4) coordination with local officials to provide helpful information on compatible land use planning and control. The regulations contain noise abatement criteria which represent the upper limit of acceptable highway traffic noise for different types of land uses and human activities. The regulations do not require that the abatement criteria be met in every instance. Rather, they require that every reasonable and feasible effort be made to provide noise mitigation when the criteria are approached or exceeded. Compliance with the noise regulations is a prerequisite for the granting of Federal-aid highway funds for construction or reconstruction of a highway.

NOISE FUNDAMENTALS

As we all know, sound is created when an object moves; the rustling of leaves as the wind blows, the air passing through our vocal chords, the almost invisible movement of the speakers on a stereo. The movements cause vibrations of the molecules in air to move in waves like ripples on water. When the vibrations reach our ears, we hear what we call sound.

Noise is defined as unwanted sound. Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit which expresses the ratio of the sound pressure level being measured to a standard reference level. Sound is composed of various frequencies, but the human ear does not respond to all frequencies. Frequencies to which the human ear does not respond must be filtered out when measuring highway noise levels. Sound-level meters are usually equipped with weighting circuits which filter out selected frequencies. It has been found that the A-scale on a sound-level meter best approximates the frequency response of the human ear. Sound pressure levels measured on the A-scale of a sound meter are abbreviated dBA.

In addition to noise varying in frequency, noise intensity fluctuates with time. In the past few years, there has been a definite trend toward the use of the equivalent (energy-average) sound level as the descriptor of environmental noise in the U.S. The equivalent sound level is the steady- state, A-weighted sound level which contains the same amount of acoustic energy as the actual time-varying, A-weighted sound level over a specified period of time. If the time period is 1 hour, the descriptor is the hourly equivalent sound level, $L_{eq}(h)$, which is widely used by SHAs as a descriptor of traffic noise. An additional descriptor, which is sometimes used, is the L_{10} . This is simply the A-weighted sound level that is exceeded 10 percent of the time.

A few general relationships may be helpful at this time in understanding sound generation and propagation. First, as already mentioned above, decibels are logarithmic units. Consequently, sound levels cannot be added by ordinary arithmetic means. A chart for decibel addition is shown in Table 1. From this table it can be seen that the sound pressure level from two equal sources is 3 dB greater than the sound pressure level of just one source. Therefore, two trucks producing 90 dB each will combine to produce 93 dB, not 180 dB. In other words, a doubling of the noise source produces only a 3 dB increase in the sound pressure level. Studies have shown that this increase is barely detectable by the human ear.

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Table 3: Decibel Changes, Loudness, and Energy Loss					
Sound Level Change	Relative Loudness	Acoustic Energy Loss			
0 dBA	Reference	0			
-3 dBA	Barely Perceptible Change	50%			
-5 dBA	Readily Perceptible Change	67%			
-10 dBA	Half as Loud	90%			
-20 dBA	1/4 as Loud	99%			
-30 dBA	1/8 as Loud	99.9%			

Table 4: Rules for Combining Sound Levels by "Decibel Addition" For noise levels known or desired to an accuracy or <u>+</u> l decibel (acceptable for traffic noise analyses):			
When two decibel values differ by	Add the following amount to the higher value		
0 or 1 dB	3 dB		
2 or 3 dB	2 dB		
4 to 9 dB	1 dB		
10 dB or more	0 dB		

Secondly, an increase or decrease of 10 dB in the sound pressure level will be perceived by an observer to be a doubling or halving of the sound. For example, a sound at 70 dB will sound twice as loud as a sound at 60 dB.

Finally, sound intensity decreases in proportion with the square of the distance from the source. Generally, sound levels for a point source will decrease by 6 dBA for each doubling of distance. Sound levels for a highway line source vary differently with distance, because sound pressure waves are propagated all along the line and overlap at the point of measurement. A long, closely spaced continuous line of vehicles along a roadway becomes a line source and produces a 3 dBA decrease in sound level for each doubling of distance. However, experimental evidence has shown that where sound from a highway propagates close to "soft" ground (e.g., plowed farmland, grass, crops, etc.), the most suitable dropoff rate to use is not 3 dBA but rather 4.5 dBA per distance doubling. This 4.5 dBA dropoff rate is usually used in traffic noise analyses.

For the purpose of highway traffic noise analyses, motor vehicles fall into one of three categories: (1) automobiles - vehicles with two axles and four wheels, (2) medium trucks - vehicles with two axles and six wheels, and (3) heavy trucks - vehicles with three or more axles. The emission levels of all three vehicle types increase as a function of the logarithm of their speed.

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The level of highway traffic noise depends on three things: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of the traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater numbers of trucks. Vehicle noise is a combination of the noises produced by the engine, exhaust, and tires. The loudness of traffic noise can also be increased by defective mufflers or other faulty equipment on vehicles. Any condition (such as a steep incline) that causes heavy laboring of motor vehicle engines will also increase traffic noise levels. In addition, there are other, more complicated factors that affect the loudness of traffic noise. For example, as a person moves away from a highway, traffic noise levels are reduced by distance, terrain, vegetation, and natural and manmade obstacles. Traffic noise is not usually a serious problem for people who live more than 150 meters from heavily traveled freeways or more than 30 to 60 meters from lightly traveled roads.

FHWA NOISE REGULATIONS

The current FHWA procedures for highway traffic noise analysis and abatement are contained in 23 CFR 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise." These procedures specify the requirements that SHAs must meet when using Federal-aid funds for highway projects.

This discussion will address those requirements and point out the most important issues related to the requirements. Each paragraph of 23 CFR 772 will be presented in boldface type and followed by a discussion of that paragraph. Some parts are self-explanatory and need only a sentence or two of discussion. Other, more complicated paragraphs will have greater discussion.

772.1: <u>PURPOSE</u>. To provide procedures for noise studies and noise abatement measures to help protect the public health and welfare, to supply noise abatement criteria, and to establish requirements for information to be given to local officials for use in the planning and design of highways approved pursuant to Title 23, United States Code (U.S.C.).

The protection of the public's health and welfare is an important responsibility that FHWA helps to accomplish during the planning and design of a highway project. The U.S. Congress has directed that this be done when the 1970 Federal-Aid Highway Act was passed. Concerned citizens and States encouraged Congress to provide this protection.

772.3: NOISE STANDARDS. The highway traffic noise prediction requirements, noise analyses, noise abatement criteria, and requirements for informing local officials in this directive constitute the noise standards mandated by 23 U.S.C. 109(i). All highway projects which are developed in conformance with this directive shall be deemed to be in conformance with the Federal Highway Administration (FHWA) noise standards.

This paragraph makes the whole 23 CFR 772 the FHWA noise standard. The standard is required by 23 U.S.C. 109(i). Some people mistake the noise abatement criteria for the FHWA standard. Early on, FHWA did not want to be restricted to specific noise levels that may not be achieved in most highway projects. So, a standard was developed that would best serve the public in terms of protection and reasonable cost.

772.5: **DEFINITIONS**

a. <u>Design Year</u> - the future year used to estimate the probable traffic volume for which a highway is designed. A time, 10 to 20 years, from the start of construction is usually used.

