

---

# 6

## Alternatives To The Proposed Project

### 6.1 Introduction

#### 6.1.1 PURPOSE AND SCOPE

The California Environmental Quality Act (CEQA) requires that an EIR include a discussion of reasonable project alternatives that would “feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives” (CEQA Guidelines Section 15126.6). This chapter identifies potential alternatives to the proposed project and evaluates them, as required by CEQA.

Key provisions of the CEQA Guidelines on alternatives (Section 15126.6(a) through (f)) are summarized below to explain the foundation and legal requirements for the alternatives analysis in the EIR.

- *The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly” (15126.6(b)).*
- *“The specific alternative of ‘no project’ shall also be evaluated along with its impact” 15126.6(e)(1). “The no project analysis shall discuss the existing conditions at the time the Notice of Preparation is published, and at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives” (15126.6(e)(2)).*
- *“The range of alternatives required in an EIR is governed by a ‘rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project” (15126.6(f)).*

- 
- *“Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)” (15126.6(f)(1)).*
  - *For alternative locations, “only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR” (15126.6(f)(2)(A)).*
  - *“An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative” (15126.6(f)(3)).*

For each development alternative, this analysis:

- Describes the alternative.
- Analyzes the impact of the alternative as compared to the proposed project.
- Identifies the impacts of the project which would be avoided or lessened by the alternative.
- Assesses whether the alternative would meet most of the basic project objectives.
- Evaluates the comparative merits of the alternative and the project.

Per the CEQA Guidelines Section 15126.6(d), additional significant effects of the alternatives are discussed in less detail than the significant effects of the project as proposed.

### **6.1.2 PROJECT OBJECTIVES**

As described in Section 2.2, the following objectives have been established for the proposed project and will aid decision makers in their review of the project, the project alternatives, and associated environmental impacts:

- Provide for comprehensive planning of lands within the City’s Northern Sphere of Influence through a General Plan Amendment (48403-GA) and Zone Change (48405-ZC) to:
  - allow for transfer and development of residential dwelling units assumed in the City of Irvine’s General Plan to help meet its housing objectives; allow for the development of Multi-Use, Community Commercial, Commercial Recreation, Research and Industrial, and Institutional uses, as an extension and continuation of

- 
- the Irvine Spectrum contributing housing and job opportunities near activity centers and transportation facilities;
- amend the Circulation Element to achieve consistency with the County’s Master Plan of Arterial Highways (MPAH);
  - concentrate jobs in the Irvine Spectrum employment center near regional transportation systems and enhance the Irvine Spectrum transportation demand reduction program (Spectrumotion) by placing housing and jobs near major activity centers and transportation facilities;
  - allow for the annexation of portions of Planning Areas 5 and 8, and all of Planning Areas, 3, 6, and 9 to extend the City’s jurisdiction within its established Sphere of Influence in accordance with established LAFCO policies; and
  - maintain internal consistency of the City’s General Plan.
- Provide for future annexation of the Project Area through establishment of a development plan satisfactory to the landowner and the City relative to rules and regulations governing development.
  - Provide for a wide range of housing opportunities in close proximity to existing and future employment centers, consistent with the City's Housing Element and local and regional jobs/housing balance policies, while assuring no net increase in the number of residential units allowed within the City in accordance with the currently adopted General Plan.
  - Provide for continued implementation of the Phased Dedication and Compensating Development Opportunities Program through dedication of open space areas as development is implemented in designated Planning Areas;
  - Provide for implementation of Policy (k) of Objective L-10 of the City’s General Plan Open Space and Conservation Element to resolve phased dedication and development opportunities issues for those lands in the Northern Sphere Area currently in agricultural use;
  - Provide for a fiscally sound land use plan maintaining a mix of employment, retail, and housing opportunities that will continue to support the provision of municipal services throughout the City.
  - Provide land uses that are in harmony with and can accommodate future redevelopment plans for the El Toro MCAS;
  - Allow for the reasonable use of lands within the Northern Sphere reflecting current and projected market demands considering adjacent existing and planned development.

- 
- Provide additional recreational opportunities through the provision of neighborhood and community park sites and dedication of the Jeffrey Open Space Spine as a connector to the regional open space system.
  - Take actions consistent with the Implementation Agreement for the Central/Coastal Orange County Natural Communities Conservation Program/Habitat Conservation Plan (NCCP/HCP) approved by the United States Fish and Wildlife Service (USFWS) on July 17, 1996 (NCCP/HCP Implementation Agreement). Transfer approximately 1,600 acres of additional open space lands to City ownership, as identified in the NCCP Facilitation Agreement. Due to potential impacts on Federally listed species, implementation of the NCCP/HCP is necessary to allow the development of the proposed project in a manner consistent with the requirements of the Federal Endangered Species Act.

## **6.2 Alternatives Considered and Rejected During the Scoping/Project Planning Process**

The following is a discussion of the development alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this EIR. The feasibility of developing the project on an alternative site was the only alternative reviewed and rejected during the scoping/project planning process. The main reason for rejecting an alternative site analysis was that developing the project on an alternative site is not consistent with the project's main objectives. Please refer to the following section for greater analysis.

### **6.2.1 ALTERNATIVE SITES**

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR. (Guidelines Sec. 15126(5)(B)(1)) In general, any development of the size and type proposed by the project would have substantially the same impacts on air quality, land use/planning, noise, population/housing, public services, recreation, transportation/traffic and utilities/service systems. Without a site specific analysis, impacts on aesthetics, biological resources, cultural resources, geology/soils, hazards and hazardous materials, hydrology/water quality and mineral resources cannot be evaluated. An alternative site could lessen or avoid agricultural resources impacts.

Where a previous document has sufficiently analyzed a range of reasonable alternative locations and environmental impacts for projects with the same basic purpose, the lead agency should review the previous document. The EIR may rely on the previous document to help it assess the feasibility of

---

potential project alternatives to the extent the circumstances remain substantially the same as they relate to the alternative. (Guidelines Sec. 15126(5)(B)(3))

At the General Municipal Election of June 7, 1988, the voters of the City of Irvine enacted the Open Space Initiative. The intent of the Open Space Initiative and subsequent General Plan Amendment 16 (GPA 16) was to preserve important conservation and open space resources through a program that consolidates large, contiguous open space areas under public ownership by permitting development to occur in other areas of the City deemed to be of lesser open space value, rather than by pursuing stringent, localized, isolated open space preservation policies. The alternatives analysis in the EIR for GPA 16 addresses various alternatives for rearranging land use designations with the goal of gaining permanent open space in exchange for development in other areas. The complete discussion of these alternatives starting at Page 337 of the FEIR 82-GA-0016 is hereby incorporated by reference, as if set forth in full (the "Alternative Site Analysis").

The Open Space Initiative and subsequent GPA 16 preserve important conservation and open space resources through a program that consolidates large, contiguous open space areas under public ownership by permitting development to occur in other areas of the City deemed to be of lesser open space value. As a result, the only remaining alternative sites within the jurisdiction of the City not currently planned for development consist of existing or future open space preservation areas (i.e., Implementation Districts) which the Alternative Site Analysis determined were most appropriate for preservation. Development of these preservation areas would result in significantly greater environmental impacts than the proposed project and would therefore not meet the CEQA criteria for an alternatives analysis. In addition, most of the land within the Implementation Districts are also subject to the Natural Communities Conservation Plan for the Central/Coastal Subregion and are not otherwise available for development.

As the California Supreme Court indicated in its decisions in *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal. 3d 553 (1990):

*The general plan has been aptly described as the "constitution for all future developments" within the city or county... "The propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements."... To be sure, the general plan is not immutable, far from it. But it may not be trifled with lightly, as the limitation on the number of amendments to the general plan in any calendar year attests." (Goleta, at 570-571)*

*... in some circumstances, an EIR may consider alternatives requiring a site-specific amendment of the general plan. However, an EIR is not ordinarily an occasion for the reconsideration or overhaul of fundamental land use policy. (Goleta, at 573)*

Consistent with the Supreme Court's interpretation of the role of the General Plan in framing CEQA alternatives analysis, and in consideration of the Open Space Initiative and subsequent GPA 16, and

---

the NCCP/HCP for the Central/Coastal Subregion, no alternative sites within the jurisdiction of the City are considered to be feasible alternatives to the proposed project.

The landowner of the proposed project does not own any land outside of the City of Irvine or the City's sphere of influence which would accommodate the proposed project. Nor is there any land outside of the City's jurisdiction which could be feasibly acquired by the landowner and which would accommodate the proposed project. CEQA does not require the consideration of sites not owned by the landowner or which could not be reasonably acquired by the landowner as alternatives to the proposed project. (Guidelines Sec. 15126.6(f)(1).)

