CITY OF IRVINE STANDARD NOTES

NON-RESIDENTIAL CONSTRUCTION 2013 CALIFORNIA GREEN BUILDING STANDARDS (1.0)

Applies to ***Newly Constructed Non-residential Buildings and associated site development, initial tenant improvements regardless of valuation,*** ***and any subsequent addition of 1,000 square feet or more, or tenant improvement having a valuation of $200,000 and associated site development*** for which permit application is made on or after January 1, 2014. The following standard notes shall be completed and incorporated into the approved plans and all effected design features and specifications shall be made to conform.

 *(Instructions: Designer to place an* **X** *preceding each applicable section and complete the notes or indicate* **N/A** *if not applicable. Building plan check shall be responsible for verification except for those items preceded by a* **[P]** *which will be verified by Planning. All provisions generally apply to new construction and additions of 1,000 square feet or more or tenant improvements having a valuation of $200,000. An* ***[N]****, however, indicates a provision applies only to new construction, an* ***[E]*** *indicates additional qualifiers for the provision to apply to an addition or tenant improvement.)*

**PARKING AND CHANGING ROOMS** (CGBSC 5.106.4**)**

**[E]** Short term bicycle parking applies to existing facilities if the project is expected to generate visitor traffic and adds 10 or more vehicular parking spaces.

Check the appropriate box and provide complete input for each selection as applicable:

 **[P]** Short-term bicycle parking (bicycle racks) are provided to accommodate anticipated visitor traffic. The total number provided is: . These racks are located within 200 feet of the visitor’s entrance as depicted on plan sheet: .

**[E]** Long term bicycle parking applies to existing facilities if the project adds 10 or more vehicular parking spaces.

 This project will accommodate over 10 tenant-occupants, therefore long term bicycle parking is provided. The total number (minimum 1) provided equal to 5% of the required parking is: . The method(s) selected to satisfy this requirement is (are):

 Covered, lockable enclosures with permanently anchored racks for bicycles, the total number provided is: , see plan sheet: .

 Lockable bicycle rooms with permanently anchored racks, the total number provided is: , see plan sheet: .

 Lockable, permanently anchored bicycle lockers, the total number provided is: , see plan sheet: .

**DESIGNATED PARKING FOR “CLEAN AIR VEHICLES** (CGBSC 5.106.5.2, 5.710.6.3)

**[E]** Applicable for existing facilities if the project is expected to generate visitor traffic and adds 10 or more vehicular parking spaces.

 Per Table 5.106.5.2, a total of  Clean Air Vehicle parking spaces are provided. Spaces shall be permanently identified in 12 inch high lettering that says “CLEAN AIR/VAN POOL/EV”. Such lettering shall align with the end of the stall striping so as to be visible when a vehicle is parked in the stall. See plan sheet  defining designated stalls and lettering details.

**LIGHT POLLUTION REDUCTION** (CGBSC 5.106.8)

 **[P]** Outdoor lighting designed to comply with the City of Irvine Security Code, section 3-16-1 of the City of Irvine Zoning Code, which requires all direct rays to be confined to the site and that adjacent properties are protected from glare, and allowable BUG rating limitations of Table 5.106.8 of CGBSC are depicted on plan sheet  along with photometrics.

**WATER EFFICIENCY AND CONSERVATION** (CGBSC 5.303**)**

**Separate Submeters or metering devices**

Applicable to new buildings exceeding 50,000 square feet and **[E]** additions of 50,000 square feet or more made to existing buildings, and to any tenant of a new building or addition, regardless of size, which is projected to consume more than 1,000 gals/day sections 5.303.1.1 and 5.303.1.2 CGBSC.

 This project consists of a single tenant building with a dedicated meter.

A separate meter or metering device is provided forthe following spaces: **.**

See plan sheet  for details and specifications defining metering design.

 Separate meters or metering devices are not required as the new building or addition is less than 50,000 square feet, and no tenant usage is projected to exceed 1,000 gals/day.

 Separate meters or metering devices are not required as no tenant usage is projected to consume more than 100 gals/day.

Notes: (1) Tenants of new multi-tenant buildings or additions exceeding 50,000 square feet and that are not provided with a separate metering device must be shown to use less than 100 gals/day via worksheet WS-1 found in chapter 8 of the CGBSC and any necessary addendum worksheet to reflect process water or other uses not represented on the worksheet. (2) For new buildings or additions having a total floor area less than 50,000 square feet, all its spaces not having a separate metering device must be shown to have a projected consumption of less than 1,000 gals/day via worksheet WS-1 found in chapter 8 of the CGBSC and any necessary addendum worksheet to reflect process water or other uses not represented on the worksheet.

**INDOOR WATER USE** (CGBSC 5.303.2)

**[E]** Applicable to any newly installed plumbing fixture within the area of remodel or addition.

All new plumbing fixtures meet the requirements of Table 5.303.2.3 and section 5.303.3

 All new plumbing fixtures meet the requirements of Table 5.303.2.3 and section 5.303.3, see modified table below for flow rates.