5



U.S. Department of Transportation

FHWA

Federal Highway Administration Roadway Construction Noise Model User's Guide

FHWA-HEP-05-054 DOT-VNTSC-FHWA-05-01 Final Report January 2006



Prepared for U.S. Department of Transportation Federal Highway Administration Office of Natural and Human Environment Washington, DC 20590 Prepared by U.S. Department of Transportation Research and Innovative Technology Administration John A. Volpe National Transportation Systems Center Acoustics Facility Cambridge, MA 02142

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE January 2006	3. REPORT TYPE AND DATES COVERED Final Report January 2004-January 2006
4. TITLE AND SUBTITLE FHWA Roadway Construction Noise Mod 6.AUTHOR(S) Reherman, Clay N. ⁽³⁾ , Rochat, Judith Michael C. ⁽³⁾ , Fleming, Gregg G. ⁽³⁾ , F Christopher ⁽¹⁾	L. (3), Thalheimer, Erich S. (2), Lau,	5. FUNDING NUMBERS HW-66/CS036
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Department of Transportation Research and Innovative Technology Administration John A. Volpe National Transportation Systems Center Environmental Measurement and Modeling Division, DTS-34 Cambridge, MA 02142		8. PERFORMING ORGANIZATION REPORT NUMBER DOT-VNTSC-FHWA-05-01
9. sponsoring/monitoring agency name(s) and add U.S. Department of Transportation Federal Highway Administration Office of Natural and Human Environ Washington, DC 20590		10. SPONSORING/MONITORING AGENCY REPORT NUMBER FHWA-HEP-05-054

(1) U.S. Department of Transportation

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12a. DISTRIBUTION/AVAILABILITY STATEMENT

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12b. DISTRIBUTION CODE

13. ABSTRACT (Maximum 200 words)

The Roadway Construction Noise Model (RCNM) is the Federal Highway Administration's (FHWA) national model for the prediction of construction noise. Due to the fact that construction is often conducted in close proximity to residences and businesses, construction noise must be controlled and monitored to avoid impacts on surrounding communities. In addition to community issues, excessive noise can threaten a construction projects' progress. Each project needs to balance the community's need for peace and quiet with the contractor's need to progress the work.

During the Central Artery/Tunnel (CA/T) project in Boston, Massachusetts, the project's noise control program developed the Construction Noise Control Specification 721.560, the most comprehensive noise specification ever developed in the United States. As part of the CA/T project noise control program, a construction noise prediction spreadsheet was developed. Because the CA/T prediction tool can benefit other state and local governments, the FHWA developed the RCNM, which is based on the noise prediction calculations and equipment database used in the CA/T prediction spreadsheet. The RCNM provides a construction noise screening tool to easily predict construction noise levels and determine compliance with noise limits for a variety of construction noise projects of varying complexity.

14. SUBJECT TERMS Construction noise, noise le	15. NUMBER OF PAGES 28		
Highway Administration			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT
onerabbilied	onerassified	Unclassified	Unlimited

NSN 7540-01-280-5500

Standard Form 298(Rev. 2-89) Prescribed by ANSI Std. 239-18 298-102

<u>Irvine, California, Code of Ordinances</u> >> <u>TITLE 6 - PUBLIC WORKS</u> >> <u>Division 8 - POLLUTION</u> >> <u>CHAPTER 2. - NOISE >></u>

CHAPTER 2. - NOISE

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Sec. 6-8-209. - Appeals.

Sec. 6-8-201. - Declaration of policy.

The City Council has adopted the following regulations in order to control unnecessary, excessive and annoying noise in the City of Irvine. The provisions of this chapter are applicable to nontransportation-related stationary noise sources.

(Code 1976, § VI.K-301; Ord. No. 84-18, 9-11-84)

Sec. 6-8-202. - Definitions.

The following definitions are provided to clarify words, phrases and terms used in this chapter.

Ambient noise level: The all-encompassing noise level associated with a given environment, being a composite of sounds from all sources, excluding the alleged offensive noise, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

Cumulative period: An additive period of time composed of individual time segments which may be continuous or interrupted.

Decibel (dB): A unit of noise measurement indicating the loudness of sound, based on logarithmic (base 10) scale.

Emergency work: Any mechanical device, apparatus or equipment which is used, employed or performed in an effort to protect, provide or restore safe conditions in the community or for the citizenry, or work by private or public utilities when restoring utility service.

Grading: Any excavating or filling of earth material or any combination thereof conducted to prepare a site for construction or the placement of the improvements thereon.

Impact noises: The noise produced by the collision of one mass in motion with a second mass which may be either in motion or at rest.

Noise level: The "A" weighted sound pressure level in decibels obtained by using a sound level meter. The "A" weighted discriminates against the lower and higher frequencies according to a relationship with the sensitivity of the human ear. The unit of measurement is designated as dB(A).

Predominant tone noise: A noise characterized by a predominant frequency or frequencies so that other frequencies cannot be readily distinguished.

Stationary noise source: The source which is often referred to as "fixed source" (non-transportation-related) including but not limited to mechanical electric equipment, various power tools construction, commercial, industrial and agricultural activity and animal noise.

(Code 1976, § VI.K-302; Ord. No. 84-18, 9-11-84)

REFERENCE 6

Sec. 6-8-203. - Noise level measurement criteria.

Any noise level measurements made pursuant to the provisions of this chapter shall be performed using a sound level meter. The location selected for measuring exterior noise levels shall be anywhere on the affected property. The interior noise measurement shall be made at a point in the affected unit at least four feet from the wall, ceiling or floor nearest the noise source.

(Code 1976, § VI.K-303; Ord. No. 84-18, 9-11-84)

Sec. 6-8-204. - General provision.

- **A.** Designated noise zones. The properties hereinafter described, whether within or without the City, are hereby assigned to the following noise zones:
 - 1. Noise zone 1: All hospitals, libraries, churches, schools and residential properties.
 - 2. Noise zone 2: All professional office and public institutional properties.
 - 3. Noise zone 3: All commercial properties excluding professional office properties.
 - **4.** Noise zone 4: All industrial properties.
- B. Exterior and interior noise standards.
 - The following noise standards, unless otherwise specifically indicated, shall apply to all
 property within a designated noise zone.

NOISE STANDARDS dB(A)

Noise Levels for a Period Not Exceeding (minutes/hour)

	Noise Zone	Time Period	30	15	5	1	0 (anytime)
1	Exterior	7:00 a.m.— 10:00 p.m.	55	60	65 ¹	70	75
		10:00 p.m.— 7:00 a.m.	50	55	60	65 ¹	70
	Interior	7:00 a.m.— 10:00 p.m.		_	55	60	65
		10:00 p.m.— 7:00 a.m.			45	50	55
2	Exterior	Any time	55	60	65	70	75
	Interior	Any time	_		55	60	65
3	Exterior	Any time	60	65	70	75	80
	Interior	Any time	_	_	55	60	65
4	Exterior	Any time	70	75	80	85	90
	Interior	Any time		_	55	60	65

- This standard does not apply to multi-family residence private balconies. Multi-family developments with balconies that do not meet the 65 CNEL are required to provide occupancy disclosure notices to all future tenants regarding potential noise impacts.
 - 2. It shall be unlawful for any person at any location within the City to create any noise or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person which causes the noise level when measured on any property within designated noise zones either within or without the City to exceed the applicable noise standard.
 - 3. Each of the noise standards specified above shall be reduced by five dB(A) for impact, or predominant tone noise or for noises consisting of speech or music.
 - 4. In the event that the noise source and the affected property are within different noise zones, the noise standards of the affected property shall apply.

(Code 1976, § VI.K-304; Ord. No. 84-18, 9-11-84; Ord. No. 05-06, § 2, 2-22-05)

REFERENCE 6

Sec. 6-8-205. - Special provisions.

A. Construction activities and agricultural operations may occur between 7:00 a.m. and 7:00 p.m. Mondays through Fridays, and 9:00 a.m. and 6:00 p.m. on Saturdays. No construction activities shall be permitted outside of these hours or on Sundays and federal holidays unless a temporary waiver is granted by the Chief Building Official or his or her authorized representative. Trucks, vehicles, and equipment that are making or are involved with material deliveries, loading, or transfer of materials, equipment service, maintenance of any devices or appurtenances for or within any construction project in the City shall not be operated or driven on City streets outside of these hours or on Sundays and federal holidays unless a temporary waiver is granted by the City. Any waiver granted shall take impact upon the community into consideration. No construction activity and agricultural will be permitted outside of these hours except in emergencies including maintenance work on the City rights-of-way that might be required.