### **6.3 Alternatives Selected for Further Analysis**

Based on the criteria listed above, the following six alternatives have been determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the project but which may avoid or substantially lessen any of the significant effects of the project. These alternatives are analyzed in detail in Section 6.6 below:

1. No-Project/No Development Alternative
2. No-Project/Existing General Plan Alternative
3. No Industrial/Increased Residential Alternative
4. Reduced Density Alternative
5. Increased Residential Intensity Alternative
6. Reduced Density and Development Area Alternative

Table 6-1 provides a summary of the relative impacts and feasibility of each alternative. A complete discussion of each alternative, including those rejected, is provided below.

**Table 6-1  
Summary of Development Alternatives**

Alternative	Description	Basis for Selection and Summary of Analysis
Proposed Project	<ul style="list-style-type: none"> <li>- 12,350 dwelling units</li> <li>- 575,000 s.f. of Multi-Use Development</li> <li>- 175,000 s.f. of Community Commercial uses</li> <li>- 6,566,000 s.f. of Medical and Science uses</li> <li>- 13 acres of Institutional Uses</li> <li>- 51 acres of Commercial Recreation</li> <li>- 4,615-acre Preservation area</li> <li>- Community and Neighborhood Parks</li> <li>- a minimum of 4 elementary/middle schools</li> </ul>	
<i>Alternatives Analyzed in Detail in this EIR</i>		
1. No Project/No Development Alternative	<ul style="list-style-type: none"> <li>- Existing City of Irvine and County of Orange zoning would remain</li> <li>- Agricultural uses would remain as long as market forces support such use</li> </ul>	Required by CEQA; eliminates most environmental impacts associated with the project; does not meet project objectives.
2. No Project/Existing General Plan Alternative	<ul style="list-style-type: none"> <li>- Existing City of Irvine and County of Orange zoning would remain</li> <li>- Maximum of 7,650 dwelling units in Planning Area 6 per County General Plan</li> <li>- Agricultural uses would remain on other areas as long as market forces support such use</li> </ul>	Avoids need for General Plan Amendment, Zone Change, and Annexation; lessens some project impacts, but does not avoid significant environmental impacts; may meet some project objectives.
3. No Industrial/Increased Residential Alternative	<ul style="list-style-type: none"> <li>- 15,500 dwelling units</li> <li>- 575,000 s.f. of Multi-Use Development</li> <li>- 175,000 s.f. of Community Commercial uses</li> <li>- 51 acres of Commercial Recreation</li> <li>- 4,615-acre Preservation area</li> <li>- Community and Neighborhood Parks</li> <li>- a minimum of 4 elementary/middle schools</li> </ul>	Increases housing opportunities within a job-rich area; lessens some project impacts, but does not avoid significant environmental impacts; may meet some project objectives.
4. Reduced Density Alternative	<ul style="list-style-type: none"> <li>- 8,645 dwelling units</li> <li>- 402,500 s.f. of Multi-Use Development</li> <li>- 122,500 s.f. of Community Commercial uses</li> <li>- 4,596,200 s.f. of Medical and Science uses</li> <li>- 13 acres of Institutional Uses</li> <li>- 51 acres of Commercial Recreation</li> <li>- 4,615-acre Preservation area</li> <li>- Community and Neighborhood Parks</li> <li>- Commensurate reduction in number of elementary/middle schools</li> </ul>	May lessen some impacts, but does not avoid significant environmental impacts; may meet some project objectives.

**Table 6-1  
Summary of Development Alternatives**

<b>Alternative</b>	<b>Description</b>	<b>Basis for Selection and Summary of Analysis</b>
5. Increased Residential Intensity Alternative	<ul style="list-style-type: none"> <li>- 15,500 dwelling units</li> <li>- 575,000 s.f. of Multi-Use Development</li> <li>- 175,000 s.f. of Community Commercial uses</li> <li>- 6,566,000 s.f. of Medical and Science uses</li> <li>- 13 acres of Institutional Uses</li> <li>- 51 acres of Commercial Recreation</li> <li>- 4,615-acre Preservation area</li> <li>- Community and Neighborhood Parks</li> <li>- a minimum of 4 elementary/middle schools</li> </ul>	Increases housing opportunities within a job-rich area; may increase some impacts of the project; does meet project objectives.
6. Reduced Density and Development Area Alternative	<ul style="list-style-type: none"> <li>- 11,031 dwelling units</li> <li>- 225,000 s.f. of Multi-Use Development</li> <li>- 175,000 s.f. of Community Commercial uses</li> <li>- 4,000,000 s.f. of Medical and Science uses</li> <li>- 13 acres of Institutional Uses</li> <li>- 51 acres of Commercial Recreation</li> <li>- 376 acres of Agricultural Uses</li> <li>- 3,867-acre Preservation area</li> <li>- Community and Neighborhood Parks</li> <li>- Commensurate reduction in number of elementary/middle schools</li> </ul>	Reduces impacts to Significant Farmland; may lessen some project impacts; may meet some project objectives.



---

### **6.3.1 NO-PROJECT/NO DEVELOPMENT ALTERNATIVE**

The No-Project/No Development Alternative, as required by CEQA, assumes that the existing zoning designations for the project site would remain unchanged. The current City of Irvine zoning for the Northern Sphere Area is 1.1 Exclusive Agriculture, 1.2 Development Reserve, 1.3 Conservation Open Space Reserve, and 1.7 Landfill Overlay. Therefore, development cannot occur in the Northern Sphere Area without a zone change, with the exception of permitted and conditional uses identified in the City of Irvine Zoning Code. Agriculture is one such use. As a result, this alternative assumes all existing uses within the Northern Sphere Area would remain in their current location and no additional development would occur. However, development of 12,350 residential units that are being transferred to the Northern Sphere Area could still be developed elsewhere in the City. The impacts of the No-Project/No Development Alternative as compared to the proposed project are discussed below:

#### **Aesthetics**

Under this alternative, the general appearance of the project site would not change and the existing landform would not be altered except as different crops are planted within the agricultural fields. In addition, implementation of the No-Project/No Development Alternative would eliminate the need for grading associated with the proposed project. However, this alternative would also not include the dedication of approximately 1,600 acres of biologically sensitive habitat included within the Implementation Districts “P,” “Q,” and “R” in accordance with the Phased Dedication and Compensating Development Opportunities Program and the Protocol Agreement.

#### **Agricultural Resources**

Under this alternative, agricultural lands would not be replaced by urban uses. The 3,602 acres of Significant Farmland within the Northern Sphere Area and Implementation District “P” would potentially remain in agricultural production. There is no assurance, however, that long term, large scale agricultural operations would continue on any of these lands due to the constraints on continued agricultural operations described in Section 4.2.

#### **Air Quality**

The air pollutant emissions generated by the project-related traffic would not increase under this alternative. This alternative would eliminate the projected exceedance of SCAQMD Threshold Criteria for project generated CO, ROG, NO<sub>x</sub>, and PM10 emissions. Therefore, the No-Project/No Development Alternative would avoid the significant unavoidable adverse air quality impacts associated with the proposed project, and is considered environmentally superior. However, the No-Project/No Development Alternative would not contribute to improving the projected 2010 jobs/housing imbalance in the Southeast Orange County Subregion, which is not consistent with the AQMP.

---

## **Biological Resources**

The No-Project/No Development Alternative would maintain the project site in its current state. The 175.9 acres of coastal sage scrub habitat in the development area would not be developed (total coastal sage scrub for the project is approximately 4,002.4 acres). The project site would also remain in agricultural use potentially impacting biological resources. In addition, this alternative would not include the dedication of over 1,600 acres of biologically sensitive habitat included within the Implementation Districts “P,” “Q” and “R” within Planning Areas 2 and 6, which will provide long-term preservation of the southwestern willow flycatcher and least Bell’s vireo and other sensitive species. Even though no development would occur, this alternative proposes to retain agricultural uses in their current configuration, therefore, additional biological impacts could occur as a result of existing agricultural operations. Therefore, the no-project alternative does not substantially lessen biological resource impacts as compared to the proposed project.

## **Cultural Resources**

Under this alternative potential impacts on cultural and paleontological resources on the site would not occur due to the elimination of grading activities. It should be noted, however that although approximately 3,602 acres of Significant Farmland would not be developed for urban uses under this alternative, these areas would still be actively farmed at least in the near term. Depending upon the extent of ground disturbance required to prepare and plant the fields and the depth of subsurface resources, continued farming operations could impact as yet unidentified subsurface resources.

## **Geology/Soils**

Since the No-Project/No Development Alternative would maintain the project site in its current state, potential geological impacts would be avoided, and mitigation measures would not have to be implemented. As a result, the “No-Project” Alternative would have less geologic impacts than the p r o p o s e d p r o j e c t .