 20 percent reduction in baseline water use is demonstrated, see attached work sheets, WS-1, WS-2…, pursuant to the exception to CGBSC section 5.303.2. For alternate fixture table, see plan sheet: .

TABLE 5.303.2.3 (modified)

FIXTURE FLOW RATES

|  |  |
| --- | --- |
| FIXTURE TYPE | MAXIMUM FLOW RATE  |
| Showerheads | 2 gpm @ 80 psi |
| Lavatory faucets | 0.5 gpm @ 60 psi |
| Kitchen faucets | 1.8 gpm @ 60 psi |
| Wash fountain | 1.8[rim space (in.)/20 gpm @60 psi] |
| Metering faucet | 0.2 gallons/cycle |
| Metering faucet for wash fountains | 0.2[rim space (in.)/20 gpm @60 psi] |
| Water Closets | 1.28 gallons/flush\* |
| Urinal | 0.5 gallons/flush |

\* Includes single and dual flush water closets with an effective flush rate of 1.28 gallons or less.

Dual flush toilets—The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush.

Note: The combined flow of multiple showerheads serving a single shower shall not exceed maximum allowable flow rate for a single fixture shower or the control valves shall be arranged to only allow one shower head to operate at a time.

**OUTDOOR WATER USE** (CGBSC 5.304)

**[E]** Applicable to any new landscaping in conjunction to addition or remodel.

Landscape and irrigation design shall comply with the City of Irvine Municipal Code Chapter 7 of Title 5, Sustainability in Landscaping.

**WATER RESISTANCE AND MOISTURE MANAGEMENT** (CGBSC 5.407)

**[E]** Applicable to any new entry or opening which is part of an addition of 1000 or more square feet or any tenant improvement having a valuation of $200,000 or more.

**ENTRIES** To prevent water intrusion into exterior entries and/or openings subject to foot traffic or wind-driven rain, the following features have been incorporated into the design for **primary exterior entries**:

 Door is protected by an awning or roof overhang four feet or more in depth, or is recessed four feet or more, see plan sheet: .

 Flashings integrated with a drainage plane, see plan sheet: .

 Nonabsorbent floor and wall finishes within at least two feet around and perpendicular to such openings, see plan sheet: .

**MATERIAL CONSERVATION AND RESOURCE EFFICIENCY- CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING** (CGBSC 5.408)

Recycling of materials for new construction, additions and remodels shall conform to the Construction and Demolition Materials Recycling Requirements of the City of Irvine Municipal Code, sections 6-7-901 through 6-7-912.

**BUILDING MAINTENANCE AND OPERATION** (CGBSC 5.410)

**RECYCLING BY OCCUPANTS**

**[E]** Applicable to an addition that adds 1,000 square feet or more or has a valuation of $200,000, that **also increases** total floor area by at least 30% of existing floor area.

 **[P]** Designated recycling areas shall be provided as required by sections 3-23-1 through 3-23-4 of the City of Irvine Zoning Code. See plan sheet: .

 **COMMISSIONING** Building Commissioning is **only** required for new buildings or initial tenant improvements greater than 10,000 square feet. (Exceptions: Dry Storage Warehouses and conditioned areas under 10,000 square feet, and accessory to dry storage warehouses.)

**Design**

Using the templates available through the California Building Commission available in “Part 4 Suggested Forms and Templates” of the [Guide to the Nonresidential CalGreen Code](http://www.documents.dgs.ca.gov/bsc/CALGreen/MasterCALGreenNon-ResGuide2010_2012Suppl-3rdEd_1-12.pdf) at: <http://www.bsc.ca.gov/Home/CALGreen.aspx>, the following documents are complete and included in the plans as follows:

* Completed and signed Owner’s Project Requirements (OPR), see sheet .
* Completed and signed Basis of Design (BOD), see sheet .
* Commissioning Plan, including a completed and signed “Commissioning Plan” form and complete coverage of each of the elements 1-9 as specified therein. Functional performance testing shall utilize templates available at the above referenced website, see sheet .

**Construction-Prior to Final Inspection Approval**

* A completed Commissioning Report shall be provided to the City Inspector prior to final inspection approval. Contents, pursuant to section 5.410.2.6, shall include a description of the commissioning process activities undertaken through the design, construction and reporting recommendations for post construction phases. In addition all required functional performance testing reports shall be included.
* A completed Systems Manual shall be made available for review by the City Inspector prior to final inspection approval. Contents shall include a completed and signed “System Manual” form from the above referenced website and complete coverage of each of the elements 1-7 as specified therein.

Note: Approved equals may be substituted for the forms specified herein which may include acceptance forms required under the California Building Energy Efficiency Standards.

 **TESTING AND ADJUSTING.** For buildings not exceeding 10,000 square feet, **[E]** and any new system serving an addition of 1,000 or more square feet or a tenant improvement having a valuation of $200,000, testing and adjusting are required.

**Design**

See sheet  for procedures for testing and adjusting systems, which includes:

* HVAC systems and controls.
* HVAC balancing per the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; or Associated Air Balance Council National Standards or approved equal.
* Indoor and outdoor lighting and controls.
* Water heating systems.
* Renewable energy systems.
* Landscape irrigation systems.
* Water reuse systems.