Deliveries to or pickups from any commercial property sharing a property line with any residential property may occur between 7:00 a.m. and 10:00 p.m. daily. No deliveries to or pickups from any such properties shall occur outside of these hours.

- **B.** Maintenance of real property operations may exceed the noise standards between 7:00 a.m. and 7:00 p.m. on any day except Sundays, or between 9:00 a.m. and 6:00 p.m. on Sundays or a federal holiday.
- **C.** The use of leaf blowers shall be regulated as follows:
 - Definition of leaf blower. Leaf blowers are defined as portable power equipment that is
 powered by fuel or electricity and used in any landscape maintenance, construction, property
 repair, or property maintenance for the purpose of blowing, dispersing or redistributing dust,
 dirt, leaves, grass clippings, cuttings and trimmings from trees and shrubs or other debris.
 - 2. Limitations on use.
 - a. All leaf blowers shall be equipped with a permanently installed limiter that restricts the individual equipment motor performance to half throttle speed or less, and will produce not more than 70 decibels db(A) measured at the midpoint of a wall area 20 feet long and ten feet high and at a horizontal distance 50 feet away from the midpoint of the wall, or not more than 76 db(A) at a horizontal distance of 25 feet using a sound level meter set at level A.
 - b. Each individual leaf blower shall be tested and certified for use by the City of Irvine or its designated representative. Each individual leaf blower shall bear the label of required approval in a visible location on the equipment prior to use and at all times during use. A fee for the City to recover all costs connected with equipment approvals shall be charged in an amount set by City resolution.
 - **c.** The use of leaf blowers is prohibited except between the hours of 8:00 a.m. and 5:00 p.m. Monday through Friday and between 9:00 a.m. and 5:00 p.m. on Saturday.
 - d. Leaf blower operations shall not cause dirt, dust, debris, leaves, grass clippings, cuttings or trimmings from trees or shrubs to be blown or deposited on any adjacent or other parcel of land, lot, or public right-of-way/property other than the parcel, land, or lot upon which the leaf blower is being operated. Deposits of dirt, dust, leaves, grass clippings, debris, cuttings or trimmings from trees or shrubs shall be removed and disposed of in a sanitary manner which will prevent dispersement by wind, vandalism or similar means within six hours of deposit by the user or property occupant.
 - **e.** Leaf blowers shall not be operated within a horizontal distance of ten feet of any operable window, door, or mechanical air intake opening or duct.
 - f. No person using leaf blowers shall exceed noise limitations set by section 6-8-204 of the City Code of Ordinances.

3. Education.

- a. Each person operating an individual leaf blower is required to complete not less than one training session of content and time approved by the City of Irvine Administrative Authority prior to operation of leaf blower equipment. Training and qualification shall be required for certification at least every two years for each individual equipment user.
- b. The equipment operator shall carry certification of the training and qualification at all times during equipment use and make it available upon demand. Failure to abide by the use requirements contained in this Code and/or the certification training provided will be cause for the City of Irvine to revoke such certification.
- **c.** *Exception:* An individual residential property occupant operating a single leaf blower himself or herself in a manner confined to his or her own property shall be excepted from the education requirements set forth by this subsection.
- **4.** Fees. A fee for the City to recover all costs connected with training, testing, certification and enforcement shall be charged in an amount set by City Council resolution.
- **D.** The following activities shall be exempted from the provision of this chapter:

REFERENCE 6

- 1. School bands, school athletic and school entertainment events, provided said events are conducted on school property or authorized by special permit from the City.
- Activities otherwise lawfully conducted on public parks, public playgrounds and public or private school grounds.
- 3. Any mechanical device, apparatus or equipment which is utilized for emergency work, pest control, and protection or harvest of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions.
- **4.** Any activity or equipment to the extent that design regulation thereby has been preempted by State or federal law.

The Chief Building Official or his or her duly authorized representative and City police shall enforce where necessary the provisions of this chapter. No person shall interfere with, oppose or resist any authorized person charged with the enforcement of this chapter which such person is engaged in the performance of his or her duty.

(Code 1976, § VI.K-305; Ord. No. 84-18, 9-11-84; Ord. No. 88-11, §§ 1, 2, 5-24-88; Ord. No. 90-2, § 1, 2-13-90; Ord. No. 90-7, § 1, 4-10-90; Ord. No. 05-16, § 2, 7-12-05)

Sec. 6-8-206. - Reserved.

Sec. 6-8-207. - Enforcement.

The Chief Building Official or his or her duly authorized representative shall enforce the provisions of this chapter. No person shall interfere with, oppose or resist any authorized person charged with the enforcement of this chapter while such person is engaged in the performance of his or her duty.

(Code 1976, § VI.K-306; Ord. No. 84-18, 9-11-84)

Sec. 6-8-208. - Waiver procedure.

- A. The owner or operator of a noise source which violates any of the provisions of this chapter may apply for temporary waiver with the Chief Building Official. Any waiver granted shall take impact upon the community into consideration and state why immediate compliance cannot be achieved, a proposed method of achieving compliance, and a proposed time schedule for its accomplishment. Said application shall be accompanied by a fee as listed in the City Council resolution for variances where deemed appropriate and necessary by the City administrative authority.
- **B.** A separate application shall be filled for each noise source; provided, however, that several sources under common ownership or several sources on a single property may be combined into one application.
- C. An applicant for a waiver shall remain subject to prosecution under the terms of this chapter until a waiver is granted.
- D. Within 60 days of receipt of an appeal, the City Council shall either affirm, modify or reverse the decision of the Chief Building Official at a duly notified public hearing.

(Code 1976, § VI.K-307; Ord. No. 84-18, 9-11-84; Ord. No. 90-7, § 2, 4-10-90)

Sec. 6-8-209. - Appeals.

- A. The decision of the Chief Building Official on waiver applications may be appealed to the City Council. Appeals shall be filed with the City Clerk and shall be accompanied by a letter stating the reason for the appeal.
- **B.** An appeal shall be accompanied by a deposit/fee of \$150 to be updated on an annual basis by City Council resolution.
- C. An appeal shall be filed within 15 days of the decision of the Chief Building Official.
- **D.** Within 60 days of receipt of an appeal, the City Council shall either affirm, modify or reverse the decision of the Chief Building Official at a duly notified public hearing.

(Code 1976, § VI.K-308; Ord. No. 84-18, 9-11-84)

FOOTNOTE(S):

⁽⁷⁷⁾ Editor's note—Prior to amendment by Ord. No. 84-18, adopted Sept. 11, 1984, the provisions of this chapter derived from Ord. No. 136, §§ 2—13, adopted March 25, 1975. (Back)



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GREAT PARK NEIGHBORHOODS
VESTING TENTATIVE TRACT MAPS 17202, 17364, 17283, 17366, AND 17368
PRELIMINARY NOISE IMPACT ANALYSIS
CITY OF IRVINE, CALIFORNIA

February 24, 2011

JN:07228-06 BL:JS

ELEMENT F NOISE

GOAL: Contribute to a healthy and safe environment by minimizing noise impacts.

Description of Noise Element

Noise, as defined in this element, is generally unwanted sound which is considered unpleasant and bothersome. Unwanted noise can affect people both physically and psychologically. People are usually more sensitive to noise during the evening and nighttime than during the day because of reduced activities, fewer noise emitting sources, and the need for rest. Land uses in which people are especially sensitive to noise include residential, convalescent and rest homes, hospitals, libraries, churches, and schools. This element provides guidelines for minimizing noise impacts from various sources.

The Community Noise Equivalent Level (CNEL), commonly used by California local governments, is used by Irvine to quantify community noise levels and standards. The CNEL is an average of noise levels over a twenty-four hour period. Refer to technical definitions on Page F-3.

The City's interior and exterior noise standards are shown on Table F-1. Table F-2 shows each land use category and the CNEL which is compatible with the uses in the category.

