# 1. Executive Summary

#### 1.1 INTRODUCTION

This Draft Second Supplemental Environmental Impact Report ("DSSEIR") addresses the environmental effects associated with the implementation of the Heritage Fields 2012 – General Plan Amendment and Zone Change Project at the former Marine Corps Air Station ("MCAS"), El Toro (the "2012 Modified Project"). The California Environmental Quality Act ("CEQA") requires that local government agencies, prior to taking action on projects over which they have discretionary approval authority, consider the environmental consequences of such projects. In this case the City of Irvine ("City"), as lead agency, determined that a Supplemental Environmental Impact Report (EIR) should be prepared. An EIR is a public document designed to provide the public and local and State governmental agency decision makers with an analysis of potential environmental consequences to support informed decision-making. This document focuses on those impacts determined to be potentially significant as disclosed in the Initial Study completed for the 2012 Modified Project (see Appendix A to this DSSEIR).

As discussed in Section 3.3.1, Previous Environmental Documentation, of this DSSEIR, in 2003, the City certified the Final Program Environmental Impact Report for the Orange County Great Park ("Great Park"), SCH No. 2002101020, dated May 2003 ("2003 OCGP EIR"), which analyzed the environmental effects of the development of 3,625 residential units and 6,585,594 million square feet of non-residential development (including the Great Park and other non-Great Park Neighborhood uses) on a portion of the former Marine Corps Air Station ("MCAS") El Toro. Subsequently, the City prepared, and the City Council of the City of Irvine ("City Council") approved, seven addenda to the 2003 OCGP EIR ("Addenda"), which analyzed revisions made to the project that were analyzed in the 2003 OCGP EIR. In addition, in September 2011 the City Council certified a Supplemental EIR ("2011 SEIR"), which analyzed a total of 4,894 dwelling units and 6,585,594 square feet of non-residential uses (including Great Park uses and other non-Great Park Neighborhood uses). The City Council thereafter approved an eighth Addendum in October 2011. The actions analyzed in the 2003 OCGP EIR, the eight Addenda, and the 2011 Supplemental EIR are referred to in this DSSEIR as the "2011 Approved Project." The 2003 OCGP EIR, the eight Addenda, and the 2011 SEIR are referred to together as the "2011 Certified EIR." The 2011 Certified EIR is incorporated by reference in this DSSEIR. A summary of the 2011 Certified EIR is provided in Section 3.3.1 of this DSSEIR.

This DSSEIR has been prepared pursuant to the requirements of CEQA (California Public Resources Code, Division 13, Sections 21000, et seq.), the State CEQA Guidelines (Title 14 of the California Code of Regulations, Division 6, Chapter 3, Sections 15000, et seq.), and the City's CEQA Procedures. The overall purpose of this DSSEIR is to inform the City's decision makers and the general public whether, as compared to the 2011 Approved Project, the 2012 Modified Project would result in any new significant impacts or an increase in the severity of significant impacts of the 2011 Approved Project. The 2011 Approved Project is the "baseline" for the analysis in this DSSEIR, and was used in preparing the Initial Study for the 2012 Modified Project, to evaluate the potential impacts of the 2012 Modified Project. The City, as the Lead Agency, has reviewed and revised as necessary all submitted drafts, technical studies, and reports to reflect its own independent judgment, including, without limitation, by relying on applicable City technical personnel and review of all technical subconsultant reports.

Data and other information for this DSSEIR was obtained from previous environmental documentation; onsite field observations; discussions with affected agencies; analysis of adopted plans and policies; review of available studies, reports, data and similar literature; and specialized environmental assessments (e.g., air quality analysis, geology and soils update, greenhouse gas emissions analysis, hydrology and water quality updates, noise analysis, traffic impact analysis and a water supply assessment).

#### 1.2 ENVIRONMENTAL PROCEDURES

This DSSEIR has been prepared pursuant to CEQA to assess the environmental effects associated with implementation of the 2012 Modified Project, as well as associated anticipated future discretionary actions and approvals for the 2012 Modified Project, all as compared to the 2011 Approved Project. The six main objectives of this document as established by CEQA are listed below:

- 1) To disclose to decision makers and the public the significant environmental effects of proposed activities.
- 2) To identify ways to avoid or reduce environmental damage.
- 3) To prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.
- 4) To disclose to the public reasons for agency approval of projects with significant environmental effects.
- 5) To foster interagency coordination in the review of projects.
- 6) To enhance public participation in the planning process.

An EIR is the most comprehensive form of environmental documentation identified in CEQA and the CEQA Guidelines and provides the information needed to assess the environmental consequences of a proposed project, to the extent feasible. EIRs are intended to provide an objective, factually supported, full-disclosure analysis of the environmental consequences associated with a proposed project that has the potential to result in significant, adverse environmental impacts.

An EIR is also one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Prior to approving a proposed project, the lead agency must consider the information contained in the EIR; determine whether the EIR was properly prepared in accordance with CEQA and the CEQA Guidelines; determine that it reflects the independent judgment of the lead agency; adopt findings concerning the project's significant environmental impacts and alternatives; and adopt a Statement of Overriding Considerations ("SOC") if the proposed project would result in significant impacts that cannot be avoided.

#### 1.2.1 EIR Format

This DSSEIR has been formatted as described below.

**Table of Contents.** The table of contents provides a list of the chapters, sections, figures, and tables included in this DSSEIR and the associated page numbers where they can be found. The table of contents also includes a list of defined terms and abbreviations used in this DSSEIR.

**Section 1. Executive Summary:** Summarizes the background and description of the 2012 Modified Project, the format of this DSSEIR, project alternatives, and the potential environmental impacts and mitigation measures identified for the 2012 Modified Project. It also includes a discussion of any critical issues remaining to be resolved and areas of controversy.

**Section 2.** Introduction: Describes the purpose of this DSSEIR, background on the 2012 Modified Project, the Notice of Preparation/Initial Study ("NOP/IS"), the use of incorporation by reference, Final EIR certification, and mitigation monitoring requirements.

**Section 3. Project Description:** Includes a detailed description of the 2012 Modified Project, the objectives of the 2012 Modified Project, the Proposed Project Site location, approvals anticipated to be included as part of the 2012 Modified Project, the necessary environmental clearances for the 2012 Modified Project, and the intended uses of this DSSEIR.

**Section 4.** Environmental Setting: Includes a description of the physical environmental conditions in the vicinity of the Proposed Project Site as they existed at the time the NOP/IS was published, from both a local and regional perspective. Ordinarily, the existing environmental setting provides the baseline physical conditions from which the lead agency determines the significance of environmental impacts resulting from a development project. However, because this is a Supplemental EIR that supplements the 2011 Certified EIR, the baseline used for the analyses in this DSSEIR is the 2011 Approved Project.

**Section 5.** Environmental Analysis: For each environmental topic analyzed, the DSSEIR provides a description of the affected environment, presenting an analysis for each of the environmental resource areas evaluated, a detailed analysis of the environmental impacts, and discussion of mitigation measures to reduce or eliminate any significant environmental impacts associated with the 2012 Modified Project. Included for each environmental topic (i.e., Aesthetics, Air Quality, Transportation and Traffic, etc.) addressed in Section 5.0 is the identification and description of specific measures or requirements incorporated into the 2012 Modified Project that serve to avoid or lessen potential significant impacts. Those measures and requirements fall into the following three categories:

- *Existing Plans, Programs, and Policies ("PPPs").* These measures include existing regulatory requirements, plans and programs that are applicable to the 2012 Modified Project and that reduce or avoid impacts. For example, existing standard conditions imposed by the City, such as the requirement that new structures meet seismic safety requirements (i.e., Uniform Building Code requirements), serve to reduce the potential for new development within the Proposed Project Site to be significantly affected by possible seismic events.
- **Project Design Features ("PDFs").** The analysis of each topic includes a description of any project design features proposed by Heritage Fields El Toro, LLC ("Applicant" or "Heritage Fields"), which are specifically intended and designed to reduce or avoid impacts.
- *Mitigation Measures ("MMs")*. For those issue areas where the impact analysis determines that implementation of the 2012 Modified Project would result in significant impacts, as compared to

the 2011 Approved Project, mitigation measures are recommended in accordance with the requirements of CEQA.

It should be noted that the existing PPPs and the PDFs as well as the MMs for the 2011 Approved Project, as adopted in the mitigation monitoring and reporting program (the "MMRP") for the 2011 Approved Project, were assumed to be incorporated into the 2012 Modified Project for each topical issue area analyzed given that they have already been adopted by the City in the 2011 Approved Project or in MMRP for the 2011 Approved Project. Additional MMs were formulated only for those topical issue areas where the results of the impact analysis identified significant impacts of the 2012 Modified Project, as compared to the 2011 Approved Project, even with the inclusion of PPPs, PDFs, and the 2011 Approved Project's MMs. All three types of measures described above will be required to be implemented as part of the 2012 Modified Project, and will be included in the MMRP for the 2012 Modified Project. In instances where these types of measures are not feasible, or cannot reduce the impact to a less than significant level, the impact is identified as "Significant and Unavoidable."

**Section 6.** Significant Unavoidable Adverse Impacts: Describes the significant unavoidable adverse impacts of the 2012 Modified Project.

**Section 7.** Alternatives to the Proposed Project: Describes the impacts of the alternatives to the 2012 Modified Project, including the No Project/2011 Approved Project Alternative and the Marine Way Alignment Alternative, and compares the alternatives to the 2012 Modified Project.

**Section 8.** Impacts Found Not to Be Significant: Briefly describes the potential impacts of the 2012 Modified Project that the City determined in its Initial Study (Appendix A to this DSSEIR) would not be significant and that therefore have not been discussed in detail elsewhere in this DSSEIR.

**Section 9.** Significant Irreversible Changes Due to the 2012 Modified Project: Describes the significant irreversible environmental changes associated with the 2012 Modified Project.

**Section 10.** Growth-Inducing Impacts of the 2012 Modified Project: Describes the growth-inducing impacts of the 2012 Modified Project.

**Section 11.** Organizations and Persons Consulted: Lists the people and organizations that were contacted during the preparation of this DSSEIR for the 2012 Modified Project.

**Section 12. Qualifications of Persons Preparing EIR:** Lists the people who prepared this DSSEIR for the 2012 Modified Project.

**Section 13. Bibliography:** A bibliography of the technical reports and other documentation used in the preparation of this DSSEIR for the 2012 Modified Project.

**Appendices.** The appendices to this DSSEIR (presented in PDF format on a CD attached to the front cover) contain the following supporting documents:

- Appendix A: Notice of Preparation ("NOP") and Initial Study
- Appendix B: NOP Responses
- Appendix C: Air Quality Technical Report
- Appendix D: Greenhouse Gas ("GHG") Technical Report

- Appendix E: Hydrology Study
- Appendix F: Water Quality Technical Report
- Appendix G: Noise Technical Report
- Appendix H: Public Services Correspondence
- Appendix I: Traffic Impact Analysis
- Appendix J: Sewer and Water Master Plan Study
- Appendix K: 2011 SAMP Update
- Appendix L: 2012 Water Supply Assessment
- Appendix M: Geology and Seismicity Update
- Appendix N: Biological Technical Report for: Irvine Wildlife Corridor Relocation
- Appendix O: Relocated Wildlife Feature Light and Noise Memo

#### 1.2.2 Type and Purpose of This DSSEIR

According to Section 15121(a) of the CEQA Guidelines, the purpose of an EIR is to:

Inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This DSSEIR analyzes the changes to the 2011 Approved Project that are being proposed by the 2012 Modified Project. CEQA dictates when a supplemental or subsequent EIR is required for changes being made to a project that was previously analyzed under CEQA. Once a project has been approved based on a CEQA analysis contained in an EIR, or even in a negative declaration, and the EIR or negative declaration is no longer subject to challenge, CEQA section 21166 provides that "no subsequent or supplemental environmental impact report shall be required by the lead agency or any responsible agency" unless one of three circumstances apply: (1) substantial changes to the approved project will require major revisions to the certified EIR, (2) substantial changes occur with respect to the circumstances under which the approved project is being undertaken will require major revisions to the the time the EIR for the approved project was certified becomes available. (CEQA § 21166.)

In this case, in-depth review has already occurred and the time for challenging the sufficiency of the 2011 Certified EIR has long since expired (CEQA § 21167, subd. (c)). Moreover, as discussed below, no circumstances have changed enough to justify repeating a substantial portion of the process. The factors used to evaluate whether a subsequent or a supplemental EIR should be prepared are set forth in CEQA Guidelines 15162 and 15163, and relate to whether "major changes" to the EIR are required. CEQA Guidelines section 15162 clarifies what constitute major changes to the EIR. According to that Section, major changes to the EIR are those that are required either:

- "Due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;" (CEQA Guidelines § 15162, subd. (a)(1), (a)(2); see also, id., subd. (a)(3)(A), (a)(3)(B));
- Where "[m]itigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or" (id., subd. (a)(3)(C));

• Where "[m]itigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative." (Id., subd. (a)(3)(D).)

This Draft SSEIR does not disclose any new significant environmental effects or any substantial increase in the severity of previously identified significant effect except for certain increases in Air Quality and Traffic impacts. Although the 2012 Modified Project's impacts in these two areas are increased, as compared to the 2011 Approved Project, these are both areas in which impacts for the 2011 Approved Project were already previously identified as significant and unavoidable in the 2011 Certified EIR . Like the 2011 Approved Project, the 2012 Modified Project would result in significant and unavoidable impacts to Transportation/Traffic, but only if certain mitigation measures requiring improvements that are within the responsibility and jurisdiction of a public agency over which the City has no control, are not implemented for reasons beyond the City's control. Moreover, the Applicant has not refused to adopt any new or newly feasible mitigation measures or alternatives. However, it should be noted that the 2011 Certified EIR concluded that population and housing impacts would be a significant and unavoidable adverse impact of the 2011 Approved Project. As described in Section 5.9, *Population and Housing*, of this DSSEIR, impacts related to population and housing are no longer considered significant with implementation of the 2012 Modified Project.