Functional performance testing report scope and content shall be consistent with CALGreen Compliance Form “Functional Performance Testing” available in the [Guide to Nonresidential Commissioning](http://www.documents.dgs.ca.gov/bsc/CALGreen/Non-Res-Comm-Guide-10-10.pdf) Guide to Nonresidential Commissioning at <http://www.bsc.ca.gov/Home/CALGreen.aspx>, or approved equals and may incorporate acceptance forms required under the California Building Energy Efficiency Standards. For itemized list of functional tests required see sheet .

**Construction-Prior to Final Inspection Approval**

Completed testing, adjusting, and balancing reports shall be provided to the City Inspector prior to final inspection approval. Contents shall match those specified in the procedures section above and be signed by the responsible parties.

**ENVIRONMENTAL QUALITY**

 **FIREPLACES** Wood burning devices including fireplaces are not permitted under SQAQMD Rule 445. Any installed gas fireplace shall be a direct-vent sealed-combustion type. (CGBSC 5.503)

**MECHANICAL EQUIPMENT AND DUCT PROTECTION** To reduce the amount of dust, water, and debris collected in mechanical equipment and ducts, all duct openings and other related air distribution equipment component openings shall be covered from the time of delivery at the jobsite through the construction until final start up. (CGBSC 5.504.3)

**FINISH MATERIAL POLLUTANT CONTROL**

* **Adhesives, sealants and caulks** shall meet the applicable standards of CGBSC 5.504.4.1 and tables 5.504.4.1 and 5.504.4.2 for VOC limits and content prohibitions.
* **Paints and coatings** shall meet the applicable standards of CGBSC 504.4.3 and table 5.504.4.3 for VOC limits.
* **Aerosol paints and coatings** shall meet the applicable standards of CGBSC 5.504.4.3.1.

**Carpet systems** shall meet the applicable standards of CGBSC 5.504.4.4 including CGBSC 5.504.4.4.1 for **carpet cushions** and CGBSC 5.504.4.4.2 for **carpet adhesives**.

**Resilient flooring** shall meet the applicable standards of CGBSC 5.504.4.6.

**Composite wood products** shall meet the applicable standards of CGBSC 5.504.4.5 and table 5.504.4.5.

**Environmental Tobacco Smoke Control (5.504.7)**

 See plan sheet  for designated outdoor smoking area which shows a minimum of 25 feet from building entries, outdoor ventilation intakes and operable windows.

 **Ventilation filtration-** CGBSC 5.504.5.3) **-** For new HVAC systems outside and return air shall pass through filtration media having a rating of:

 MERV 8 or better, see plan sheet  for specifications.

An ASHRAE 10 to 15 percent efficiency filter (only allowed for an HVAC unit meeting the 2013 California Energy Code of 60,000 btu/h or less and an energy usage of 0.4 W/cfm or less at design air flow), see plan sheet  for specifications.

**ENVIRONMENTAL COMFORT (CGBSC 5.507)**

**Exterior Noise** Wall and roof assemblies making up the building envelope and exposed to the noise source as follows shall meet a composite STC rating of 50 or a composite OITC rating of 40, and exterior windows within said walls shall meet an STC of 40 or an OITC of 30.

Prescriptive Method (Using [Sound Transmission Class (STC) Map - 2012](http://www.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=16660) at [www.cityofirvine.org](http://www.cityofirvine.org) in the [form catalog](http://www.cityofirvine.org/cityhall/cd/buildingsafety/formcatalog/default.asp))

 1. A portion or the entire building is within the 65 CNEL contour for a freeway or expressway therefore exterior wall assemblies and roof or roof-ceiling assemblies shall meet the specified exterior wall assemblies and roof or roof-ceiling assemblies requirements stated above. For details and specifications see plan sheets .

 2. A portion or the entire building is within the 65 CNEL contour for John Wayne Airport therefore exterior wall assemblies and roof or roof-ceiling assemblies shall meet the specified exterior wall assemblies and roof or roof-ceiling assemblies requirements stated above. For details and specifications see plan sheets .

 3. The project site fronts a street identified as producing 65 CNEL contours extending beyond the right of way therefore that portion of the building that is the contour shall meet the specified exterior wall assemblies and roof or roof-ceiling assemblies requirements stated above. For details and specifications see plan sheets .

 This building is a factory, storage facility, utility building, enclosed parking structure or stadium therefore no STC assemblies are required.

**Performance Method**

 Pursuant to Section 5.507.4.2, site and building mitigations have been defined based on a noise study prepared by an acoustical engineer. For a summary of features see plan sheets . For construction details see sheets

 Prior to final inspection an acoustical report shall be provided to the City Inspector which demonstrates complying interior noise sound levels. Said report shall be signed and stamped by an acoustical engineer.

**Interior Sound**

 Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40. Note:Examples of assemblies and their various STC ratings may be found at the California Office of Noise Control @ http://www.toolbase.org/PDF/Case Studies/stc\_icc\_ratings.pdf. For details and specifications see plan sheets .

 No interior walls separate tenant spaces or occupant spaces and public areas.