TABLE F-1

INTERIOR AND EXTERIOR NOISE STANDARDS ENERGY AVERAGE (CNEL)

LAND USE CATEGORIES		ENERGY AVERAGE (CNEL)		
CATEGORIES	USES	INTERIOR ⁽¹⁾	EXTERIOR ⁽²⁾	
RESIDENTIAL	Single-Family Multiple-Family	45 ⁽³⁾ 55 ⁽⁴⁾	65 ⁽⁷⁾	
,	Mobile Home		65 ⁽⁵⁾	
COMMERCIAL/ INDUSTRIAL	Hotel, motel, transient lodging	45	65 ⁽⁶⁾	
	Commercial, retail, bank, restaurant	55		
÷	Office building, professional office, research & development	50		
	Amphitheater, concert hall, auditorium, meeting hall	45		
	Gymnasium (Multipurpose)	50	·	
	Health clubs	55		
	Manufacturing, warehousing, wholesale, utilities	65		
	Movie theater	45	National Control of Co	
INSTITUTIONAL	Hospital, school classroom	45	65	
	Church, library	45		
OPEN SPACE	Parks		65	

Interpretation:

- 1. Interior environment excludes bathrooms, toilets, closets, and corridors.
- 2. Outdoor environment limited to private yard of single-family or multi-family residences private patio which is accessed by a means of exit from inside the unit; mobile home park; hospital patio; park picnic area; school playground; and hotel and motel recreation area.
- 3. Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided pursuant to Appendix Chapter 12, Section 1208 of UBC.
- 4. Noise level requirement with open windows, if they are used to meet natural ventilation requirement.
- 5. Exterior noise level shall be such that interior noise level will not exceed 45 CNEL.
- Except those areas affected by aircraft noise.
- Multi-family developments with balconies that do not meet the 65 CNEL are required to provide occupancy disclosure notices to all future tenants regarding potential noise impacts.

City of Irvine General Plan F-10

Noise Element

ACOUSTICAL REPORT

INFORMATION SHEET

REFERENCE 9



GENERAL INFORMATION

Acoustical analysis reports for noise impacted projects may be required, according to either the Noise Element of the Irvine General Plan, the zoning regulations, or conditions of project approval. This information sheet will discuss the requirements for acoustical reports, the review process, and guidelines for evaluation of noise reports. If you have any questions after you have read this information, call Community Development Department, Development Assistance Center at (949) 724-6308.

ACOUSTICAL REPORT

In meeting the acoustical analysis requirements for noise impacted areas (outside ambient noise levels of 60 & 65 CNEL or more for aircraft noise impacted areas) in the City of Irvine, two acoustical reports are usually required, a preliminary report and a final report.

- 1. Preliminary Acoustical Reports: In noise impacted areas, a preliminary acoustical analysis is required prior to approvals for either Zone Change, subdivision, Conditional Use Permit or Master Plan, whichever come first. The site plan and/or subdivision map shall show where the 60 and 65 etc. CNEL lines fall within the project. Specific approaches to reducing noise to acceptable levels shall be discussed in this preliminary report. Noise mitigation measures such as berms, walls, or other barriers, setbacks, and project design alternative shall be discussed and evaluated. Sound barriers such as berms and walls shall be specified on the site plan.
- 2. Final Report: Prior to issuance of building permits, a final acoustical report shall be submitted if required by a condition of project approval; noise attenuation, building materials and construction techniques shall be provided. Where appropriate, verify the adequacy of mitigation measures proposed in the preliminary report. For new hotels, motels, apartment houses, and dwellings other than single-family detached, the noise report shall also verify whether the requirements of Title 25 have been met for mitigating noise transmission between attached units.

PROCESSING ACOUSTICAL REPORTS

- 1. Preliminary Acoustical Reports.
 - a) The project applicant shall submit the preliminary acoustical report at the time of submittal of plans for approvals for Zone Change, subdivision, Conditional Use Permit, or Master Plan. The preliminary acoustical report shall meet the minimum requirements as outlined in "Submittal Requirements", on the following page.
 - b) Review of all preliminary acoustical reports will be complete within the time frames established for review and approval of all other environmental documents to be prepared for the development project pursuant to the California Environmental Quality Act (CEQA).
 - c) The approval of the preliminary acoustical report will be made as part of the approval of environmental documents prepared pursuant to CEQA for the project. The environmental documents will specify mitigation measures necessary for the project to meet City standards. Copies of all environmental documents will be incorporated into the development project file and appropriate conditions will be placed in the project resolution of approval.

2. Final Acoustical Reports.

REFERENCE 9

- a) The project applicant shall submit the final acoustical report building permit submittal. The final acoustical report shall meet the minimum requirements as specified in "Submittal Requirements."
- b) Review of all final acoustical reports will be completed within three weeks.

SUBMITTAL REQUIREMENTS

The following items shall be included in an acoustical analysis submitted to the City:

- 1. City Noise Standards
 - a) Exterior noise levels
 - b) Interior noise levels
- 2. Title 25 Standard
 - a) Sound transmission class
 - b) Impact insulation class
- 3. Noise sources
 - a) Highway sources
 - b) Aircraft sources
 - c) Other: specify
 - d) Combined sources
- 4. Noise Level Calculations (both existing and ultimate)
 - a) CNEL
 - b) Lmax^(10 or 30)

NOTE: Show in terms of distance from centerline of the road. Show the CNEL contours for all surface and air noise sources, both individually and combines.

- 5. Assumptions
 - a) Average daily traffic (ADT)
 - b) Traffic speed
 - c) Percent of truck traffic
 - d) Future motor vehicle noise reduction
 - e) Roadway pad elevations
 - f) On-site aircraft noise measurements (sample should include 20-25 overflights, or 35-40 over flights for critical areas).
- 6. Mitigation Measures
 - a) Site and building design orientation
 - b) Grading assumptions identified for noise barriers
 - c) Sound flanking on barriers
 - d) Barrier breaks line of sight (with center line of road)
 - e) Building construction elements identified
 - f) Total noise reduction

7. Optional. Material. The Planning Commission or Director of Community Development may require the submittal of additional supportive materials illustrating the design and development concept proposed for the project will meet City noise attenuation requirements.

INTERIOR AND EXTERIOR NOISE STANDARDS

ENERGY AVERAGE (CNEL)

LAND	ENERGY AVERAGE (CNEL)				
CATEGORIES	<u>USES</u>	<u>INTERIO</u> R ¹	EXTERIO R ²	<u>STC</u>	<u>IIC</u>
RESIDENTIAL	Single Family Multiple Family, Duplex Mobile Home	45 ³ 55 ⁴ 45 ³ 55 ⁴	65 65 65 ⁵	50	50
COMMERCIAL	Hotel, Motel, Transient lodging	45	65 ⁶	50	50
INDUSTRIAL/ INSTITUTIONAL	Commercial Retail, Bank, Restaurant	55			
	Office building, Research development, Professional office City office building	50			
	Amphitheater, Concert Hall, Auditorium meeting hall	45			
	Gymnasium (Multipurpose)	50			
	Sports clubs	55			
	Manufacturing, Warehousing, Wholesale, Utilities	65			
	Movie Theater	45			
INSTITUTIONAL	Hospital, Schools' classroom	45	65		
	Church, Library	45			
OPEN SPACE	Parks		65		

INTERPRETATION

REFERENCE 9

- 1. Indoor environment excluding: Bathrooms, toilets, closets, corridors.
- 2. Outdoor environment including:
- 3. Private Yard of Single Family

Private Patio or Balcony of Multiple Family

Mobile Home Park

Hospital Patio

Park's Picnic Area

Hotel and Motel Recreation Area

Noise level requirement with closed windows. Mechanical ventilating system shall be provided as of Chapter 12, Section 1205 of UBC.

- 3. Noise level requirement with open windows.
- 4. Exterior noise level should be such that interior noise level will not exceed 45 CNEL.
- 5. Except those area affected by aircraft noise.