## **Hazards & Hazardous Materials**

Based upon the Property Transfer Disclosure Reports prepared for the project site, no hazardous substances or petroleum products have been discovered at the site or in the surrounding vicinity that would present a material risk to human health or the environment at the site. However, there is the potential for localized soil contamination in the areas where agriculture, fuels, equipment maintenance chemicals and waste are currently being stored on the site, which would continue under the No-Project/No Development Alternative. Therefore, the No-Project/No Development Alternative would not result in a reduction in potential impacts associated with environmental hazards, since no on-site remediation would occur at this time.

---

## **Hydrology/Water Quality**

The No-Project/No Development Alternative would result in less runoff than the proposed project. Natural erosion, however, would continue to occur under the No-Project/No Development Alternative. The detention basins required for the proposed project will not be constructed under this alternative and the existing deficiency in the Trabuco watershed would not be corrected. Agricultural production would continue with the associated water quality impacts described in Section 4.8 and the benefits to water quality downstream resulting from the implementation of the proposed project would not occur. Therefore, the No-Project/No Development Alternative impacts are somewhat greater than the proposed project.

## **Land Use/Planning**

Under the No-Project/No Development Alternative, approximately 3,602 acres of Significant Farmland would remain undeveloped and would not be converted to a mixture of Residential, Commercial, and Industrial uses as proposed by the project. The natural open space areas within Implementation District “P” and Planning Area 6 would continue to exist in the future, but would remain in private ownership without the commitments to long-term preservation provided by the proposed project except as provided in the NCCP Facilitation Agreement. The retention of agricultural land use designations in PA 5B, 6, 8A and 9 would create greater land use impacts than the proposed project, as the interface of existing development and continuing agricultural operations would continue to create land use compatibility problems, such as odors, dust generation, and vandalism. Therefore, land use impacts would be greater than those associated with the proposed project, although no significant land use impacts were identified.

## **Noise**

The No-Project/No Development Alternative would eliminate noise volumes on adjacent arterials including Jeffrey Road and Irvine Boulevard produced by the proposed project. In addition, temporary short-term construction noise impacts associated with the proposed project would be reduced under the No-Project/No Development Alternative. Therefore, the No-Project/No Development Alternative would not result in any significant noise impacts.

## **Population/Housing**

The regional growth projections would not be exceeded for RSA E-44 under the No-Project/No Development Alternative. However, the No-Project/No Development Alternative would not contribute housing to the job-rich subregion of Southeast Orange County, and is therefore inconsistent with SCAG and AQMP policies.

---

## **Public Services**

The demand for public services generated at the project site would remain unchanged from the existing environmental setting. The project's impact on police, fire, schools and libraries would be eliminated under the No-Project/No Development Alternative. Therefore, impacts to public services would be eliminated, although, the new elementary and middle schools would not be constructed.

## **Recreation**

Under this alternative potential impacts on City-wide recreational facilities would be eliminated since no new homes would be constructed. However, implementation of the No-Project/No Development Alternative would also eliminate construction of the community and neighborhood park sites as well as the Jeffrey Open Space Spine. In addition, this alternative would not include the dedication of over 1,600 acres of permanent open space included within the Implementation Districts "P," "Q" and "R", as well as the 117 acres in the Jeffrey Open Space Spine. Therefore, no impacts to recreation will be created by the No-Project/No Development Alternative, although the recreational amenities associated with the proposed project would not occur.

## **Transportation/Traffic**

The No-Project/No Development Alternative would generate significantly fewer vehicle trips than the proposed project and would have none of the traffic-related impacts of the proposed project.

## **Utilities and Service Systems**

The demand for utility service within the Northern Sphere Area would remain at existing levels. The impact on sewer, water, electricity, natural gas, and solid waste would be eliminated under the No-Project/No Development Alternative as compared to the proposed project.

## **Conclusion**

### *Avoid or Substantially Lessen Project Impacts*

The No-Project/No Development Alternative would avoid or reduce impacts associated with aesthetics, agriculture, air quality, cultural resources, geology/soils, noise, population and housing, public services, transportation and traffic, and utilities/service systems and would substantially lessen the impacts on land use/planning.

### *Attainment of Project Objectives*

---

This Alternative would not attain any of the proposed project objectives identified in Section 2.2.

### *Comparative Merits*

While this alternative would avoid most of the significant effects of the proposed project, the beneficial impacts associated with new recreational facilities, the dedication of over 1,600 acres of permanent open space, improvements to hydrology and water quality, and improvements to the jobs/housing balance of the area would not occur. Also, as a result of the lack of construction of fire facilities proposed by the project, fire hazards would be increased for the surrounding Northwood, Northwood Point and Foothill Ranch communities as compared to the proposed project.

In addition, the potential for development of the site at some future date would not be precluded, since the applicant could submit alternative development plans, potentially to the County of Orange, if the proposed project were not approved.

### **6.3.2 NO-PROJECT/EXISTING GENERAL PLAN ALTERNATIVE**

This alternative, which is also required by CEQA, assumes that the existing County of Orange General Plan and Zoning designations for the project site would remain unchanged and no annexation of the project area to the City of Irvine would occur. The current County of Orange General Plan (which would continue to govern land use if the project is not annexed to the City) designates the majority of the Northern Sphere Area, including all of Planning Areas 3, 5B, 8A, and 9 and portions of Planning Areas 2 and 6 as (5) Open Space. Approximately 850 acres located outside the Nature Reserve of Orange County established by the NCCP/HCP and within Planning Area 6 are designated (1B) Suburban Residential Communities which allows for residential development between .5 and 18 dwelling units per acre. The No-Project/Existing General Plan Alternative, therefore, assumes that approximately 7,650 dwelling units (9 dwelling units per acre) could be developed within Planning Area 6. All other existing agricultural uses within the Northern Sphere Area would remain in their current location and no additional development would occur. However, under this alternative, 12,350 residential dwelling units could still be developed in other Planning Areas of the City and the City's Sphere of Influence pursuant to the existing General Plan from which the development potential for the proposed project was to be transferred. The impacts of the No-Project/Existing General Plan Alternative as compared to those of the applicant's proposal are discussed below:

#### **Aesthetics**

Under this alternative, the appearance of the project site would generally remain unchanged in Planning Areas 3, 5B, 8A and 9 and the existing landforms would not be altered. Planning Area 6 which would be altered by the development of 7,650 dwelling units allowed by the County of Orange General Plan which is in excess of the 4,500 units planned within Planning Area 6 by the proposed project. This alternative would not include the dedication of approximately 1,600 additional acres

---

of biologically sensitive habitat included within the Implementation Districts “P,” “Q,” and “R” within Planning Areas 2 and 6 to the City of Irvine since the project would be developed in the County of Orange and would not be subject to the Phased Dedication and Compensating Development Opportunities Program or the Protocol Agreement.

### **Agricultural Resources**

Under this alternative, agricultural lands would not be replaced by urban uses except within Planning Area 6. Approximately 2,500 acres of Significant Farmland would remain undeveloped within the Northern Sphere Area. Approximately 850 acres of the 1,694 acres of Significant Farmland located within Planning Area 6 would be converted to residential uses. There is no assurance, however, that long term, large scale agricultural operations would continue on any of these lands due to the constraints on continued agricultural operations described in Section 4.2.

### **Air Quality**

The air pollutant emissions generated by the project-related traffic would decrease under this alternative compared to the proposed project since fewer residential units would be constructed and none of the Commercial, Multi-Use or Industrial development would occur. This alternative would still add to the projected exceedance of SCAQMD Threshold Criteria for project generated CO, ROG, NO<sub>x</sub>, and PM10 emissions. Therefore, the No-Project/Existing General Plan Alternative would also create significant unavoidable adverse air quality impacts. The No-Project/Existing General Plan Alternative, however, would contribute to improving the projected 2010 jobs/housing imbalance in the Southeast Orange County Subregion, which is consistent with the objectives of the AQMP. It should be noted, however, that any reductions to air pollutant emissions from a reduction in vehicle trips from residential units would be specific to the project area, and not necessarily a regional reduction. In accordance with the General Plan and the Protocol Agreement, the transferred units not developed in the project area could be developed in other Planning Areas in the City so that air pollutant emissions from residential uses would, on a regional basis, remain the same. Because this alternative greatly reduces the employment-generating uses that are a part of the project, it could have the effect of increasing vehicle trips and vehicle miles traveled because it removes an employment center from an area near transportation corridors and residential areas.

### **Biological Resources**

The No-Project/Existing General Plan Alternative would result in more development within Planning Area 6 than planned for the proposed project. Since development under the County General Plan designations would develop some areas proposed for open space under the proposed project, this alternative may have a greater impact on biology than the proposed project. Agricultural operations would continue in the balance of the Northern Sphere Area for some period of time. This alternative would not include the dedication of over 1,600 additional acres of biologically sensitive habitat included within the Implementation Districts “P,” “Q” and “R” or the Jeffrey Open Space

---

Spine. Therefore, the no-project alternative does not substantially lessen biological resource impacts as compared to the proposed project.