This DSSEIR is a project-level document that supplements the analyses in the 2011 Certified EIR. Section 15163 of the CEQA Guidelines provides that:

- (a) The lead or responsible agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:
  - 1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and
  - 2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.
- (b) The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.
- (c) A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.
- (d) A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.
- (e) When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised.

In accordance with Section 15163 of the CEQA Guidelines, this document:

• Incorporates the 2011 Certified EIR by reference, as discussed in Section 3.3.1, *Previous Environmental Documentation*.

- Contains information necessary to make the 2011 Certified EIR adequate for the 2012 Modified Project.
- Evaluates the potential environmental impacts of the changes to the 2011 Approved Project that are proposed by the 2012 Modified Project.
- Focuses on the land uses of the 2012 Modified Project and analyzes the potentially significant impacts of these proposed land uses, as compared to the 2011 Approved Project.
- Updates where necessary information relating to the resources in the vicinity of the Proposed Project Site that will be affected by the 2012 Modified Project.
- Updates where necessary the discussion of cumulative impacts, project alternatives, growth inducing impacts and other required sections of this DSSEIR.

The 2012 Modified Project changes to the 2011 Approved Project are summarized below in Section 1.4, *Project Description*, and more fully described in Chapter 3 of this DSSEIR. The analysis contained in this DSSEIR confirms that the 2011 Certified EIR is adequate for the 2012 Modified Project, with the updated information contained herein.

# 1.3 **PROJECT LOCATION**

As used in this DSSEIR, the term "Proposed Project Site" refers to and encompasses; 1) the Heritage Fields Development, also known as the Great Park Neighborhoods, consisting of nine existing Development Districts; 2) an approximately 11 acre parcel currently owned by the Transportation Corridor Agencies (TCA) located adjacent to the SR-133 Freeway between Trabuco Road and Irvine Boulevard (the "TCA Property"); 3) Lot D, Lot E, and Lot F as depicted on 2nd Amended Vesting Tentative Tract Map 17008 currently zoned 3.2 Transit Oriented Development within Districts 2 and 3 (together, the "City Parcels"); 4) approximately 132 acres owned by the City and zoned 1.4 Preservation that generally extends from Irvine Boulevard to the Southern California Regional Rail Authority ("SCRRA") rail lines, as depicted in Figure 3-5 and that is part of the "Approved Wildlife Corridor Feature"; and 5) a portion of the Great Park known as the "Sports Park District," all of which are located within the areas designated as Existing "Planning Area" (PA) 30 and Existing PA 51 in the City's General Plan, northeast of the freeway junction of Interstate 5 (I-5) and Interstate 405 (I-405), within the City. Figure 3-1, *Regional Location*, depicts the location of the Proposed Project Site in a regional context and Figure 3-2, *Local Vicinity*, shows its local context. Figure 3-2 also shows the Development Districts, the TCA Parcel and the additional acreage owned by the City, which are the subject of this DSSEIR.

Existing PA 51 is generally bounded by the Eastern Transportation Corridor to the west, the Foothill Transportation Corridor to the north, the SCRRA rail lines to the south, and Irvine Boulevard and the storm water channel near Alton Parkway to the north. Existing PA 51 abuts Existing PA 30 and PA 32 to the south, PA 35 (Irvine Spectrum 2) and the City of Lake Forest to the east, and PAs 9 and 40 to the west. Existing PA 30 is generally bounded by I-5 to the south, the SCRRA rail lines to the north, and the Irvine Spectrum to the east and west (Irvine Spectrum 2- PA 35 and Irvine Spectrum 3 - PA 32).

The major roadways bordering the 2012 Modified Project are Sand Canyon Avenue to the west, Portola Parkway to the north, and Alton Parkway to the east. Irvine Boulevard separates District 7 and District 8 on its north side from District 1-North, District 1-South and District 4 on its south side. The Irvine Station

is adjacent to the SCRRA rail lines that traverse the Proposed Project Site and that separate Existing PAs 30 and 51. Surrounding the Proposed Project Site are residential and nonresidential uses to the north and west, open space to the northeast, and nonresidential and mixed land uses to the east and southeast within the City of Lake Forest and Irvine. An aerial photograph of the Proposed Project Site is shown in Figure 3-3, *Aerial Photograph*.

# 1.4 PROJECT SUMMARY

The 2012 Modified Project changes\_the 2011 Approved Project as follows:

- Combines Existing PAs 30 and 51, and the TCA Parcel, into a single PA that will be designated "Combined PA 51";
- Rezones property in Districts 2, 3, and 6 from 3.2 Transit Oriented Development, 4.3 Vehicle Related Commercial, and 5.4B General Industrial to 8.1/8.1B Trails and Transit Oriented Development.
- Relocates a 132-acre portion of the Approved Wildlife Corridor Feature known as Segments 2 and 3 (the "Relocated Wildlife Corridor Feature"), to a location adjacent to the Borrego Canyon Channel within District 5 and 6.
- Rezones 13-acres in District 6 (formerly District 9) from its current 1.1 Agriculture zoning to 1.4 Preservation to accommodate the Relocated Wildlife Corridor Feature.
- Rezones the City Parcels from 3.2 Transit Oriented Development to 8.1 Trails and Transit Oriented Development.
- Updates the General Plan land use designation and zoning designation for the TCA Parcel to Orange County Great Park and 8.1 TTOD, respectively.
- Amends the Master Plan of Arterial Highways, Figure B-1, to eliminate the extension of Rockfield Boulevard from the eastern boundary of the Proposed Project Site to Marine Way once the Orange County Transportation Authority (OCTA) has approved this proposed amendment to the countywide Master Plan of Arterial Highways (see Figure 3-4, *Proposed MPAH Amendment*).
- Modifies General Plan Objective B-1 to identify where LOS E may be considered potentially acceptable, as shown on Figure 3-6, *Proposed Locations Where LOS E May Be Acceptable*, of this DSSEIR.
- Amends the City General Plan and Zoning Ordinance to allow the following:
  - 3,412 residential units within Combined PA 51, in addition to the 4,894 units already approved by the City and located in Districts 1 North, 1 South, 4, 7, and 8.
  - Modify non-residential uses within Combined PA 51 to allow:
    - 3,364,000 square feet of Medical and Science

- 1,318,200 square feet of Multi-Use. The 2012 Modified Project includes an option to convert up to 535,000 square feet of the proposed Multi-Use intensity to residential intensity for up to an additional 889 dwelling units within District 6 and Lot 48 of 2nd Amended VTTM 17008, subject to a vehicle trip limit.
- 220,000 square feet of Community Commercial
- Grants, pursuant to State law, up to 1,194 additional DB units (35% of the proposed additional 3,412 multi-use residential units) plus up to 311 additional DB units associated with the optional conversion of up to 535,000 square feet of non-residential Multi-Use intensity to residential intensity and granted pursuant to State law.
- Encourages Accessory Retail, as defined in the City of Irvine Zoning Code, within Combined PA 51.

The 2012 Modified Project consists of 4,606 dwelling units (3,412 base units and 1,194 DB units) for a total of 9,500 units.). The 2012 Modified Project also includes the option to convert up to 535,000 square feet of non-residential Multi-Use to up to 889 base dwelling units and 311 DB units, granted pursuant to State law. These are in addition to the already approved 4,894 dwelling units. With the conversion, the total number of dwelling would be 10,700 units.

In addition, the 2012 Modified Project proposes to relocate certain portions of the Approved Wildlife Corridor Feature. The Approved Wildlife Corridor Feature is a design feature included in the OCGP Master Plan that connects established habitat preserve areas in the central and coastal subareas of the Orange County Central Coastal NCCP/HCP, and is intended to provide habitat for, and facilitate movement of four target species: Bobcat (*Lynx rufus*), Coyote (*Canis latrans*), Coastal California Gnatcatcher (*Polioptila californica californica*), and Least Bell's Vireo (*Vireo bellii pusillus*). The Approved Wildlife Corridor is comprised of five "segments."

The 2012 Modified Project proposes to relocate Segments 2 and 3 of the Approved Wildlife Corridor Feature, which total 132 acres, to a location adjacent to Borrego Canyon Channel within Districts 5 and 6, as shown on Figure 3-5, *Proposed Wildlife Corridor Relocation*, of this DSSEIR. The relocated segments of the Approved Wildlife Corridor Feature total 132 acres and the 2012 Modified Project proposes to zone these segments in their new location as 1.4 Preservation. Concurrently, the 2012 Modified Project proposes to incorporate the area currently approved for Segments 2 and 3 of the Approved Wildlife Corridor Feature total 5 and 6, and to rezone the area 8.1 TTOD.

The Relocated Wildlife Corridor Feature would provide habitat for, and facilitate movement of, the same four target species as the Approved Wildlife Corridor Feature, and would range in width from approximately 500 to 1,000 feet, with an average width of more than 600 feet. Road and/or trail crossings may cross the Relocated Wildlife Corridor Feature, but would be designed with sufficient clearance to allow for free passage of the target species while discouraging wildlife from crossing at grade. Storm water flows from development of areas adjacent to the western side of the Relocated Wildlife Corridor Feature may be discharged into the Relocated Wildlife Corridor Feature so long as they are first treated pursuant to applicable water quality regulatory requirements and can be introduced without requiring artificial channel stabilization. The Relocated Wildlife Corridor Feature would be planted with native vegetation, which may include mulefat scrub, southern willow scrub, coastal sage scrub, cactus scrub, needlegrass grasslands and screening plantings. Earthen berms and screening vegetation would be

installed along the eastern and western edges of the Relocated Wildlife Corridor Feature as necessary to provide screening, to reduce visibility and human access into the corridor, and to reduce light spillage and ambient noise within the corridor.

The 2012 Modified Project includes two options for the "Main Street" development along Trabuco Road east of "O" Street. Option 1, which was studied in the 2011 SEIR, includes Community Commercial and Multi-Use north of Trabuco Road with Residential south of Trabuco Road in District 1 South. Option 2, which is studied in this DSSEIR, would include Residential north of Trabuco Road with Community Commercial, Multi-Use, and Residential south of Trabuco Road in District 1 South. Option 1 was analyzed in the 2011 SEIR within the context of the other entitlements that were part of the 2011 SEIR Approved Project. This DSSEIR studies Option 1 in the context of the changes proposed as part of the 2012 Modified Project. Both Options include a 2,600 student high school in District 5.

The 2012 Modified Project also includes implementation of recreational facilities in the previously approved Sports Park District of the Orange County Great Park (Great Park).

The 2012 Modified Project incorporates the Mitigation Measures recommended by the 2011 Certified EIR and adopted by the City in the Mitigation Monitoring and Reporting Program for the 2011 Approved Project. It also includes the Project Design Features described below.

#### **General Plan Amendments**

The General Plan Amendment application requests the following in Existing PAs 30 and 51: (1) consolidation of Existing PAs 30 and 51 and the TCA Parcel into one PA to be designated as "Combined PA 51"; (2) amendment of the General Plan maps to reflect a zone change for Districts 2, 3 and 6 from 3.2 Transit Oriented Development, 4.3 Vehicle Related Commercial, and 5.4 B General Industrial to 8.1 TTOD; (3) amendment of the General Plan maps to reflect a zone change for a portion of District 5, which is currently zoned 8.1 TTOD, and 13-acres in District 6 (formerly District 9), which is currently zoned 1.1 Agriculture, to 1.4 Preservation to accommodate the Relocated Wildlife Corridor Feature; (4) amendment of General Plan Land Use Table A-l to allow 9,500 dwelling units in the proposed Combined PA 51 (reflecting the inclusion of the previously approved 4,894 residential units) with an option to convert up to 535,000 square feet of non-residential Multi-Use to up to an additional 889 dwelling units (and 311 DB units) for a revised total up to 10,700 dwelling units; and (5) amendment the Master Plan of Arterial Highways, Figure B-1, to eliminate the extension of Rockfield Boulevard from the eastern project boundary to Marine Way once the proposed amendment to the countywide Master Plan of Arterial Highways (MPAH) is approved by the OCTA.

The proposed text and table modification for the General Plan generally consist of the following:

- Revise General Plan Land Use Table A-1 and associated footnotes to modify the distribution of residential units;
- Revise General Plan Land Use Tables A-1 and A-2 to combine Existing PAs 30 and 51 into one PA, Combined PA 51;
- Delete references to Existing PA 30 throughout the General Plan;

- Revise General Plan Table A-1 and associated footnotes to allow a total of 9,500 dwelling units in Combined PA 51 with an option to convert up to 535,000 square feet of non-residential Multi-Use to up to an additional 889 dwelling units (and 311 DB units) for a revised total of up to 10,700 dwelling units in Combined PA 51;
- Amend General Plan maps and figures to reflect the proposed zone changes identified below;
- Revisions to General Plan Land Use Table A-2 and associated footnotes to modify the land use acreage distribution;
- Amend General Plan Circulation Element, Figure B-1, and other General Plan Maps as necessary, to eliminate the extension of Rockfield Boulevard from the eastern project boundary to Marine Way once the Orange County Transportation Authority (OCTA) has approved this proposed amendment to the countywide Master Plan of Arterial Highways;
- Modify General Plan Objective B-1 to identify locations where LOS E may be considered potentially acceptable, as shown on Figure 3-6, *Proposed Locations Where LOS E May Be Acceptable*, of this DSSEIR;
- Amend General Plan Figure G-1 to add the location of a 2,600 student high school within District 5;
- Revise Figure A-2 and Figure C-2 to reflect the deletion of Existing Planning Area 30;
- Revise Figure L-2 to depict the Relocated Wildlife Corridor Feature; and
- Other minor modifications as necessary to implement the 2012 Modified Project.

#### Zoning Ordinance Amendments

Consistent with the goal of unified land use and development regulations, the 2012 Modified Project proposes to rezone property located in Districts 2, 3, and 6 (currently zoned 3.2 Transit Oriented Development, 4.3 Vehicle Related Commercial, and 5.4B General Industrial), the City Parcels, and the TCA Parcel, to 8.1 Trails and Transit Oriented Development. In addition, 13-acres in District 6 (formerly District 9) that are currently zoned 1.1 Agriculture will be rezoned to 1.4 Preservation to accommodate the Relocated Wildlife Corridor Feature. The existing zoning is shown on Figure 3-7, *Existing Zoning*, of this DSSEIR, and proposed zone changes are shown on Figure 3-8, *Proposed Zone Changes*. Proposed zoning is shown on Figure 3-9, *Proposed Zoning*.