Single Event Noise Standard

Lmax⁽¹⁰⁾ for

65 dBA 7a.m. - 7p.m.

Less than

55 dBA 7p.m. - 7a.m.

Noise sensitive land uses within the 60 CNEL of Aircraft and Railroad

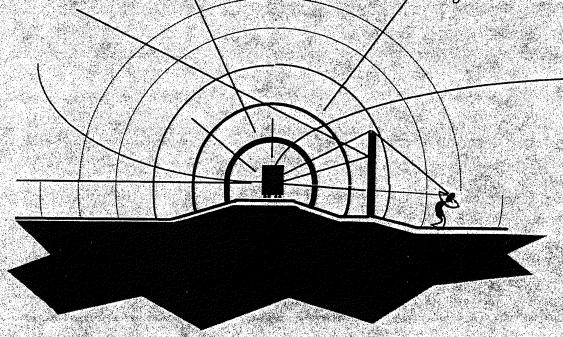
The maximum interior noise levels of the loudest 10% of single noise events (Lmas⁽¹⁰⁾) for typical occupancy for noise sensitive land uses shall not exceed 65 dBA daytime (7a.m. to 7p.m.) and 55 dBA nighttime (7p.m. to 7a.m.).

NOTE: The samples for single event noise measurement must include representative aircraft operation.

Technical Noise Supplement



A Technical Supplement To The Traffic Noise Analysis Protocol



October 1998

California Department of Transportation Environmental Program Environmental Engineering-Noise, Air Quality, and Hazardous Waste Management Office "negative path length difference and "negative Fresnel Number") generally occurs when the direct noise path is within 1.5 m (5 ft) above the top of barrier for the average traffic source and receiver distances encountered in near highway noise environments. The noise attenuation provided by this situation is between 0 - 5 dBA: 5 dBA when the noise path approaches the grazing point and near 0 dBA when it clears the top of barrier by approximately 1.5 m (5 ft) or more.

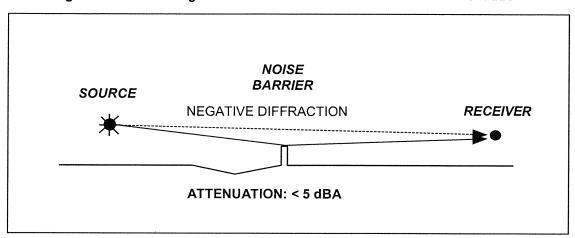


Figure N-2144.6 - "Negative Diffraction" Provides Some Noise Attenuation

The aforementioned principles of barriers loosely apply to terrain features (such as berms, low ridges, as well as other significant manmade features). The principles will be discussed in greater detail in sections N-5500 and N-6000.

N-2200 EFFECTS OF NOISE; NOISE DESCRIPTORS

N-2210 Human Reaction to Sound

People react to sound in a variety of ways. For example, rock music may be pleasant to some people while for others it may be annoying, constitute a health hazard and/or disrupt activities. Human tolerance to noise depends on a variety of acoustical characteristics of the source, as well as environmental characteristics. These factors are briefly discussed below:

1. <u>Level, variability in level (dynamic range), duration, frequency spectrums and time patterns of noise</u>. Exposures to very high noise levels can damage hearing. A high level is more objectionable than a low level noise, and intermittent truck peak noise levels are more objectionable than the continuous level of fan noise. Humans have better hearing sensitivities in the high frequency region than in the low. This is reflected in the A-scale (section N-2136) which de-emphasizes the low frequency

sounds. Studies indicate that the annoyance or disturbance correlates with the Ascale.

- 2. The amount of background noise present before the intruding noise. People tend to compare an intruding noise with the existing background noise. If the new noise is readily identifiable or considerably louder than the background or ambient, it usually becomes objectionable. An aircraft flying over a residential area is an example.
- 3. The nature of the work or living activity that is exposed to the noise source. Highway traffic noise might not be disturbing to workers in a factory or office, but the same noise might be annoying or objectionable to people sleeping at home or studying in a library. An automobile horn at 2:00 a.m. is more disturbing than the same noise in traffic at 5:00 p.m.

N-2211 Human Response to Changes in Noise Levels

Under controlled conditions in an acoustics laboratory, the trained healthy human ear is able to discern changes in sound levels of 1 dBA, when exposed to steady, single frequency ("pure tone") signals in the mid-frequency range. Outside of such controlled conditions, the <u>trained ear</u> can detect changes of 2 dBA in normal environmental noise. It is widely accepted that the <u>average</u> healthy ear, however, can barely perceive noise level changes of 3 dBA.

Earlier, we discussed the concept of "A" - weighting and the reasons for describing noise in terms of dBA. The human response curve of frequencies in the audible range is simply not linear, i.e. humans do not hear all frequencies equally well.

It appears that the human perception of loudness is also not linear, neither in terms of decibels, nor in terms of acoustical energy. We have already seen that there is a mathematical relationship between decibels and relative energy. For instance, if one source produces a noise level of 70 dBA, two of the same sources produce 73 dBA, three will produce about 75 dBA, and ten will produce 80 dBA.

Human perception is complicated by the fact that it has no simple correlation with acoustical energy. Two noise sources do not "sound twice as loud" as one noise source. Based on the opinions of thousands of subjects tested by experts in the field, however, some approximate relationships between changes in acoustical energy and corresponding human reaction have been charted. The results have been summarized in Table N-2211.1, which shows the relationship between changes in acoustical energy, dBA and human perception. The table shows the relationship between changes in dBA (ΔdBA), relative

energy with respect to a reference of a ΔdBA of 0 (no change), and average human perception. The factor change in relative energy relates to the change in acoustic energy.

Figure N-2211.1Relationship Between Noise Level Change, Factor Change in Relative Energy, and Perceived Change

		Perceived Change			
Noise Level Change,	Change in Relative	Perceived Change in Percentage,	Descriptive Change in Perception		
ΔdBA	Energy,	(2 ^{±∆dBA/10} -1) x 100%			
	10 ^{±∆dBA/10}				
+ 40 dBA	10,000 x		Sixteen Times as Loud		
+ 30 dBA	1,000 x		Eight Times as Loud		
+20 dBA	100 x	+ 300 %	Four Times as Loud		
+ 15 dBA	31.6 x	+ 183 %			
+ 10 dBA	10 x	+ 100 %	Twice as Loud		
+ 9 dBA	7.9 x	+ 87 %			
+ 8 dBA	6.3 x	+ 74 %			
+ 7 dBA	5.0 x	+ 62 %			
+ 6 dBA	4.0 x	+ 52 %			
+5 dBA	3.16 x	+ 41 %	Readily Perceptible Increase		
+4 dBA	2.5 x	+ 32 %			
+ 3 dBA	2.0 x	+ 23 %	Barely Perceptible Increase		
O dBA	1	0 %	REFERENCE (No change)		
- 3 dBA	0.5 x	- 19 %	Barely Perceptible Reduction		
- 4 dBA	0.4 x	- 24 %			
- 5 dBA	0.316 x	- 29 %	Readily Perceptible Reduction		
- 6 dBA	.25 x	- 34 %			
- 7 dBA	0.20 x	- 38 %			
- 8 dBA	0.16 x	- 43 %			
- 9 dBA	0.13 x	-46 %			
- 10 dBA	0.10 x	- 50 %	Half as Loud		
- 15dBA	0.0316 x	- 65 %			
- 20 dBA	0.01 x	- 75 %	One Quarter as Loud		
- 30 dBA	0.001 x		One Eighth as Loud		
- 40 dBA	0.0001 x		One Sixteenth as Loud		

Section N-2133 mentioned that the r.m.s. value of the sound pressure ratio squared (P_1/P_2 is proportional to the energy content of sound waves (acoustic energy). Human perception is displayed in two columns (percentage and descriptive). The

	T	$(CNEL = Ldn + \Delta)$
		(CHEE BUILTED)
d	E	Δ
0.80	0.05	0.3
0.79	0.06	0.4
0.78	0.07	0.5
0.77	0.08	0.5
0.76	0.09	0.6
0.75	0.10	0.7
0.74	0.11	0.7
0.73	0.12	0.8
0.72	0.13	0.8
0.71	0.14	0.9
0.70	0.15	0.9

Table N-2231.2 - Ldn/CNEL Corrections (△); must be added to Ldn to obtain CNEL.