The No-Project/Existing General Plan Alternative would not maintain the project site in its current undeveloped state because the County of Orange General Plan allows for 7,650 dwelling units in Planning Area 6. The project site would remain in agricultural use potentially impacting biological resources. In addition, this alternative would not include the dedication of over 1,600 acres of biologically sensitive habitat included within the Implementation Districts “P,” “Q” and “R” within Planning Area 6 dedication areas to the City of Irvine as well as the Jeffrey Open Space Spine, which will provide long-term preservation of the southwestern willow flycatcher and least Bell’s vireo and other species listed as endangered or threatened.

### **Cultural Resources**

Under this alternative potential impacts on cultural and paleontological resources on the site would not occur in Planning Areas 3, 5B, 8A and 9. Most impacts to cultural resources occur within Planning Area 6, however, which would also be impacted by this alternative. The impacts to cultural resources are considered to be the same or slightly less than the proposed. It should also be noted that although approximately 2,500 acres of Significant Farmland acres would not be developed for urban uses under this alternative, these areas would still be actively farmed at least in the near term. Depending upon the extent of ground disturbance required to prepare and plant the fields and the depth of subsurface resources, continued farming operations could impact as yet unidentified subsurface resources.

### **Geology/Soils**

Since most of the areas with geologic and soils issues are located within the foothill areas included within Planning Area 6, the No-Project/Existing General Plan Alternative would not substantially lessen the impacts of the proposed project with respect to geology and soils.

### **Hazards & Hazardous Materials**

Based upon the Property Transfer Disclosure Reports prepared for the project site, no hazardous substances or petroleum products have been discovered within the Northern Sphere Area that would present a material risk to human health or the environment. However, there is the potential for localized soil contamination in the areas where agriculture, fuels, equipment maintenance chemicals and waste are currently being stored on the site, which would continue under the No-Project/Existing General Plan Alternative. Therefore, the No-Project/No Development Alternative would not result in a reduction in potential impacts associated with environmental hazards, since no on-site remediation would occur at this time.

### **Hydrology/Water Quality**

---

The No-Project/Existing General Plan Alternative would result in less runoff than the proposed project. Natural erosion, however, would continue to occur under the No-Project/Existing General Plan Alternative. The detention basins required for the proposed project not be constructed under this alternative and the existing deficiency in the Trabuco watershed would not be corrected. Agricultural production would continue with the associated impacts described in Section 4.8 and the benefits to water quality downstream resulting from the implementation of the proposed project would not occur. Therefore, the No-Project/Existing General Plan Alternative impacts are somewhat greater than the proposed project.

### **Land Use/Planning**

Under the No-Project/Existing General Plan Alternative, approximately 2,500 acres of Significant Farmland would remain undeveloped and would not be converted to a mixture of Residential, Commercial, and Industrial uses as proposed by the project. The project site would remain irrigated row crops and undeveloped with the exception of the 7,650 dwelling units allowed by the County of Orange General Plan in Planning Area 6. The natural open space areas on the site within Planning Area 6 outside of the development areas and outside of the Orange County Nature Reserve would continue to exist in the future, but would remain in private ownership without the commitments to long-term preservation provided by the proposed project.

The retention of agricultural land use designations in PA 5B, 8A and 9 would create greater land use impacts than the proposed project, as the interface of existing development and continuing agricultural operations would continue to create land use compatibility problems, such as odors, dust generation, and vandalism. Therefore, land use impacts would be greater than those associated with the proposed project, although no significant land use impacts were identified.

### **Noise**

Due to the reduction in associated traffic volumes, the No-Project/Existing General Plan Alternative would reduce the noise volumes from adjacent arterials within the Northern Sphere Area, including Jeffrey Road and Irvine Boulevard. Due to reduced development activity, temporary short-term construction noise impacts associated with the proposed project would also be reduced under the No-Project/Existing General Plan Alternative. However, as noted above, the proposed project's 12,350 units could be developed in the existing Planning Areas within the City, resulting in noise impacts elsewhere. Therefore, the No-Project/Existing General Plan Alternative impacts are considered to be similar to or slightly less than the proposed project.

### **Population/Housing**

Under the No-Project/Existing General Plan Alternative, the maximum of 12,350 units, 575,000 sq. ft. of Multi-Use development, 175,000 square feet of Community Commercial, 6,566,000 square feet of Medical and Science uses and 13 acres of Institutional uses would not be built in the Northern



---

Sphere Area. Instead, 7,650 residential dwelling units would be constructed in Planning Area 6. As a result, the regional growth projections would not be exceeded for RSA E-44. However, the benefits of providing additional housing in a job rich area would be less under this alternative than the proposed project.

### **Public Services**

The impact on police, fire, schools and libraries would be less than the proposed project under the No-Project/Existing General Plan Alternative. There is no assurance, however, that any new elementary and middle schools would be constructed, since only statutory school fees may be available to fund their construction and these fees currently only fund fifty percent of the state estimated cost of new school facilities. Although fire department calls for service would be less than the proposed project, more residences would be exposed to the higher fire hazards associated with development within Planning Area 6, which is located in a very high fire hazard zone. Also, as noted above, the proposed project's 12,350 units could be developed in the existing Planning Areas within the City which would result in similar impacts on public services.

### **Recreation**

Under this alternative potential impacts on existing City-wide recreational facilities would be reduced due to the decrease in intensity in residential uses. However, implementation of the No-Project/Existing General Plan Alternative would result in fewer acres of parkland dedication because the County standard is lower than the City's (approximately 2.32 acres per thousand population as opposed to 5 acres per thousand population) and the population, which is the basis for parkland dedication requirements in the Subdivision Map Act, would be less. In addition, the Jeffrey Open Space Spine would not be improved and dedicated under this alternative. This alternative would not include the dedication of over 1,600 acres of permanent open space included within the Implementation Districts "P," "Q" and "R" under the Phased Dedication and Compensating Development Opportunities Program or the Protocol Agreement which would not apply to development in the County. Therefore, impacts to recreation would be greater under this Alternative.

### **Transportation/Traffic**

The No-Project/Existing General Plan Alternative would generate approximately 73,058 trips per day (based on Table 4-82, "Proposed Project Land Use and Trip Generation Summary"). Trips per day were calculated by multiplying 7,650 maximum dwelling units by the Single Family Detached vehicle trip rate of 9.55). As a result, the No-Project/Existing General Plan Alternative would reduce project-generated traffic by approximately 181,815 trips per day. These traffic impacts, however, may be transferred to other areas of the City if the proposed project's 12,350 units are developed in the existing Planning Areas within the City.

### **Utilities and Service Systems**

---

The project's impact on sewer, water, electricity, natural gas, and solid waste would be reduced under the No-Project/Existing General Plan Alternative as compared to the proposed project. As noted above, however, the proposed project's 12,350 units could be developed in the existing Planning Areas within the City resulting in potential utility and service system impacts elsewhere in the City.

## **Conclusion**

### *Avoid or Substantially Lessen Project Impacts*

This alternative would substantially lessen impacts to aesthetics, agricultural resources, and transportation. Impacts to air quality, land use/planning, noise, population/housing, public services, recreation and utilities/service systems would be somewhat lessened. If, however, the proposed project's 12,350 units are developed in the existing Planning Areas within the City, the impacts on air quality, land use/planning, noise, population/housing, public services, recreation and utilities/service systems would be the same or even greater than the proposed project.

### *Attainment of Project Objectives*

This alternative would not realize most of the basic project objectives as indicated in Section 2.2, *Statement of Objectives*. This alternative would, however, partially attain the project objective relating to adding housing to a jobs rich region.

### *Comparative Merits*

While the No-Project/Existing General Plan Alternative would reduce impacts associated with aesthetics, air quality, agricultural resources, land use/planning, noise, population/housing, public services, recreation, transportation and utilities/service systems, unless the proposed project's 12,350 units are developed in the existing Planning Areas within the City, the beneficial impacts associated with new recreational facilities, the dedication of over 1,600 acres of permanent open space, the provision of new schools, improvements to hydrology and water quality, and the extent of the improvements to the jobs/housing balance of the area would not occur. Also, as a result of the lack of construction of fire facilities proposed by the project, fire hazards would be increased for the surrounding Northwood, Northwood Point and Foothill Ranch communities as compared to the proposed project. Impacts with respect to biological resources, hazards/hazardous materials, would be somewhat greater than the proposed project. Impacts to cultural resources and geology/soils would be the same as the proposed project.

