1.0 Executive Summary

1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The City of Lake Forest (City) undertook analysis of the proposed Portola Center Area Plan and Tentative Tract Map Nos. 15353 and 17300 (the proposed project) and evaluated it against the standards set forth in Public Resources Code, section 21166 and State California Environmental Quality Act (CEQA) Guidelines, section 15162. That analysis is set forth in the Modified Initial Study attached hereto as Appendix 11.1, *Modified Initial Study and Notice of Preparation*. The City is the Lead Agency under CEQA and has determined that a Subsequent Environmental Impact Report (SEIR) is required for the proposed project (State Clearinghouse No. 2012061063). This SEIR has been prepared in conformance with CEQA (California Public Resources Code [PRC] Section 21000 et seq.); CEQA Guidelines (California Code of Regulations [CCR], Title 14, Section 15000 et seq.); and the rules, regulations, and procedures for the implementation of CEQA, as adopted by the City. The principal CEQA Guidelines sections governing content of this document include Article 9 (*Contents of Environmental Impact Reports*) (Sections 15120 through 15132), and Section 15162 (*Subsequent EIRs and Negative Declarations*).

1.2 PROJECT BACKGROUND

1.2.1 OPPORTUNITY STUDY AREA BACKGROUND

Due to aircraft flight patterns from the former El Toro Marine Corps Air Station (El Toro MCAS) and resultant noise from aircraft, restrictions were placed on a large swath of land located in the central portion of the City (which includes the project site). This area was formerly contained within the 65 Community Noise Equivalent Level (CNEL) contours and airport crash zones, which restricted development in this portion of the City. As the City developed in the southern and northern portions with residential and commercial development, along with areas of park, trail, and other recreational uses, this land use restricted area was developed with industrial, office, and commercial uses devoid of the open space and trail linkages found in the remainder of the City. Consequently, the land use restrictions effectively segregated the northern and southern portions of the City.

With the decision to utilize the former El Toro MCAS property for non-aviation uses, the restriction on certain development in the central portion of the City is no longer necessary. The City initiated a series of studies, collectively dubbed the "Opportunities Study." The overall purpose of the Opportunities Study was to examine the impacts and benefits of changes to the allowed land uses in this land use restricted area. At the outset of the Opportunities Study, the City Council developed study objectives. Utilizing the established study objectives as the basis for analysis of the potential land use changes, the City Council approved a phased approach to the Opportunities Study. The City accepted conceptual plans from six landowners in the restricted land use area, cumulatively called the "Landowner Concept Plan," which included residential and mixed uses. The land use changes proposed by the landowners were evaluated from planning, traffic, and fiscal perspectives, and compared against the industrial and commercial land uses previously allowed under the City's

General Plan. Through the Opportunities Study process, a "Recommended Plan" was developed for further study. The Recommended Plan for development included seven parcels[1], with a public facilities overlay applied to a portion of the seventh parcel.

The *City of Lake Forest Opportunities Study Final Program Environmental Impact Report* (OSA PEIR) was prepared in order to consider potential environmental impacts that would result from implementation of the City's proposed land use changes pursuant to the Recommended Plan. The City subsequently identified a new alternative (Alternative 7), which was a combination of several of the alternatives discussed in the OSA PEIR. The new Chapter 7, which was circulated for public review and analysis, described Alternative 7 and provided additional information on significant changes or new information that occurred subsequent to circulation of the prior Draft OSA PEIR. The land uses proposed under Alternative 7 are summarized in the OSA PEIR Table 7.4-1. From among the seven development alternatives analyzed in the OSA PEIR, the environmentally superior alternative was concluded to be Alternative 7 (Hybrid Alternative).

The OSA PEIR included an analysis of Site 2, which generally comprises the proposed Portola Center Area Plan and Tentative Tract Map Nos. 15353 and 17300 project (the subject of this Environmental Impact Report [EIR]). According to OSA PEIR Table 2-5, the OSA PEIR assumed development of a maximum of 1,132 dwelling units, 178,720 square feet of commercial uses, 10.0 acres of Neighborhood Park, and public facilities (including a transportation network) on Site 2. Pursuant to the OSA PEIR Table 7.4-1, Alternative 7 involves a maximum of 930 dwelling units, 40,000 square feet of commercial, and 8.0 acres of Park uses on Site 2. The OSA PEIR, which analyzed the environmental impacts associated with implementation of General Plan Amendment 2008-02B and Zone Change 2008-02, among others, was certified on June 3, 2008, and the City-adopted Alternative 7.

Concurrent with the approval of the OSA General Plan Amendment (GPA) and certification of the OSA PEIR, the City and Applicants entered into a Development Agreement (approved July 1, 2008) whereby the City vests the "permitted uses, density, intensity of use, and timing and phasing of development consistent with the New Development Plan in exchange for the Owner's commitment to provide significant public benefits to the City…" As set forth in the Development Agreement (Section 9, *Public Benefits*), the Owner agrees to contribute to the development of certain public facilities owned by the City and School District:

City Facilities

- Sports Park, City Hall, and Community Center;
- Dedication or acquisition of a park site (Portola Center Park Site, consisting of an on-site 8.0-acre Sports Park and an on-site 5.0-acre Neighborhood Park, Rados Park Site Option, consisting of the Rados site and an on-site 5-acre Neighborhood Park, or Alternative Off-Site Park Site Option, consisting of an off-site park site and an on-site 5.0-acre Neighborhood Park);

[1] The OSA PEIR analyzed a total of seven sites for potential development. General Plan Amendments, Zone Changes, and Development Agreements were approved for five of the seven analyzed properties in 2008 and 2010.

- Dedication of neighborhood park land at a rate of 3 net usable acres per 1,000 residents, which shall include the on-site 5.0-acre Neighborhood Park, described above; and
- Lake Forest Transportation Mitigation (LFTM) Improvements.

School Facilities

- School Facilities funding and mitigation.

1.2.2 IMPLEMENTING AGREEMENTS BACKGROUND

The Development Agreement between the City and Portola authorizes the use of an implementing agreement "for the implementation of obligations established in" the Development Agreement. The City and Portola have entered into two implementing agreements, one in March 2010 and another in June 2013.

MARCH 2010 IMPLEMENTING AGREEMENT

On June 12, 2009, the Nature Reserve of Orange County (NROC) Board of Directors approved a boundary adjustment to the Natural Community Conservation Plan & Habitat Conservation Plan County of Orange Central & Coastal Subregion Natural Community Conservation Planning/Habitat Conservation Plan (NCCP/HCP), to remove an erroneously mapped "Proposed NCCP Reserve" designation from the Property (project site).

Thereafter, on March 18, 2010, the NROC Board of Directors approved a Minor Amendment to the NCCP/HCP to allow for development in a designated "Existing Use Area." The Minor Amendment establishes the appropriate Mitigation Fee for the project and ensures that the development of the project is consistent with the NCCP/HCP, including development of the "Existing Use Area." The Minor Amendment also establishes that with the payment of the Mitigation Fee subject to certain credits and the implementation of construction measures in the NCCP/HCP (imposed on the project as Mitigation Measure 3.4-2 in the OSA PEIR), no further action (e.g., open space dedications or other biological mitigation) is required by the project applicant under the NCCP/HCP and the Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA) for development of the project. Accordingly, to date, the Applicant has conveyed all the required open space (approximately 32 acres) through the Irrevocable Offers of Dedication of Fee Interest (IOD) (discussed below) to the City.

In connection with the Minor Amendment, the City and the Applicants entered into an Implementing Agreement (2010 IA) (dated March 18, 2010) for purposes of implementing obligations established in the Development Agreement and the Minor Amendment. Specifically, the 2010 IA confirmed, consistent with NROC's determination in the Minor Amendment, the City's determination that development of the project (as defined in the Development Agreement), including development on that portion of the property currently designated as "Existing Use Area" and that portion of the property that was previously designated as "Proposed NCCP Reserve," is consistent with the NCCP/HCP and is in compliance with FESA and CESA. Further, consistent with NROC's determination in the Minor Amendment, the 2010 IA confirms the City's determination that development of the project, including development on the currently designated

"Existing Use Area" and the previously mapped "Proposed NCCP Reserve," is allowable without any further action by the City with respect to the NCCP/HCP, or the FESA and CESA. It confirms Portola's agreement to the City's determination and recordation of certain Irrevocable Offers to Dedicate and Lot Line Adjustments for certain open space to be added to the Reserve system. This open space is the open space that the Applicant has already conveyed to the City as part of the mitigation addressed in the Minor Amendment.

In addition, the 2010 IA effectuates Portola's agreement to locate residential lots according to a defined "Development Area." The 2010 IA also effectuates the City's agreement to use its best efforts to support Portola with respect to (1) a revised land use plan, which would add up to twenty (20) residential lots to the planning area north of Glenn Ranch Road, but the total residential lots shall not exceed what is allowed by the Development Agreement; (2) proposed retaining walls, including working cooperatively with Portola to review the proposed retaining wall designs consistent with guidelines adopted by the City that allow for the unique conditions of the project site subject to the Development Agreement; and (3) implementation of appropriate fuel management zones as authorized by the Orange County Fire Authority.

Finally, pursuant to the Development Agreement, the 2010 IA confirms the project may develop between 10,000 and 40,000 square feet of commercial space and be in compliance with the Development Agreement.

JUNE 2013 IMPLEMENTING AGREEMENT

Pursuant to the terms of the Development Agreement, the Applicant is required to identify an eight-acre sports park within Portola Center on its First Tentative Map, with the option of substituting the Sports Park Site Component with an offsite sports park or the Rados Park Site. The Development Agreement also provides that if the Applicant is "unable to dedicate the Rados Park Site, City may ... commence proceedings ... to condemn the Rados Park Site." Prior to the deadline for the Applicant to provide an irrevocable offer to dedicate the Rados Park Site, the Applicant commenced negotiations for the acquisition of the Rados Park Site but when the Applicant was unable to acquire the Rados Park Site, the City commenced proceedings to condemn the Rados Park Site in order to meet the City's schedule to build a sports park on the site. The City took possession of the Rados Park Site on April 1, 2012, and in June 2013, settled the condemnation proceedings, and anticipates a formal settlement agreement to be executed in July 2013.

During the pendency of the Rados condemnation proceedings, the Applicant was processing its First Tentative Map with the City, and consistent with the Development Agreement, proposed alternate maps to satisfy the sports park component of the proposed project. One map included an onsite 8.0-acre Sports Park Site Component within the boundaries or the project site, and a second map implemented the Rados Park Site Option, where the Applicant would participate in the acquisition of the offsite Rados property and residential units would be located where the onsite Sports Park Site Component would have been sited. Both maps are considered in the Modified Initial Study. Since the issuance of the Modified Initial Study, the Applicant has determined to proceed with the Rados Park Site Option, which is the option and map that is evaluated in this SEIR.

In addition, the City and the Applicant sought to implement the obligations of the Development Agreement with respect to the Rados Park Site, affordable housing, neighborhood parkland and public trails, and associated credits, and entered into an Implementing Agreement in June 2013. More specifically, the 2013 Implementing Agreement (2013 IA) confirms Portola's obligations with respect to the Sports Park Site Component under the Development Agreement, and establishes a schedule for Portola's payment of the Fair Market Value of the Rados Park Site and Condemnation Costs and for City's granting of City Facilities Fees credits.[2] The 2013 IA confirms Portola's obligations to provide or to facilitate the production of affordable housing under the Affordable Housing Implementation Plan, including Portola's ability to provide Second Units. Finally, the 2013 IA confirms Portola's obligations with respect to the neighborhood parkland, including neighborhood parkland credits for improved parkland, public and private, and clarifies Portola's ability to build an improved public trail and receive credits for such trail.

1.3 PROJECT SUMMARY

Baldwin & Sons (Applicant) seeks City approval for an Area Plan and Tentative Tract Maps (TTMs) 17300 and 15353 for a residential and mixed-use development on an approximately 195 acre site within the City of Lake Forest, Orange County, California. The project will include a variety of housing types, including a mixed-use area with a small neighborhood commercial component, as well as parks, a public trail, and open space. The Portola Center Area Plan would provide a comprehensive set of guidelines, regulations, and implementation plans that would guide development of the project site. The Area Plan is designed to serve as a "blueprint" for development of the project area by establishing the distribution of land use and the criteria for development of each land use district. TTM 17300 (north of Glenn Ranch Road) proposes two single-family residential neighborhoods (east and west of Saddleback Ranch Road). TTM 15353 (south of Glenn Ranch Road) proposed various single- and multi-family neighborhoods, as well as a mixed-use (commercial/residential) neighborhood. The project also proposes a 5.0-acre Community Park, 1.5 mile perimeter trail, and three neighborhood parks, for a total of 10.8 acres of parkland.

1.4 ENVIRONMENTAL PROCEDURES

1.4.1 CEQA DOCUMENT TIERING

The project site is part of the larger Opportunities Study Area (OSA) and is one of several properties, which were systematically analyzed by the City for land use changes from industrial, business park, and commercial to residential uses. These land use changes (General Plan Amendment 2008-02 and Zone Changes 2008-01 through 2008-05) were approved by the City after the closure of the El Toro Marine Corps Air Station (El Toro MCAS). It is noted that these entitlement numbers refer to the entire OSA, while GPA 2008-02C and Zone Change 2008-03 refer specifically to the project site. Prior to approval of these land uses changes, the City initiated an Opportunities Study in order to examine the impacts and benefits of land use changes proposed by the City. The OSA PEIR, dated May 23, 2008, was prepared to consider the potential

[2] The terms with initial capital letters utilized in this summary are defined in the 2013 IA or the Development Agreement.

environmental impacts that would result from implementation of General Plan Amendment 2008-02 and Zone Changes 2008-01 through 2008-05.

Per Section 15168(d) of the CEQA Guidelines, the Program EIR can be used to simplify the task of preparing environmental documents on later parts of the program. The Program EIR provides the basis in an Initial Study for determining whether the later activity may have any significant effects; and be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.

The OSA PEIR, which included analyses for General Plan Amendment 2008-02C and Zone Change 2008-03 for the project site (as Site 2), was certified in June 2008. The OSA PEIR is available in hard copy format at the City of Lake Forest and on the City's web site. General Plan Amendment 2008-02C and Zone Change 2008-03 were approved by the City Council in July and August 2008.