The 2012 Modified Project generally proposes the following Zoning Ordinance text amendments:

• Integrate certain conditional uses (manufacturing (light), mini warehouse, recreational vehicle storage (public), vehicle assembly, vehicle body, repair, paint or restoration, and vehicle sales) and permissive uses (vehicle repair and detailing, mobile and warehousing, storage and distribution) found in the 3.2 Transit Oriented Development, 4.3 Vehicle Related Commercial, and 5.4B General Industrial zones into the 8.1 Trails and Transit Oriented Development zone, as appropriate;

- Modify the 8.1/8.1B Trails and Transit Oriented Development maximum site coverage standards (Section 3-37-39(G)) to permit unlimited site coverage outside setback areas within ½ mile of a train station or transportation center;
- Modify the 8.1/8.1B Trails and Transit Oriented Development maximum site building height standards (Section 3-37-39(H)) to allow unlimited building height within ½ mile of a train station or transportation center and building heights of 90 feet for hotel/hospitality uses;
- Modify Section 3-37-39 to change residential shelter from a conditional use to a permitted use in the 8.1 Trails and Transit Oriented District zoning district;
- Delete Chapter 9-30 due to the elimination of Existing PA 30 (which will merge with Existing PA 51 into one cohesive planning area, Combined Planning Area 51);
- Modify Chapter 9-51 to reflect the consolidation of Existing PAs 30 and 51, including, but not limited to:
  - Modify Section 9-51-3, the Statistical Analysis and Map to reflect the changes in land use and acreage intensities
  - Modify the maximum average daily traffic (ADT) in Combined PA 51 to reflect the sum of the maximum ADT currently permitted in Existing PAs 30 and 51.
- Modify Chapter 9-51 to permit an additional 3,412 dwelling units and an additional 1,194 DB units in Combined PA 51, with an option to convert up to 535,000 square feet of non-residential Multi-Use to up to 889 base dwelling units and 311 DB units, granted pursuant to State law,:
- Modify Chapter 9-51 to allow the following revised non-residential intensities in Combined PA 51:
  - 3,364,000 square feet of Medical and Science
  - 1,318,200 square feet of Multi-Use. The 2012 Modified Project includes an option to convert up to 535,000 square feet of the proposed non-residential Multi-Use intensity to residential intensity for up to an additional 889 base dwelling units and 311 DB units within District 6 and Lot 48 of 2nd Amended VTTM 17008, subject to a vehicle trip limit.
  - 220,000 square feet of Community Commercial
- Add Section 9-51-6 (Q) regarding district character that discusses anticipated density, intensity, mix of land uses, and vehicular, bicycle, and pedestrian networks;
- Add Section 9-51-6 (S) regarding optional conversion (see description above);
- Add Section 9-51-6 (U) regarding information that will be provided to the City regarding land sales;

- Modify Section 9-51-6 (D) regarding development monitoring and tracking;
- Add Section 9-51-6(T) regarding the circumstances under which additional traffic analysis may be required; and
- Other modifications as necessary to implement the 2012 Modified Project.

#### **Project Design Features**

The following project design features (PDFs) have been incorporated into the 2012 Modified Project and have been assumed in the analyses of the 2012 Modified Project that are contained in Chapter 5, *Environmental Analysis*, where appropriate. With the exception of PDFs 8-1, 10-1, 10-2, and 11-1, these PDFs were included in the 2011 Certified EIR for the 2011 Approved Project, however, they have been renumbered. PDFs 4-3 and 4-8 have been revised to reflect the subsequent adoption of the California Green Building Standards Code and the Energy Commission's 2013 Building Energy Efficiency Standards (Title 24). PDFs 8-1, 10-1, 10-2, and 11-1 are new PDFs associated with the 2012 Modified Project that were not previously incorporated into the 2011 Approved Project.

- PDF 4-1 **Compact/Mixed-Use Development:** The California Energy Commission (CEC) considers compact development forms beneficial for minimizing energy consumption that leads to greenhouse gas emissions. In fact, the CEC's report on the connections between land use and climate change identifies density as the project feature most predictive of the number of vehicle trips and vehicle miles traveled ("VMT") by project occupants. Like the 2011 Approved Project, the 2012 Modified Project increases the density of development on the Proposed Project Site. Doing so will tend to reduce VMT on a local and regional basis. For the purpose of the analysis in this DSSEIR, it was assumed that there would be only a 25% reduction in VMT, which is within the range observed in Southern California.
- PDF 4-2 **High Rate of Internal Trip Capture:** With the inclusion of a mix of land uses including office, commercial, industrial, and residential in the Proposed Project Site, the 2012 Modified Project reduces trips outside the Proposed Project Site. This reduces trip length and congestion on the local circulation system outside the Proposed Project Site.
- PDF 4-3 **Low-Flow Fixtures:** The 2012 Modified Project incorporates low-flow water fixtures that will meet the requirements of the California Green Building Standards Code. Prior to issuance of building permit, the Applicant or its successor shall submit evidence to the satisfaction of the Director of Community Development that toilets, urinals, sinks, showers, and other water fixtures installed on-site meet the California Green Building Standards Code.
- PDF 4-4 Landscaping and Irrigation Systems: The 2012 Modified Project incorporates automated, high-efficiency landscaping irrigation systems on all master landscaped areas that reduce water use, such as evapotranspiration "smart" weather-based irrigation controllers, and bubbler irrigation; low-angle, low-flow spray heads; moisture sensors; and use of a California-friendly landscape palette. Prior to approval of landscape plans, the Applicant or its successor shall submit evidence to the satisfaction of the City's Director of Community Development that such landscaping irrigation systems will be installed so as to make the 2012 Modified Project consistent with the intent of the California Water Conservation in

Landscaping Act of 2006 ("AB 1881"), including provisions to reduce the wasteful, uneconomic, inefficient, and unnecessary consumption of water.

- PDF 4-5 Use of Reclaimed Water on All Master Landscaped Areas: Prior to approval of landscape plans, the Applicant or its successor shall submit evidence to the satisfaction of the City's Director of Community Development and the Irvine Ranch Water District ("IRWD") that the landscape plans incorporate the use of reclaimed water in all master landscaped areas, including master landscaped commercial, multifamily, common, roadways, and park areas. Master landscapes shall also incorporate weather-based controllers and efficient irrigation system designs to reduce overwatering, combined with the application of a California-friendly landscape palette.
- PDF 4-6 **Material Recovery:** The 2012 Modified Project incorporates measures to reduce waste generated by Proposed Project Site residents, occupants and visitors, and to encourage recycling of solid wastes, utilizing the Orange County Integrated Waste Management Department's material recovery facilities to recycle glass, plastic, cans, junk mail, paper, cardboard, greenwaste (e.g., grass, weeds, leaves, branches, yard trimmings, and scrap wood), and scrap metal. Future employees, residents, and customers would participate in these programs. These measures include the requirement to include on-site recycling facilities at all commercial, retail, industrial, and multi-family residential developments. In addition, educational materials identifying available recycling programs shall be distributed to all land uses, including single-family residential.
- PDF 4-7 **Energy Star Appliances:** EnergyStar appliances (excluding refrigerators), such as dishwashers, clothes washers, clothes dryers, air conditions, furnaces, and water heaters, shall be offered or installed in all residential dwelling units.
- PDF 4-8 **Building Energy Efficiency:** Residential dwellings and non-residential buildings will be constructed so that they achieve 15 percent higher energy efficiency than the applicable standards set forth in the 2008 California Building and Energy Efficiency Standards (Title 24, Part 6 of the California Building Code) or meet the standards in effect at the time of issuance of building permit. The Energy Commission's 2013 Building Energy Efficiency Standards are 25 percent more efficient than the 2008 standards for residential construction and 30 percent more efficient for nonresidential construction. The 2013 Energy Efficiency Standards, which take effect on January 1, 2014, offer builders more efficient windows, insulation, lighting, ventilation systems and other options that would reduce energy consumption in homes and businesses.
- PDF 4-9 **Carbon Sequestration:** The 2012 Modified Project incorporates landscaping and a plant palette that will foster carbon sequestration within the Proposed Project Site that is comparable to the landscaping and plant palette that was already incorporated into the 2011 Approved Project.
- PDF 4-10 **Softscape Landscaped Areas:** Consistent with sustainable practices and modern landscaping standards and consistent with the landscaping used in the 2011 Approved Project, the 2012 Modified Project reduces softscape (e.g., plants/horticultural elements of landscape design) landscaped areas by 28 percent as compared to the default assumption in CalEEMod.

- PDF 8-1 **Construction Noise:** Prior to issuance of grading permits, the project applicant or its successor shall incorporate the following measures as a note on the grading plan cover sheet to ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved, and that construction noise has been reduced.
  - During construction activities, all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers, consistent with manufacturers' standards. All stationary construction equipment shall be placed so that emitted noise is directed away from the noise-sensitive receptors nearest the Proposed Project Site boundaries.
  - Equipment shall be staged in areas that will create the greatest distance between construction-related noise sources and the noise-sensitive receptors nearest the Proposed Project Site during all project construction.
  - All construction-related activities shall be restricted to the construction hours outlined in the City's Noise Ordinance (Municipal Code Section 6-8-205).
  - Haul truck and other construction-related trucks traveling to and from the Proposed Project Site shall be restricted to the same hours specified for the operation of construction equipment. To the extent feasible, haul routes shall not pass directly by sensitive land uses or residential dwellings.
  - Where construction will occur adjacent to any developed/occupied noise-sensitive uses, a construction-related noise mitigation plan shall be submitted the Director of Community Development for review and approval prior to the issuance of grading permits. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of the 2012 Modified Project, through the use of such methods as: (1) temporary noise attenuation fences; (2) preferential location of equipment; and (3) use of current technology and noise-suppression equipment.
  - Construction of planned sound walls that have been incorporated into the project design shall be installed prior to construction of the building foundation; or temporary sound blankets (fences typically composed of poly-vinyl-chloride-coated outer shells with absorbent inner insulation) shall be placed along the boundary of the Proposed Project Site facing the nearest noise-sensitive receptors during construction activities.
- PDF 10-1 The Relocated Wildlife Corridor Feature will be designed and planted in such a manner as to ensure that the planting plan does not create a fire hazard for adjacent development. Maintenance of vegetation within the Relocated Wildlife Corridor Feature is not anticipated, but would be allowed as needed for fire control. Final approval of the planting schemes and palettes will require approval from the Orange County Fire Authority.
- PDF 10-2 Appropriate edge effect characteristics (e.g. earthen berms, vegetative or other barriers) will be implemented as necessary along the edges of the Relocated Wildlife Corridor Feature in order to reduce visibility and human access into the corridor, and to reduce light spillage and ambient noise within the corridor.

PDF 12-1 The 2012 Modified Project's optional conversion of non-residential square footage to residential units, if implemented, will be subject to a traffic analysis to assess traffic impacts, if any, due to the change in land use and will include a reduction in allowable Multi-Use intensity in terms of equivalent traffic generation (excluding DB units) based on AM peak, PM peak, and ADT. Conversions to other non-residential uses within the Multi-Use category, if implemented, will also be subject to a traffic analysis to assess traffic impacts, if any, and shall be reflected in terms of equivalent traffic generation based on AM peak, PM peak, and ADT.

# 1.5 SUMMARY OF PROJECT ALTERNATIVES

The CEQA Guidelines (Section 15126[a]) state that an EIR must address "a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives."

As described in Chapter 7, *Alternatives*, of this DSSEIR, the following two project alternatives were identified and analyzed, and their impacts were compared to the impacts of the 2012 Modified Project:

- No Project/2011 Approved Project Alternative
- Marine Way Realignment Alternative

Selection of the alternatives was based, in part, on their potential ability to reduce or eliminate at least one significant impact of the 2012 Modified Project including the following impacts determined to be significant and unavoidable:

- Air Quality
- Transportation and Traffic

Please refer to Chapter 7 for a complete discussion of how the alternatives were selected and the relative impacts associated with each alternative. The following presents a summary of each of the alternatives analyzed in the DSSEIR. Project objectives are outlined in Chapter 3, *Project Description*, of this DSSEIR.

# 1.5.1 No Project/2011 Approved Project Alternative

This No Project/2011 Approved Project Alternative is the circumstance under which the 2012 Modified Project would not proceed on the Proposed Project Site, and the 2011 Approved Project would be built in its place on the Approved Project Site. At the time the Notice of Preparation was published for the 2012 Modified Project, the Approved Project Site was vested for development of the 2011 Approved Project, including 4,894 dwelling units and approximately 5.3 million square feet of non-residential development within the Heritage Fields Development Districts.

Under this No Project/2011 Approved Project Alternative, the 4,894 dwelling units would be located in their existing locations under the 2011 Approved Project on the five Vesting Tentative Tract Maps approved for Districts 1 North, 1 South, 4, 7 and 8, respectively, and 5.3 million square feet of non-residential development would be located within the Heritage Fields Development Districts as entitled under the 2011 Approved Project. This alternative would also include implementation of the Master Plans

and Park Plans for Districts 1 North, 1 South, 4, 7 and 8, implementation of the 2<sup>nd</sup> Amended VTTM 17008, and implementation of the Amendments to Master Landscape and Trails Plan. Additionally, under the No Project/2011 Approved Project Alternative, the boundaries of Existing PAs 30 and 51 would remain as is; the TCA Parcel would remain within the boundaries of PA 9 and would not be rezoned to 8.1 Trails and Transit Oriented Development; no rezoning of Districts 2, 3, 6 and the City Parcels to 8.1 Trails and Transit Oriented Development would occur; the Option 2 Main Street development along Trabuco Road would not occur; the right to convert non-residential development to residential units would not occur; the Relocated Wildlife Corridor Feature would not occur; and the amendment of Figure B-1 to the Master Plan of Arterial Highways would not occur. In addition, this No Project/2011 Approved Project Alternative would not advance funding for the implementation of recreational facilities for the Great Park.