In addition, the potential for development of the site at some future date would not be precluded, since it is possible that the landowner would submit alternative development plans, potentially to the County of Orange, if the proposed project were not approved.

---

### **6.3.3 NO INDUSTRIAL/INCREASED RESIDENTIAL ALTERNATIVE**

The No Industrial/Increased Residential Alternative would convert the proposed industrial land uses into residential land uses. This alternative would bring additional housing opportunities to a job-rich area. Assuming the same housing density as that of the proposed project, this alternative would result in the development of 3,150 additional dwelling units for a total of 15,500 dwelling units, 575,000 sq. ft. of Multi-Use, and 175,000 sq. ft. of Community Commercial. The impacts of the No Industrial/Increased Residential Alternative as compared to those of the applicant's proposal are discussed below:

#### **Aesthetics**

Under this alternative, the aesthetic impacts would be similar to the proposed project. The appearance of the site would only change slightly since the proposed industrial uses would be replaced with residential land uses. Light and glare impacts would also be similar. Therefore, aesthetic impacts would be similar to the proposed project with a comparable amount of development visible to neighboring homes and roadways.

#### **Agricultural Resources**

Under this Alternative, approximately 3,300 acres of Significant Farmland within the Northern Sphere Area would be replaced by urban uses. This alternative would result in the permanent loss of agricultural soils and would have similar impacts to the proposed project.

#### **Air Quality**

This alternative would decrease traffic generation by approximately 37,090 trips per day. (Based on Table 4-82, "Proposed Project Land Use and Trip Generation Summary"). This alternative increases the amount of dwelling units by 3,150 units and eliminates industrial uses. The alternative increases residential vehicle trips by 30,083 trips per day (using a 9.55 trip generation rate). However, elimination of the Medical and Science uses would eliminate approximately 67,172 vehicle trips, for a net decrease of 37,090 trips as compared to the proposed project. As a result, implementation of the No Industrial/Increased Residential Alternative would decrease associated emissions by approximately 15 percent. This alternative would also improve the jobs/housing balance of the area. However, the projected emissions would exceed the SCAQMD Threshold Criteria for project generated CO, ROG, NO<sub>x</sub>, and PM10 emissions which is considered significant.

#### **Biological Resources**

Although the amount of residential development would be increased and industrial uses would be eliminated, development area boundaries will remain the same. Therefore, impacts to biological resources would be generally the same.

---

## **Cultural Resources**

Under this alternative potential impacts on cultural resources would be generally the same as with the proposed project.

## **Geology/Soils**

Since the development area would generally remain the same, soils and geology impacts would be the same as with the proposed project.

## **Hazards & Hazardous Materials**

Based on the Property Transfer Disclosure Reports for the project site, no hazardous substances or petroleum products have been discovered at the site or in the surrounding vicinity that would present a material risk to human health or the environment at the site. Therefore, the No Industrial/Increased Residential Alternative would not result in a reduction in potential impacts associated with environmental hazards, but would be the same as the proposed project.

## **Hydrology/Water Quality**

The development area would remain the same, although site building coverage would slightly be less for the residential uses. Therefore, runoff volumes would be slightly less as compared to the proposed project.

## **Land Use**

Since the development areas would generally be the same as the proposed project, land use impacts relating to neighboring uses, such as Northwood, Northwood Point, and the Spectrum would also be similar. No significant land use and compatibility impacts associated with the increase in residential units and elimination of industrial uses were identified. However, it should be noted that this alternative would not be consistent with an airport re-use plan at the former El Toro MCAS because residential uses would be placed within the 65 CNEL area of the OCX Alternative B Aircraft Noise Contours.

## **Noise**

This alternative would generate fewer vehicle trips than the proposed project. As a result, project noise decreases on surrounding roadways including Jeffrey Road and Irvine Boulevard, although noise walls will still be required. Short-term construction noise impacts would also be similar to the p r o p o s e d p r o j e c t .

---

## **Population and Housing**

With the No Industrial/Increased Residential Alternative, the population would increase as a result of the addition of 3,150 dwelling units for a total of 15,550 dwelling units. As a result, this alternative would increase the project's contribution of housing to the job-rich subregion of Southeast Orange County.

## **Public Services**

Under the No Industrial/Increased Residential Alternative, the demand for public services generated by the addition of 3,150 residential units would increase, including the project's impact on police, fire, schools, and libraries. The reduction in industrial demand is not enough to offset the increases in residential need for services.

## **Recreation**

Under this alternative, potential impacts on City-wide recreational facilities would increase due to the increase in residential units. However, in accordance with the City's adopted parkland ordinance, the project must plan for park facilities based on population. Therefore, park facilities would be developed to serve the increased population and the impacts would be considered to be the same as the proposed project.

## **Traffic and Circulation**

This alternative would decrease traffic generation by approximately 37,090 trips per day, as previously described. Therefore, this alternative is expected to slightly decrease the amount of traffic on local area roadways, as compared to the proposed project.

## **Utilities and Service Systems**

Under the No Industrial/Increased Residential Alternative, the project's impact on sewer, water, electricity, natural gas, and solid waste would generally be the same.

---

## **Conclusion**

### *Avoid or Substantially Lessen Project Impacts*

This alternative would not avoid or substantially lessen the impacts of the proposed project.

### *Attainment of Project Objectives*

This alternative would accomplish many of the project objectives identified in Section 2.2. It would not accomplish the objective of a fiscally sound land use plan as revenue generating land uses would be replaced with land uses which do not produce significant revenue in excess of municipal service costs. This alternative would also not accomplish the objective of meeting the market demand for industrial uses within the Northern Sphere Area. This alternative would also represent a net increase in residential units in the City over those currently permitted under the City's adopted General Plan.

### *Comparative Merits*

The No Industrial/Increased Residential Alternative would result in similar impacts in most impact categories. Impacts relating to public services would be increased somewhat due to the increase in residential development. Impacts to air quality, hydrology/water quality, noise, transportation/traffic are decreased slightly. However, this alternative would not be as fiscally sound from a land use planning standpoint as the proposed project.

## **6.3.4 REDUCED DENSITY ALTERNATIVE**

This alternative would reduce overall intensity within the project by 30 percent. This would reduce the number of residential units from 12,350 to 8,645, reduce the square footage of Multi-Use facilities from 575,000 sq. ft. to 402,500 sq. ft., reduce the square footage of Community Commercial from 175,000 sq. ft. to 122,500 sq. ft., and reduce the square footage of Medical and Science from 6,566,000 sq. ft. to 4,596,200 sq. ft. Development boundaries would remain the same. Other components of the project, including the number of elementary schools proposed as part of the project, and acreage of community and neighborhood parks would be reduced to reflect the approximately 30% reduction in development density. The impacts of the Reduced Density Alternative as compared to those of the applicant's proposal are discussed below:

### **Aesthetics**

Under this alternative, the aesthetic impacts would be similar to the proposed project. Although the densities would be decreased, the development area would be the same. Therefore, aesthetic impacts would be similar to the proposed project with slightly larger homes on larger lots.

### **Agricultural Resources**

---

Under the Reduced Density Alternative, impacts to agricultural resources would be the same as the proposed project. This alternative would result in the permanent loss of approximately 3,300 acres of Significant Farmland within the Northern Sphere Area currently in agricultural production, and would remain a significant unavoidable adverse impact. As a result, this alternative is similar in impacts to the proposed project.

### **Air Quality**

The air pollutant emissions generated by the project-related traffic would be reduced by approximately 30 percent under the Reduced Density Alternative. This Alternative would reduce the projected exceedance of the SCAQMD Threshold Criteria for project generated CO, ROG, NO<sub>x</sub>, and PM10 emissions, although the thresholds would still be exceeded and considered significant. In addition, this alternative would reduce the project's contribution of housing to the job-rich subregion of Southeast Orange County, which is inconsistent with the AQMP. It should be noted, however, that any reductions to air pollutant emissions from a reduction in vehicle trips from residential units would be specific to the project area, and not necessarily a regional reduction. In accordance with the General Plan and the Protocol Agreement, the transferred units not developed in the project area could be developed in other Planning Areas in the City so that air pollutant emissions from residential uses would, on a regional basis, remain the same. Because this alternative greatly reduces the employment-generating uses that are a part of the project, it could have the effect of increasing vehicle trips and vehicle miles traveled because it removes an employment center from an area near transportation corridors and residential areas.

### **Biological Resources**

Under the Reduced Density Alternative, unit density would be decreased throughout the entire project site, although the development area would remain unchanged. Therefore, biological impacts would be similar to the proposed project and is not considered environmentally superior to the proposed project.

### **Cultural Resources**

Under this alternative potential impacts on cultural resources would be generally the same as with the proposed project.

### **Geology/Soils**

Since this alternative reduces the number of units and not development area, grading volumes associated with the proposed project would be similar. As a result, potential geological impacts would be the same as compared to the proposed project.