THE TIERING PROCESS

To avoid repetition, wasted time, and unnecessary speculation, a lead agency may "tier" EIRs for a sequence of actions so that the later EIRs incorporate and build on the information in the previous EIRs. (PRC Sections 21068.5, 21093; CEQA Guidelines Section15152.) In particular, tiering may be used when the sequence of environmental review begins with an EIR prepared for a program, plan, policy, or ordinance, such as the OSA PEIR. (PRC Section 21094(a); CEQA Guidelines Section 15152(d).) The first-tier EIR may be followed by an EIR for another plan or policy of lesser scope, or a site-specific EIR for a specific project. (PRC Section 21094(a); CEQA Guidelines Sections 15152(b), 15385(a).

Once a first-tier EIR, such as the OSA PEIR, has been certified for a program, plan, policy, or ordinance, the significant environmental effects of a later plan or policy of lesser scope or a later development project must be examined using a tiered EIR. (PRC Section 21094(a).) The second-tier EIR, here the Subsequent EIR for the Project, is limited to significant environmental effects that were (1) not examined in the OSA PEIR, or (2) previously examined and that are susceptible to substantial reduction or avoidance through project revisions, mitigation measures, or other means. (PRC Section 21068.5, CEQA Guidelines Section 15152(d).)

The SEIR need not examine significant environmental effects that the City determined were either (1) mitigated or avoided as a result of findings adopted under PRC Section 21081(a)(1) for the OSA PEIR, or (2) examined in a sufficient level of detail in the OSA PEIR to allow it to be mitigated or avoided through revisions to the project, imposition of conditions, or other means when the later project is approved. (PRC Section 21094(a)(1).) Further, the City must determine whether the Project may cause significant environmental effects that were not adequately addressed in the OSA PEIR. (CEQA Guidelines Section 15152(f).) The City may conclude that a significant environmental effect has been adequately addressed in the OSA PEIR if it determines, based on an initial study or other analysis, that either of these statutory standards is met. (CEQA Guidelines Section 15152(f)(3).)

Accordingly, as a second-tier EIR, the SEIR should not reexamine significant project-related environmental effects that would be mitigated or avoided through measures resulting from the OSA PEIR, or impacts that were examined in sufficient detail that they can be mitigated or avoided when the later project is approved. (PRC Section 21094(a)(1); CEQA Guidelines Section 15152(f)(3).) The discussion and analysis in the SEIR is therefore limited to significant environmental effects that were not examined in the OSA PEIR, and significant effects that were not examined in sufficient detail to allow mitigation measures to be devised, but that can be mitigated or avoided after further study. (PRC Section 21068.5; CEQA Guidelines Section 15152(d).) As such, where the OSA PEIR examined impacts at a general programmatic level and did not evaluate project-level impacts, the SEIR provides an independent analysis of the Project's significant environmental impacts. (*See e.g., In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal. 4th 1143, 1173.)

TIERING FROM THE OSA PEIR

Where appropriate, this SEIR tiers off the OSA PEIR. As discussed above, under CEQA Guidelines Section 15152, tiering is appropriate when the sequence of analysis follows from an EIR prepared for a general plan, policy, or program to an EIR of lesser scope, or to a site-specific EIR. Under CEQA, the OSA PEIR is considered a first tier document and this SEIR for the proposed project is considered a second tier document. Pursuant to CEQA Guidelines Section 15152(d)(1) and (2), the standard of review for an SEIR is defined as follows:

> *(d) Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:*
>
> *(1) Were not examined as significant effects on the environment in the prior EIR; or*
> *(2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means.*

Accordingly, this SEIR will focus its analysis on changes to the project or the surrounding circumstances that may have occurred since the City of Lake Forest certified the OSA PEIR. Under principals of tiering, if a first tier document found significant impacts, then the second tier EIR must require implementation of the first tier mitigation measures unless the analysis explains that the measures are not applicable or that other mitigation measures can replace the previous measures and similarly reduce the impacts to a level of insignificance. The OSA PEIR determined that the following significant and unavoidable impacts for Site 2 (the project site) would occur with implementation of the General Plan Amendment 2008-02C and Zone Change 2008-03:

- Light and glare;
- Threshold exceedances established by the SCAQMD and cumulative considerations for air quality;
- Cumulatively considerable incremental contribution to the worldwide increase in Greenhouse Gas emissions;
- Water quality of receiving waterbodies for pesticides only;

- Cumulative long-term (2030 General Plan buildout) conditions for noise; and
- Inducing substantial population growth.

All other impacts were found to be less than significant through the existing standards, regulations, and/or mitigation measures imposed under the OSA PEIR. As discussed previously, this SEIR is "tiered" from the OSA PEIR. As defined under *CEQA Guidelines* Section 15385, "tiering" refers to the analysis of general matters in broader, programmatic EIRs (such as the OSA PEIR) with subsequent narrower EIRs for individual projects that concentrate on site-specific issues and incorporate by reference the general discussions in the programmatic EIR. CEQA and the CEQA Guidelines encourage the use of tiered EIRs to reduce delays and excessive paperwork in the environmental review process. This is accomplished in tiered EIRs by eliminating repetitive analyses of issues that were adequately addressed in the Program EIR and by incorporating those analyses by reference. The tiering of the environmental analysis for the proposed project allows this SEIR to rely on the OSA PEIR (incorporated by reference) for: (1) a discussion of general background and setting information for environmental topic areas; (2) overall growth-related issues; (3) issues that were previously evaluated in sufficient detail in the OSA PEIR and for which there is no significant new information or changed circumstances that would require further analysis; and (4) cumulative impacts. For those impacts that were determined to be significant and unavoidable for Site 2 in the OSA PEIR, and which will remain significant and unavoidable with the implementation of the Project, the SEIR is not required to, and does not provide, duplicative analysis. Certain environmental analyses from the OSA PEIR are reiterated in this SEIR to provide a comprehensive analysis of the environmental factors, but the inclusion of such analyses is not intended to provide a basis for reconsidering the City's certification of the OSA PEIR and its approval of the OSA General Plan Amendment.

EIR FORMAT

Based upon the Modified Initial Study, City of Lake Forest staff determined that a SEIR should be prepared for the proposed project because there was new information of substantial importance that showed the proposed project would have one or more significant effects not discussed in the OSA PEIR or its Addendum. The scope of the SEIR was determined based upon the City of Lake Forest's Modified Initial Study, comments received in response to the NOP, and comments received at the scoping meeting conducted by the City of Lake Forest. Pursuant to Sections 15126.2 and 15126.4 of the State CEQA Guidelines.

The SEIR is organized into 11 sections, as follows:

- Section 1.0, *Executive Summary*, provides a brief project description and summary of the environmental impacts and mitigation measures.

- Section 2.0, *Introduction and Purpose*, provides CEQA compliance information.

- Section 3.0, *Project Description*, provides a detailed project description indicating project location, background, and history; project characteristics, phasing, and objectives; as well as associated discretionary actions required.

- Section 4.0, *Basis for the Cumulative Analysis*, describes the approach and methodology for the cumulative analysis.

- Section 5.0, *Environmental Analysis*, contains a detailed environmental analysis of the existing conditions, project impacts, recommended mitigation measures, and unavoidable adverse impacts for a number of environmental topic areas.

- Section 6.0, *Other CEQA Considerations*, discusses significant environmental changes that would be involved in the proposed action, should it be implemented. The project's growth-inducing impacts, including the potential for population growth, are also discussed.

- Section 7.0, *Alternatives to the Proposed Action*, describes a reasonable range of alternatives to the project or to the location of the project that could avoid or substantially lessen the significant impact of the project and still feasibly attain the basic project objectives.

- Section 8.0, *Effects Found Not to be Significant*, provides an explanation of potential impacts that have been determined not to be significant.

- Section 9.0, *Organizations and Persons Consulted*, identifies all Federal, State, or local agencies, other organizations, and individuals consulted.

- Section 10.0, *Bibliography*, identifies reference sources for the SEIR.

- Section 11.0, *Appendices*, contains technical documentation for the project.

1.5 SUMMARY OF PROJECT ALTERNATIVES

In accordance with CEQA Guidelines Section 15126.6, this section describes a range of reasonable alternatives to the project, or to the location of the project. The analysis focuses on alternatives capable of avoiding or substantially lessening the project's significant environmental effects, even if the alternative would impede, to some degree, the attainment of the proposed project objectives, or would be more costly. The range of required alternatives is governed by the "rule of reason" that requires the analysis to set forth only those alternatives necessary to permit a reasoned choice. The alternatives are limited to ones that would avoid or substantially lessen any of the project's significant effects. Of those alternatives, only the ones that the lead agency has determined could feasibly attain most of the basic project objectives are examined in detail.

The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. The range of potential alternatives to the proposed project shall also include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. 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). Only locations that would avoid or substantially lessen any of the project's significant

effects need be considered for inclusion. An alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative need not be considered.

PROJECT OBJECTIVES

The following are the project's goals and objectives, which were developed by the project Applicant team, in consultation with community feedback, and the City of Lake Forest.

- To implement the General Plan land use designations established for the property by the Opportunities Study Area (OSA) project, consisting of a variety of housing types including single-family detached, multi-family, and affordable units, distributed across approximately 146 acres of net development area, including approximately 57 affordable units in a mixed-use site.

- To develop in accordance with the provisions of the Portola Center Development Agreement to ensure the orderly and economically viable build out of the project site.

- To create a balanced and integrated community by providing linkages to other segments of the City through trail systems, public amenities, and carefully planned residential neighborhoods.

- To implement the funding provisions set forth in the Portola Center Development Agreement which ensure that fees are paid as development proceeds to fund public facilities which provide community- and City-wide benefits.

- To benefit the entire community by providing adequate public open space (public parks and trail connections to existing regional trails), including the dedication of minimum 5-acre Neighborhood Park to the City.

- Ensure adequate internal circulation through street designs consistent with City standards.

Per CEQA Guidelines, only those impacts found significant and unavoidable are relevant in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project. As discussed throughout Section 5.0, *Environmental Analysis*, of this SEIR, environmental issue areas related to aesthetics, cultural resources, geology and soils, hydrology and water quality, land use and relevant planning, noise, traffic and circulation would result in less than significant impacts after implementation of recommended mitigation, if applicable. However, the City determined that new information exists that the proposed project would result in significant and unavoidable affects involving air quality and greenhouse gas (GHG) emissions not discussed in the OSA PEIR. These significant and unavoidable impacts are further detailed below.

AIR QUALITY

- Regional Construction Related Emissions – Activities related to construction of the project would exceed the SCAQMD daily emission thresholds for regional ROG and NO_X after implementation of all feasible mitigation measures. Therefore, the construction of the

project would have a significant and unavoidable impact on regional air quality. Construction emissions would not exceed the SCAQMD significance threshold for CO, SO_X, PM_{10}, and $PM_{2.5}$.

- Localized Construction Related Emission – Construction-related emissions would exceed the SCAQMD localized significance thresholds for NO_X and PM_{10} after implementation of all feasible mitigation measures. Therefore, construction would have a significant and unavoidable impact on localized significance air quality.

- Regional Operational Emissions – During project operations, the project would result in an exceedance of regional emissions thresholds from the operation of both stationary and mobile sources. OSA PEIR Mitigation Measures GCC2 through GCC8 and additional Mitigation Measure GHG-1 would reduce the potential air quality impacts to the degree technically feasible; however, ROG and NO_X emissions would remain above SCAQMD significance thresholds. Therefore, operation of the proposed project would have a significant and unavoidable impact on regional air quality.

- Cumulative Emissions – As stated above, construction and operational activities would create a significant and unavoidable impact due to exceedances of SCAQMD thresholds for ROG and NO_X. Implementation of recommended OSA PEIR Mitigation Measures 3.3-1 through 3.3-7, GCC2 through GCC8, and additional Mitigation Measures AQ-1 and GHG-1 would reduce impacts; however, a significant and unavoidable impact would remain.

GREENHOUSE GAS EMISSIONS

- GHG Emissions – Implementation of OSA PEIR Mitigation Measures GCC2 through GCC8, and Mitigation Measure GHG-1would reduce project-related GHG emissions to 5.9 $MTCO_2eq$ per capita per year, which would still exceed the 4.8 $MTCO_2eq$ per capita per year project level GHG threshold.

- Cumulative GHG Emissions – As stated above, project-related GHG emissions would be significant and unavoidable despite the implementation of applicable OSA PEIR Mitigation Measures GCC2 through GCC8, and Mitigation Measure GHG-1. Therefore, the project's cumulative GHG emissions would be considered significant and unavoidable.

The proposed project evaluated in this SEIR is one of the alternatives that was considered and approved as a part of the OSA PEIR process (OSA PEIR and Recirculated OSA PEIR). As described below, seven alternatives were considered in the OSA PEIR process, and Alternative 7 was implemented for the Portola Center project site (Site 2), which resulted in a reduction of dwelling units from 1,132 to 930 and a reduction in commercial uses from 178,720 square feet to 40,000 square feet, as compared to the original project proposed. This SEIR describes the alternatives considered in the OSA PEIR and other alternatives that were rejected as infeasible, and the potential environmental impacts associated with the following alternatives are compared to impacts from the proposed project:

- No Project/No Build Alternative;
- Reduced Density Alternative; and
- Reduced Grading/Reduced Intensity Alternative.

Throughout the following analysis, the alternatives' impacts are analyzed for air quality and GHG emissions, as examined in Section 5.6 and Section 5.7 of this SEIR, respectively. In this manner, each alternative can be compared to the proposed project on an issue-by-issue basis. The end of this section provides an overview of the alternatives analyzed and a comparison of each alternative's impact in relation to the proposed project. This section also identifies alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process. Per CEQA Guidelines Section 15126.6, among the factors used to eliminate alternatives from detailed consideration are: failure to meet most of the basic project objectives; infeasibility; or inability to avoid significant environmental impacts. Section 7.4, *Environmentally Superior Alternative*, references the "environmentally superior" alternative, as required by the CEQA Guidelines.