The values shown assume a fixed night time fractional traffic contribution of 0.15 (D/N split of .85/.15 for $L_{\rm dn}$). The remaining day time traffic contribution of .85 is further subdivided into day (d) and evening (E) hours. In each instance, d+E = 0.85.

N-2240 Negative Effects on Humans

The most obvious negative effects of noise are physical damage to hearing. Other obvious effects are the interference of noise with certain activities, such as sleeping, conversation, etc. Less obvious, but nevertheless very real, are the stress effects of noise. A brief discussion of each of the topics follows.

N-2241 Hearing Damage.

A person exposed to high noise levels can suffer hearing damage. The damage may be **gradual** or **traumatic**. These are described as follows:

- 1. <u>Gradual.</u> Sustained exposure to moderately high noise levels over a period of time can cause **gradual hearing loss**. It starts out as a temporary hearing loss, such as immediately after a loud rock concert. The hearing usually restores itself within a few hours after exposure, although not quite to its pre-exposure level. This is also called a **temporary threshold shift**. Although the permanent deterioration may be negligible, it will become significant after many repetitions of the exposure. At that time, it is labeled **permanent hearing damage**. The main causes of permanent damage are daily exposure to industrial noise. Transportation noise levels experienced by communities and the general public are normally not high enough to produce hearing damage.
- 2. <u>Traumatic.</u> Short and sudden exposure to an extremely high noise level, such as a gun shot or explosion at very close range can cause a traumatic hearing loss. Such a loss is very sudden and can be permanent.

Hearing damage is preventable by reducing the exposure to loud noise. This can be done by quieting the source, shield the receiver by a barrier, or having the receiver wear proper ear protection. Occupational exposure to noise is controlled by the Occupational Safety and Health Agency (OSHA), and is based on a maximum allowable noise exposure level of 90 dBA for 8 hours. For each halving of the exposure time, the maximum noise level is allowed to increase 5 dBA. Thus, the maximum allowable noise exposure (100 %) is 90 dBA for 8 hours, 95 dBA for 4 hours, 100 dBA for 2 hours, 105 dBA for 1 hour, 110 dBA for 30 minutes, and 115 dBA for 15 minutes. Dosimeters, worn by workers in noisy environments, can measure noise during the workday in percentages of the maximum daily exposure.

N-2242 Interference with Activities.

Activities most affected by noise include rest, relaxation, recreation, study and communications. Although most interruptions by noise can be considered annoying, some may be considered dangerous. An example would be the inability to hear warning signals or verbal warnings in noisy industrial situations, or in situations involving workers next to a noisy freeway. Figure N-2242.1 gives an estimate of the speech communication that is possible at various noise levels and distances.

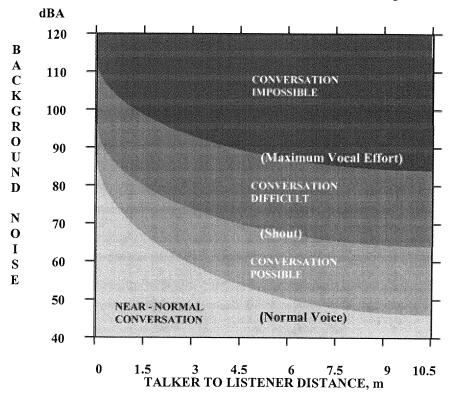


Figure N-2242.1 - Interference of Conversation due to Background Noise

For instance, if the talker to listener distance is 6 m, normal conversation can be conducted with the background level at about 50 dBA. If the background level is increased to 60 dBA, the talker must either raise his/her voice, or decrease the distance to the listener to 3 m.

N-2243 Stress Related Diseases

There is ample evidence that noise can cause stress in humans, and thus may be responsible for a host of stress-related diseases, such as hypertension, anxiety, heart disease, etc. Although noise is probably not the sole culprit in these diseases, it can be a contributor. The degree of how much noise contributes to stress related diseases, depends on noise frequencies, their band widths, noise levels, and time patterns. In general, higher frequency, pure tone, and fluctuating noise tend to be more stressful than lower frequency, broad band, and constant-level noise.

NOISE REPORTS

Introduction. The following report guidelines are to be used in conjunction with noise studies and preparation of noise reports for the City of Irvine. Two types of noise reports may be required: Preliminary and Final. The Preliminary Noise Report is intended to provide the City with environmental impact report information and proposed mitigation measures or alternatives needed to maintain noise within established standards. It is prepared for noise sensitive projects at the tentative map stage of project review, with updated or supplemental analysis provided at the time of conditional use permit review.

The Final Noise Report is intended to ensure that mitigation measures have been incorporated into the project planning and design to meet all applicable noise standards. The Final Noise Report is required based upon the findings of the Preliminary Report and is to be submitted in conjunction with the application for building permits.

The following outlines the contents of each of these reports.

Preliminary Noise Reports

<u>Project Description.</u> Provide a brief description of the project. Identify and discuss the introduction of noise sensitive receptors to the area or the development of new noise sources.

Noise Standards. Summarize Federal, State, and local noise standards applicable to the project and its environs. On a local basis this includes the City's Noise Element, Noise Ordinance and Noise Notification Requirements (City Council Resolution 1090). Include both exterior and interior standards and explain under what conditions they are applicable (i.e., windows open/closed, at edge of property line, etc.).

Existing Noise Environment. Provide a quantitative description of the noise environment through modeling and sampling of existing noise levels. Depict calculated noise contours on a land use or development plan using CNEL contours at intervals of 5 dba down to 60 CNEL The sound and temporal characteristics of each noise source shall be discussed. Calculate and discuss existing L_{max} 10 for areas inside 60 CNEL aircraft noise contours. Discuss existing land uses in the area, and compare existing noise levels to the appropriate standards to identify any uses currently subject to noise levels near or above the standards.

Impact Analysis. Calculate future noise levels for a project completion time frame and ultimate condition. Provide a table showing exterior noise levels (distance to 65 CNEL contour) under the following conditions: existing noise levels, increases in noise attributable to the project, and ultimate levels expected. Depict ultimate noise contours in CNEL on the proposed land use or development plan in intervals of 5 down to 60 CNEL 3 . Calculate and discuss the $L_{\mbox{max}} 10$.

^{1.} See following section on Noise Modeling and Measurement.

^{2.} Consult with Environmental Services staff for the area to be included in the analysis.

^{3.} Existing barriers and other specific attenuation measures planned as part of the project should be taken into account.

Discuss the increase in exterior and interior noise levels and compare these levels to applicable Federal, State and local standards. Identify any areas or uses expected to exceed these standards. For areas in excess of standards, discuss the anticipated effects of the noise (speech interference, sleep disturbance, etc.).

Mitigation Measures. Where impacts have been identified, discuss how noise levels can be mitigated, suggesting specific techniques and designs (including barrier height, location and materials) for mitigation. If several alternative mitigation techniques are available, discuss their relative effectiveness and feasibility.

Unavoidable Effects. Identify any noise levels in excess of standards which cannot be feasibly mitigated.

Appendix. List all references. Include all assumptions. Identify the model used and input data. Provide all supporting sampling data and a map of sampling locations.

Final Noise Reports

Project Description. Provide a brief description of the project.

Noise Standards. Summarize Federal, State, and local noise standards applicable to the project.

Ultimate Noise Levels. Calculate ultimate exterior noise levels from all sources. These levels should be consistent with the levels contained in the Preliminary Noise Report, unless assumptions have changed. If so, explain what assumptions have changed and why. Include a site plan with CNEL contours clearly shown.