### **Hazards & Hazardous Materials**

---

Based on the Property Transfer Disclosure Reports for the project site, no hazardous substances or petroleum products have been discovered at the site or in the surrounding vicinity that would present a material risk to human health or the environment at the site. Therefore, the Reduced Density Alternative would not result in a reduction in potential impacts associated with environmental hazards, but would be the same as the proposed project.

### **Hydrology/Water Quality**

Since this alternative reduces the number of units and not development area, hydrology impacts would be similar to the proposed project.

### **Land Use**

Under the Reduced Density Alternative, residential, commercial, and industrial development throughout the project site would be reduced by approximately 30 percent. Since the development areas would be generally similar to the proposed development, however, land use impacts would remain the same.

### **Noise**

The proposed project will not result in any significant noise impacts or decrease impacts significantly; therefore, the Reduced Density Alternative is not considered environmentally superior to the proposed project. However, due to the reduction in associated traffic volumes, the Reduced Density Alternative would result in slight reductions in the noise volumes on adjacent arterials including Jeffrey Road, Sand Canyon Avenue, Trabuco Road and Irvine Boulevard. Construction noise impacts would generally be similar to the proposed project.

### **Population and Housing**

This alternative would reduce the number of residential units from 12,350 to 8,645, reduce the square footage of Multi-Use facilities from 575,000 sq. ft. to 402,500 sq. ft., reduce the square footage of Community Commercial from 175,000 sq. ft. to 122,500 sq. ft., and reduce the square footage of Medical and Science from 6,566,000 sq. ft. to 4,596,200 sq. ft. Cumulative population and housing impacts would still exceed the regional growth estimates although to a lesser extent than the proposed project. However, the benefits of providing additional housing in a job rich area would be less under this alternative than the proposed project.

### **Public Services**



---

Under the Reduced Density Alternative, the demand for public services generated at the project site would be reduced by approximately 30 percent, including the project's impact on police, fire, schools, and libraries.

### **Recreation**

Under this alternative, potential impacts on City-wide recreational facilities would be about the same despite the reduction in units. This alternative also includes construction of community and neighborhood parks, which adequately mitigates the project's impacts on recreation facilities and therefore would have about the same impact as the proposed project. Since the estimated population would decrease by approximately 10,453 persons, the amount of parkland required to serve the new residents would be decreased by about 52 acres. Therefore, the Reduced Density Alternative is not superior to the proposed project.

### **Transportation/Traffic**

The Reduced Density Alternative would reduce project-generated ADT by approximately 76,462 trips per day (178,411 trips per day vs. 254,873 trips per day with the proposed project). As a result, the Reduced Density Alternative would generate fewer vehicle trips and would have fewer traffic-related impacts than the proposed project. However, in accordance with the General Plan and the Protocol Agreement, the remaining 3,705 units could be developed in other Planning Areas in the City resulting in traffic impacts elsewhere. Therefore, traffic volumes could be shifted to other areas of the City rather than avoided altogether.

### **Utilities and Service Systems**

Under the Reduced Density Alternative, the project's impact on sewer, water, electricity, natural gas, and solid waste would be reduced by approximately 30 percent.

### **Conclusion**

#### *Avoid or Substantially Lessen Project Impacts*

This alternative would lessen impacts associated with air quality, noise, population/housing, public services, transportation/traffic, and utilities/service systems by approximately 30 percent.

---

### *Attainment of Project Objectives*

This alternative would meet most but not all of the project objectives as described in Section 2.2. This Alternative would result in a transfer of fewer units from other Planning Areas in the City which would result in the potential for the development of residential units in areas that are more removed from activity centers and transportation systems. It would also contribute less housing to a jobs rich region.

### *Comparative Merits*

While this alternative would reduce impacts associated with air quality, noise, population/housing, public services, transportation/traffic, and utilities/service systems within the Northern Sphere Area, all other impacts would be similar to the proposed project. In addition, in accordance with the General Plan and the adopted Protocol Agreement, the 3,705 units not transferred to the Northern Sphere Area under this alternative could be developed in other Planning Areas in the City. As a result, many of the impacts reduced by this alternative could be shifted to one or more of these other areas of the City rather than be avoided altogether.

### **6.3.5 INCREASED RESIDENTIAL INTENSITY ALTERNATIVE**

The Increased Residential Intensity Alternative would include 15,500 Residential units, 575,000 sq. ft. of Multi-Use development, 175,000 sq. ft. of Community Commercial uses, and 6,566,000 sq. ft. of Medical and Science facilities. This alternative would increase residential development by 3,150 units, although the proposed land use designations and boundaries would remain unchanged. However, increased residential development could require increases in parkland dedication and increase school demands. The impacts of the Increased Residential Alternative as compared to those of the landowner's proposal are discussed below:

#### **Aesthetics**

Under this alternative, the aesthetic impacts would be similar to the proposed project. Although the densities would be increased, the development area would be the same. Therefore aesthetic impacts would be similar to the proposed project with slightly smaller homes on smaller lots.

#### **Agricultural Resources**

Under the Increased Residential Density Alternative, impacts to agricultural resources would be the same as the proposed project. This alternative would result in the permanent loss of approximately 3,300 acres of Significant Farmland within the Northern Sphere Area currently in agricultural production, and would remain a significant unavoidable adverse impact. As a result, this alternative is similar in impacts to the proposed project.

---

## **Air Quality**

This Alternative would increase traffic generation by approximately 30,083 trips per day. (Based on Table 4-82, “Proposed Project Land Use and Trip Generation Summary”). This Alternative increases the amount of dwelling units by 3,150. The Alternative increases vehicle trips by 30,083 trips per day as compared to the proposed project. As a result, implementation of the No Industrial/Increased Residential Alternative would increase associated emissions by approximately 12 percent. This alternative would improve the jobs/housing balance of the area. However, the projected emissions would exceed the SCAQMD Threshold Criteria for project generated CO, ROG, NO<sub>x</sub>, and PM10 emissions which is considered significant.

## **Biological Resources**

Although the amount of residential development would be increased, development area boundaries will remain the same. Therefore, impacts to biological resources would be generally the same.

## **Cultural Resources**

Under this alternative potential impacts on cultural resources would be generally the same as with the proposed project.

## **Geology/Soils**

Since the development area would remain the same, soils and geology impacts would be the same as with the proposed project.

## **Hazards & Hazardous Materials**

Based on the Property Transfer Disclosure Reports for the project site, no hazardous substances or petroleum products have been discovered at the site or in the surrounding vicinity that would present a material risk to human health or the environment at the site. Therefore, the Reduced Density Alternative would not result in a reduction in potential impacts associated with environmental hazards.

## **Hydrology/Water Quality**

The development area and the amount of impervious surfaces would remain the same. Therefore, runoff volumes would be generally the same as compared to the proposed project.

---

## **Land Use**

Since the development areas would generally be the same as the proposed project, land use impacts relating to neighboring uses, such as Northwood, Northwood Point, and the Spectrum would also be similar. However, densities would be slightly higher than those present within Northwood and Northwood Point. Although no significant land use impacts were identified, there would be greater land use compatibility impacts associated with the increase in residential units and density.

## **Noise**

This alternative would generate more traffic than the proposed project due to the increased residential units. As a result, project noise increases on surrounding roadways including Jeffrey Road, Sand Canyon Avenue, Trabuco Road and Irvine Boulevard would be slightly higher than the proposed project. Short-term construction noise impacts would also be similar to the proposed project.

## **Population and Housing**

With the Increased Residential Alternative, the population would increase as a result of the addition of 3,150 dwelling units for a total of 15,500 dwelling units. As a result, this alternative would increase the project's contribution of housing to the job-rich subregion of Southeast Orange County. However, cumulative population and housing impacts would still exceed the regional growth estimates.

## **Public Services**

Under the Increased Residential Alternative, the demand for public services generated by the addition of 3,150 residential units would increase, including the project's impact on police, fire, schools, and libraries.

## **Recreation**

Under this alternative, potential impacts on City-wide recreational facilities would increase by approximately 25 percent due to the increase in residential units, but since additional parkland would be provided in accordance with the City's parkland dedication ordinance the impact is considered to be the same as the proposed project.

## **Traffic and Circulation**

The Increased Residential Alternative would increase the number of residential units, while Multi-Use Development, Community Commercial, Medical and Science, and Institutional remain the same. As a result this alternative would increase traffic generation by approximately 30,083 trips per day.

---

Therefore, this alternative is expected to slightly increase the amount of traffic on local area roadways, as compared to the proposed project.

### **Utilities and Service Systems**

Under the Increased Residential Alternative, the project's impact on sewer, water, electricity, natural gas, and solid waste would increase by approximately 25 percent.