ALTERNATIVES CONSIDERED BUT REJECTED FOR FURTHER ANALYSIS

The following is a discussion of the land use alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this SEIR. Per CEQA Guidelines Section 15126.6(c), 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.

OSA PEIR ALTERNATIVES

The project site is part of the larger OSA and is one of the City's seven remaining vacant properties. The Lake Forest Opportunities Study (Opportunities Study) involved a systematic analysis of the project site and an additional six properties (838 acres), in order to amend their General Plan (and Zoning) designations from industrial and commercial uses to residential and commercial uses. The overall purpose of the Opportunities Study was to examine the impacts and benefits of changes to the allowed land uses in the OSA. A phased approach to completion of the Opportunities Study was conducted, which included consideration of conceptual plans from the OSA landowners (i.e., Landowner Concept Plan) involving residential and mixed uses. The land use changes proposed by the landowners were evaluated from planning, traffic, and fiscal perspectives and compared against the industrial and commercial land uses currently allowed under the General Plan. Ultimately, a "Recommended Plan" was developed for further study, which consisted of development on six parcels and approval of a public facilities overlay on a portion of a seventh parcel. Collectively, the systematic analyses that were conducted as part of the OSA and OSA PEIR discussed below encompass the alternative development scenarios for the project site (subject of this SEIR) that were considered by the City of Lake Forest but were rejected as infeasible. The following summarizes the development scenarios that were considered, and presents the findings of the environmental impact analyses that were conducted.

The OSA PEIR was prepared to consider the potential environmental impacts that would result from implementation of the City's proposed land use changes pursuant to the Recommended Plan. The project site, subject of this SEIR, is one of the seven properties analyzed in the OSA PEIR. OSA PEIR Chapter 2.5, *Proposed Project*, details the proposed GPA and ZC of the seven properties involving 838 acres of vacant lands. The GPA and ZC involved development of 5,415 DU on Sites 1 through 6 and a public facilities overlay on Site 7. Approximately 50 acres of neighborhood parks, up to 45 acres of public facilities (sports park and Community Center/Civic Center), and 648,720 square feet of commercial development were proposed. The proposed land uses are summarized in OSA PEIR Table 2-5, *Project Summary*, and illustrated on OSA PEIR Figure 2-4, *Proposed Project Land Use Map*. The project site, subject of this SEIR, is analyzed as Site 2 in the OSA PEIR.

OSA PEIR Chapter 4, *Alternatives to the Proposed Project*, analyzed the following alternatives to the project (i.e., the Recommended Plan) or to the location of the project:

- *Alternative 1*. No Project/Reasonably Foreseeable Development General Plan Alternative – This alternative assumed that development would occur on the OSA project sites as set forth in the then current General Plan.

- *Alternative 2*. Development on Sites 1 through 6 and Public Facilities Overlay on Site 1 – This alternative assumed that the proposed OSA project development, with the exception that 408 residential units would be removed from Site 1 to allow development of all three community facilities (Civic Center, Community Center, and sports park) on a 45-acre portion in the northwestern portion of Site 1 adjacent to Bake Parkway. The site would have remained developed with 320,000 square feet of commercial development, and a new net development of 2,407 dwelling units consisting of 1,102 medium-density residential units, 805 single-family units, and 500 rental units. New General Plan designations would have remained for the site as under the proposed OSA project.

- *Alternative 3*. Development on Sites 1 through 6 and Public Facilities Overlay on Sites 1, 3, and 4 – This alternative included the proposed OSA project development on Sites 2, 5, and 6. The analysis assumed that the Civic Center and Community Center would be built on Site 3, utilizing 6 acres, while two sports parks would utilize 18 acres from Site 1 and 20 acres from the southern portion of Site 4. Site 1 would have continued to accommodate residential units and commercial uses. Site 3 would have continued to accommodate 833 medium-density dwelling units, eliminating 250 residential units from Site 4 as under the proposed OSA project; 150,000 square feet of commercial would have been developed on Site 4. New General Plan designations would have remained the same as under the proposed OSA project alone.

- *Alternative 4*. Development on Sites 1 through 6 and Public Facilities Overlay on Sites 4 and 9 – This overlay assumed 35 acres from Site 4 and 10 acres from Site 9 for the public facilities; 150,000 square feet of commercial would have been developed on Site 4; the 200,000 square feet of business park uses that could be accommodated without the overlay would have been eliminated on Site 9. The 475 residential units would have removed from Site 4. Zoning for Site 9 would have changed from urban activity (Baker Ranch Planned Community) to Public Facility Overlay. Land use designation for site 9 would have been

changed from business park to business park with land use overlay. Development on Sites 1, 2, 3, 5, and 6 would have remained as under the proposed OSA project.

- *Alternative 5*. Landowner Concept Plan – This alternative consisted of the conceptual plans submitted by six participating OSA landowners during Phase 2 of the Opportunities Study. Those plans comprised a mixed-use plan for the OSA with 6,617 residential units, 498,720 square feet of commercial uses, and 41.4 acres of neighborhood parks.

- *Alternative 6*. Proposed Project Plus Public Facilities/Land Use Overlay on Site 7 – In this alternative, the entire 121-acre site would have hosted all three public facilities on a 45-acre portion, plus 450 low-medium density (single-family detached) dwelling units on 76 acres at a gross density of approximately six units per acre. These units were in addition to the proposed OSA project's maximum of 5,415 residential units. The site would have retained its current General Plan designation of Business Park. All development on Sites 1 through 6 would have continued as under the proposed OSA project.

The following alternatives were also considered infeasible and rejected from further consideration:

- General Plan Amendment and Zone Change for All-Commercial Development;
- General Plan Amendment and Zone Change for All-Residential Development;
- General Plan Amendment and Zone Change for All-Industrial/Business Park Development;
- General Plan Amendment and Zone Change for Industrial-Residential Alternative;
- Reduced Density Alternative; and
- Public Facilities Overlay on Sites 4 and 8.

Subsequent to the OSA PEIR public comment period, the City identified a new alternative for locating the public facilities. This new alternative (Alternative 7), which is a combination of several of the alternatives discussed in the OSA PEIR, is referred to as the "Hybrid Alternative." The new Chapter 7, which was circulated for public review and analysis, describes the Alternative 7 (Hybrid Alternative) and provides additional information on significant changes or new information that occurred subsequent to circulation of the prior Draft OSA PEIR. The land uses proposed under Alternative 7 are summarized in Recirculated OSA PEIR Table 7.4-1.

From among the seven development alternatives analyzed in the OSA PEIR and Recirculated OSA PEIR, the environmentally superior alternative was concluded to be Alternative 7 (Hybrid Alternative), since it would reduce impacts to the greatest extent by reducing project trip generation and overall development. Pursuant to Recirculated OSA PEIR Table 7.4-1, Alternative 7 involves a maximum of 930 dwelling units, 40,000 square feet of commercial uses, and 8 acres of Neighborhood Park on Site 2 (the subject site of this SEIR). The OSA PEIR, which analyzed the environmental impacts associated with implementation of General Plan Amendment 2008-02B and Zone Change 2008-02, was certified in June 2008.

Overall, six alternatives to the Recommended Plan were analyzed in OSA PEIR Chapter 4. These involved development of the proposed project components (i.e., residential, parks/recreational, and mixed-use commercial uses, among others) on the project site and six additional sites. Alternative 7 analyzed in Recirculated OSA PEIR Chapter 7 was identified as environmentally superior and was

implemented for the Portola Center project site (Site 2) through the City's approval of the GPA and the Development Agreement. As explained in the OSA PEIR, the General Plan and Zoning designations assigned to and approved for the Portola Center property would allow densities that are compatible with the existing Portola Hills community (see OSA PEIR, Response to Comment 23-1 in the Final EIR). Thus, Alternative 7 for Site 2 is the "project" subject of this SEIR. As they do not focus analysis on a project-level basis, they have been supplemented with two other alternatives considered in Section 7.2, Alternatives Considered for Further Analysis, which include the "Reduced Density" Alternative and "Reduced Grading/Reduced Intensity" Alternative, below. Therefore, the six other alternatives analyzed in the OSA PEIR have been considered but rejected from further consideration.

ALTERNATIVE DEVELOPMENT AREAS

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. Per CEQA Guidelines Section 15126.6(2)(A), 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 SEIR. In general, any development of the size and type proposed by the Portola Center project would have substantially the same impacts on air quality and GHG emissions impacts. Without a site specific analysis, impacts on aesthetics, biological resources, cultural resources, geology/soils, hazards and hazardous materials, hydrology/water quality, mineral resources, etc., cannot be evaluated. In addition, the Applicant has a vested right to develop the proposed project on the Portola Center project site, and not another location, pursuant to the Portola Center Development Agreement. Consequently, this alternative has been considered and rejected from further analysis.

NO DEVELOPMENT/EXISTING GENERAL PLAN ALTERNATIVE

Pursuant to CEQA Guidelines Section 15126.6(e)(2), this alternative describes 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. The Applicant has a vested right to develop a minimum of 904 units (not exceeding 930 units) and a total commercial floor area of a minimum of 10,000 square feet (not to exceed 40,000 square feet) pursuant to the Portola Center Development Agreement. The practical result of the disapproval of the proposed project is that the Applicant would utilize the property pursuant to the Portola Center Development Agreement. It is reasonably foreseeable that as land values increase, the Applicant would develop the 195 acres to the maximum extent allowed under the Portola Center Development Agreement. This would result in development of a similar number of residential units and approximately 30,000 additional square feet of commercial use, and a reduction of active and passive open space. While this alternative would meet all of the project objectives, it would not avoid or substantially lessen any of the significant and unavoidable environmental impacts. As a result, this alternative has been rejected from further analysis.

ALTERNATIVES CONSIDERED FOR FURTHER ANALYSIS

In addition to the alternatives considered in the OSA PEIR, three additional alternatives were selected based on the criteria set forth in the CEQA Guidelines Section 15126.6 and the new information considered in this SEIR. The "No Project/No Build" Alternative, the "Reduced Density" Alternative, and the "Reduced Grading/Reduced Intensity" Alternative were selected to in order to reduce air quality and GHG construction related impacts by reducing the development footprint and the corresponding amount of grading required. These alternatives are analyzed in detail in the following sections.

An EIR must identify an "environmentally superior" alternative and where the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior. However, only those impacts found significant and unavoidable are used in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project. Only the impacts involving air quality and GHG were found to be significant and unavoidable. Section 7.3 of this SEIR identifies the Environmentally Superior Alternative.

"NO PROJECT/NO BUILD" ALTERNATIVE

This alternative assumes that the existing 195-acre site would remain in the current state, graded-vacant land, and would not be developed for other uses, including the proposed project. None of the buildings or improvements proposed as part of the project would be constructed. A new community of residential neighborhoods and 10,000 square feet of commercial mixed-use development would not be developed. A 5-acre Neighborhood Park and 2.0 lineal miles (1.9 acres) of new hiking and walking trails and trail amenities including rest areas, viewing areas, and par course-style activity nodes would not be constructed. Under this alternative, a new network of public collector roadways and private local streets, and the proposed drainage and water quality improvements would not be constructed. Additionally, the proposed hardscape (i.e., retaining walls, soundwalls, perimeter walls, walkways, and entrance driveways) and landscape improvements would not be installed. New signals along Glenn Ranch Road would not be constructed. The project's proposed grading, which would involve approximately 2,300,000 cubic yards of cut and an equal amount of fill in the Portola South Planning Area and approximately 1,970,000 cubic yards of cut and an equal amount of fill in the Portal Northeast and Northwest Planning Areas.

"REDUCED DENSITY" ALTERNATIVE

This alternative assumes development of 81 single-family residential units, no commercial space, and 0.78 acres of park/trail on the 28 acre site (the Portola Northwest Planning Area). This is approximately the maximum number of units that could be developed while avoiding most of the short-term construction and operation phase air quality and GHG impacts. The recorded Portola Center Development Agreement allows a minimum of 904 residential units (a maximum of 930 residential units) and a minimum of 10,000 square feet of commercial space (a maximum of 40,000 square feet of commercial space).

Grading the Portola Northwest Planning Area would result in 370,000 cubic yards of cut and an equal amount of fill, and 110,000 cubic yards of export and 110,000 cubic yards of import. Overall, this alternative would reduce grading by approximately 3.9 million cubic yards of cut and an equal amount of fill.

Table 1-1, *Comparison of Proposed Project and Reduced Density Alternative*, compares the proposed project and Reduced Density Alternative. Comparatively, this alternative proposes an 86.9 percent decrease in dwelling units overall, with 536 fewer single-family detached units and no new multi-family or apartment units. This alternative would not construct any commercial floor space. Parkland/trails would also be reduced by 9.93 acres, compared to the proposed project. The remaining project components (i.e., open space and circulation system) would only be developed similar to the proposed project in the Portola Northwestern Planning Area. The remaining planning areas would remain vacant/undeveloped as part of this alternative.

Table 1-1
Comparison of Proposed Project and Reduced Density Alternative

Land Use	Project	Reduced Density Alternative	Difference	% Difference
Residential Uses (dwelling units)				
Single-Family Detached	617	81	-536	-86.9
Multi-Family	256	0	-256	-100
Apartment	57	0	-57	-100
Commercial (square feet)	10,000	0	-10,000	-100
Population (persons)	2,759[1]	261[2]	-2,498	-90.5
Employment (persons)	20	0	-20	-100
Average Daily Trips[3]	10,400	833	-9,567	-92
Park Dedication (net acres)	10.8	0.78[4]	-9.93	-91.9

Notes:
1. Based on 948 dwelling units (930 dwelling units plus 18 with attached accessory living quarters/secondary units) and 2.91 persons per household, consistent with the OSA PEIR.
2. Based on 88 dwelling units (81 dwelling units plus 7 with attached accessory living quarters/secondary units) and 2.91 persons per household, consistent with the OSA PEIR.
3. Based on a trip generation rate of 9.57 trips per unit for single family dwelling units and 8.15 trips per unit for townhomes/multi-family/ apartments/attached accessory living quarters/secondary units, and the assumption of 1,520 average daily trips for 10,000 square feet of commercial uses. Trips for the park dedication are 269 trips for the proposed project (Consistent with the Traffic Impact Study) and 1.59 trips per acre for the Reduced Density Alternative.
4. Based on the required three net acres of usable park per every 1,000 persons requirement in the Portola Center Development Agreement.