#### Ability to Reduce Environmental Impacts

This No Project/2011 Approved Project Alternative would have reduced traffic impacts than the 2012 Modified Project. However, as with the 2012 Modified Project, traffic related impacts would still be considered significant and unavoidable because implementation of certain improvement mitigation measures would be under the control of other cities, Orange County, or Caltrans. In addition, the mass criteria pollutant emissions for the No Project/2011 Approved Project Alternative are lower than for the 2012 Modified Project, although the mass criteria pollutant emissions of both are significant and unavoidable. Further, this No Project/2011 Approved Project Alternative would have a significant population and housing impact, whereas the 2012 Modified Project would not. Therefore, this alternative would not represent a significant improvement as compared to the 2012 Modified Project and, in fact, would have one significant impact that the 2012 Modified Project would not have (population and housing).

# 1.5.2 Marine Way Realignment Alternative

This alternative has been developed to provide an alternate alignment for Marine Way from East of "B" to Bake Parkway in an effort to reduce potential traffic impacts associated with the 2012 Modified Project. All other components of the 2012 Modified Project would remain the same under this alternative. East of "B" Street, this alternative would shift the alignment of Marine Way easterly to create larger parcels in close proximity to the Irvine Station. The adjusted Marine Way alignment would extend south from "B" Street and cross the SCRRA right of way to connect with Barranca Parkway and Alton Parkway with a more direct bearing toward Bake Parkway.

#### Ability to Reduce Impacts

Overall, trip generation would remain the same for this alternative as for the 2012 Modified Project, but larger parcels in close proximity to the Irvine Station and a more direct Marine Way alignment toward Bake Parkway would offer some traffic benefit under this alternative since a more direct alignment would allow for faster travel. However, this slight traffic benefit must be weighed against other potential traffic issues that arise with this alternative, namely the decreased distances between arterial intersections on Barranca Parkway and Alton Parkway Traffic impacts of this alternative would be significant and unavoidable, as would those of the 2012 Modified Project, but only if the off-site improvements under other jurisdictions are not implemented. As further described in Chapter 7, *Alternatives*, all other impacts of this alternative would be similar to those of the 2012 Modified Project.

# 1.5.3 Environmentally Superior Alternative

CEQA requires a lead agency to identify the "environmentally superior alternative" when significant environmental impacts result from the 2012 Modified Project, if one exists. In cases where the "No Project" Alternative is environmentally superior to the 2012 Modified Project, an environmentally superior development alternative should be identified as well.

As discuss in Chapter 7, *Alternatives to the 2012 Modified Project*, the alternatives analysis in this DSSEIR differs from a typical alternatives analysis contemplated in CEQA in that the 2011 Approved Project is the subject of a development agreement and has vested development rights. The CEQA Guidelines (Section 15126[a]) state that an EIR must address "a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. As noted the only significant and unavoidable impact of the 2012 Modified Project (aside from the traffic contingency for implementation in other jurisdictions, which cannot remedied) is Air Quality, which primarily results from traffic. Any elimination or reduction of traffic impacts which involves reducing development below the levels approved for the 2011 Approved Project is not legally feasible because that level of development is a vested right that cannot legally be reduced.

This DSSEIR has analyzed an alternative (the Marine Way Realignment Alternative) that could potentially have fewer traffic impacts than the 2012 Modified Project. After analyzing the Marine Way Realignment Alternative, however, the 2012 Modified Project remains the environmentally preferable choice as compared to the No Project/2011 Approved Project and the Marine Way Realignment Alternatives. As discussed above, while the Marine Way Realignment Alternative may have slight traffic benefits, it would require deviation from the City's standards for the minimized distances between signalized intersections

# 1.6 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the 2012 Modified Project, the major issues to be resolved include decisions by the City, as lead agency, related to the following:

- 1. Whether this DSSEIR adequately analyzes the environmental impacts of the 2012 Modified Project, as compared to the 2011 Approved Project.
- 2. Whether the benefits of the 2012 Modified Project override its environmental impacts which cannot be feasibly avoided or mitigated to a level of insignificance.
- 3. Whether the land use changes proposed by the 2012 Modified Project are compatible with the character of the existing area.
- 4. Whether the identified project design features and mitigation measures should be adopted and/or modified.

- 5. Whether there are other mitigation measures that should be adopted for the 2012 Modified Project in addition to the mitigation measures recommended in the DSSEIR.
- 6. Whether there are any alternatives to the 2012 Modified Project that would reduce or avoid any of its significant impacts and achieve most of its basic project objectives.

# 1.7 AREAS OF CONTROVERSY

In accordance with Section 15123(b)(2) of the CEQA Guidelines, the DSSEIR must identify areas of controversy known to the lead agency, including issues raised by agencies and the public. No areas of controversy concerning the 2012 Modified Project have been identified. This DSSEIR has taken into consideration the comments received from the various agencies and jurisdictions in response to the NOP. Written comments received during the NOP period, which extended from April 4 to May 4, 2012, are contained in Appendix B of this DSSEIR. A summary of the NOP comments is provided in Section 2.2, *Notice of Preparation and Initial Study*, of this DSSEIR.

Prior to preparation of this DSSEIR, a public scoping meeting was held on April 19, 2012, at Irvine City Hall. The scoping meeting was held to determine the concerns of responsible and trustee agencies, stakeholders, and the community regarding the 2012 Modified Project. The scoping meeting was attended by various stakeholders, government officials, and one representative from the Irvine Unified School District (IUSD). The only issue raised at the public scoping meeting was related to the provision of IUSD school facilities within the Proposed Project Site. School facilities are addressed in Section 5.11, *Public Services*, of this DSSEIR.

# 1.8 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION

Table 1-1 summarizes the conclusions of the environmental analyses contained in this DSSEIR. Table 1-1 includes a summary of the environmental impacts of the 2012 Modified Project; mitigation measures, project design features, and existing plans, programs, and polices that reduce potential significant impacts of the 2012 Modified Project; and the level of significance of each significant impact after implementation of PDFs, PPPs, mitigation measures contained in the MMRP for the 2011 Approved Project, and any additional mitigation necessary for the 2012 Modified Project.

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3	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation					
Envii	ronmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation		
5.1 AESTHETI	ICS		• •			
Modified substantia character compared	Project would change, but not illy degrade, the visual	<ul> <li>Plans, Programs, and Policies</li> <li>There are no PPPs that apply.</li> <li>Project Design Features</li> <li>There are no PDFs of the 2012 Modified Project that apply.</li> <li>Applicable Mitigation Measures from the 2011 Certified EIR</li> <li>No mitigation measures were identified in the 2011 Certified EIR.</li> </ul>	Less than significant	Less than significant		
		Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.				
Modified of light ar	nent pursuant to the 2012 Project may decrease sources ad glare compared to land uses in the 2011 Approved Project.	<ul> <li>Plans, Programs, and Policies</li> <li>PPP 1-1 Prior to the issuance of building permits, the applicant shall demonstrate they have met the Irvine Uniform Security Code requirements for lighting by providing the below listed items for a complete review by the Police Department. Failure to provide a complete lighting package will result in the delay of satisfaction of this condition (City Standard Condition 3.6).</li> <li>a. Electrical plan showing light fixture locations, type of light fixture, height of light fixture, and point-by-point photometric lighting analysis overlaid on the landscape plan with a tree legend. The photometric plan should only show those fixtures used to meet the Irvine Uniform Security Code requirements.</li> <li>b. Corresponding fixture cut-sheets (specifications) of those lights used to meet the Irvine Uniform Security Code.</li> <li>c. Site plan demonstrating that landscaping shall not be planted so as to obscure required light levels.</li> <li>d. Site plans that are full-scale and legible.</li> </ul>	Less than significant	Less than significant		

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation					
Environmental Impact	Plans, Programs, and Polices [PPPs], mental Impact Project Design Features [PDFs], and Mitigation Measures [MM]		Level of Significance After Additional Mitigation		
	Applicable Mitigation Measures from the 2011 Certified EIR         A-1       Prior to issuance of building permits, lighting plans and signage plans for residential or non-residential development shall be reviewed by the Community Development Department to ensure that minimal light intrusion and spillover into adjacent residential areas occurs.				
	A-2 Prior to the issuance of building permits for residential and non-residential development, and during the master plan review process for future development in the project area, the Director of Community Development shall ensure that mirrored and highly reflective surfaces are discouraged or, where proposed, shall be accompanied by a design-level glare impact analysis that demonstrates no adverse visual impairment to motorists or other visual nuisance occurs.				
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.				
5.2 AGRICULTURE RESOURCES					
5.2-1 Development pursuant to the 2012 Modified Project would convert 13 acres of prime farmland to zoning designation 1.4 Preservation to accommodate the Relocated Wildlife Corridor Feature, unlike under the 2011 Approved Project.	Plans, Programs, and Policies PPP 2-1 The City shall continue to implement the Agricultural Legacy Program outlined in City of Irvine General Plan Open Space and Conservation Element. Objective L-10 is intended to mitigate the conversion of agricultural land to nonagricultural uses citywide by facilitating limited-scale agricultural operations and programs on public lands within Irvine. As part of the Agricultural Legacy Program, specific sites in Irvine will be identified and made available for metro-farming within five years. Metro-farming generally includes small-scale agricultural operations and activities that can be accommodated in an urban environment. Such activities could include, but not be limited to, small-scale specialty farming, model farming, heritage farming, and community service/educational farming.	Less than significant	Less than significant		
	<b>Project Design Features</b> There are no PDFs of the 2012 Modified Project that apply.				
	Applicable Mitigation Measures from the 2011 Certified EIR				

Summary of Env	Table 1-1 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Mea	Level of Significance Before Additional Sures [MM] Mitigation	Level of Significance After Additional Mitigation		
	This DSSEIR proposes to make certain modifications to the agricul mitigation measures adopted by the City in the MMRP for the 2012 Project. Modifications to the original mitigation measure are identi text to indicate deletions and <u>underlined</u> to signify additions. The p to Mitigation Measure AG-1 eliminate obsolete references to prior Conditions. The proposed changes to Mitigation Measure AG1 wo operation.	l Approved fied in <del>strikeout</del> roposed changes Standard			
	AG-1 In order to encourage agriculture as an interim land use per development on the project site by warning future residen buying or renting a house adjacent to existing agricultural Of Irvine Standard Discretionary Case Condition 8.4 and Standard Subdivision Condition 3.4 regarding disclosure a amended to include the following for subdivisions propos existing agricultural operations:	ts that they are operations, <del>City</del> <del>City Of Irvine</del> statements shall <del>be</del>			
	Prior to issuance of building permits, the appli- and the Director of Community Development approved, a completed occupancy disclosure for project. The approved disclosure form, along a attachments, shall be included as part of the re agreement and as part of the sales literature for disclosure statement shall include the followir	shall have form for the with its ental/lease or the project. The			
	Continuation of agricultural operation site and their potential effects (spray noise, dust, odor, etc.) on future resi	ving of pesticides,			
	AG-2 Heritage and community service/educational farming oper encouraged within utility easements and other lands. Heri defined as small-scale specialty farming operations that ca accommodated in an urban environment. An example wor Landscape project located adjacent to Harvard within the way.	tage farming is an be uld be the Edible			

Table 1-1					
Summary of Enviro	Plans, Programs, and Polices [PPPs], Plans Frograms, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	f Significance After Level of Significance Before Additional Mitigation	<i>r Mitigation</i> Level of Significance After Additional Mitigation		
	AG-3 Future landowners and the City shall work cooperatively with farmers to minimize conflicts between agricultural operation and adjacent urban uses.				
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.				
5.2-2 With the approval of the proposed zone change, like the 2011 Approved Project development pursuant to the 2012		Less than significant	Less than significant		
Modified Project would not conflict with existing zoning of the 13 acres within the Proposed Project Site.	<b>Project Design Features</b> There are no PDFs of the 2012 Modified Project that apply.				
	<b>Applicable Mitigation Measures from the 2011 Certified EIR</b> No mitigation measures were identified in the 2011 Certified EIR.				
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.				
5.3 AIR QUALITY					
5.3-1 Like the 2011 Approved Project, the 2012 Modified Project is consistent with the applicable air quality management plan.	<ul> <li>Plans, Programs, and Policies</li> <li>PPP 3-1 SCAQMD Rule 201 – Permit to Construct: The SCAQMD requires developers who build, install, or replace any equipment or agricultural permit unit, which may cause new emissions of or reduce, eliminate, or control emissions of air contaminants to obtain a permit to construct from the Executive Officer.</li> <li>PPP 3-2 SCAQMD Rule 402 – Nuisance Odors: The SCAQMD prohibits the discharge of any quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property to be emitted</li> </ul>	Less than significant	Less than significant		
	<ul> <li>PPP 3-3 SCAQMD Rule 403 – Fugitive Dust (PM<sub>10</sub> and PM<sub>2.5</sub>): The SCAQMD prohibits any person to cause or allow the emissions of fugitive dust from</li> </ul>				

Summary of Fnu	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigatio		
· · · ·	any active operation, open storage pile, or disturbed surface area such that: (a) the dust remains visible in the atmosphere beyond the property line of the emission source; or (b) the dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook) if the dust emission is the result of movement of a motorized vehicle.				
	PPP 3-4 SCAQMD Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities: This rule specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM). All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.				
	PPP 3-5 SCAQMD Rule 445 – Wood-Burning Devices: SCAQMD prohibits installation of wood-burning devices such as fire places and wood-burning stoves in new development unless the development is located at an elevation above 3,000 feet or if existing infrastructure for natural gas service is not available within 150-feet of the development. All fireplaces installed within the Proposed Project Site will be natural gas fueled fireplaces.				
	<b>Project Design Features</b> PDFs 4-1, 4-2, 4-7, and 4-8 apply (see section below).				
	<b>Applicable Mitigation Measures from the 2011 Certified EIR</b> No mitigation measures were identified in the 2011 Certified EIR				
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.				