### **Conclusion**

#### *Avoid or Substantially Lessen Project Impacts*

This alternative would not avoid or substantially lessen any of the proposed projects impacts.

#### *Attainment of Project Objectives*

This alternative would meet all of the project objectives identified in Section 2.2.

#### *Comparative Merits*

This alternative would result in similar impacts to most impact categories and satisfies the project objectives. However, impacts relating to air quality, noise, population/housing, public services, transportation/traffic, and utilities/service systems would be increased due to the increase in residential development.

### **6.3.6 REDUCED DENSITY AND DEVELOPMENT AREA ALTERNATIVE**

Because the conversion of agricultural land was identified as an unavoidable adverse impact, this alternative would reduce the development area by retaining agricultural general plan designations on approximately 376 acres in Planning Area 9. This area of prime and unique farmland is located north of Irvine Boulevard and south of Portola Parkway between Sand Canyon and Jeffrey Road. In addition to a reduction in the development area, this alternative also reduces the number of residential units from 12,350 to 11,031, reduces the square footage of Multi-Use facilities from 575,000 sq. ft. to 225,000 sq. ft., and reduces the square footage of Medical and Science from 6,566,000 sq. ft. to 4,000,000 sq. ft. No reduction in Community Commercial uses would occur under this alternative. Other components of the project, including the number of elementary schools proposed as part of the project, and acreage of community and neighborhood parks, would be reduced to reflect the approximately 10% reduction in residential development density. The impacts of the Reduced Density and Development Area Alternative as compared to those of the landowner's proposal are discussed below.

---

## **Aesthetics**

Under this alternative, the aesthetic impacts would be somewhat less than the proposed project as development would not be proposed in an approximately 376 acre area north of Irvine Boulevard, south of Portola Parkway, east of Jeffrey Road and west of Sand Canyon Avenue (the “Agricultural Area”). In the Agricultural Area, there would be no change from the existing environment. With the exception of the agricultural area, however, the nature of development and mix and location of proposed uses would be similar to the proposed project. Certain aesthetic benefits of the proposed project will not occur under this alternative as the Jeffrey Open Space Spine would not be implemented along the agricultural area which would otherwise provided an “open space gateway” to Planning Area 5B and a new proposed park in Planning Area 6. In addition, landscape improvements that would occur under the proposed project along Sand Canyon Avenue and Portola Parkway bordering the Agricultural Area would not be implemented.

## **Agricultural Resources**

Under the Reduced Density and Development Area Alternative, impacts to agricultural resources would be less than the proposed project, as approximately 376 acres of Significant Farmland would potentially remain in agricultural production. Because Prime Farmland and Unique Farmland are among the significant categories of agricultural land identified by CEQA, this Alternative does provide a benefit by avoiding the conversion of this area of Significant Farmland to urban uses. Because this alternative would still result in the conversion of approximately 2,944 acres of Significant Farmland, the impacts to agricultural resources would still be considered unavoidable and adverse. It should be noted that even if this area remains under an agricultural land use designation under this alternative, increasing urbanization and the economic and regulatory pressures that affect the feasibility of long-term agricultural production in this area as noted in Section 4.2 would remain and this area could eventually be converted to other uses.

## **Air Quality**

The air pollutant emissions generated by the residential-related traffic would be reduced by approximately 28 percent (see Transportation/Traffic discussion for calculations) under the Reduced Density and Development Area Alternative. This alternative would reduce the projected exceedances of the SCAQMD Threshold Criteria for project generated CO, ROG, NO<sub>x</sub>, and PM10 emissions, although the thresholds would still be exceeded and considered significant. It should be noted, however, that any reductions to air pollutant emissions from a reduction in vehicle trips from residential units would be specific to the project area, and not necessarily a regional reduction. In accordance with the General Plan and the Protocol Agreement, the transferred units not developed in the project area could be developed in other Planning Areas in the City so that air pollutant emissions from residential uses would, on a regional basis, remain the same. Because this alternative greatly reduces the employment-generating uses that are a part of the project, it could have the effect

---

of increasing vehicle trips and vehicle miles traveled because it removes an employment center from an area near transportation corridors and residential areas.

### **Biological Resources**

Under this alternative, both density and development area would be decreased throughout the entire project site. Even though the development area would be reduced, this alternative proposes to retain agricultural zoning, therefore, biological impacts would be the same as the proposed project. It should be noted, however, that there are few, if any, biological impacts identified in this area as a result of ongoing agricultural activities.

### **Cultural Resources**

Under this alternative potential impacts on prehistoric cultural resources would be generally the same as with the proposed project. No prehistoric or historic resources have been recorded on Planning Area 9, but because the extensive agricultural operations obscure the ground surface, an updated site survey could not be conducted and therefore, the site may contain unrecorded archaeological or historical resources. This alternative would not result in any changes to the existing conditions. Although approximately 376 acres would not be developed for urban uses, the agricultural area would still be actively farmed at least in the near term. Depending upon the extent of ground disturbance required to prepare and plant the fields and the depth of subsurface resources, continued farming operations could impact subsurface resources.

### **Geology/Soils**

Since this alternative reduces the development area, no grading would occur on these 376 acres within the agricultural area and grading volumes would be reduced accordingly. No structures would be constructed on this area which would be exposed to seismic shaking or other identified geologic hazards. As a result, potential geological impacts would be less than the proposed project.

### **Hazards & Hazardous Materials**

Based on the Property Transfer Disclosure Reports for the project site, no hazardous substances or petroleum products have been discovered at the site or in the surrounding vicinity that would present a material risk to human health or the environment at the site. As this alternative proposes the retention of agricultural land use designations, storage of pesticides, fertilizers and other chemicals used in agricultural production activities could continue. Therefore, this alternative would not result in a reduction in potential impacts associated with environmental hazards as compared to the proposed project.

### **Hydrology/Water Quality**

---

Since this alternative reduces both the density of development and development area, hydrology impacts would be somewhat less than the proposed project. Water quality impacts may be greater than the project, however, as runoff from farmed areas could continue to contribute to sediment load and would contain pesticides and fertilizers which would be eliminated under the proposed project. In addition, because of the reduced development area, the project would not size the Trabuco detention facility to manage stormwater runoff from the areas that are not being developed with urban uses, and therefore the water quality benefits that would result from the project would not be achieved under this alternative.

### **Land Use**

Under the Reduced Density and Development Area Alternative, commercial, and industrial development throughout the project site would be reduced by approximately 40 % percent and residential uses would be reduced by approximately 10%. The retention of agricultural land use designations in PA 9 would create greater land use impacts than the proposed project, as the interface of existing and proposed new development that would occur under this alternative with agricultural operations could create land use compatibility problems, such as odors, dust generation, and vandalism. Residential uses would be sited to the south of the project (across Irvine Boulevard), as well as to the west across Jeffrey.

### **Noise**

The Reduced Density and Development Alternative would have less noise impacts than the proposed project, but since the proposed project does not result in any significant noise impacts, this alternative would not substantially reduce impacts as compared to the proposed project. However, due to the reduction in associated traffic volumes by approximately 10 percent, this alternative would result in slight reductions in the noise volumes on adjacent arterials including Jeffrey Road, Sand Canyon Avenue, Portola Parkway and Irvine Boulevard. Construction noise impacts would generally be similar to the proposed project. Noise from agricultural operations would not be required to be mitigated as it is an existing use, so additional noise impacts to the surrounding residential development along Jeffrey and south of Irvine Boulevard may result from their proximity to the agricultural areas.

### **Population and Housing**

This alternative would reduce the number of residential units from 12,350 to 11,031, reduce the square footage of Multi-Use facilities from 575,000 sq. ft. to 225,000 sq. ft., and reduce the square footage of Medical and Science from 6,566,000 sq. ft. to 4,000,000 sq. ft. However, cumulative population and housing impacts would still exceed the regional growth estimates. This alternative would also reduce the project's contribution of both housing and jobs to the job-rich subregion of S o u t h e a s t O r a n g e C o u n t y .



---

## **Public Services**

Under the Reduced Density and Development Area Alternative, the demand for public services generated at the project site would be reduced by approximately 10 percent, including the project's impact on police, fire, schools, and libraries. The project benefits relating to reduced fire hazard potential for the adjacent communities of Northwood, Northwood Point and Foothill Ranch would also occur under this alternative, although the benefits of this alternative would be less than the proposed project.

## **Recreation**

Under this alternative, potential impacts on City-wide recreational facilities would be slightly reduced due to the approximately 10% reduction in housing units. This alternative also includes construction of community and neighborhood parks, which adequately mitigates the project's impacts on recreation facilities. However, with the Reduced Density Alternative, the estimated population would decrease by approximately 3,484 persons thereby decreasing the amount of required parkland by 17.42 acres. With the retention of 376 acres in agricultural land use designations along Jeffrey Road, implementation of the Jeffrey Open Space Spine would not fully occur, thus hindering the implementation of this recreational feature. In addition, the "gateway" to Planning Area 5B and the new park and recreational uses in Planning Area 6 would not be implemented with the continuation of agricultural land use designations.