"REDUCED GRADING/REDUCED INTENSITY" ALTERNATIVE

This alternative assumes that no development would occur at the Portola Northwest Planning Area. Project development would be limited to areas within the Portola Northeast and South Planning Areas. As stated previously, the Applicant has a vested right to develop the Portola Center project site pursuant to the General Plan and Zoning designations, and other City regulations, including the vested right to develop a minimum of 904 units (not exceeding 930 units) and a total commercial floor area of a minimum of 10,000 square feet (not to exceed 40,000 square feet), pursuant to the Portola Center Development Agreement. Nonetheless, this alternative assumes that 904 dwelling

units, 10,000 square feet of commercial uses, park and open space, and roadways and infrastructure would be built on approximately 167 acres.

Grading the Portola Northeast and South Planning Areas would result in 3.9 million cubic yards of cut and an equal amount of fill, and 110,000 cubic yards of export. Overall, this alternative would reduce grading by approximately 370,000 cubic yards of cut and an equal amount of fill.

Table 1-2, *Comparison of Proposed Project and Reduced Grading/Reduced Intensity Alternative*, compares the proposed project and Reduced Grading/Reduced Intensity Alternative. This alternative would develop single-family residential uses similar to the proposed project within the Northeast Planning Area. The proposed park uses within this area would total approximately 0.85 acres. Densities within the South Planning Area would have to be increased in order to be within the range of the DA's allowed 904 to 930 units on-site. Density increases would occur within the General Plan designated Medium Density Residential (15 to 25 dwelling units per net acre) within the northern portion of the South Planning Area. Park uses proposed within the South Planning Area would total approximately 7.2 acres.

Table 1-2
Comparison of Proposed Project and Reduced Grading/Reduced Intensity Alternative

Land Use	Project	Reduced Grading/Reduced Intensity Alternative	Difference	% Difference
Residential Uses (dwelling units)				
Single-Family Detached	617	478	-139	-22.5
Multi-Family	256	369	+113	+44.1
Apartment	57	57	0	0
Commercial (square feet)	10,000	10,000	0	0
Population (persons)	2,759[1]	2,683[2]	-76	-2.8
Employment (persons)	20	20	0	0
Average Daily Trips[3]	10,400	9,987	-413	-4.0
Park Dedication (net acres)	10.8	8.05[4]	-2.75	-25.5

Notes:
1. Based on 948 dwelling units (930 dwelling units plus 18 with attached accessory living quarters/secondary units) and 2.91 persons per household, consistent with the OSA PEIR.
2. Based on 922 dwelling units (904 dwelling units plus 18 with attached accessory living quarters/secondary units) and 2.91 persons per household, consistent with the OSA PEIR.
3. Based on a trip generation rate of 9.57 trips per unit for single family dwelling units and 8.15 trips per unit for townhomes/multi-family/ apartments/attached accessory living quarters/secondary units, and the assumption of 1,520 average daily trips for 10,000 square feet of commercial uses. Trips for the park dedication are 269 trips for the Project (Consistent with the Traffic Impact Study) and 53.8 trips per acre for the 5-acre Neighborhood Park and 1.59 trips for the remaining 3.05 acres of park proposed for the Reduced Grading/Reduced Intensity Alternative.
4. Based on the required three net acres of usable park per every 1,000 persons requirement in the Portola Center Development Agreement.

Comparatively, this alternative proposes 139 fewer single-family detached units, an increase in 113 multi-family units, and the same number of apartment units (57 units) compared to the proposed project. This alternative proposes the same square footage in overall commercial floor space (10,000 square feet, similar to the proposed project). Parkland would also be reduced by 2.75 net acres, compared to the proposed project. As to the remaining project components (i.e., trails, open space,

and circulation system) there would be little variation between the proposed project and the Reduced Grading/Reduced Intensity Alternative to account for the Portola Northwestern Planning Area remaining vacant/undeveloped as part of this alternative.

"ENVIRONMENTALLY SUPERIOR" ALTERNATIVE

Table 1-3, *Comparison of Alternatives*, summarizes the comparative analysis presented above (i.e., the alternatives compared to the proposed project). Review of Table 1-3 and the analysis presented above indicates the No Project/No Build Alternative is the environmentally superior alternative, because it would avoid the air quality and GHG impacts associated with development of the proposed project. According to CEQA Guidelines Section 15126.6(e), "*No Project" Alternative*, "if the environmentally superior alternative is the "no project" alternative, the SEIR shall also identify an environmentally superior alternative among the other alternatives." Accordingly, an environmentally superior alternative among the other alternatives is identified below.

Table 1-3
Comparison of Alternatives

Impact Issue Areas	No Project/No Build Alternative	Reduced Density Alternative	Reduced Grading/Reduced Intensity Alternative
Air Quality			
Regional Construction Emissions	↓	↓*	↑*
Localized Construction Emissions	↓	↓	↓*
Regional Operational Emissions	↓	↓	↓*
Cumulative Impacts	↓	↓	↓*
Greenhouse Gas Emissions			
Greenhouse Gas Emissions	↓	↓	↓*
Cumulative Greenhouse Gas Emissions	↓	↓	↓*

↑ Indicates an impact that is greater than the proposed project (environmentally inferior).
↓ Indicates an impact that is less than the proposed project (environmentally superior).
= Indicates an impact that is equal to the proposed project (neither environmentally superior nor inferior).
* Indicates a significant and unavoidable impact.

Among the other alternatives, the environmentally superior alternative is the Reduced Density Alternative, given it would achieve the greatest impact reductions in air quality and GHG emissions. As concluded in the analysis presented above, the Reduced Density Alternative would lessen the impacts associated with development of the proposed project, because it would involve a 849-unit reduction of proposed residential uses and a 10,000 square-foot reduction of commercial uses, with corresponding decreases in construction activities, building footprints, and traffic volumes. These decreases would result in proportionate decreases in air quality and GHG emissions and would avoid most of the project's significant and unavoidable impacts pertaining to air quality and GHG emissions. However, due to off-site hauling and earthwork volumes, construction PM_{10} emissions would exceed SCAQMD thresholds and impacts would be significant and unavoidable with this alternative.

The Reduced Density Alternative is considered environmentally superior to the proposed project and it would avoid most of the project's significant and unavoidable project impacts involving air quality and GHG emissions. However, this alternative only achieves some, but not all of the project's objectives. More importantly, the Reduced Density Alternative would not meet the most basic project objective of allowing development of the site consistent with the Development Agreement.

1.6 ENVIRONMENTAL ISSUES/ MITIGATION SUMMARY

The following is a brief summary of the impacts, mitigation measures, and unavoidable significant impacts identified and analyzed in Section 5.0, *Environmental Analysis* of this SEIR. Impacts are generally classified as potentially significant impact, less than significant impact, or no impact. For the purposes of this environmental analysis, impacts were analyzed in each environmental issue area for the proposed project. If necessary, mitigation measures are recommended in order to reduce any significant impacts. As SEIR is being prepared for the Portola Center Project, the Standard Conditions of Approval and OSA PEIR Mitigation Measures are applied as appropriate. The "Mitigation Measures" are project-specific measures that would be required of the project to avoid a significant adverse impact; to minimize a significant adverse impact; to rectify a significant adverse impact by restoration; to reduce or eliminate a significant adverse impact over time by preservation and maintenance operations; or to compensate for the impact by replacing or providing substitute resources or environment. Modifications to the OSA PEIR Mitigation Measures are made in strikethrough and double underline text. Where further Mitigation Measures are required beyond what was recommended in the OSA PEIR, Additional Mitigation Measures are prescribed. Refer to the appropriate SEIR Section for additional information.

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
5.1	**AESTHETICS**		
AES-1	**Scenic Views and Vistas** Project implementation would not have a substantial adverse effect on a scenic view or vista.	**Standard Conditions of Approval:** *No Standard Conditions of Approval are applicable to this topical area.* **Applicable OSA Mitigation Measures:** *No OSA PEIR Mitigation Measures are applicable to this topical area.* **Additional Mitigation Measures:** No additional mitigation measures are required.	Less Than Significant Impact.
AES-2	**Short-Term Visual Character/Quality** Project construction activities would not temporarily degrade the visual character/quality of the site and its surroundings.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Additional Mitigation Measure TRA-1	Less Than Significant Impact With Mitigation Incorporated.
AES-3	**Long-Term Visual Character/Quality** Project implementation would not degrade the visual character/quality of the site and its surroundings.	**Standard Conditions of Approval:** LS1 Prior to the issuance of a building permit, the applicant shall submit to the Director of Development Services for review and approval a precise landscape and irrigation construction plan prepared by a licensed landscape architect for the project, considering the Landscape Concept provided in the approved Area Plan, and consistent with the approved Landscape Concept Plans for the project. ~~conceptual landscape plans approved by the Planning Commission on _____, 200_~~. LS2 Prior to the issuance of a certificate of ~~use and~~ occupancy for the project, the applicant shall have installed landscaping and irrigation in accordance with the approved Landscape Concept Plans~~plan~~. The applicant shall submit a landscape installation verification letter to the Director of Development Services from a licensed landscape architect indicating that the landscaping for the project was installed in accordance with the approved plan. ME2 Prior to issuance of a certificate of occupancy, the applicant shall	Less Than Significant Impact With Mitigation Incorporated.

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		insure that mechanical equipment placed on any roof such as, but not limited to, air conditioning, heating, ventilating ducts and exhaust fans shall be screened from view through the use of approved roof screens, recessed roof wells and/or use of the building parapets. MHC1 Within 60 days after the termination of the use of the subject property as a model home/sales complex, the parking lot and temporary fencing shall be removed or revised as necessary to comply with the current applicable zoning regulations. Within six months following the removal of the parking lot improvement and trailer, the lots upon which the parking lot and trailer were situated shall be either planted with grass or improved with dwellings. The following are Standard Conditions of Approval considered as part of the City's Retaining Wall Design Guidelines, approved by City Council on June 15, 2010. RWDG1 An encroachment permit shall be obtained from the Public Works Department for any wall adjacent to or within the public right-of-way. RWDG2 All retaining walls and associated landscaping shall be maintained in the City-approved condition. The following conditions of approval shall be applied to any project that contains retaining walls which are: (a) under common ownership and/or (b) traverse multiple, independently-owned parcels: RWDG3 The Codes, Covenants, and Restrictions (CC&Rs) shall be submitted to the City for review and approval by the Director of Development Services, the Director of Public Works/City Engineer, and the City Attorney, prior to recordation. CC&Rs shall identify the entity (e.g., property owners association) responsible and liable for the maintenance and repair of all common area improvements and shall specify those improvements, including but not limited to: retaining walls, non-retaining walls, slopes, landscaping, irrigation and drainage improvements, private streets, driveways, walkways, and	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		community facilities. The CC&R's shall identify the mechanism for funding all necessary (anticipated and unanticipated) maintenance and repairs. RWDG4 A property owner's association shall be formed for the purpose of assuming maintenance responsibility for retaining walls in all instances where retaining walls traverse multiple independently owned parcels. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** AES-1 To minimize visual impacts caused by the new wall features (i.e., retaining walls, MSE walls, and soundwalls), aesthetic treatments shall be developed consistent with the Portola Hills Area Plan (i.e., terraced, color treatment, textural treatment, varying materials, landscaping, etc.), in consultation with the Director of Development Services, for new walls within the proposed project (per the discretion of the City design review) prior to issuance of a grading permit. Structural themes (i.e., walls, sidewalk, etc.) shall be similar in character to the surrounding environment and shall be in conformance with the Portola Center Area Plan and Portola Hills Planned District, as applicable.	
	CUMULATIVE IMPACTS Project development, together with cumulative projects, would not result in significant aesthetic impacts in the project area.	**Standard Conditions of Approval**: Refer to Standard Conditions LS1, LS2, ME2, and MHC1. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Additional Mitigation Measures TRA-1 and AES-1.	Less Than Significant Impact With Mitigation Incorporated.
5.2	**CULUTRAL RESOURCES**		
CUL-1	**Archaeological Resources** The proposed project would not cause a significant	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area.	Less Than Significant Impact With Mitigation Incorporated.