Table 1-1				
Summary of Enviro	nmental Impacts, Mitigation Measures and Levels of Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	f Significance After Level of Significance Before Additional Mitigation	<i>Mitigation</i> Level of Significance After Additional Mitigation	
5.3-2 Construction emissions of the 2012 Modified Project would, like the 2011 Approved Project, exceed SCAQMD's emissions thresholds for VOC, NO <sub>x</sub> , CO, PM <sub>10</sub> , and PM <sub>2.5</sub> .	<ul> <li>Plans, Programs, and Policies PPPs 3-1 through 3-4 apply.</li> <li>Project Design Features There are no PDFs of the 2012 Modified Project that apply.</li> <li>Applicable Mitigation Measures from the 2011 Certified EIR AQ-1 Prior to the start of demolition and construction within the project area, adjacent sensitive receptors shall be informed of the planned demolition and construction activities. Measures to avoid significantly impacting these receptors shall be developed and implemented by the project proponent in coordination with these uses. Other applicable mitigation measures such as erection of fences around construction areas; staggered use of equipment near sensitive receptors; diversion of truck trips away from receptors; etc.; shall be employed as necessary. Compliance with this measure shall be verified by the Director of Community Development.</li> <li>AQ-2 Prior to the commencement of construction activities required to demolish and/or remove existing DON infrastructure, including runways, the Director of Community Development shall receive and approve a construction emissions mitigation plan from the chosen demolition contractor. Prior to the issuance of grading permits, the application of any future development project shall submit, and the Director of Community Development shall approve a construction emissions mitigation measures shall be implemented. If certain measures are determined infeasible, an explanation thereof shall be provided.</li> <li>Utilize off-road construction equipment that conforms to Tier 3 of the United States Environmental Protection Agency, or higher emissions standards for construction equipment over 50 horsepower that are commercially available. The construction contractor shall be made aware of this requirement prior to the start of construction activities.</li> </ul>		Significant and Unavoidable Like the 2011 Approved Project, the 2012 Modified Project (with or without the optional conversion) would result in significant and unavoidable short-term construction air quality impacts due to emissions of VOC, NO <sub>x</sub> , CO, PM <sub>10</sub> and PM <sub>2.5</sub> . PPPs 3-1 through 3-4 and Mitigation Measures AQ-1 and AQ-2 from the 2011 Approved Project would reduce construction emissions impacts to the extent feasible. However, like the 2011 Approved Project, Impact 5.3-2 would remain significant and unavoidable even after mitigation.	

	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation		
Environmental Impact		Mitigation			
	<ul> <li>equipment and vehicle engines in good condition and in proper tune.</li> <li>Wash off trucks leaving the site.</li> <li>Replace ground cover on construction sites when it is determined that the site will be undisturbed for lengthy periods.</li> <li>Reduce speeds on unpaved roads to less than 15 miles per hour.</li> <li>Halt all grading and excavation operations when wind speeds exceed 25 miles per hour.</li> <li>Suspend all emission generating activities during smog alerts.</li> </ul>				

Heritage Fields Project 2012 GPA/ZC Draft Second Supplemental EIR

al Impacts, Mitigation Measures and Levels of Plans, Programs, and Polices [PPPs], ject Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional	Level of Significance
	Mitigation	After Additional Mitigation
<ul> <li>Use propane or butane-powered on-site mobile equipment instead of diesel/gasoline, whenever feasible.</li> <li>Properly maintain diesel-powered on-site mobile equipment.</li> <li>Prohibit nonessential idling of construction equipment to five minutes or less in compliance with California Air Resources Board's Rule 2449.</li> <li>Sweep streets with SCAQMD Rule 1186 compliant PM<sub>10</sub>-efficient vacuum units at the end of the day if substantial visible soil material is carried over to the adjacent streets.</li> <li>Use electricity from power poles rather than temporary on-site diesel or gasoline-powered generators, whenever feasible.</li> <li>Use of low-VOC asphalt.</li> <li>Maintain a minimum 24-inch freeboard on trucks hauling dirt, sand, soil, or other loose materials and tarp materials with a fabric cover or other suitable means.</li> <li>Provide temporary traffic controls (e.g., flag persons) during all phases of construction to ensure minimum disruption of traffic.</li> <li>Schedule construction activities that affect traffic flow on adjoining streets to off-peak hours to the extent possible.</li> </ul>	MIIIgailon	
	<ul> <li>instead of diesel/gasoline, whenever feasible.</li> <li>Properly maintain diesel-powered on-site mobile equipment.</li> <li>Prohibit nonessential idling of construction equipment to five minutes or less in compliance with California Air Resources Board's Rule 2449.</li> <li>Sweep streets with SCAQMD Rule 1186 compliant PM<sub>10</sub>-efficient vacuum units at the end of the day if substantial visible soil material is carried over to the adjacent streets.</li> <li>Use electricity from power poles rather than temporary on-site diesel or gasoline-powered generators, whenever feasible.</li> <li>Use of low-VOC asphalt.</li> <li>Maintain a minimum 24-inch freeboard on trucks hauling dirt, sand, soil, or other loose materials and tarp materials with a fabric cover or other suitable means.</li> <li>Provide temporary traffic controls (e.g., flag persons) during all phases of construction activities that affect traffic flow on adjoining streets to off-peak hours to the extent possible.</li> </ul>	<ul> <li>instead of diesel/gasoline, whenever feasible.</li> <li>Properly maintain diesel-powered on-site mobile equipment.</li> <li>Prohibit nonessential idling of construction equipment to five minutes or less in compliance with California Air Resources Board's Rule 2449.</li> <li>Sweep streets with SCAQMD Rule 1186 compliant PM<sub>10</sub>-efficient vacuum units at the end of the day if substantial visible soil material is carried over to the adjacent streets.</li> <li>Use electricity from power poles rather than temporary on-site diesel or gasoline-powered generators, whenever feasible.</li> <li>Use of low-VOC asphalt.</li> <li>Maintain a minimum 24-inch freeboard on trucks hauling dirt, sand, soil, or other loose materials and tarp materials with a fabric cover or other suitable means.</li> <li>Provide temporary traffic controls (e.g., flag persons) during all phases of construction activities that affect traffic flow on adjoining streets to off-peak hours to the extent possible.</li> <li>Reroute construction trucks away from congested streets, whenever feasible.</li> </ul>

Summary of Enviro	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation					
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation			
	<ul> <li>and equipment on and off-site, whenever feasible.</li> <li>Use coatings and solvents with a volatile organic compound (VOC) content lower than required under SCAQMD Rule 1113 (i.e., Super Compliant Paints). All architectural coatings shall be applied either by (1) using a high-volume, low-pressure spray method operated at an air pressure between 0.1 and 10 pounds per square inch gauge to achieve a 65 percent application efficiency; or (2) manual application using a paintbrush, handroller, trowel, spatula, dauber, rag, or sponge, to achieve a 100 percent applicant efficiency. The construction contractor shall also use precoated/natural colored building, where feasible. Use of low-VOC paints and spray method shall be included as a note on architectural building plans.</li> <li>Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.</li> </ul>					
5.3-3 Long-term operation of the 2012 Modified Project would, like the 2011 Approved Project, exceed SCAQMD's thresholds for VOC, NO <sub>x</sub> , CO, and PM <sub>2.5</sub> .	<ul> <li>Plans, Programs, and Policies</li> <li>PPPs 3-1 and 3-5 apply.</li> <li>Project Design Features</li> <li>Implementation of PDFs 4-1, 4-2, 4-7, 4-8, and 4-9 apply.</li> <li>Applicable Mitigation Measures from the 2011 Certified EIR</li> <li>The following mitigation measures were included in the 2011 Certified EIR and imposed by the City for the 2011 Approved Project. These mitigation measures apply to the 2012 Modified Project, and have been renumbered for the purposes of this DSSEIR.</li> <li>AQ-3 Prior to the issuance of building permits for any future development, the applicant shall submit, and Director of Community Development shall have approved, an operation-emissions mitigation plan. The plan shall identify implementation procedures for each of the following emissions reduction measures and all feasible mitigation measures shall be implemented. If</li> </ul>	Significant	<b>Significant and Unavoidable</b> Like the 2011 Approved Project, long-term operation of the 2012 Modified Project (with, and without the optional conversion) would result in significant and unavoidable impacts due to emissions of VOC, NO <sub>X</sub> , CO, and PM <sub>2.5</sub> . PPP 3-1, 3-5, PDFs 4-1, 4-2, 4- 7, 4-8 and 4-9, and Mitigation Measures AQ-3 through AQ-5 contained in the 2011 Approved Project would reduce operational phase air quality impacts to the extent feasible. However, like the			

Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	<ul> <li>certain measures are determined infeasible, an explanation thereof shall be provided.</li> <li>Utilize built-in energy-efficient appliances to reduce energy consumption and emissions.</li> <li>Utilize energy-efficient and automated controls for air conditioners and lighting to reduce electricity consumption and associated emissions.</li> <li>Install special sunlight-filtering window coatings or double-paned windows to reduce thermal loss, whenever feasible.</li> <li>Utilize light-colored roofing materials as opposed to dark roofing materials to conserve electrical energy for air-conditioning.</li> <li>Provide shade trees in residential subdivisions as well as public areas, including parks, to reduce building heating and cooling needs, whenever feasible.</li> <li>Ensure that whenever feasible, commercial truck traffic is diverted from local roadways to off-peak periods.</li> <li>Centralize space heating and cooling for multiple-family dwelling units and commercial space.</li> <li>Orient buildings north/south for reducing energy-related combustion emissions.</li> <li>Use solar energy, when feasible.</li> </ul>		2011 Approved Project, Impa 5.3-3 would remain significant and unavoidable even after mitigation.

	Table 1-1						
Summary of Envir	Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation           Level of Significance						
Environmental Impact	Plans, Programs, and Polices [PPPs], nvironmental Impact Project Design Features [PDFs], and Mitigation Measures [MM]		Level of Significance After Additional Mitigation				
	AQ-4 Prior to the issuance of building permits, future sales information on available housing and employment opportunities within the project area shall be provided to employees and residents of the project area, so as to encourage employees to live within the residential developments planned on-site and future residents to find employment nearby.						
	AQ-5 Prior to the issuance of building permits, the applicant shall demonstrate to the satisfaction of the Director of Community Development that future employment generating nonresidential development shall include measures to reduce vehicle trips including: the promotion of carpool incentives and alternative work schedules, easy access to public transit systems, trail linkages between uses, low emissions vehicles fleets, and the provision of on-site facilities such as banking and food courts, and bicycle parking facilities, and other transportation demand management measures, as deemed appropriate.						
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.						
5.3-4 As compared to the 2011 Approved Project, construction of the 2012 Modified Project would not expose sensitive receptors to significant air	Plans, Programs, and Policies         PPPs 3-3 and 3-4 apply.         Project Design Features         The Policy Project Design Features	Less than significant	Less than significant				
pollutant concentrations.	There are no PDFs of the 2012 Modified Project that apply. <b>Applicable Mitigation Measures from the 2011 Certified EIR</b> Implementation of Mitigation Measures AQ1 and AQ2.						
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.						

	Table 1-1           Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation					
	Environmental Impact	Projec	Plans, Programs, and Polices [PPPs], t Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation	
5.3-5	As compared to the 2011 Approved Project, operation of the 2012 Modified Project would not expose sensitive receptors to elevated concentrations of CO at intersections.	There are no Project Desi There are no Applicable M	<ul> <li>ams, and Policies</li> <li>PPPs that apply to this impact.</li> <li>gn Features</li> <li>PDFs of the 2012 Modified Project that apply.</li> <li>Vitigation Measures from the 2011 Certified EIR</li> <li>n measures were outlined in the 2011 Certified EIR.</li> </ul>	Less than significant	Less than significant	
			<b>Aitigation Measures for the 2012 Modified Project</b> I mitigation measures are required.			
5.4 0	GREENHOUSE GAS EMISSIONS					
5.4-1	Although the 2012 Modified Project's GHG emissions would be greater than the 2011 Approved Project's GHG emissions, like the 2011 Approved Project, the 2012 Modified Project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment	Plans, Progr PPP 4-1	<b>rams, and Policies</b> City of Irvine Construction and Demolition ("C&D") Debris Recycling and Reuse Ordinance: The C&D ordinance requires that 1) all residential projects of more than one unit, 2) nonresidential developments on 5,000 square feet or larger, and 3) nonresidential demolition/renovations with more than 10,000 square feet of building recycle or reuse a minimum of 75 percent of concrete and asphalt and 50 percent of nonhazardous debris generated.	Less than significant	Less than significant	
	environment.	PPP 4-2	SCAQMD Rule 445 – Wood-Burning Devices: SCAQMD prohibits installation of wood-burning devices such as fire places and wood-burning stoves in new development unless the development is located at an elevation above 3,000 feet or if existing infrastructure for natural gas service is not available within 150-feet of the development. All fireplaces installed within the Proposed Project Site will be natural gas fueled fireplaces.			
		PPP 4-3	Building and Energy Efficiency Standards (CCR Title 24): Prior to the issuance of a building permit for residential, commercial, or office structures in the Proposed Project Site, development plans for these structures shall be required to demonstrate that the project meets the 2008 Building and Energy Efficiency Standards. Commonly known			

	Table 1-1			
Summary of Enviro	nmental Impacts, Mitigation Measures and Levels of Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Significance After Level of Significance Before Additional Mitigation	<i>Mitigation</i> Level of Significance After Additional Mitigation	
	<ul> <li>as Title 24, these standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2008 standards are approximately 15 percent more energy efficient than the 2005 Building and Energy Efficiency Standards. Plans submitted for building permits shall include written notes demonstrating compliance with the 2008 energy standards and shall be reviewed and approved by the Public Utilities Department prior to issuance of building permits. Design strategies to meet this standard may include maximizing solar orientation for daylighting and passive heating/cooling, installing appropriate shading devices and landscaping, utilizing natural ventilation, and installing cool roofs. Other techniques include installing insulation (high R value) and radiant heat barriers, low-e window glazing, or double-paned windows.</li> <li>PPP 4-4 Title 24 Code Cycles: Net-Zero Buildings (Residential &amp; Non-Residential): The California Public Utilities Commission adopted its Long-Term Energy Efficiency Strategic Plan on September 18, 2008, presenting a roadmap for all new residential and commercial construction to achieve a zero-net energy standard. This Plan outlines the goal of reaching zero net energy in residential construction by 2020 and in commercial construction by 2030. Achieving this goal will require increased stringency in each code cycle of California's Energy Code (Title 24).</li> <li>PPP 4-5 California Renewable Portfolio Standard: CARB's Renewable Portfolio Standard (RPS) is a foundational element of the State's emissions reduction plan. In 2002, Senate Bill 1078 established the California RPS program, requiring 20 percent renewable energy by 2017. In 2006, Senate Bill 107 advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020. These</li> </ul>			