## **Transportation/Traffic**

The Reduced Density and Development Area Alternative would reduce project-generated ADT by approximately 70,421 trips per day. (Based on Table 4-82, "Proposed Project Land Use and Trip Generation Summary"). This alternative would produce 184,452 trips per day vs. 254,873 trips per day with the proposed project. This alternative decreases the amount of dwelling units by 10 percent, or 10,509 trips and all other uses by 40 percent, or 59,912 trips for a total reduction of 70,421 trips per day (28 percent). As a result, the Reduced Density and Development Area Alternative would generate fewer vehicle trips and would have fewer traffic-related impacts than the proposed project. However, in accordance with the General Plan and the adopted Protocol Agreement, those units not developed within the Northern Sphere Area could be developed in other Planning Areas in the City resulting in traffic impacts elsewhere. Therefore, traffic volumes generated by residential uses could be shifted to other areas of the City rather than avoided altogether. By eliminating a significant amount of commercial and industrial square footage in an area that is both close to regional transportation corridors and residential areas, this alternative does not place jobs in close proximity to where its potential employees reside and may result in more vehicle trips and vehicle miles traveled for residents to commute to more remote workplaces.

## **Utilities and Service Systems**

---

Under the Reduced Density Alternative, the project's impact on sewer, electricity, natural gas, and solid waste would be reduced by approximately 10 percent for residential uses and 40 percent for all other uses as compared to the proposed project. Although the project's demand for potable water will be reduced due to the reduction in urban development, the agricultural uses will still continue to use water for irrigation.

---

## **Conclusion**

### *Avoid or Substantially Lessen Project Impacts*

The Reduced Density and Development Alternative would substantially lessen impacts associated with agricultural resources, although it does not avoid or reduce the impact on agricultural resources to a less than significant level. This alternative also lessens impacts on aesthetics, air quality, geology/soils, population/housing, public services, transportation/traffic and utilities/service systems.

### *Attainment of Project Objectives*

This alternative would attain many of the project objectives identified in Section 2.2. This alternative, however would result in a transfer of fewer units from other Planning Areas in the City which are more removed from activity centers and transportation systems. This alternative would also reduce the project's contribution of both housing and jobs to the job-rich subregion of Southeast Orange County. On balance, however, this alternative would result in the reduction of more jobs than housing and would improve the current jobs-housing balance. The extent of improvement (i.e., the contribution of new housing to a jobs-rich area) would be greater than the proposed project. In addition, under the Protocol Agreement, the landowner would not be required to and likely would not annex to the City areas where the agricultural zoning does not change.

### *Comparative Merits*

While the Reduced Density and Development Alternative would reduce impacts associated with agricultural resources, it does not avoid or reduce the impact on agricultural resources to a less than significant level. This alternative also reduces impacts on aesthetics, air quality, geology/soils, population/housing, public services, transportation/traffic and utilities/service systems, but would continue to generate air quality impacts associated with the use of farm equipment and particulate matter generation from soil disturbance. The water quality benefits of this alternative would be less than the proposed project as runoff from agricultural areas will not be managed in the same manner proposed by the project for runoff from urban areas. This alternative has the potential to create greater land use impacts than the project as it would place new residential areas adjacent to ongoing agricultural operations. Other impacts, such as biological resources, geology/soils, cultural resources, and noise would be similar to the landowner's proposal or would result in an insignificant decrease in associated impacts.

Although this alternative would result in an incremental reduction in impacts associated with the reduction in residential units as compared to the proposed project, the General Plan and the Protocol Agreement allow for the transfer of the 1,319 units that would not be built in the Northern Sphere Area to other areas of the City. As a result, many of the impacts associated with the proposed project, such as traffic, noise and air quality, would be shifted to one or more of these other areas of

---

the City under this alternative rather than be avoided altogether. As a result, this alternative would incur similar regional impacts to the proposed project.

Over the long-term, there will be continued pressure to convert agricultural areas due to increased urbanization as well as the feasibility of agricultural operations in an urban environment due to regulatory and economic factors. In addition, under the Protocol Agreement, the landowner would not be required to and likely would not annex to the City areas where the agricultural zoning does not change. This alternative does not provide the same degree of environmental benefits as the proposed project, such as implementation of the Jeffrey Open Space Spine. This alternative would not meet the City's housing needs without greater intensification of existing development areas. In addition, this alternative does not provide the same amount of housing to help the City meet its housing needs and could reduce the range of housing opportunities provided in the City. This alternative also reduces additional employment opportunities in an area where regional benefits, such as reducing traffic congestion and vehicle miles traveled, can be realized.

#### **6.4 Alternatives Summary Comparison**

CEQA requires that the analysis of project alternatives include a comparison of the proposed project and the alternatives. The following section includes an analysis of the comparative merits of the proposed project and each alternative. Table 6-2 provides an analysis of each of the six alternatives in relation to the project objectives. Table 6-3 provides a summary of the comparative impacts of each alternative in relation to the proposed project.

---

Insert Table 6-2 Project Objectives for Each Alternative–Page 1

---

Insert Table 6-2 Project Objectives for Each Alternative–Page 2

---

Insert Table 6-2 Project Objectives for Each Alternative–Page 3

---

Insert Table 6-2 Project Objectives for Each Alternative–Page 4



---

Insert Table 6-3 Summary Comparison of Impacts by Alternatives–Page 1

---

Insert Table 6-3 Summary Comparison of Impacts by Alternatives–Page 2

---

## **6.5 Environmentally Superior Alternative**

CEQA requires a lead agency to identify the “environmentally superior alternative” and, in cases where the “No-Project” Alternative is environmentally superior to the proposed project, the environmentally superior development alternative must be identified. A total of four alternatives have been identified as “environmentally superior” to the proposed project:

- 1) No-Project/No Development Alternative
- 2) No-Project/Existing General Plan Alternative
- 3) Reduced Density Alternative
- 4) Reduced Density and Development Area Alternative

The No-Project/No Development Alternative has the least impact to the environment because it would not result in the significant changes to landform, would not generate any additional traffic, noise, or air emissions, and would not require the provision of additional public services or utilities. While this alternative would avoid most of the significant effects of the proposed project, the beneficial impacts associated with new recreational facilities, the dedication of over 1,600 acres of permanent open space, improvements to hydrology and water quality, and improvements to the jobs/housing balance of the area would not occur. Also, as a result of the lack of construction of fire facilities proposed by the project, fire hazards would be increased for the surrounding Northwood, Northwood Point and Foothill Ranch communities as compared to the proposed project. In addition, the potential for development of the site at some future date would not be precluded, since the applicant could submit alternative development plans, potentially to the County of Orange, if the proposed project were not approved.

With regard to the remaining development alternatives, the Reduced Density and Development Area Alternative has been identified as the environmentally superior alternative. The Reduced Density and Development Alternative would substantially lessen impacts associated with agricultural resources, although it does not avoid or reduce the impact on agricultural resources to less than significant. This alternative also lessens impacts on aesthetics, air quality, geology/soils, population/housing, public services, transportation/traffic and utilities/service systems, but would continue to generate air quality impacts associated with the use of farm equipment and particulate matter generation from soil disturbance.

This alternative would also attain many of the project objectives identified in Section 2.2 but would result in a transfer of fewer units from other Planning Areas in the City which Planning Areas are more removed from activity centers and transportation systems. On balance, however, this alternative would result in the reduction of more jobs than housing and would improve the current jobs-housing balance.

---

This alternative appears to be feasible in the near term, however, over the long-term, there will be continued pressure to convert agricultural areas due to increased urbanization as well as the feasibility of agricultural operations in an urban environment due to regulatory and economic factors.

This alternative does not provide the same degree of environmental benefits as the proposed project, such as full implementation of the Jeffrey Open Space Spine. This alternative would also not meet the City's housing needs without greater intensification of existing development areas and could reduce the range of housing opportunities provided in the City. This alternative also does not provide new employment opportunities in an area where regional benefits, such as reducing traffic congestion and vehicle miles traveled, can be realized. The water quality benefits of this alternative would be less than the proposed project as runoff from agricultural areas will not be managed in the same manner proposed by the project for runoff from urban areas. This alternative has the potential to create greater land use impacts than the project as it would place new residential areas adjacent to ongoing agricultural operations.

Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts." [Guidelines Sec. 15126.6(c)] These are factors which will be considered by the City of Irvine decisionmakers in determining whether to approve the proposed project or one of the alternatives identified above.