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
	impact to known or unknown archaeological resources that could occur on-site.	**Applicable OSA Mitigation Measures:** 3.5-1 Prior to issuance of a grading permit for any site within the Project Area, a qualified archaeologist shall be retained by the Applicant for that grading permit to provide professional archaeological services. The archaeologist shall be present at the pre-grading conference to establish procedures for archaeological resource surveillance. Those procedures shall include provisions for temporarily halting or redirecting work to permit sampling, identification, and evaluation of resources deemed by the archaeologist to potentially be historical resources or unique archaeological resources under CEQA. ~~If, before grading, any portions of the property subject to the grading permit have been identified as sites, which may have such resources present and may be impacted by development, the archaeologist shall conduct a site survey and records search and such further examination as may be needed to assess the significance of the resources. If the archaeological resource is determined to be a unique archaeological resource, options for avoidance or preservation in place shall be evaluated and implemented if feasible. In the event that avoidance or preservation in place is infeasible and the archaeologist determines that the potential for significant impacts to such resources exists, a data recovery program shall be expeditiously conducted.~~ The archaeologist also shall conduct on-site archaeological monitoring for the grading operation. Should historical resources or unique archaeological resources be discovered during the grading operation, grading activities shall be modified to allow expeditious and proper analysis and/or salvage of the resources. Disposition of the resources shall be within the discretion of the City of Lake Forest. A. Prior to Approval of Grading or Improvement plans, the Applicant shall implement a grading monitoring plan to mitigate potential impacts to undiscovered buried archaeological resources on the Portola Center Project to the satisfaction of the City of Lake Forest. This program shall include, but shall not be limited to, the following actions:	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		1. Provide evidence to the lead agency that a qualified archaeologist has been contracted to implement a grading monitoring program to the satisfaction of the City of Lake Forest. A letter from the Project Archaeologist shall be submitted to the City of Lake Forest Director of Development Services. The letter shall include the following guidelines: a. The consulting archaeologist shall contract with a Native American monitor to be involved with the grading monitoring program. b. The qualified archaeologist/historian and Native American Monitor shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program. c. The consulting archaeologist shall monitor all areas identified for development. d. An adequate number of monitors (archaeological/ historical/Native American) shall be present to ensure that all earth-moving activities are observed and shall be on site during all grading activities. e. During the original cutting of previously undisturbed deposits, the archaeological monitor(s) and Native American monitor(s) shall be on site full-time. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections shall be determined by the Principal Investigator. f. During the cutting of previously disturbed deposits, the archaeological monitor(s) and	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		Native American monitor(s) shall be on site as determined by the Principal Investigator of the excavations. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections shall be determined by the Principal Investigator in consultation with the Native American monitor. g. Isolates and clearly non-significant deposits shall be minimally documented in the field and the monitored grading can proceed. h. In the event that previously unidentified, potentially significant cultural resources are discovered, the archaeologist shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow for evaluation. The archaeologist shall contact the City of Lake Forest Director of Development Services at the time of discovery. Disposition of the resources shall be within the discretion of the City of Lake Forest. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist, then carried out using professional archaeological methods. i. If any human bones are discovered, the Principal Investigator shall contact the County Coroner. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted in order to determine proper treatment and disposition of the remains.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		j. Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The Principal Investigator shall determine the amount of material to be recovered for an adequate artifact sample for analysis. k. In the event that previously unidentified cultural resources are discovered, all cultural material collected during the grading monitoring program shall be processed and curated at a facility that meets federal standards per 36 CFR Part 79, and therefore shall be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to the John D. Cooper Archaeological and Paleontological Curation Center, to be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid. l. In the event that previously unidentified cultural resources are discovered, a report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed and submitted to the satisfaction of the City of Lake Forest prior to the issuance of any building permits. The report shall include Department of Parks and Recreation Primary and Archaeological Site Forms. m. In the event that no cultural resources are discovered, a brief letter to that effect shall be	

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		sent to the City of Lake Forest by the consulting archaeologist that the grading monitoring activities have been completed. 2. Provide evidence to the Lead Agency that the following notes have been placed on the Grading Plan: a. The qualified archaeologist/historian and Native American monitor shall attend the pre-construction meeting with the contractors to explain and coordinate the requirements of the monitoring program. b. During the original cutting of previously undisturbed deposits, the archaeological monitor(s) and Native American monitor(s) shall be on site to perform full-time monitoring as determined by the Principal Investigator of the excavations. The frequency of inspections shall depend on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. c. During the cutting of previously disturbed deposits, the archaeological monitor(s) and Native American monitor(s) shall be on site as determined by the Principal Investigator of the excavations. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections shall be determined by the Principal Investigator in consultation with the Native American monitor. d. In the event that previously unidentified, potentially significant cultural resources are discovered, the archaeologist shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery	

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		to allow for evaluation. The archaeologist shall contact the City of Lake Forest Director of Development Services at the time of discovery. Disposition of the resources shall be within the discretion of the City of Lake Forest. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist, then carried out using professional archaeological methods. e. The consulting archaeologist shall monitor all areas identified for development. f. If any human bones are discovered, the Principal Investigator shall contact the County Coroner. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted in order to determine proper treatment and disposition of the remains. g. Prior to rough grading inspection sign-off, provide evidence that the field grading monitoring activities have been completed to the satisfaction of the City of Lake Forest. Evidence shall be in the form of a letter from the Project Archaeologist. h. Prior to final grading release, submit to the satisfaction of the City of Lake Forest, a final report that documents the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program. The report shall also include the following: ▪ Department of Parks and Recreation Primary and Archaeological Site Forms.	

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		▪ Evidence that all cultural materials collected during the grading monitoring program has been curated, and therefore shall be professionally curated and made available to other archaeologists/ researchers for further study. The collections and associated records shall be transferred, including title, the John D. Cooper Archaeological and Paleontological Curation Center, to be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid. 3. In the event that no cultural resources area discovered, a brief letter to that effect shall be sent to the City of Lake Forest by the consulting archaeologist that the grading monitoring activities have been completed. 3.5-2 The qualified archaeologist retained shall prepare monthly progress reports to be filed with the site developer(s) and the City of Lake Forest. 3.5-3 Artifacts recovered shall be prepared, identified, and cataloged before donation to the accredited repository designated by the City of Lake Forest. Any artifacts determined to be insignificant shall be offered to local schools for use in educational programs. 3.5-4 The qualified archaeologist retained shall prepare a final report to be filed with the site developer(s) and the City of Lake Forest. The report shall include a list of specimens recovered, documentation of each locality, interpretation of artifacts recovered and shall include all specialists' reports as appendices.	

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		Additional Mitigation Measures: No additional mitigation measures are required.	
CUL-2	**Paleontological Resources** The proposed project would not cause a significant impact to known or unknown paleontological resources that could occur on-site.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** 3.5-5 Prior to issuance of a grading permit, a qualified paleontologist shall be retained by the site developer(s) to provide professional paleontological services. ~~Specifically, during grading activities, the qualified paleontologist shall conduct on site paleontological monitoring for the project site. Monitoring shall include inspection of exposed surfaces and microscopic examination of matrix to determine if fossils are present. The monitor shall have authority to divert grading away from exposed fossils temporarily in order to recover the fossil specimens. Cooperation and assistance from on site personnel will greatly assist timely resumption of work in the area of the fossil discovery.~~ 1. The paleontologist shall conduct a pre-grade salvage program to collect and recover all significant paleontological resources previously recognized and recorded during the pre-grade survey of the property. All exposed specimens, even those occurring only as float, shall be collected at this stage of the mitigation. If the paleontologist of record is responsible for supervising the paleontological monitoring program during mass grading and earth-moving activities, all fossils salvaged at that time can be retained and processed with those recovered during the paleontological monitoring program. 2. Prior to initiation of grading, the project Applicant shall provide written evidence to the City of Lake Forest that the Applicant has retained a County-certified paleontologist to observe grading activities, supervise the monitoring program and be responsible for all aspects of the Paleontological Mitigation Monitoring and Reporting Program (MMRP). The paleontologist shall be present at the pre-grade conference, shall establish procedures for	Less Than Significant Impact With Mitigation Incorporated.

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		paleontological resource surveillance, and shall establish, in cooperation with the Applicant, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of the fossils. If the paleontological resources are found to be significant, the paleontologist shall determine appropriate actions, in cooperation with the Applicant, which ensure proper exploration and/or salvage. 3. ~~Specifically,~~During grading activities, the qualified paleontologist shall conduct on-site paleontological monitoring for the project site. Monitoring shall include inspection of exposed surfaces and microscopic examination of matrix to determine if fossils are present. The monitor shall have authority to divert grading away from exposed fossils temporarily in order to recover the fossil specimens. Cooperation and assistance from on-site personnel will greatly assist timely resumption of work in the area of the fossil discovery. A. Paleontological monitoring of mass grading and excavation activities in areas identified as likely to contain paleontological resources shall be required by a qualified paleontologist and/or paleontological monitor(s). Monitoring shall be conducted in areas of grading or excavation in undisturbed formational deposits, as well as in areas where over-excavation of surficial sediments or deposits will encounter these formations in the subsurface. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitors shall be expected to carefully record the location, elevation, and stratigraphic position, and fully document all aspects of the recovery of all significant collections. It is recommended that monitors be	

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		equipped with GPS devices to accurately record the position of any fossil localities in a continuously changing landscape. Monitoring may be reduced in areas if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. 3.5-6 The qualified paleontologist retained shall prepare monthly progress reports to be filed with the site developer(s) and the City of Lake Forest. 3.5-7 Fossils recovered shall be prepared, identified, and cataloged before donation to the accredited repository designated by the City of Lake Forest. 3.5-8 The qualified paleontologist retained shall prepare a final report to be filed with the site developer(s) and the City of Lake Forest. The report shall include a list of specimens recovered, documentation of each locality, interpretation of fossils recovered and shall include all specialists' reports as appendices. 1. Recovered specimens shall be prepared to a point of identification and permanent preservation. Screen-washing of sediments to recover small invertebrates and vertebrates may also be necessary. Preparation procedures include cleaning, physical removal of matrix surrounding individual fossils, and repair of damaged specimens. Large specimens of fossil vertebrates encased in cemented matrix, as has been observed on the property and on adjacent properties, may be extremely time consuming to prepare properly, and in such cases, consultation between the City of Lake Forest, the developer, the institutional repository, and the project paleontologist may be necessary. 2. Following preparation of recovered specimens to a point of identification, fossils shall be properly curated to museum	

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		standards, before being offered to any institutional collection for permanent long-term archival care and conservation. Curation steps shall include identification of fossils to the lowest level possible, painting and numbering of specimens, and production of labels. Prearrangements shall be made with an institution such that the receiving institution's specimen and/or locality numbers can be applied to each specimen. Numbers shall be applied with waterproof India ink on permanent enamel or acrylic paint. Small specimens shall be placed in glass vials with inert plastic caps, and the appropriate locality and/or specimen numbers enclosed with the fossils. All labels shall be printed on acid-free paper or card or cover stock. 3. Specimens shall be curated into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (e.g., the Ralph B. Clark Regional Park Interpretive Center) is a requirement. The paleontological program shall include a written repository agreement prior to the initiation of post-grade mitigation activities. Copies of all field notes, field maps, photographs, and documentary materials shall accompany the fossils when offered to the archiving institution. The developer shall agree to be responsible for any one-time archival fees charged by the receiving institution. These fees shall cover the cost of steel storage cabinets or shelving, cabinet drawers, specimen trays, and the time and materials necessary to catalogue and fully integrate the new materials into the preexisting collections. 4. A final monitoring and mitigation report of findings and significance, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location, shall be prepared. The report shall include documentation of acceptance or deed of gift from the receiving institution. The final report, when submitted to the City of Lake Forest, shall signify satisfactory completion of the project program to mitigate impacts to any potential nonrenewable paleontological resources (i.e., fossils) that	

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		might have been lost or otherwise adversely affected without such a program in place. Final release of any grading bond shall be approved by the City of Lake Forest only when the final monitoring and mitigation report and the fossil collections have been accepted by the receiving institution and any fees paid. **Additional Mitigation Measures:** No additional mitigation measures are required.	
Cumulative	**CUMULATIVE IMPACTS** The proposed project, combined with other related cumulative projects, would not cause a significant impact to known or unknown archaeological resources that could occur on-site.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measures 3.5-1 through 3.5-8. **Additional Mitigation Measures:** No additional mitigation measures are required.	Less Than Significant With Mitigation Incorporated.
	The proposed project, combined with other related cumulative projects, would not cause a significant impact to known or unknown paleontological resources that may occur on-site.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measures 3.5-1 through 3.5-8. **Additional Mitigation Measures:** No additional mitigation measures are required.	Less Than Significant With Mitigation Incorporated.
5.3	**GEOLOGY**		
GEO-1	**Seismic-Related Ground Failure** The proposed project would not expose people or structures to potential substantial adverse effects associated with seismically induced ground failure, including liquefaction.	**Standard Conditions of Approval:** G1 Prior to the issuance of precise grading permits, the applicant shall prepare and submit a final (precise) grading plan to the Building Division of the Development Services Department showing building footprints, new and revised pads and elevations of finished grades, drainage routes, retaining walls, erosion control, slope easements, structural best management practices conforming to the approved water quality management plan, and other pertinent information.	Less Than Significant With Mitigation Incorporated.

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		G2 Prior to the issuance of precise grading permits, the applicant shall in a manner meeting the approval of the City Engineer: ▪ Design provisions for surface drainage. ▪ Design all necessary storm drain facilities extending to a satisfactory point of disposal for the proper control and disposal of storm runoff. ▪ Dedicate the associated easements to the City of Lake Forest, if determined necessary by the City Engineer. ▪ Prior to the issuance of any certificates of use and occupancy said improvements shall be constructed in a manner meeting the approval of the City Engineer. ~~G3 Prior to approval of the final design plans and issuance of a grading permit, the applicant shall conduct a site specific geotechnical investigation for the entire site and prepare a report that fully assesses the geologic and soil conditions of the site. As part of the report preparation, soil sampling and any geotechnical testing will be completed at each location where structures are to be erected. The report shall provide grading and structural design recommendations for avoiding liquefaction, subsidence or collapse for each of the proposed structures. The recommendations shall be implemented by the Project Applicant.~~ *(Standard Condition of Approval G3 is deleted as Geotechnical Investigations have been prepared for the proposed project.)* ~~G4 During project grading and construction activities, the following measures shall be implemented by the applicant as monitored by the Director of Development Services and Director of Public Works/City Engineer.~~ ~~A. Normal watering procedures or other dust palliative measures shall be followed during earth moving and construction operations to minimize fugitive dust emissions in compliance with SCAQMD Rule 403. Soil binders shall be spread on site, unpaved roads, and parking area in compliance with Rule 403.~~ ~~B. Where practical, heavy duty construction equipment shall be kept on site when not in operation to minimize exhaust~~	

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		~~emissions associated with vehicles entering and exiting the project site.~~ ~~C. Restrict traffic speeds on all unpaved road to 15 miles per hour or less, and provide a flag person to properly guide traffic and ensure safety at the construction site.~~ ~~D. Suspend all grading operations when wind speeds exceed 25 miles per hour and during second stage smog alerts.~~ ~~E. Comply with SCAQMD Rules 402 and 403 which state that no dust impacts off-site sufficient to be called a nuisance are created and restrict visible emissions from construction and grading, respectively.~~ ~~F. Use low emission mobile construction equipment (i.e., tractors, scrapers, dozers, etc.) where practical. Shut off engines when not in use.~~ ~~G. Maintain construction equipment in peak operating condition to reduce operating emissions.~~ ~~• Use low sulfur fuel for equipment to the extent feasible.~~ ~~• Use electric equipment whenever practicable.~~ ~~• Moisten soil to grading to 12% soil moisture.~~ ~~• Water exposed surfaces at least twice daily under calm conditions and as often as needed on windy days when winds are less than 25 miles per hour or during dry weather in order to maintain a surface crust and prevent the release of visible emissions from the construction site.~~ ~~• Treat any area that will be exposed for extended periods with a soil conditioner to stabilize soil or temporarily plant with vegetation.~~ ~~• Wash mud covered tires and under carriages of any trucks leaving construction sites.~~ ~~• Provide for street sweeping, as needed, on adjacent roadways to remove dirt dropped by construction vehicles or mud, which would otherwise be carried off by trucks departing project sites.~~ ~~• Provide for permanent sealing of all graded areas, as applicable, at the earliest practicable time after soil disturbance.~~ *(Standard Condition of Approval G4 is deleted as these requirements are included in Mitigation Measures 3.3-1 through*	