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
Environmental Impact	Proj	Plans, Programs, and Polices [PPPs], ect Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	mandates apply directly to investor-owned utilities, in this case Southern California Edison ("SCE").			
	PPP 4-6	California Low Carbon Fuel Standard: On January 18, 2007, Governor Arnold Schwarzenegger issued Executive Order S-1-07 requiring the establishment of a Low Carbon Fuel Standard ("LCFS") for transportation fuels. This statewide goal requires that California's transportation fuels reduce their carbon intensity by at least 10 percent by 2020. Regulatory proceedings and implementation of the LCFS have been directed to CARB. The LCFS has been identified by CARB as a discrete early action item in the Scoping Plan. CARB expects the LCFS to achieve the minimum 10 percent reduction goal; however, many of the early action items outlined in the Scoping Plan work in tandem with one another. To avoid the potential for double- counting emission reductions associated with AB 1493 (Pavley), the Scoping Plan has modified the aggregate reduction expected from the LCFS to 9.1 percent.		
	PPP 4-7	Federal Corporate Average Fuel Economy ("café") Standards: The 2007 Energy Bill creates new federal requirements for increases in fleetwide fuel economy for passenger vehicles and light trucks. The federal legislation requires a fleetwide average of 35 miles per gallon (mpg) to be achieved by 2020. The National Highway Traffic Safety Administration is directed to phase in requirements to achieve this goal. Analysis by CARB suggests that this will require an annual improvement of approximately 3.4 percent between 2008 and 2020.		
	PPP 4-8	California Assembly Bill 1493 – Pavley Standards: On July 22, 2002, Governor Gray Davis signed Assembly Bill 1493 requiring CARB to develop and adopt regulations designed to reduce greenhouse gases emitted by passenger vehicles and light-duty trucks beginning with the 2009 model year. The standards set within the Pavley regulations are expected to reduce GHG emissions from California passenger vehicles by about 22 percent in 2012 and about 30 percent in 2016.		

Summary of Envi Environmental Impact		I Impacts, Mitigation Measures and Levels of Plans, Programs, and Polices [PPPs], ct Design Features [PDFs], and Mitigation Measures [MM]	Significance After Level of Significance Before Additional Mitigation	<i>r Mitigation</i> Level of Significance After Additional Mitigation
	PPP 4-9 PPP 4-10	California had petitioned the USEPA in December 2005 to allow these more stringent standards and California executive agencies have repeated their commitment to higher mileage standards. On July 1, 2009, the USEPA granted California a waiver that will enable the state to enforce stricter tailpipe emissions on new motor vehicles. SB 375: SB 375 requires the reduction of GHG emissions from light trucks and automobiles through land use and transportation efforts that will reduce vehicle miles traveled ("VMT"). In essence, SB 375's goal is to control GHGs by curbing urban sprawl and through better land use planning. SB 375 essentially becomes the land use contribution to the GHG reduction requirements of AB 32, California's global warming bill enacted in 2006. The 2012 Modified Project is consistent with SB 375 strategies to reduce VMT and associated GHG emissions in that it represents a compact, mixed-use development, improves the jobs/housing balance in the City and the Orange County Council of Governments Subregion, and provides access to mass transit. According to SCAG's 2008 Regional Comprehensive Plan, SCAG's Land Use and Housing Action Plan can be expected to result in a 10 percent reduction in VMT in 2035 when compared to current trends. Transit Service to LAX: Although the City is serviced by John Wayne Airport, Los Angeles International Airport ("LAX") is the regional air transportation hub. Providing direct transit service from the City to LAX can reduce single passenger trips to this destination. The Los Angeles World Airports operates three Flyaway shuttles that provide nonstop airport service to and from Westwood, Van Nuys, and Downtown Los Angeles via the Flyaway program. Since November 16, 2009, a Flyaway shuttle from the Irvine Metrolink Station to LAX provides nonstop service.		

Table 1-1           Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measu	<i>Level of Significance</i> <i>Before Additional</i> <i>ures [MM] Mitigation</i>	Level of Significance After Additional Mitigati	
	PPP 4-11Comprehensive Signal Retiming and Coordination Pre Emissions are highest at the lowest travel speeds. The currently retiming and coordinating signals throughou its ITEMS (Irvine Traffic Engineering System) progra to retime and coordinate traffic signals would produce traffic flows, so that vehicles are not starting and stopp These types of programs can improve vehicular level ("LOS"), thereby decreasing emissions for the same v vehicles.	e Čity is at Irvine under am. A program e more even ping constantly. of service		
	PPP 4-12 Waste Reduction: The City adopted a Zero Waste pro approach waste management. The City recovers appro- percent of its waste for recycling and composting, wh state's AB 939 waste diversion goals. Furthermore, w establish rate schedules according to bin size and freq collection. Commercial customers that subscribe to sn 2 cubic-yard bins) are routinely charged less by hauler structure encourages waste reduction and recycling, an minimize hauler pickups.	oximately 66 ich exceeds the vaste haulers juency of naller bins (e.g., rrs. This pricing		
	Project Design FeaturesPDF 4-1Compact/Mixed-Use Development: The California I Commission ("CEC") considers compact developmen beneficial for minimizing energy consumption that lea greenhouse gas emissions. In fact, the CEC's report of connections between land use and climate change ider the project feature most predictive of the number of vo vehicle miles traveled ("VMT") by project occupants. Modified Project intensified the residential developmen Proposed Project Site as compared to the 2011 Appro locates additional housing opportunities near major en transportation centers. Doing so will tend to reduce V and regional basis.	at forms ads to in the ntifies density as ehicle trips and . The 2012 ent on the ved Project, and mployment and		

	Table 1-1					
Summary of Envir	Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation					
Environmental Impact	Proje	Plans, Programs, and Polices [PPPs], ct Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation		
	PDF 4-2	<b>High Rate of Internal Trip Capture:</b> With the inclusion of a mix of land uses including office, commercial, industrial, and residential in the Proposed Project Site, the 2012 Modified Project significantly reduces trips outside the Proposed Project Site. This reduces trip length and congestion on the local circulation system outside the Proposed Project Site.				
	PDF 4-3	<b>Low-Flow Fixtures:</b> The 2012 Modified Project incorporates low- flow water fixtures that will meet the requirements of the California Green Building Standards Code standards. Prior to issuance of building permit, the Applicant or its successor shall submit evidence to the satisfaction of the Director of Community Development that toilets, urinals, sinks, showers, and other water fixtures installed on- site are low-flow water fixtures that meet the California Green Building Standards Code standards.				
	PDF 4-4	Landscaping and Irrigation Systems: The 2012 Modified Project incorporates automated, high-efficiency landscaping irrigation systems on all master landscaped areas that reduce water use, such as evapotranspiration "smart" weather-based irrigation controllers, and bubbler irrigation; low-angle, low-flow spray heads; moisture sensors; and use of a California-friendly landscape palette. Prior to approval of landscape plans, the Applicant or its successor shall submit evidence to the satisfaction of the City's Director of Community Development that such landscaping irrigation systems will be installed so as to make the 2012 Modified Project consistent with the intent of the California Water Conservation in Landscaping Act of 2006 ("AB 1881"), including provisions to reduce the wasteful, uneconomic, inefficient, and unnecessary consumption of water.				
	PDF 4-5	<b>Use of Reclaimed Water on All Master Landscaped Areas:</b> Prior to approval of landscape plans, the Applicant or its successor shall submit evidence to the satisfaction of the City's Director of Community Development and the Irvine Ranch Water District				

6	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact		Plans, Programs, and Polices [PPPs], ct Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigatio
		("IRWD") that the landscape plans incorporate the use of reclaimed water in all master landscaped areas, including master landscaped commercial, multifamily, common, roadways, and park areas. Master landscapes shall also incorporate weather-based controllers and efficient irrigation system designs to reduce overwatering, combined with the application of a California-friendly landscape palette.	liniguton	
	PDF 4-6	<b>Material Recovery:</b> The 2012 Modified Project incorporates measures to reduce waste generated by Proposed Project Site residents, occupants and visitors, and to encourage recycling of solid wastes, utilizing the Orange County Integrated Waste Management Department's material recovery facilities to recycle glass, plastic, cans, junk mail, paper, cardboard, greenwaste (e.g., grass, weeds, leaves, branches, yard trimmings, and scrap wood), and scrap metal. Future employees, residents, and customers would participate in these programs. These measures include the requirement to include on-site recycling facilities at all commercial, retail, industrial, and multi- family residential developments. In addition, educational materials identifying available recycling programs shall be distributed to all land uses, including single-family residential.		
	PDF 4-7	<b>Energy Star Appliances:</b> EnergyStar appliances (excluding refrigerators), such as dishwashers, clothes washers, clothes dryers, air conditions, furnaces, and water heaters, shall be offered or installed in all residential dwelling units.		
	PDF 4-8	<b>Building Energy Efficiency:</b> Residential dwellings and non- residential buildings will be constructed so that they achieve 15 percent higher energy efficiency than the applicable standards set forth in the 2008 California Building and Energy Efficiency Standards (Title 24, Part 6 of the California Building Code) or meet the standards in effect at the time of issuance of building permit,. The Energy Commission's 2013 Building Energy Efficiency Standards are 25 percent more efficient than the 2008 standards for residential		

Summary of Enviro	nmental	Table 1-1Impacts, Mitigation Measures and Levels of	<sup>r</sup> Significance After	Mitigation
Environmental Impact		Plans, Programs, and Polices [PPPs], ct Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	PDF 4-9 PDF 4-10 Applicable 1	<ul> <li>construction and 30 percent more efficient for nonresidential construction. The 2013 Energy Efficiency Standards, which take effect on January 1, 2014, offer builders more efficient windows, insulation, lighting, ventilation systems and other options that would reduce energy consumption in homes and businesses.</li> <li><b>Carbon Sequestration:</b> The 2012 Modified Project incorporates landscaping and a plant palette that will foster carbon sequestration within the Proposed Project Site that is comparable to the landscaping and plant palette that was already incorporated into the 2011 Approved Project.</li> <li><b>Softscape Landscaped Areas:</b> Consistent with sustainable practices and modern landscaping standards and consistent with the landscaping used in the 2011 Approved Project, the 2012 Modified Project reduces softscape (e.g., plants/horticultural elements of landscape design) landscaped areas by 28 percent as compared to the default assumption in CalEEMod.</li> <li><b>Mitigation Measures from the 2011 Certified EIR</b></li> </ul>		
	No mitigatio	n measures were identified in the 2011 Certified EIR.		
		Mitigation Measures for the 2012 Modified Project Il mitigation measures are required.		
5.4-2 Like the 2011 Approved Project, he 2012 Modified Project would not conflict with an applicable plan, policy	Implementat	rams, and Policies ion of PPPs 4-1 and 4-12.	Less than significant	Less than significant
or regulation adopted for the purpose of reducing GHG emissions.	Project Desi Implementat	ign Features ion of PDFs 4-1 through 4-10.		
		Mitigation Measures from the 2011 Certified EIR n measures were identified in the 2011 Certified EIR.		
	Additional 1	Mitigation Measures for the 2012 Modified Project Il mitigation measures are required.		

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
5.5 HAZARDS AND HAZARDOUS MATE	RIALS		
5.5-1 Like the 2011 Approved Project the 2012 Modified Project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.	<ul> <li>Plans, Programs, and Policies</li> <li>PPP 5-1 If any underground storage tanks ("USTs") are encountered during site grading and excavation activities, they shall be removed in accordance with the existing standards and regulations of, and oversight by, the Orange County Health Care Agency ("OCHCA"), based on compliance authority granted through the California Code of Regulations, Title 23, Division 3, Chapter 16, Underground Tank Regulations. The process for UST removal is detailed in the OCHCA's "Underground Storage Tanks: The Basics." Soil samples from areas where storage tanks have been removed or where soil contamination is suspected shall be analyzed for hydrocarbons including gasoline and diesel in accordance with procedures set forth by OCHCA. If hydrocarbons are identified in the soil, the appropriate response/remedial measures will be implemented as directed by OCHCA with support review from the Regional Water Quality Control Board until all specified requirements are satisfied and a Tank Closure Letter is issued. Any aboveground storage tank ("AST)" in existence at the commencement of site development shall be removed in accordance with all applicable regulations under the oversight of Orange County Fire Authority. Compliance requirements relative to the removal/closure of storage tanks are set forth through the California Health and Safety Code, Sections 25280 through 25299.</li> <li>PPP 5-2 During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations, Section 1532.1, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead. Lead-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision(s) of the California Health and Safety Code.</li> <li>PPP 5-4 Federal law requires compliance with Rule 29 of the Code of Federal Regulations ("CFR") Part 1926. Prior to site demolition activities, build</li></ul>	Less than significant	Less than significant

Summary of Fry	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation	
	<ul> <li>materials shall be carefully assessed for the presence of lead-based paint, and its removal, where necessary, must comply with state and federal regulations, including Occupational Safety and Health Administration ('OSHA'') 29 CFR Part 1926. The OSHA rule establishes standards for occupational health and environmental controls for lead exposure. The standard also includes requirements addressing exposure assessment, methods of compliance, respiratory protection, protective clothing and equipment, hygiene facilities and practices, medical surveillance, medical removal protection, employee information and training, signs, recordkeeping, and observation of monitoring. Furthermore, the requirements of California Code of Regulations, Title 17, Division 1, Chapter 8, identify procedures that must be followed for accreditation, certification, and work practices for lead-based paint and lead hazards. Section 36100 thereof specifically sets forth requirements for lead-based paint abatement in public and residential buildings.</li> <li>PPP 5-5 Prior to site demolition activities, building materials must be carefully assessed for the presence of asbestos-containing materials ("ACM"), and removal of this material, where necessary, must comply with state and federal regulations, including SCAQMD Rule 1403, which specifies work practices with the goal of minimizing asbestos emissions during building demolition and renovation activities, including the removal and associated disturbance of ACMs. The requirements for demolition and renovation activities, including and cleanup procedures; and storage, disposal, and landfill disposal requirements for asbestos-containing waste materials.</li> </ul>	Integration		
	PPP 5-6 During site decommissioning and demolition activities, hazardous wastes must be managed in accordance with the requirements of Title 22, Division 4.5 of the California Code of Regulations. Title 22 sets forth the requirements with which hazardous-waste generators, transporters, and owners or operators of treatment, storage, or disposal facilities must comply. These regulations include the requirements for packaging, storage,			

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	labeling, reporting, and general management of hazardous waste prior to shipment. In addition, the regulations identify standards applicable to transporters of hazardous waste such as the requirements for transporting shipments of hazardous waste, manifesting, vehicle registration, and emergency accidental discharges during transportation.	-	
	PPP 5-7 During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations, Section 1529, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to asbestos. Asbestos-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision(s) of the California Health and Safety Code.		
	PPP 5-8 Evidence of soil and/or groundwater contamination (e.g., chemical odors, staining) unrelated to above/underground storage tank releases may be encountered during site development. The appropriate agency (e.g., OCHCA, DTSC, or the RWQCB) shall be notified if these conditions are encountered during construction or grading activities. With their oversight, an environmental site assessment shall be completed and a determination shall be made as to whether cleanup is required. Cleanup activities are required to be consistent with all applicable federal, State and local rules, regulations, and laws. A cleanup would not be considered complete until confirmatory samples of soil and/or groundwater reveal levels of contamination below the standards established by the oversight agency. Alternatively, a risk assessment may be prepared for the site to determine that there are no human or environmental risks associated with leaving contamination below specific levels in place. Construction in the impacted area shall not proceed until a "no further action" clearance letter or similar determination is issued by the oversight agency, or until a land use covenant is implemented.		