Attentuation Measures Needed to Meet Standards. If applicable, discuss and depict specific attentuation measures to reduce exterior noise to established standards. If barriers are recommended, show the location on the site plan, if available, and provide a typical dimensional cross-section. Calculate the sound level assuming the barrier. Specify the following information you used in your calculations: Source height, road elevation at centerline, distance from centerline to barrier, elevation at base of barrier, distance from centerline to observer, building pad elevation, observer height.

Calculate the interior noise levels and attenuation, if any, needed to meet established standards. Provide the following information: Building square footage, sound transmission loss co-efficient, or EWNR values, and total noise reduction achieved.

Appendix. Show your calculations in the appendix.

NOISE MODELING AND MEASUREMENT GUIDELINES

Noise Modeling

The following guidelines are to be used in modeling noise levels for use in City Noise Reports.

Roadway Noise: Use the following model type and input data for roadway noise:

PARAMETER	FREEWAYS	HIGHWAYS
Model Type	FHWA Highway Noise Prediction Model	Irvine Modified FHWA Highway Noise Prediction Model
Traffic Characteristics	CalTrans-LARTS	Transportation Services Staff
Site Surface	Soft	Soft

NOTE: Make adjustment for possible future reductions in vehicle noise levels in accordance with the Noise Element (1.9 dBA reduction.)

Railroad Noise: Wyle Laboratories Model, "Assessment of Noise Environments Around Railroad Operations."

Aircraft Noise: Indicate the model or base report used and any assumptions made.

Noise Measurement

Noise measurements are required in association with Preliminary Noise Reports, unless specifically waived by Environmental Services staff based upon the project proposal and the known noise environment. The following guidelines are to be used in completing these measurements.

Equipment. All measurements should be accomplished with acceptable, calibrated equipment (i.e., ANSI Standards type 1 or 2). Identify the type of equipment used in the report's appendix.

Measurement Locations. Measurement locations shall be reviewed and approved by the Environmental Services staff. In general, avoid newly paved surfaces, and other reflective ground surfaces, where possible. Measurement locations should be situated at least 50 feet from the near travel land and avoid any existing shielding or reflective surfaces. The rationale for selecting the measurement locations, and a map depicting these locations is to be provided in the report's appendix.

Measurement Periods. For 24-hour measurements each of the 24 one hour Leq values should be determined. Periods for short term Leq measurements should be at least 15 minutes. Measurement periods for point sources should be based upon typical facility operations, and worst case examples.

<u>Traffic Parameters.</u> Vehicles should be counted by type during the entire measurement period. Speed should be measured for a representative sample of vehicles.

Aircraft Noise. Measurement of aircraft noise for $L_{\mbox{max}}$ 10 calculations should include a minimum of 60 flyovers. These should be representative of the aircraft type and typical operational conditions expected.

Noise Barriers

- o Design the barrier for combined noise sources, i.e., aircraft, railroad and highway.
- o Compute required attenuation separately for each type of vehicle, i.e., automobile, medium truck and heavy truck.
- o Assume the following observer/yard relationship:

	Observer Distance		
Yard Depth (ft)	from Yard Edge (ft)		
0-25	. 5		
greater than 25	0		

- o For railroad noise, assume a source height of 10 feet for locomotives
- o For yards with building pads 5 feet or greater below grade, an observer location near the buildings exterior wall must also be calculated.
- o Use 5 foot observer height for ground floor observer, and 15 foot for second floor observer (modify as appropriate for varying road to pad grades).

INFORMATION ON LEVELS OF ENVIRONMENTAL NOISE REQUISITE TO PROTECT PUBLIC HEALTH AND WELFARE WITH AN ADEQUATE MARGIN OF SAFETY

MARCH 1974

PREPARED BY

THE U.S. ENVIRONMENTAL PROTECTION AGENCY OFFICE OF NOISE ABATEMENT AND CONTROL

This document has been approved for general availability. It does not constitute a standard, specification, or regulation.

TABLE 3

SUMMARY OF HUMAN EFFECTS IN TERMS OF SPEECH COMMUNICATION, COMMUNITY REACTION, COMPLAINTS, AMNOYAMOS AND ATTITUDE TOWARDS AREA ASSOCIATED WITH AN OUTDOOR DAY/NICHT SOUND LEVEL OF 55 d3 re 20 MICROPASCALS

Type of Effect	Hagnitude of Effect
Speech - Indoors	100% sentence intelligibility (average) with a 5 dB margin of safety
- Outdoors	100% sentence intelligibility (average) at 0.35 meters
. •	99% sentence intelligibility (average) at 1.0 meters
•	95% sentence intelligibility (average) at 3.5 meters
Average Community Reaction	None evident; 7dB below level of significant "complaints and threats of legal action" and at least 16 dB below "vigorous action" (attitudes and other non-level related factors may affect this result)
Complaints	1% dependent on attitude and other non- level related factors
Annoyance	17% dependent on attitude and other non- level related factors
Attitudes Towards Area	Noise essentially the least important of various factors

(REF: Derived from Appendix D)

STATE OF CALIFORNIA

General Plan Guidelines



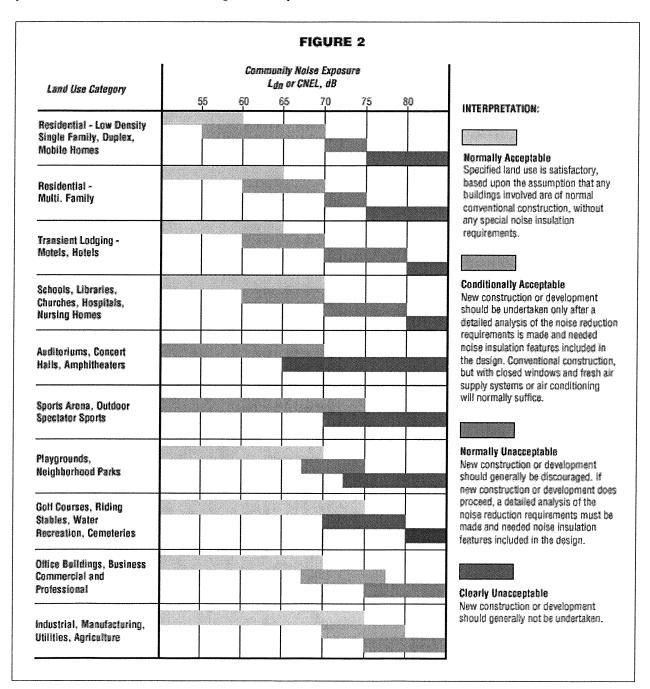
GOVERNOR'S OFFICE OF PLANNING AND RESEARCH

and 38275 of the California Vehicle Code, as well as excessive speed laws, may be applied to curtail this problem. Both the Highway Patrol and the Department of Health Services (through local health departments) are available to aid local authorities in code enforcement and training pursuant to proper vehicle sound-level measurements.