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		3.3-7 in Section 5.6, Air Quality.) G5 This project necessitates the construction of public and/or private infrastructure improvements. Prior to the issuance of preliminary or precise grading permits or approval of a Final 'A' or 'B' Map, the applicant shall construct, or enter into an agreement and post security, in a form and amount acceptable to the City Engineer, guaranteeing the construction of public and/or private improvements associated with the grading permit or map, in conformance with applicable City standards and the City's Capital Improvement Policy, including but not limited to: a. Street improvements including, but not limited to: pavement, curb and gutter, medians, sidewalks, drive b. Traffic signal systems, interconnect traffic signal preemption devices and other traffic control and management devices c. Storm drain facilities d. Subdrain facilities e. Landscaping and computerized irrigation control system (for all public streets, parks and public areas). f. Sewer, reclaimed and/or domestic water systems, as required by the appropriate sewer and water districts as well as the Orange County Fire Authority when appropriate. g. Riding, hiking and bicycle trails adjacent to or through the project site. h. Undergrounding of existing overhead and proposed utility distribution lines. i. Transit-related improvements depicted on the approved tentative map Plans for improvements, including proposed and relocated utility lines, shall be approved by the Public Works Director/City Engineer based on the City's ordinances, standards, and policies, including, but not limited to, those design and construction standards adopted by the City or otherwise reasonably determined by the Director to be applicable to the project. Plans for signing, striping, and other traffic control devices shall be approved by the City Traffic Engineer. Water improvement plans shall be approved by the Fire Marshal, the local water district,	

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		and the Public Works Director/City Engineer. The water distribution system and appurtenances shall conform to the applicable laws and adopted regulations enforced by the Orange County Health Department. Public sewer and reclaimed water improvement plans shall be approved by the local sewering agency and the Public Works Director/City Engineer. The requirement for the reclaimed water line for irrigation is contingent upon an existing line within reasonable proximity to the site. Construction of improvements shall be under the inspection of the Public Works Department. G6 Prior to issuance of any permit, any easement that lies within or crosses rights-of-way proposed to be deeded or dedicated to the City, shall be subordinated by the applicant to the City prior to City acceptance of the rights-of-way, unless otherwise exempted by the Director of Public Works/City Engineer based on the City's ordinances, standards, and policies, including, but not limited, to those design and construction standards adopted by the City or otherwise reasonably determined by the Director to be applicable to the project. G7 Prior to issuance of a grading permit, a recordable instrument providing for reciprocal ingress and egress access easements between and among the parcels with access via private drives shall be submitted by the applicant to the City of Lake Forest for review and approval of the City Attorney, Director of Development Services and the Director of Public Works/City Engineer. The instrument shall be approved if it is appropriate recordable form, and adequately provides for reciprocal access in a manner consistent with the City's ordinances, standards, and policies, including, but not limited, to those public design and construction standards adopted by the City or otherwise reasonably determined by the Directors to be applicable to the project. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:**	

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		GEO-1 Concurrent with submittal of the 40-scale grading plans, the project applicant shall submit a Final Geotechnical Engineering Report for review and approval by the City's Engineer. The Final Geotechnical Engineering Report shall be prepared by a professional engineer and certified engineering geologist licensed by the State of California, in consultation with a corrosion engineer, and demonstrate compliance with the recommendations identified in the Geotechnical Investigations prepared for the project (Geotechnical Investigation for Portola Center North Tentative Tract No. 17300 [dated April 16, 2013] and Geotechnical Investigation for Portola Center South Tentative Tract No. 15353 [dated July 6, 2012]), the retaining wall recommendations prepared by Soil Retention Designs Inc. (Verdura 40/60 Retaining Wall Feasibility Design and Response to Plan Review Comments from the City of Lake Forest [for Tentative Tract Map Numbers 17300 and 15353, dated August 10, 2012]) and any additional recommendations identified by the City's Engineer. The Geotechnical Investigations and retaining wall recommendations are included in Appendix 11.3, Geotechnical Investigation, of this EIR and are incorporated by reference into this mitigation measure.	
GEO-2	**Landslides** The proposed project would not expose people or structures to potential landslides.	**Standard Conditions of Approval:** Refer to Standard Conditions of Approval G1 through G7. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Additional Mitigation Measure GEO-1 and the following Additional Mitigation Measure: GEO-2 During grading, the removal of landslide debris and surficial soil shall be evaluated by a qualified geologist to determine the actual depth of removal necessary. Topsoil, colluvium, alluvium, landslide debris, undocumented fill, and the unsuitable portions of previously placed fill and formational materials within the limits of grading shall be removed to expose firm, formational materials or moist, dense previously placed fill. Removals shall be required beyond the toe of slope and extend to the property line to remove	Less Than Significant Impact With Mitigation Incorporated.

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		landslide debris. The bottom of the excavation should be scarified at least one foot, moisture conditioned as necessary, and compacted prior to the placement of fill material. These recommendations shall be stipulated in the construction contracts, grading plans, and specifications. The project grading plans and specifications shall be subject to review and approval by the City of Lake Forest Department of Public Works.	
GEO-3	**Unstable Geologic Units** Development of the proposed project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project.	**Standard Conditions of Approval:** Refer to Standard Conditions of Approval G1 through G7. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Additional Mitigation Measure GEO-1, GEO-2, and the following Additional Mitigation Measures: GEO-3 During grading, cut slope excavations including buttresses and shear keys shall be observed full time by a Certified Engineering Geologist to confirm that soil and geologic conditions do not differ significantly from those expected. This requirement shall be stipulated in the construction contracts, grading plans, and specifications. The project grading plans and specifications shall be subject to review and approval by the City of Lake Forest Department of Public Works. GEO-4 Prior to the issuance of any grading permit, the City Engineer shall confirm that all grading plans and specifications require that buttress fill is graded in short segments and/or the inclination of the temporary slopes is flattened to ensure stability of backcut slopes. GEO-5 Concurrent with submittal of the 40-scale grading plans, the final retaining wall plans shall be reviewed by a qualified geotechnical consultant. Review of the final retaining wall plans shall ensure that the reinforcement geogrid type, length, and spacing presented on the slope stability analyses are the estimated minimum requirements for the required factor of 1.5 and 1.1 for static and seismic conditions, respectively. The review shall also verify that all applicable recommendations from the project	Less Than Significant Impact With Mitigation Incorporated.

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		Geotechnical Investigations are incorporated.	
GEO-4	**Expansive Soils** The proposed project would not be located on expansive soil creating substantial risks to life or property.	**Standard Conditions of Approval:** Refer to Standard Conditions of Approval G1 through G7. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Additional Mitigation Measure GEO-1 and the following Additional Mitigation Measure: GEO-6 During the grading phase, additional testing for expansion potential shall be performed once final grades are achieved. Excavated soil with an expansion index greater than 90 shall be kept at least 4 feet below finish grade in areas of the structural fill, where possible. These recommendations shall be stipulated in the construction contracts, grading plans, and specifications. The project grading plans and specifications shall be subject to review for expansive soils and approval by the City of Lake Forest Department of Public Works.	Less Than Significant Impact With Mitigation Incorporated.
GEO-5	**Corrosive Soils** Development of the proposed project would not encounter corrosive soils potentially resulting in damage to foundations and buried pipelines.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Additional Mitigation Measure GEO-1 and the following Additional Mitigation Measure: GEO-7 Concurrent with submittal of the 40-scale grading plans, the City's Engineer shall confirm that the project's Final Geotechnical Engineering Report includes recommendations from a corrosion engineer for proper protection of buried metal pipes at the project site.	Less Than Significant Impact With Mitigation Incorporated.
Cumulative	**CUMULATIVE IMPACTS** Seismically Induced Hazards, Unstable Geologic Units, Expansive Soils, And Corrosive Soils	**Standard Conditions of Approval:** Refer to Standard Conditions of Approval G1 through G7. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area.	Less Than Significant Impact With Mitigation Incorporated.

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		Additional Mitigation Measures: Refer to Additional Mitigation Measures GEO-1 through GEO-7.	
	The proposed project, combined with other related cumulative projects, would not expose people or structures to potential substantial adverse effects associated with seismically induced ground failure, including liquefaction.	**Standard Conditions of Approval:** Refer to Standard Conditions of Approval G1 through G7. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Additional Mitigation Measures GEO-1 through GEO-7.	Less Than Significant Impact With Mitigation Incorporated.
	The proposed project, combined with other related cumulative projects, would not expose people or structures to potential substantial adverse effects associated with seismically induced landslides.	**Standard Conditions of Approval:** Refer to Standard Conditions of Approval G1 through G7. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Additional Mitigation Measures GEO-1 through GEO-7.	Less Than Significant Impact With Mitigation Incorporated.
	The proposed project, and other related cumulative projects, would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project.	**Standard Conditions of Approval:** Refer to Standard Conditions of Approval G1 through G7. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Additional Mitigation Measures GEO-1 through GEO-7.	Less Than Significant Impact With Mitigation Incorporated.
	The proposed project, and other related cumulative projects, would not be located on expansive soil creating substantial risks to life or property.	**Standard Conditions of Approval:** Refer to Standard Conditions of Approval G1 through G7. **Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Additional Mitigation Measures GEO-1 through GEO-7.	Less Than Significant Impact With Mitigation Incorporated.
	The proposed project, and other related cumulative projects, would not encounter corrosive soils potentially resulting in damage to foundations and	**Standard Conditions of Approval:** Refer to Standard Conditions of Approval G1 through G7.	Less Than Significant Impact With Mitigation Incorporated.

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	buried pipelines.	**Applicable OSA Mitigation Measures:** No OSA PEIR Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Additional Mitigation Measures GEO-1 through GEO-7.	
5.4	**HYDROLOGY**		
HWQ-1	**Long-Term Hydrology/Drainage Impacts** Implementation of the proposed project would not alter the existing drainage pattern resulting in a substantial increase in runoff, flooding, or erosion.	**Standard Conditions of Approval:** ▪ Compliance with NPDES, DAMP, Groundwater Management Plan. ▪ Compliance with Lake Forest Municipal Code and County of Orange Codes regulating drainage and water quality. **Applicable OSA PEIR Mitigation Measures:** 3.8-1 ~~Prior to approval of a Parcel Map or a Tentative Tract Map (whichever comes first),~~ Concurrent with submittal of the 40-scale grading plans, the applicant shall submit a Final Water Quality Management Plan (WQMP), including a Final hydrology study~~, if appropriate,~~ for review and approval of the City Engineer. The Final WQMP ~~Plan~~ shall include Best Management Practices (BMPs) in accordance with the latest City of Lake Forest Water Quality Management Plan Template User Guide and include stormwater detention/retention features~~, if necessary,~~ to mitigate impacts of changes in stormwater rates or volumes as identified in the site-specific Final hydrology study. The Final hydrology study shall comply with the Orange County Hydrology Manual (OCHM) and addresses the following as part of final design: ▪ The time of concentration (Tc) for the different storm events shall be calculated to provide correct times for each storm event in both existing and proposed condition rational method models. ▪ Orange County Hydrology Manual recommendations shall be utilized for small area hydrograph analysis or justification for the use of different values. ▪ Equation D.4 shall be utilized for calculating effective area.	Less Than Significant Impact With Mitigation Incorporated.

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		consistent with the Orange County Hydrology Manual. ▪ Verify details of the diversion structure for Basin #2 to ensure it functions as intended. **Additional Mitigation Measures:** No additional mitigation measures are required.	
HWQ-2	**Long-Term Water Quality Impacts** Implementation of the proposed project would not substantially degrade or impair surface water quality.	**Standard Conditions of Approval:** ▪ Compliance with NPDES, DAMP, Groundwater Management Plan. ▪ Compliance with Lake Forest Municipal Code and County of Orange Codes regulating drainage and water quality. DFN4 Prior to the issuance of a certificate of occupancy related to a given area, neighborhood, or building site of the project, the applicant shall demonstrate that all structural Best Management Practices (BMP) described in the project's Final Water Quality Management Plan (WQMP) that serve as water quality treatment and detention facilities for that area, neighborhood, or building site of the project have been constructed and installed. In addition, the applicant ~~is prepared to~~ shall implement all non-structural BMP's described in the project's Final WQMP for that portion of the project site. Two (2) copies of the Final WQMP shall be available on-site. Prior to the issuance of a certificate of occupancy, all equipment shall be in place and in good working order as indicated in the Final WQMP. **Applicable OSA PEIR Mitigation Measures:** In addition to the following, refer to OSA PEIR Mitigation Measure 3.8-1, as modified above. 3.8-2 ~~All City landscape contractors and project developers shall be required, as part of their contract,~~ Prior to the issuance of a grading permit the applicant shall ~~to~~ submit to the City a landscape design plan ~~including~~ that includes the following elements: ▪ Maximized use of native plant species with minimum water and fertilizer requirements ▪ Watering shall be kept to the minimum necessary to	Less Than Significant Impact With Mitigation Incorporated.