	Table 1-1					
Summary of Env	Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation					
Environmental Impact	Project Desi	Plans, Programs, and Polices [PPPs], gn Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation		
	<b>Project Design Fea</b> There are no PDFs of	tures of the 2012 Modified Project that apply.				
	Applicable Mitigat	ion Measures from the 2011 Certified EIR				
	renovated and dispos	naining structures known to contain ACMs that will be and/or demolished, HF shall ensure that all asbestos is removed ed of in accordance with applicable federal, state and local requirements.				
	constructed unknown, requiremen for the con signs a stat the best of the asbesto asbestos is	cupancy, renovation or demolition of any remaining structures d before October 1988, and in which the presence of ACMs is an asbestos survey shall be conducted by Heritage Fields. This at can be waived if an architect or project engineer responsible struction of the structure or an accredited asbestos inspector ement that no ACM was specified as a building material, and to their knowledge, no ACMs were used as a building material. If s survey identifies ACMs, the applicant shall ensure that all removed and disposed of in accordance with applicable federal, ocal regulatory requirements.				
	remain in u	ng structures in which ACMs have been identified and which will use shall be addressed in an Operation and Maintenance Plan and anaged in accordance with applicable laws.				
	former MC	ation and/or LBP abatement activities on residential units at CAS El Toro, shall be conducted in accordance with all applicable te and local regulatory requirements.				
	Restoratio IRP Sites Modified	ns of the Proposed Project Site located on the active Installation n Program ("IRP") Sites listed in Table 5.5-2, Action Required and Zoning – 2012 Modified Project, of the DSSEIR for the 2012 Project shall be used only in accordance with the requirements of able Final FOST or Finding of Suitability to Lease, including in				

Heritage Fields Project 2012 GPA/ZC Draft Second Supplemental EIR

Summary of Env	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
Environmental Impact	P	Plans, Programs, and Polices [PPPs], roject Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation	
		strict compliance with all lease restrictions (such as restrictions against soil or groundwater disturbance without approval from the Navy and regulators) and all institutional controls (such as restrictions against disturbing the integrity of physical remedial components like caps or groundwater treatment systems and other restrictions imposed by the Navy).			
	HH-4	Prior to issuance of occupancy permits of any existing structure at the former MCAS El Toro, a fire life-safety evaluation of the structure including recommendations for improvements required for compliance with current Building Codes for use of existing structures adopted by the City and plans for any required improvements shall be submitted to the Chief Building Official for review and approval.			
	НН-5	Prior to the issuance of a grading permit, the applicant shall prepare and the Director of Community Development shall approve a protocol plan (including but not limited to worker training, health and safety precautions, additional testing requirements, and emergency notification procedures) in the event that unknown hazardous materials are discovered during grading, construction, and/or related development activities. Additionally, said protocol plan will be revised should the discovery of previously unknown hazardous materials be made during any of the above mentioned development activities. The applicant and/or property owner that discovers contamination due to past military operations not previously identified by the DON shall be responsible for notifying the DON, appropriate regulatory agencies, and the Director of Community Development of the City in a timely manner. Additionally, said Protocol Plan shall be revised should the discovery of previously unknown hazardous materials be made during any of the above metrics.			
	НН-6	The City shall develop and maintain the location and status, as well as other pertinent information, of all monitoring wells on the former MCAS El Toro in a geographic information systems database ("GIS"). The City			

Table 1-1				
Summary of Enviro	nmental Impacts, Mitigation Measures and Levels of Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	f Significance After Level of Significance Before Additional Mitigation	<i>r Mitigation</i> Level of Significance After Additional Mitigatior	
,	will review all permit applications on the former air station for monitoring well locations that may be affected by a permit, and require applicants to maintain appropriate access. Access to monitoring wells will be limited to authorized personnel.			
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.			
5.5-2 Like the 2011 Approved Project, the 2012 Modified Project could expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, but not to a level that would be significant.	<ul> <li>Plans, Programs, and Policies</li> <li>PPP 5-3 Prior to approval of a conditional use permit, project applicants shall prepare a Fire Master Plan for submittal to the Orange County Fire Authority ("OCFA") consistent with OCFA Guideline B-09 (Fire Master Plans for Commercial and Residential Development).</li> <li>Project Design Features</li> <li>There are no PDFs of the 2012 Modified Project that apply.</li> <li>Applicable Mitigation Measures from the 2011 Certified EIR</li> <li>This DSSEIR proposes that Mitigation Measure HH3 from the 2011 Certified EIR be modified for the 2012 Modified Project as set forth below; <u>underlined text</u> is used to signify new additions. The modification is being made to note that the high fire hazard maps are occasionally updated and does not affect the substance of the mitigation measure.</li> </ul>	Less than significant	Less than significant	
	HH-3 The Community Development Department, in coordination with the Orange County Fire Authority ("OCFA"), will be responsible for review of all development plans, which would include evaluation of very high fire severity zones, special fire protection plans, and any requirements for fuel modification zones. Projects potentially impacted by wildland fire hazards will be subject to OCFA Guidelines for "Development Within and Exclusion from Very High Fire Severity Zones" and "Fuel Modification			

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	Plans and Maintenance." Additionally, all demolition, renovation, and construction activities in the project area will be subject to review by OCFA to ensure adequate fire protection, water flow, emergency access, design features, etc., according to the standards of the Uniform Fire Code and the California Fire Code. Due to the implementation of these standard fire protection procedures <u>and based on the revised Fire Hazard Maps</u> , the 2012 Modified Project is not anticipated to result in significant short- or long-term adverse impacts related to fire hazards		
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.		
5.6 HYDROLOGY AND WATER QUALIT			
5.6.1-1 The 2012 Modified Project would no substantially increase surface water flows into drainage systems as compared to the 2011 Approved Project	PPP 6-1 Prior to the issuance of a precise grading permit, the applicant shall submit a hydrology and hydraulic analysis of the site. The analysis shall be	Less than significant	Less than significant
	a. Hydrology/hydraulic analysis of 100-year surface water elevation at the project site to determine building elevation or flood proofing elevation.		
	b. Analysis of existing and post-development peak 100-year storm flow rates, including mitigation measures to reduce peak flows to existing conditions.		
	c. An analysis demonstrating that the volume of water ponded on the site and stored underground in the drainage system outside of the building envelope in the proposed condition is greater than or equal to the corresponding volume in the existing condition. The water surface used to determine the ponded volume shall be based on the water		

Table 1-1					
Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation           Level of Significance					
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Before Additional Mitigation	Level of Significance After Additional Mitigation		
	surface in the major flood control facility that the site is tributary to.				
	<b>Project Design Features</b> There are no PDFs of the 2012 Modified Project that apply.				
	Applicable Mitigation Measures from the 2011 Certified EIR H/WQ3 Prior to approval of the first tentative tract or parcel map in the project area, detailed hydrologic and hydraulic analysis shall be conducted. Studies and analysis shall be prepared in accordance with OCFCD methodologies and standards and the Flood Control Master Plan for San Diego Creek, as well as any additional guidelines in effect at the time of project design. Recommendations contained in the hydrology studies and/or hydraulic analysis to address drainage/flooding issues related to proposed development shall be implemented. Compliance with this measure shall be verified by the Community Development Department.				
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.				
5.6.1-2 The 2012 Modified Project would not locate additional development areas within a 100-year flood hazard area as	Plans, Programs, and Policies There are no PPPs that apply to the 2012 Modified Project.	Less than significant	Less than significant		
compared to the 2011 Approved Projec	. <b>Project Design Features</b> There are no PDFs of the 2012 Modified Project that apply.				
	<ul> <li>Applicable Mitigation Measures from the 2011 Certified EIR</li> <li>H/WQ4 Prior to issuance of a building permit for any unit within the 100-year floodplain, developers with property located in the newly delineated 100-year floodplain shall be required to construct such improvements as necessary to remove the property from the 100-year floodplain. Additionally, the developer shall prepare a Letter of Map Revision (LOMR) request to have the FIRMs revised to remove the development areas from the 100-year floodplain upon completion of the approved flood control facilities. The LOMR request shall be filed upon completion of design of the flood control improvements to contain or redirect the 100-year flood</li> </ul>				

Table 1-1           Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation	
	flows away from the property. After the improvements are constructed, Record Drawings and a maintenance agreement with, or letter from, a public agency shall be submitted to FEMA to complete the LOMR process.	_		
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.			
5.6.2-1 The 2012 Modified Project would no substantially alter the drainage pattern of the Proposed Project Site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site as compared to the 2011 Approved Project	<ul> <li>PPP 6-2 Prior to the issuance of a precise grading permit, the applicant shall submit a groundwater survey of the entire site. The analysis shall be prepared by a geotechnical engineer versed in groundwater analysis and shall include the following information and analysis (Standard Condition A.7):</li> <li>a. Potential for perched groundwater intrusion into the shallow</li> </ul>	Less than significant	Less than significant	

Summary of Env	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation		
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigatio
	Control Board Stormwater Multi-Application and Report Tracking System (SMARTS) website or the Regional Water Quality Control Board, or a letter from either agency stating that the NOI has been filed (Standard Condition A.10).		
	PPP 6-4 Prior to the issuance of precise grading permits, the applicant shall submit, and the Director of Community Development shall have approved, a project water quality management plan (WQMP). The WQMP shall identify the best management practices that will be used on the site to control predictable pollutant runoff (Standard Condition A.13).		
	<b>Project Design Features</b> There are no PDFs of the 2012 Modified Project that apply.		
	Applicable Mitigation Measures from the 2011 Certified EIR		
	H/WQ-1 Prior to issuance of a grading permit, the applicant shall provide evidence that the development of the project area shall comply with City of Irvine adopted Grading and Water Quality Ordinances to ensure that the potential for soil erosion is minimized on a project-by-project basis. Specifically, the NPDES discharge permitting requirements to which the City is obligated will ensure that construction activities reduce, to the maximum extent feasible, the water quality impacts of construction activities. The NPDES permit guidance states that "industrial/commercial construction operations that result in a disturbance of one acre or more of total land areaand residential construction sites that result in the disturbance of five acres or moreshall be required to develop and implement BMPsto control erosion and siltation and contaminated runoff from the construction sites." Note: In March 2003 this provision will apply to residential construction		
	The City's standard conditions of approval indicate that a Storm Water Pollution Prevention Plan (SWPPP) shall be prepared prior to the approval of grading permits for any project site in order to reduce sedimentation and		

Summary of Enviro	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation	
Environmental Impact	<ul> <li>erosion. The SWPPP shall include the adoption of erosion and sediment control practices such as desilting basins and construction site chemical control management measures.</li> <li>Additionally, prior to the issuance of a grading permit, project applicants must submit, and the Director of Community Development or designee must have approved, a Water Quality Management Plan (WQMP). The WQMP must identify the Best Management Practices (BMPs) that will be used on the site to control predictable pollutant runoff after the site is occupied. Ongoing operations after construction would be subject to the Countywide Municipal NPDES Stormwater Permit, for which the City is a Co-Permittee. This WQMP shall identify, at a minimum, the routine, structural, and non-structural measures specified in the Countywide NPDES DAMP Appendix which they are applicable to a project, the assignment of long-term maintenance responsibilities (specifying the developer, parcel owner, maintenance association, lessee, etc.), and shall reference the location(s) of structural BMPs.</li> <li>Also in accordance with standard City project permitting and approval procedures, Notices of Intent (NOI) for coverage of projects under the General Construction Activity Storm Water Runoff Permit will be submitted to the State Water Resources Control Board prior to issuance of grading permits in the project area. This requirement will be met to the satisfaction of the Director of Community Development of any disturbance of one acre or more of soil in the project area. Also in force during the period of construction would be the General Dewatering NPDES permit of the Santa Ana RWQCB, as well as the provisions of the Countywide Permit.</li> </ul>	Mitigation	After Additional Mitigation	
	The Mitigation Measures will be implemented in accordance with local and State regulatory requirements. As future projects are planned and designed in the project area, specific BMPs and other water quality control methods will be utilized to reduce water quality degradation in the Newport Bay watershed. Future projects in the proposed project area will acknowledge			

Table 1-1			
Summary of Enviro	nmental Impacts, Mitigation Measures and Levels of	f Significance After	Mitigation
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	and implement those additional requirements that may be imposed by RWQCB in the future. Compliance with these measures shall be verified by the Community Development Department.		
	H/WQ-2 Prior to issuance of a grading permit, evidence (e.g., in the form of a construction management plan) shall be provided that demonstrates that all stormwater runoff and dewatering discharges from the project area shall be managed to the maximum extent practicable or treated as appropriate to comply with water quality requirements identified in the Santa Ana Regional Water quality Control Board Basin Plan, including Total Maximum Daily Load (TMDL) Implementation Plan adopted for this watershed.		
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.		
5.6.2-2 The 2012 Modified Project would not significantly increase water pollutant concentrations in runoff from the	Plans, Programs, and Policies PPPs 6-2 through 6-4 apply.	Less than significant	Less than significant
Proposed Project Site during long-term operation or alter the quality of stormwater runoff, or otherwise	<b>Project Design Features</b> There are no PDFs of the 2012 Modified Project that apply.		
substantially degrade water quality, as compared to the 2011 Approved Project.	<b>Applicable Mitigation Measures from the 2011 Certified EIR</b> Implementation of Mitigation Measures H/WQ1 and H/WQ2.		
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.		