Step 17:

Commercial and public airports operating under a permit from Caltrans' Aeronautics Program are required

to comply with both state aeronautics standards governing aircraft noise and all applicable legislation governing the formation and activities of a local Airport Land Use Commission (ALUC). The function of the ALUC is, among other things, to develop a plan for noise-compatible land use in the immediate proximity of the airport. The local general plan must be reviewed for compatibility with this Airport Land Use Plan and amended if necessary (Public Utilities Code §21676). Therefore, the developers of the noise element will need to coordinate their activities with the local ALUC to



Type of Correction	Table 1 Description	Amount of Correction to be Added to Measured CNEL in dB	
Seasonal Correction	Summer (or year-round operation)	(
	Winter only (or windows always closed)	- (
Correction for Outdoor Residual Noise Level	Quiet suburban or rural community (remote from large cities and from industrial activity and trucking).	+ 10	
	Quiet suburban or rural community (not located near industrial activity).	+ 5	
	Urban residential community (not immediately adjacent to heavily traveled roads and industrial areas).	O	
	Noisy urban residential community (near relatively busy roads or industrial areas.	* £	
	Very noisy urban residential community.	- 10	
Correction for Previous Exposure and Community Attitudes	No prior experience with the intruding noise.	+ 5	
	Community has had some previous exposure to intruding but little effort is being made to control the noise. This correction may also be applied in a situation where the community has not been exposed to the noise previously, but the people are aware that bona fide efforts are being made to control the noise.	0	
	Community has had considerable previous exposure to the intruding noise and the noise maker's relations with the community are good.	* 5	
	Community aware that operation causing noise is very necessary and it will not continue indefinitely. This correction can be applied for an operation of limited duration and under emergency circumstances.	- 10	
Pure Tone or Impulse	No pure tone or impulsive character.	0	
	Pure Tone or impulsive character present.	+ 5	

ensure that compatible standards are utilized throughout the community and that the noise element develops as part of a coherent master plan, of which the ALUP forms an integral component.

Step 18:

"The adopted noise element shall serve as a guideline for compliance with the State's noise insulation standards." (§65302(f)) Recognizing the need to provide acceptable habitation environments, state law requires noise insulation of new multifamily dwellings constructed within the 60 dB (CNEL or Ldn) noise exposure contours. It is a function of the noise element to provide noise contour information around all major sources in support of the sound transmission control standards (Appendix, Chapter 2-35, Part 2, Title 24, California Code of Regulations).

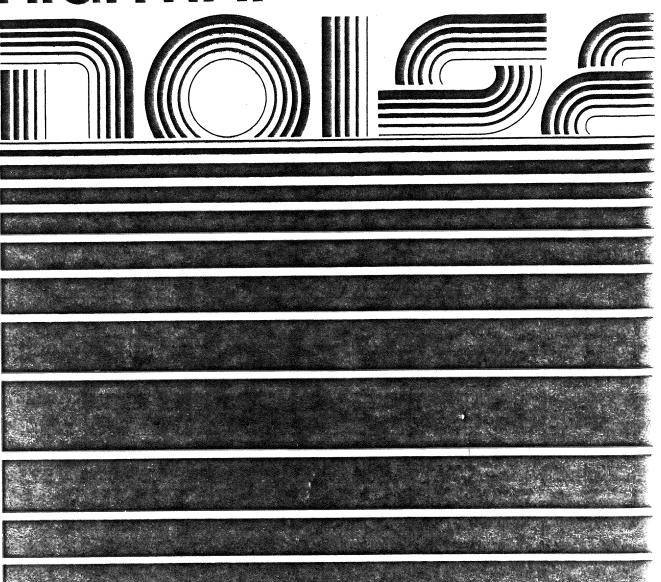






FHWA-RD-77-108
FHWA HIGHWAY TRAFFIC NOISE
PREDICTION MODEL

HIGHWAY





U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION:

TECHNICAL REPORTS FRENCE 14 LE PAGE

T. M. Barry and J. A. Reagan 9. Performing Organization Name and Address Federal Highway Administration Office of Research, Office of Environmental Policy Washington, D.C. 20590 12. Sponsoring Agency Name and Address U.S. Department of Transportation Federal Highway Administration Office of Research, Office of Environmental Policy 13. Type of Report and Period Covered Final Report June 1977-December 1978 14. Sponsoring Agency Code	1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.	
FHWA HIGHWAY TRAFFIC NOISE PREDICTION MODEL December 1978 6. Performing Organization Code 33F4602 7. Author(s) T. M. Barry and J. A. Reagan 9. Performing Organization Name and Address Federal Highway Administration Office of Research, Office of Environmental Policy Washington, D.C. 20590 12. Sponsoring Agency Name and Address U.S. Department of Transportation Federal Highway Administration Office of Research, Office of Environmental Policy U.S. Department of Transportation Federal Highway Administration Office of Research, Office of Environmental Policy 14. Sponsoring Agency Code	FHWA-RD-77-108			
7. Author(s) 7. M. Barry and J. A. Reagan 9. Performing Organization Name and Address Federal Highway Administration Office of Research, Office of Environmental Policy Washington, D.C. 20590 12. Sponsoring Agency Name and Address U.S. Department of Transportation Federal Highway Administration Office of Research, Office of Environmental Policy U.S. Department of Transportation Federal Highway Administration Office of Research, Office of Environmental Policy 14. Sponsoring Agency Code	4. Title and Subtitle		5. Report Date	
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Office of Research, Office of Environmental Policy	Federal Highway Administration			
Washington D.C. 2000	Office of Research, Office of Environmental Policy		14. Sponsoring Agency Code	
	Washington, D.C. 20590			

16. Abstract

This report presents the FHWA method for predicting noise generated by constant speed highway traffic. The report is intended to be a users' manual as well as a reference document detailing the development, use, and limitations of the prediction method. In the main body of the report, the prediction procedure is presented in a step-by-step fashion and includes numerous example problems designed to highlight important concepts and features. For those interested in the theoretical development of the model, an extremely detailed derivation is presented in the appendices. The basis of the model is the equivalent sound level, Leq, although an adjustment for conversion to L10 is provided. The method incorporates three classes of vehicles—automobiles, medium trucks, and heavy trucks. Adjustments for absorptive ground covers and finite length barriers are also included. Certain special topics such as nonuniform highway sites and determination of equivalent day-night levels, Ldn, are also included.

17. Key Words Traffic Noise, Traffic Noise Prediction, Traffic Noise Abatement		18. Distribution Statement This document is available to the Public through: National Technical Information Service, Springfield, Virginia 22161			
19. Security Classif. (of this report) Unclassified	20. Security Class Unclassifi	•	21. No. of Pages 272	22. Price	

COUNTY OF ORANGE



LAND USE/NOISE COMPATIBILITY MANUAL

ADOPTED: SEPTEMBER 18, 1984

AMENDMENT 93-1: DECEMBER 14, 1993 BOARD OF SUPERVISORS RESOLUTION NO. 93-1391

Technical Issues

(1) Traffic Noise Level Predications

Although the same FHWA-RD-77-108 methodology generally applies, CALTRANS will use the calculated equivalent levels (Leq in dBA) of traffic noise at an assumed maximum hourly flow rate and may choose to rely on base-readings from 50-ft to the centerline of the nearest traffic lane. CALTRANS' allowable standard of 67 dBA for out-door living area may and may not exceed County's CNEL of 65-dBA based on a modified approach. (see p B-1 of this Manual)

(2) Receiver Height

This height is generally placed at 5-feet above ground level for all observers.

(3) Height of Noise Source

County prefers the slightly more conservative approach in placing the heights of equivalent noise sources of motor vehicles as follows (for slightly higher requirement in barrier heights);

Passenger vehicles $\underline{2}$ – feet above ground Medium trucks, including busses and up to 3-axles $\underline{4}$ – feet above ground All Heavy-duty truck $\underline{8}$ – feet above ground

(4) Line of Sight requirement of CALTRANS

County allows the inclusion of this condition in its requirement and stipulates further that the right-hand exhaust stack should be considered 3-feet closer to an observer than the vehicle which is assumed to be at the centerline of the nearest lane. The height of the exhaust stack will be 11.5 feet with the observer in his outdoor living area at 5-ft above ground level.

NOTE: Projects located near or adjacent to proposed transportation corridors freeways have notification procedures similar to those required for airport noise. A notice concerning possible impacts of the proposed Transportation Corridor (illustrated in Exhibit V-7) must be recorded for the project prior to recordation of the project. Another notification procedure is a Statement of Acknowledgment which is signed by home buyers, renters and lessees, acknowledging the presence of the proposed corridor. Exhibit V-8 illustrates the document. The process for execution/recordation of both documents is identical to aircraft noise notification procedures, fully described in Section VI of this manual.