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		maintain new landscaping ▪ Drip irrigation shall be used only until the native landscaping is established ▪ Minimal use of fertilizers and pesticides 3.8-4 Prior to the issuance of a grading permit, the applicant shall develop and implement appropriate Best Management Practices, such as a nutrient management program, to reduce the amount of nutrients entering the watershed (see San Luis Rey Watershed Urban Runoff Management Program http://www.projectcleanwater.org/ html/wurmp_san_luis_rey.html) for an example of a management program that addresses nutrients). In addition, a pesticide management program shall be developed to reduce the amounts of pesticides entering the watershed through minimizing the use of pesticides and emphasizing non-chemical controls (see the City of San Francisco's Integrated Pest Management Program (http://www.sfgov.org/site/frame.asp?u=http://www.sfwater.org/) for an example). These plans shall be approved by the City prior to issuance of a grading permit. **Additional Mitigation Measures:** No additional mitigation measures are required.	
Cumulative	**CUMULATIVE IMPACTS** Implementation of the proposed project and other related cumulative projects would not result in a substantial increase in runoff, flooding or erosion.	**Standard Conditions of Approval:** ▪ Compliance with NPDES, DAMP, Groundwater Management Plan. ▪ Compliance with Lake Forest Municipal Code and County of Orange Codes regulating drainage and water quality. ▪ Refer to Standard Condition of Approval DFN4. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measures 3.8-1, 3.8-2, and 3.8-4. **Additional Mitigation Measures:** No additional mitigation measures are required.	Less Than Significant Impact With Mitigation Incorporated.
	Implementation of the proposed project and other	**Standard Conditions of Approval:**	Less Than Significant Impact With Mitigation Incorporated.

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
	related cumulative projects would not substantially degrade or impair surface water quality.	▪ Compliance with NPDES, DAMP, Groundwater Management Plan. ▪ Compliance with Lake Forest Municipal Code and County of Orange Codes regulating drainage and water quality. ▪ Refer to Standard Condition of Approval DFN4. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measures 3.8-1, 3.8-2, and 3.8-4. **Additional Mitigation Measures:** No additional mitigation measures are required.	
5.5	**TRAFFIC**		
TRA-1	**Construction Traffic Generation** Project construction would not cause a significant increase in traffic for existing conditions when compared to the traffic capacity of the street system.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** TRA-1 Prior to issuance of any grading permits, a Construction Management Plan shall be submitted for review and approval by the Director of Development Services. The Construction Management Plan shall, at a minimum, address the following: ▪ Traffic control for any street closure, detour, or other disruption to traffic circulation. ▪ Identify the routes that construction vehicles will utilize for the delivery of construction materials (i.e., lumber, tiles, piping, windows, etc.), to access the site, traffic controls and detours, and proposed construction phasing plan for the project. ▪ Identify staging areas, stockpiling of materials, and fencing (i.e., temporary fencing with opaque material). Staging areas shall be sited and/or screened in order to minimize	Less Than Significant With Mitigation Incorporated.

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		public views to the maximum extent practicable. ▪ Specify the hours during which transport activities can occur and methods to mitigate construction-related impacts to adjacent streets. ▪ Require the applicant to keep all haul routes clean and free of debris, including but not limited to gravel and dirt as a result of its operations. The applicant shall clean adjacent streets, as directed by the City Engineer (or representative of the City Engineer), of any material which may have been spilled, tracked, or blown onto adjacent streets or areas. ▪ Hauling or transport of oversize loads shall be allowed between the hours of 9:00 a.m. and 3:00 p.m. only, Monday through Saturday, unless approved otherwise by the City. No hauling or transport will be allowed during nighttime hours, weekends, or Federal holidays, unless otherwise approved by the City. ▪ Use of local residential streets shall be prohibited. ▪ Haul vehicles entering or exiting public streets shall yield to public traffic. ▪ If hauling operations cause any damage to existing pavement, streets, curbs, and/or gutters along the haul route, the applicant shall be fully responsible for repairs. The repairs shall be completed to the satisfaction of the City Engineer. ▪ All construction-related parking and staging of vehicles shall be kept out of the adjacent public roadways and shall occur on-site or in public parking lots. ▪ This Plan shall meet standards established in the current California Manual on Uniform Traffic Control Device (MUTCD) as well as City of Lake Forest requirements.	
TRA-2	**Project Traffic Generation** Project implementation would not cause a significant increase in traffic for existing and near term year 2015 conditions when compared to the traffic capacity of the street system.	**Standard Conditions of Approval:** FFP1 Prior to the issuance of a building permit, the applicant shall pay fees to the City of Lake Forest as prescribed in the Major Thoroughfare and Bridge Fee Program, including but not limited to the following: ▪ Foothill Circulation Phasing Plan – ~~Zone 2, 3,~~ 4~~, 5 or 8~~ ▪ Foothill/Eastern Transportation Corridor – Zone A~~ or Zone B~~	Less Than Significant Impact.

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		▪ Santiago Canyon Road ▪ Drainage Fees ($945.00/Acre) ▪ El Toro Road ▪ LFTM Program **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** No additional mitigation measures are required.	
TRA-3	**Long-Range (Buildout Year 2030 With Project) Conditions** Development associated with the proposed project and buildout of the Lake Forest General Plan would not result in significant traffic impacts.	**Standard Conditions of Approval:** Refer to Standard Condition of Approval FFP1. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** TRA-2 Prior to the issuance of building permits, the applicant shall pay its proportionate share contribution to fund the following improvement: ▪ Portola Parkway/Santa Margarita Parkway and El Toro Road: Add an overlap phase for the southbound right-turn movement from Portola Parkway to El Toro Road. Prohibit the eastbound u-turn movement along El Toro Road.	Less Than Significant Impact with Mitigation Incorporated.
TRA-4	**Intersection Spacing And Operation** Project implementation would not cause a significant operational impact associated with the Saddleback Ranch Road and Project Driveway 1 intersection.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** No additional mitigation measures are required.	Less Than Significant Impact.
TRA-5	**Onsite Queuing** Project implementation would not cause a significant queuing impact associated with the	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are	Less Than Significant Impact.

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	Glenn Ranch Road and Project Driveway 2 intersection.	applicable to this topical area. **Additional Mitigation Measures:** No additional mitigation measures are required.	
TRA-6	**Hazardous Traffic Conditions** Development of the proposed project would not result in a hazardous traffic condition either on-site or in the surrounding area.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** No additional mitigation measures are required.	Less Than Significant Impact.
TRA-7	**Conflict With Policies, Plans, Or Programs** Implementation of the project would not result in a decrease of the performance or safety of public transit, bicycle, or pedestrian facilities as a result of a conflict with adopted policies, plans, or programs.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** TRA-3 Prior to issuance of certificates of occupancy, the applicant shall install a pedestrian/equestrian push button on the signal mast arm poles at the northwest and northeast corners of the Saddleback Ranch Road/Glenn Ranch Road intersection in order to allow for controlled pedestrian crossings across the north leg of the intersection.	Less Than Significant Impact with Mitigation Incorporated.
Cumulative	**CUMULATIVE IMPACTS** Construction of the proposed project, and other related cumulative projects, could increase traffic when compared to the traffic capacity of the existing street system.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Mitigation Measure TRA-1.	Less Than Significant Impact with Mitigation Incorporated.
	Implementation of the proposed project and other related cumulative projects, would not cause a significant increase in traffic for existing and near term year 2015 conditions when compared to the traffic capacity of the street system.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area.	Less Than Significant Impact with Mitigation Incorporated.

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	Implementation of the proposed project and other related cumulative projects, would not cause a significant increase in traffic for buildout year 2030 conditions.	**Additional Mitigation Measures:** Refer to Mitigation Measure TRA-2.	
	Implementation of the proposed project and other related cumulative projects would not cause a significant operational impact associated with the Saddleback Ranch Road and Project Driveway 1 intersection.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** No additional mitigation measures are required.	Less Than Significant Impact.
	Implementation of the proposed project and other related cumulative projects would not cause a significant queuing impact associated with the Glenn Ranch Road and Project Driveway 2 intersection.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** No additional mitigation measures are required.	Less Than Significant Impact.
	Development of the proposed project and other related cumulative projects could result in a hazardous traffic condition either on-site or in the surrounding area.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** No additional mitigation measures are required.	Less Than Significant Impact.
	Implementation of the project and related cumulative projects would not result in a decrease of the performance or safety of public transit, bicycle, or pedestrian facilities as a result of a conflict with adopted policies, plans, or programs.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Mitigation Measure TRA-3.	Less Than Significant With Mitigation Incorporated.
5.6	**AIR QUALITY**		

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AQ-1	**Short-Term (Construction) Air Emissions** Short-term construction activities associated with the proposed project would result in air pollutant emission impacts or expose sensitive receptors to substantial pollutant concentrations.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** 3.3-1 ~~The developer shall require by contract specifications that all diesel-powered equipment used would be retrofitted with after-treatment products (e.g., engine catalysts) to the extent that it is readily available in the South Coast Air Basin. Contract specifications language shall be reviewed by the City prior to issuance of a grading permit.~~ The following measures shall be implemented during construction to reduce NO_X related emissions. They shall be included in the Grading Plan, Building Plans, and contract specifications. Contract specification language shall be reviewed by the City prior to issuance of a grading permit. ▪ With the exception of engine start up, off-road diesel equipment operators shall be required to shut down their engines rather than idle for more than five minutes, and shall ensure that all off-road equipment is compliant with the CARB in-use off-road diesel vehicle regulation and SCAQMD Rule 2449. ▪ The following note shall be included on all grading plans: "During construction activity, where available, the contractor shall incorporate California Air Resources Board (CARB) Tier 2 or 3 certified equipment into on-site off-road construction equipment fleets according to the following: o Start of construction to December 31, 2014: Where available, incorporate Tier 2 and 3 equipment into the construction fleet of off-road diesel construction equipment used for the project. Where available, non-Tier 2 or 3 off-road diesel construction equipment shall be outfitted with the BACT devices certified by CARB. If CARB certified engines are not available, the project Applicant shall provide evidence to the City prior to issuance of grading permits, or within 30 days of	Less than significant impact from construction particulate matter. **Significant and Unavoidable Impact from Construction ROG and NO_X.**

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		procurement of the construction equipment fleet. o Post-January 1, 2015: Where available and commercially feasible, incorporate Tier 3 and 4 equipment into the construction fleet of off-road diesel construction equipment used for the project. Where available, non-Tier 3 or 4 off-road diesel construction equipment shall be outfitted with BACT devices certified by CARB. o A copy of each unit's certified tier specification, Best Available Control Technology (BACT) documentation, and CARB or SCAQMD operating permit shall be provided to the City at the time of mobilization of each applicable unit of equipment. ▪ Configure construction parking to minimize traffic interference. ▪ Minimize obstruction of through-traffic lanes and provide temporary traffic controls such as a flag person during all phases of construction when needed to maintain smooth traffic flow. Construction shall be planned so that lane closures on existing streets are kept to a minimum. ▪ Schedule construction operations affecting traffic for off-peak hours to the best extent when possible. ▪ Develop a traffic plan to minimize traffic flow interference from construction activities (the plan may include advance public notice of routing, use of public transportation and satellite parking areas with a shuttle service.) ▪ Encourage construction contractors to apply for SCAQMD Surplus Off-Road Opt-In for NO_X ("SOON") funds. Incentives could be provided for those construction contractors who apply for AQMD "SOON" funds. The "SOON" program provides funds to accelerate clean-up of off-road diesel vehicles, such as heavy duty construction	

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		equipment. More information on this program can be found at the following website: http://www.aqmd.gov/tao/Implementation/SOONProgram.htm (Revisions to Mitigation 3.3-1 are based on the latest guidance from the South Coast Air Quality Management District to minimize construction NO_X emissions.) ~~3.3-2 The developer shall require by contract specifications that all heavy-duty diesel-powered equipment operating and refueling at a project site within the Project Area would use low-NO_X diesel fuel to the extent that it is readily available and cost effective (up to 125 percent of the cost of California ARB diesel) in the South Coast Air Basin (this does not apply to diesel-powered trucks traveling to and from the project sites within the Project Area). Contract specification language shall be reviewed by the City prior to issuance of a grading permit.~~ (Mitigation Measure 3.3-2 is deleted as it is outdated and has been superseded by the additions to Mitigation Measure 3.3-1, which require BACT devices to reduce NO_X emissions.) 3.3-3 The developer shall require by contract specifications that alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) and low-emission diesel construction equipment would be utilized to the extent that the equipment is readily available and cost effective in the South Coast Air Basin. Contract specification language shall be reviewed by the City prior to issuance of a grading permit. 3.3-4 The developer shall require by contract specifications that construction equipment engines will be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction. Contract specification language shall be reviewed by the City prior to issuance of a grading permit. 3.3-5 The developer shall require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when	

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		not in use for more than five minutes. Contract specification language shall be reviewed by the City prior to issuance of a grading permit. 3.3-6 The developer shall require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site rather than electrical generators powered by internal combustion engines to the extent feasible. Contract specification language shall be reviewed by the City prior to issuance of a grading permit. 3.3-7 The developer shall implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. Contract specification language shall be reviewed for inclusion of this language by the City prior to issuance of a grading permit. The following actions are currently recommended to implement Rule 403 and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation: ▪ Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days). ▪ Replace ground cover in disturbed areas as quickly as possible. ▪ Enclose, cover, water twice three times daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content. ▪ Water trucks will be utilized on the site and shall be available to be used throughout the day during site grading to keep the soil damp enough to prevent dust being raised by the operations. Water active grading sites at least twice daily.	

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		▪ Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period. ▪ All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code. ▪ Sweep streets at the end of the day. ▪ Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip on a gravel surface to prevent dirt and dust from impacting the surrounding areas. ▪ Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces. ▪ Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved roads. ▪ <u>All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.</u> ▪ <u>All delivery truck tires shall be watered down and scraped down prior to departing the job site.</u> ▪ <u>Visible dust beyond the property line which emanates from the project shall be minimized to the extent feasible.</u> **Additional Mitigation Measures:** AQ-1 The following measures shall be implemented by the contractor to reduce ROG emissions resulting from application of architectural coatings:	

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		▪ Use high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50 percent; ▪ Use required coatings and solvents with a ROG content lower than required under Rule 1113; and ▪ Use pre-painted construction materials.	
AQ-2	**Long-Term (Operational) Air Emissions** Development associated with the proposed project would result in significant and unavoidable impacts pertaining to operational air emissions.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measures GCC2 through GCC8 in Section 5.7, *Greenhouse Gas Emissions*. **Additional Mitigation Measures:** Refer to Mitigation Measure GHG-1 in Section 5.7, *Greenhouse Gas Emissions*.	**Significant and Unavoidable Impact for ROG and NO_X emissions.**
AQ-3	**Localized Emissions** Development associated with the project would result in localized emissions impacts or expose sensitive receptors to substantial pollutant concentrations.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measures 3.3-1 through 3.3-7 and GCC2 through GCC8 in Section 5.7, *Greenhouse Gas Emissions*. **Additional Mitigation Measures:** Refer to Mitigation Measures AQ-1, above, and GHG-1 in Section 5.7, *Greenhouse Gas Emissions*.	**Significant and Unavoidable Impact.**
Cumulative	**CUMULATIVE IMPACTS** **Short-Term (Construction) Air Emissions** Short-term construction activities associated with the proposed project and other related cumulative projects, would result in air pollutant emission impacts or expose sensitive receptors to substantial pollutant concentrations.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measures 3.3-1 through 3.3-7. **Additional Mitigation Measures:** Refer to Mitigation Measure AQ-1.	**Significant and Unavoidable Impact.**
	Long-Term (Operational) Air Emissions Development associated with the proposed project and other related cumulative projects, would result in significant impacts pertaining to operational air emissions.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measures GCC2 through GCC8 in Section 5.7, *Greenhouse Gas Emissions*. **Additional Mitigation Measures:** Refer to Mitigation Measure GHG-1 in	**Significant and Unavoidable Impact.**

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		Section 5.7, *Greenhouse Gas Emissions*.	
5.7	**GREENHOUSE GAS EMISSIONS**		
GHG -1	**Greenhouse Gas Emissions** Greenhouse Gas Emissions generated by the project would have a significant impact on global climate change.	***Standard Conditions of Approval:*** No Standard Conditions of Approval are applicable to this topical area. ***Applicable OSA Mitigation Measures:*** GCC2 Prior to the issuance of building permits ~~for new commercial and retail projects or residential projects within the Opportunities Study Area~~, the City shall review the plans to confirm that the project complies with the Tier 1 requirements of Title 24, Part 11 (California Green Building Standards Code) of the California Code of Regulations. GCC3 Prior to the issuance of a Site Development Permit ~~for new commercial and retail projects within the Opportunities Study project area~~, site plans shall include prioritized parking for electric vehicles, hybrid vehicles, and alternative fuel vehicles. GCC4 The ~~City~~ Applicant shall ~~identify~~ utilize energy efficient street lights ~~and water and wastewater pumps and treatment systems~~ which are currently available for all private streets and which when installed will provide for a 10 percent reduction beyond the 2007 baseline energy use for this infrastructure~~, and shall require the use of this technology in all new development~~. All new traffic signals and traffic signal safety lighting (at intersections). ~~lights~~ installed in conjunction with the Portola Center project ~~within the City~~ shall use LED technology per the City's requirements. All other public street lights and water and wastewater pumps and treatment systems shall be consistent with City and/or other public agency standards. GCC5 The Applicant shall ~~City shall require all new development projects in the Opportunities Study Area to~~ recycle and/or salvage at least 25 percent of nonhazardous construction and demolition debris. To implement this requirement, the applicant shall submit a construction waste management plan for review and approval	**Significant and Unavoidable Impact.**

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		of the Development Services Director prior to issuance of a Building Permit. The construction waste management plan shall identify materials to be diverted from disposal and whether the materials will be stored on-site or commingled. Excavated soil and land-clearing debris do not contribute to this credit. Calculation can be done by weight or volume but must be documented. GCC6 Prior to approval of a Site Development Permit ~~for new development in the Opportunity Study Area~~, the Applicant shall demonstrate on conceptual landscape plans ~~the City shall require~~ that new development within the ~~Opportunity Study Area~~ project site will use reclaimed water for public and common area landscaping where available; install 50 percent native/drought-tolerant plant species in developer-installed landscaped areas; and utilize "smart" advanced capability controllers (e.g., Weather-Trac) to reduce water and energy consumption. GCC7 Prior to approval of a Site Development Permit ~~for new commercial, retail and industrial projects within the Opportunities Study Area~~, site plans must incorporate any combination of the following strategies to reduce heat gain created by impervious areas: ▪ Utilizing shade trees in common area landscaping; ▪ Reducing the street widths to minimize impervious areas and reduce the use of asphalt; ▪ Utilizing light-colored and reflective roofing materials and paint; and ▪ Incorporating bioswales where feasible in development areas to capture urban runoff and increase the amount of pervious surfaces. GCC8 All commercial~~, industrial~~ and retail development in the ~~Opportunities Study Area~~ project site shall be required to post signs and limit idling time for commercial vehicles, including delivery trucks to no more than 5 minutes. ***Additional Mitigation Measures:***	

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		GHG-1 The proposed project shall include, but not be limited to, the following list of potential design features. These features shall be incorporated into the project design to ensure consistency with adopted statewide plans and programs. The project applicant shall demonstrate the incorporation of the following project design features prior to the issuance of building or occupancy permits as applicable. *Transportation* ▪ Provide pedestrian connections to the off-site circulation network (prior to issuance of building permits). ▪ Bicycle lanes and walking paths shall be incorporated into the street system of new residential development to provide alternative circulation routes to reach logical points of destinations such as schools, parks, and retail areas (prior to issuance of building permits). ▪ Implement a trip reduction program, for which all employees shall be eligible to participate (prior to issuance of occupancy permit). This measure is not applicable to residential uses. ▪ Provide a ride sharing program, for which all employees shall be eligible to participate (prior to issuance of occupancy permit). This measure is not applicable to residential uses. *Energy Efficiency* ▪ Install Energy Star rated appliances (prior to issuance of building permits). ▪ Install high efficiency heating ventilation and air conditioning (HVAC) equipment with a Seasonal Energy Efficiency Rating (SEER) of 13 or higher and thermostatic expansion (TXV) valve (prior to issuance of building permits). ▪ Install vinyl frame windows with dual pane low emissivity glass (prior to issuance of building permits). ▪ Reduce unnecessary outdoor lighting (prior to issuance of	

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		building permits). *Water Conservation and Efficiency* ▪ Install low-flow faucets and toilets (prior to issuance of building permits). *Solid Waste* ▪ Provide interior and exterior storage areas for recyclables and adequate recycling containers located in public areas (prior to issuance of occupancy permit).	
GHG -2	**Consistency With Applicable GHG Plans, Policies, or Regulations** Implementation of the proposed project would not conflict with an applicable greenhouse gas reduction plan, policy, or regulation.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measures GCC2 through GCC8. **Additional Mitigation Measures:** Refer to Mitigation Measure GHG-1.	Less Than Significant Impact With Mitigation Incorporated.
Cumulative	**CUMULATIVE IMPACTS** **Greenhouse Gas Emissions** Greenhouse gas emissions generated by the project and other related cumulative projects, would have a significant impact on global climate change.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measures GCC2 through GCC8. **Additional Mitigation Measures:** Refer to Mitigation Measure GHG-1.	**Significant and Unavoidable Impact.**
	Consistency with Applicable GHG Plans, Policies, or Regulations Implementation of the proposed project and other related cumulative projects, would not conflict with an applicable greenhouse gas reduction plan, policy, or regulation.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measures GCC2 through GCC8. **Additional Mitigation Measures:** Refer to Mitigation Measure GHG-1.	Less Than Significant Impact.
5.8	**NOISE**		
N-1	**Short-Term Construction Noise Impacts**	**Standard Conditions of Approval:**	Less Than Significant With Mitigation Incorporated.

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	Grading and construction within the area would not result in significant temporary noise impacts to nearby noise sensitive receivers.	N1 Prior to the issuance of a grading permit, the applicant shall produce written evidence, or other evidence deemed reasonably acceptable by the Director of Development Services, that all construction vehicles or equipment, fixed or mobile, operated within 1,000 feet of any residential dwelling unit shall be equipped with properly operating and maintained mufflers. N2 Grading and construction, construction activities shall be prohibited between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday; 6:00 p.m. and 8:00 a.m. Saturday; and at any time on Sunday or a federal holiday. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** N-1 Prior to issuance of grading permits, the project shall submit a plan that demonstrates, to the satisfaction of the Lake Forest Development Services Department, that the project complies with the following: ▪ Construction noise reduction methods such as shutting off idling equipment, maximizing the distance between construction equipment staging areas and occupied residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible. Unattended construction vehicles shall not idle for more than 5 minutes when located within 300 feet from residential properties. ▪ Noise attenuation measures, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources, are implemented where feasible. ▪ During construction, stationary construction equipment shall be placed such that emitted noise is directed away from or shielded from sensitive noise receivers where feasible.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		▪ During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise sensitive receptors. ▪ Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners and residents to contact the job superintendent if necessary. In the event the City receives a complaint, appropriate corrective actions shall be implemented. ▪ Two weeks prior to the commencement of construction, notification must be provided to surrounding land uses within 300 feet of a project site disclosing the construction schedule, including the various types of activities that would be occurring throughout the duration of the construction period. This notification shall give a contact phone number for any questions or complaints. All complaints shall be responded to in a method deemed satisfactory by the City of Lake Forest.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
N-2	**Vibration Impacts** Project implementation would not result in significant vibration impacts to nearby sensitive receptors.	**Standard Conditions of Approval:** Refer to Standard Conditions of Approval N1 and N2. **Applicable OSA Mitigation Measures:** 3.10-1 ~~A condition of approval shall be placed on all Site Development Permit and/or Use Permit approvals for site-specific developments, which states~~ Prior to issuance of grading permits, the project shall submit a plan that demonstrates, to the satisfaction of the Lake Forest Development Services Department: Construction staging areas and operation of earth moving equipment on a project site shall be located more than 25 feet away from sensitive receptors (such as residences, schools, hospitals). If equipment will be operated within 25 feet of any sensitive receptor, the applicant shall prepare a construction plan which quantifies the anticipated vibration levels associated with the construction (in VdB) and the length of time the construction is to occur, and documents efforts to minimize impacts associated with groundborne vibration. **Additional Mitigation Measures:** No additional mitigation measures are required.	Less Than Significant With Mitigation Incorporated.
N-3	**Long-Term (Mobile) Noise Impacts** Traffic generated by the proposed project would not significantly contribute to existing traffic noise in the area or exceed the city's established standards.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topic area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** N-2 Prior to issuance of certificates of occupancy, the applicant shall demonstrate that noise barriers up to six feet in height (i.e., sound walls or berms) have been installed along the homes adjacent to Glenn Ranch Road and Saddleback Ranch Road, as depicted in SEIR Exhibit 5.8-4, *Noise Barrier Heights and Locations*. Noise barriers must have a surface density of at least 3.5 pounds per square foot, and have no openings or cracks. The walls may be constructed of five-eighth inch thick acrylic glass, any masonry material, an earthen berm or a combination of these materials.	Less Than Significant With Mitigation Incorporated.

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		N-3 Prior to issuance of building permits, an interior noise study shall be developed for the homes and multi-family buildings adjacent to, and with a direct line-of-sight of, Glenn Ranch Road and Saddleback Ranch Road to ensure that the interior CNEL would not exceed 45 dB. To mitigate the interior noise impact, the homes and multifamily buildings would most likely require air-conditioning and/or mechanical ventilation and possibly sound-rated windows.	
N-4	**Long-Term (Stationary) Noise Impacts** The proposed project would not result in a significant increase in long-term stationary ambient noise levels.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topic area. **Applicable OSA Mitigation Measures:** 3.10-3 ~~A condition of approval shall be placed on all Site Development Permit and/or Use Permit approvals for site-specific developments, which states~~ Prior to issuance of building permits, the project shall submit a plan or other satisfactory documentation that demonstrates, to the satisfaction of the Lake Forest Development Services Department: ~~prior to issuance of a building permit, the applicant shall submit plans for~~ shielding of all HVAC equipment to provide noise attenuation ~~with~~ will reduce noise from HVAC systems to 65 dBA or less when measured 50 feet from the noise source. **Additional Mitigation Measures:** N-4 Prior to issuance of building permits, the Applicant shall demonstrate that all stands and general spectator areas shall be located a minimum of 150 feet from the closest residential property line. Alternatively, noise barriers (e.g., sound walls or berms) up to six feet in height above the finished grade shall be constructed along the western boundaries of all lots with a direct line-of-sight to the proposed 5-acre public Neighborhood Park. The noise barriers, such as solid walls or noise-rated glass, shall be located along the line of sight between the residential outdoor activity areas (i.e., rear yards) and the spectator areas in the park. The parks shall not be used between the hours of 10:00 p.m. and 7:00 a.m.	Less Than Significant With Mitigation Incorporated.

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		N-5 Prior to issuance of building permits, a noise assessment shall be prepared for the commercial property outdoor mechanical equipment. The noise assessment shall identify any noise control measures necessary to comply with the City's Noise Ordinance requirements.	
Cumulative	**CUMULATIVE IMPACTS** **Short-Term Construction Noise Impacts** Grading and construction within the area combined with other related cumulative projects would not result in significant short-term noise impacts to nearby noise sensitive receivers, following implementation of mitigation measures.	**Standard Conditions of Approval:** Refer to Standard Conditions of Approval N1 and N2. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Mitigation Measure N-1.	Less Than Significant With Mitigation Incorporated.
	Vibration Impacts Project implementation combined with other related cumulative projects would not result in significant vibration impacts to nearby sensitive receptors.	**Standard Conditions of Approval:** Refer to Standard Conditions of Approval N1 and N2. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measure 3.10-1. **Additional Mitigation Measures:** No additional mitigation measures are required.	Less Than Significant With Mitigation Incorporated.
	Long-Term (Mobile) Noise Impacts Traffic generated by the proposed project combined with other related cumulative projects would not significantly contribute to existing traffic noise in the area or exceed the City's established standards.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** No OSA Mitigation Measures are applicable to this topical area. **Additional Mitigation Measures:** Refer to Mitigation Measures N-2 and N-3.	Less Than Significant With Mitigation Incorporated.
	Long-Term (Stationary) Noise Impacts The proposed project combined with other related cumulative projects would not result in a significant increase in long-term stationary ambient noise levels.	**Standard Conditions of Approval:** No Standard Conditions of Approval are applicable to this topical area. **Applicable OSA Mitigation Measures:** Refer to OSA PEIR Mitigation Measure 3.10-3. **Additional Mitigation Measures:** Refer to Mitigation Measures N-4 and N-5.	Less Than Significant With Mitigation Incorporated.