	Table 1-1				
Summary of Enviro	Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation		
5.7 LAND USE AND PLANNING					
5.7-1 Like the 2011 Approved Project, implementation of the 2012 Modified Project would not be in conflict with an applicable adopted land use plan, policy or regulation.	<ul> <li>Although the Land Use section refers to several PPPs included in other Sections in Chapter 5, there are no PPPs specifically included or relied upon in the Land Use section</li> <li>Project Design Features</li> <li>Although the Land Use section refers to several PDFs included in other</li> </ul>	Less than significant	Less than significant		
	Sections in Chapter 5, there are no PDFs specifically included or relied upon in the Land Use section Applicable Mitigation Measures from the 2011 Certified EIR No mitigation measures were identified in the 2011 Certified EIR.				
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.				
5.8 NOISE					
5.8-1 As compared to the 2011 Approved Project, the 2012 Modified Project would not substantially elevate traffic	There are no PPPs that apply to this impact.	Less than significant	Less than significant		
noise levels above local noise standards at noise-sensitive receptors proximate to the Proposed Project Site.					
	Applicable Mitigation Measures from the 2011 Certified EIR No mitigation measures were identified in the 2011 Certified EIR.				
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.				

Table 1-1					
Summary of En	Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation		
5.8-2 Like the 2011 Approved Project, stationary sources of noise generat the 2012 Modified Project would comply with the City's Municipal and would not substantially increas ambient noise levels at sensitive receptors proximate to the Propose Project Site.	Irvine Municipal Code, also known as the City's Noise Ordinance, outlinesodethe regulations necessary to control unnecessary, excessive and annoyingnoise in the City. The provisions of this chapter are applicable tonontransportation-related stationary noise sources. It outlines the noise level	Less than significant	Less than significant		

	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Summary of Envi				
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation	
	attenuation measures (Standard Condition 3.5)			
	<b>Project Design Features</b> There are no PDFs of the 2012 Modified Project that apply.			
	<ul> <li>Applicable Mitigation Measures from the 2011 Certified EIR</li> <li>N-1 Prior to the issuance of building permits for lots facing or located near major highways such as Irvine Boulevard, the project applicant shall provide a final noise study to the Director of Community Development that demonstrates how the exterior and interior noise requirements (65 dBA CNEL and 45 dBA CNEL, respectively) of the City's Noise Ordinance will be met. To attain the exterior and interior noise requirements, the final noise study shall include, but not be limited to the following measures and shall be shown on the final map:</li> </ul>			
	<ul> <li>Exterior</li> <li>Provide a minimum six-foot high noise barrier for single-family detached residences shown in Figures 5.7-3 through 5.7-7 of this DSEIR.</li> </ul>			
	<ul> <li>Interior</li> <li>Provide a "windows closed" condition, requiring a means of mechanical ventilation (e.g., air conditioning) for all residential units.</li> <li>Provide standard and upgraded dual-glazed windows with a minimum Sound Transmission Coefficient (STC) rating of 26. Specific window recommendations shall be made once final architectural plans are available and detailed interior noise reduction calculations can be calculated based on actual building assembly details.</li> </ul>			
	N-2 Prior to authorization to use, occupy and/or operate, the project applicant shall submit evidence to the satisfaction of the Director of Community Development that occupancy disclosure notices for residential units with patios and/or balconies that do not meet the City's exterior noise standard of 65 dBA CNEL will be provided to all future tenants pursuant to the			

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	City's Noise Ordinance.		
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.		
5.8-3 Construction-related activities of the 2012 Modified Project would not result in a substantial increase in temporary construction noise as compared to the 2011 Approved Project.	<ul> <li>Plans, Programs, and Policies Implementation of PPPs 8-1, 8-2, and:</li> <li>PPP 8-3 Title 5 (Planning), Division 10 (Grading Code and Encroachment Regulations), Chapter 1 (Grading Code), Section 5-10-127.G (Import and Export of Earth Materials) of the Irvine Municipal Code, states that if a grading project includes the movement of earth material to or from the site in an amount considered substantial by the Chief Building Official, the permittee is required to submit the proposed haul route for review and approval by the Chief Building Official. Special conditions of the grading permit may be imposed that require alternate routes or other measures in consideration of the possible impact on the adjacent community environment or effect on the public right-of-way itself.</li> <li>Project Design Features</li> <li>PDF 8-1 Prior to issuance of grading permits, the project applicant or its successor shall incorporate the following measures as a note on the grading plan cover sheet to ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved, and that construction noise has been reduced.</li> <li>During construction activities, all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers, consistent with manufacturers' standards. All stationary construction equipment shall be placed so that emitted noise is directed away from the noise-sensitive receptors nearest the Proposed Project Site boundaries.</li> <li>Equipment shall be staged in areas that will create the greatest distance between construction-related noise sources and the noise-</li> </ul>	Less than significant	Less than significant

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	<ul> <li>sensitive receptors nearest the Proposed Project Site during all project construction.</li> <li>All construction-related activities shall be restricted to the construction hours outlined in the City's Noise Ordinance (Municipal Code Section 6-8-205).</li> <li>Haul truck and other construction-related trucks traveling to and from the Proposed Project Site shall be restricted to the same hours specified for the operation of construction equipment. To the extent feasible, haul routes shall not pass directly by sensitive land uses or residential dwellings.</li> <li>Where construction will occur adjacent to any developed/occupied noise-sensitive uses, a construction-related noise mitigation plan shall be submitted the Director of Community Development for review and approval prior to the issuance of grading permits. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of the 2012 Modified Project, through the use of such methods as: (1) temporary noise attenuation fences; (2) preferential location of equipment.</li> <li>Construction of planned sound walls that have been incorporated into the project design shall be installed prior to construction of the building foundation; or temporary sound blankets (fences typically composed of poly-vinyl-chloride-coated outer shells with absorbent inner insulation) shall be placed along the boundary of the Proposed Project Site facing the nearest noise-sensitive receptors during construction activities.</li> </ul>		

	Table 1-1		
Summary of Enviro	nmental Impacts, Mitigation Measures and Levels of	<sup>r</sup> Significance After	· Mitigation
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.		
5.9 POPULATION AND HOUSING			
5.9-1 The 2012 Modified Project will generate additional population growth associated with the proposed increase in residential units as compared to the 2011 Approved Project, however, the 2012 Modified Project results in improved jobs-housing balance within the City and County.	<ul> <li>Plans, Programs, and Policies</li> <li>PPP 9-1 Compliance with the City's Housing Element - Compliance with the City's Housing Element policies provides a strategic blueprint to ensure the siting of new very low, low, and moderate income housing units in future development projects under the 2012 Modified Project to help the City continue to meet its State fair share housing targets. The Housing Ordinance mandates that all projects with 50 or more housing units shall set-aside 15 percent of the total units for very low, low, and moderate income households.</li> <li>Project Design Features</li> <li>There are no PDFs of the 2012 Modified Project that apply.</li> <li>Applicable Mitigation Measures from the 2011 Certified EIR.</li> <li>No mitigation Measures for the 2012 Modified Project</li> <li>No additional Mitigation measures are required.</li> </ul>	Less than significant	Less than significant

Table 1-1			
Summary of Enviro	nmental Impacts, Mitigation Measures and Levels of	f Significance After	· Mitigation
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigatio
5.10 PUBLIC SERVICES			
FIRE PROTECTION AND EMERGENCY SI	ERVICES		
5.10-1 The 2012 Modified Project would locate 4,606 additional dwelling units within the Orange County Fire Authority service boundaries (or 5,806 additional dwelling units with the optional conversion), thereby increasing the requirement for fire protection facilities and personnel as compared to the 2011 Approved Project, but not to a significant level.	<ul> <li>Plans, Programs, and Policies         PPP 10-1 Every project applicant shall comply with all applicable Orange County             Fire Authority codes, ordinances, and standard conditions regarding fire             prevention and suppression measures relating to water improvement plans,             fire hydrants, automatic fire extinguishing systems, fire access, access             gates, combustible construction, water availability, and fire sprinkler             systems.     </li> <li>PPP 10-2 Prior to the approval of the first certificate of occupancy the applicant shall             arrange for and have passed an inspection, to be performed by the Police             Department and the Orange County Fire Authority, to ensure compliance             with the Emergency Access Plan requirements. The inspector shall verify             test acceptance and locations of all Knox boxes and key switches as             depicted on the approved plan (Standard Condition 4.9).</li> <li>PPP 10-3 Prior to the issuance of the first building permit, the applicant shall submit         and have approved by the Chief of Police an Emergency Access Plan,         which identifies and locates all Knox Boxes, Knox key switches, and         Click2Enter radio access control receivers. Said plan shall be incorporated         into the plan set approved for building permit, the applicant shall have         executed a Secured Fire Protection Agreement with the Orange County Fire         Authority (Standard Condition A.15).     </li> <li>Project Design Features     PDF 10-1         The Relocated Wildlife Corridor Feature will be designed and planted in         such a manner as to ensure that the planting plan does not create a fire         hazard for adjacent development. Maintenance of vegetation within the</li></ul>	Less than significant	Less than significant

Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigatio
	Relocated Wildlife Corridor Feature is not anticipated, but would be allowed as needed for fire control. Final approval of the planting schemes and palettes will require approval from the Orange County Fire Authority.		
	<ul> <li>Applicable Mitigation Measures from the 2011 Certified EIR</li> <li>HH-3 The Community Development Department, in coordination with the Orange County Fire Authority (OCFA), will be responsible for review of all development plans, which would include evaluation of very high fire severity zones, special fire protection plans, and any requirements for fuel modification zones. Projects potentially impacted by wildland fire hazards will be subject to OCFA Guidelines for "Development Within and Exclusion from Very High Fire Severity Zones" and "Fuel Modification Plans and Maintenance." Additionally, all demolition, renovation, and construction activities in the project area will be subject to review by OCFA to ensure adequate fire protection, water flow, emergency access, design features, etc., according to the standards of the Uniform Fire Code and the California Fire Code. Due to the implementation of these standard fire protection procedures, the Proposed Project is not anticipated to result in significant short- or long-term adverse impacts related to fire hazards.</li> </ul>		
	HH-4 Prior to issuance of occupancy permits of any existing structure at the former MCAS El Toro a fire life-safety evaluation of the structure including recommendations for improvements required for compliance with current Building Codes for use of existing structures adopted by the City and plans for any required improvements shall be submitted to the Chief Building Official for review and approval.		

## Heritage Fields Project 2012 GPA/ZC Draft Second Supplemental EIR

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
POLICE PROTECTION			
5.10-2 The 2012 Modified Project would locate an additional 4,606 dwelling units would increase the need for police protection facilities and personnel as compared to the 2011 Approved Project.	PPPs 10-2 and 10-3 apply. PPP 10-5 The project applicant shall comply with all applicable requirements of the	Less than significant	Less than significant

Heritage Fields Project 2012 GPA/ZC Draft Second Supplemental EIR

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
SCHOOL SERVICES	-		
5.10-3 The 2012 Modified Project would generate new students and impact the school enrollment capacities of area schools as compared to the 2011 Approved Project.	<ul> <li>Plans, Programs, and Policies</li> <li>PPP 10-9 Pursuant to California Government Code Section 65995, the individual applicants shall pay developer fees to the appropriate school districts at the time building permits are issued; payment of the adopted fees would provide full and complete mitigation of school impacts. Alternatively, the applicant may enter into a school finance agreement with the school district(s) to address mitigation to school impacts in lieu of payment of developer fees. The agreement shall establish financing mechanisms for funding facilities to serve the students from the project. If the applicant and the affected school district(s) do not reach a mutually satisfying agreement, then project impacts would be subject to developer fees.</li> <li>Project Design Features</li> <li>There are no PDFs of the 2012 Modified Project that apply.</li> <li>Applicable Mitigation Measures from the 2011 Certified EIR.</li> <li>No mitigation Measures for the 2012 Modified Project</li> </ul>	Less than significant	Less than significant
	No additional mitigation measures are required.		
LIBRARY SERVICES			-
5.10-4 Development of the 2012 Modified Project would cause increased demand for library services as compared to the 2011 Approved Project.	<ul> <li>Plans, Programs, and Policies</li> <li>PPP 10-10 In the event that a city-wide library impact fee is adopted and in force, the developer shall pay this fee prior to issuance of building permits for new development. Since a 39,000 square foot library facility is approved for development within Existing PA 51, this would satisfy payment of a library impact fee, if adopted by the City at a future date.</li> <li>Project Design Features</li> </ul>	Less than significant	Less than significant
	There are no PDFs of the 2012 Modified Project that apply.		
	Applicable Mitigation Measures from the 2011 Certified EIR		

	Table 1-1		
Summary of Enviro	nmental Impacts, Mitigation Measures and Levels of	f Significance After Level of Significance	r Mitigation
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Before Additional Mitigation	Level of Significance After Additional Mitigation
	No mitigation measures were identified in the 2011 Certified EIR.		
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.		
5.11 RECREATION			
5.11-1 The 2012 Modified Project would result in an increase in population on the Proposed Project Site as compared to the 2011 Approved Project, and	Plans, Programs, and Policies         There are no PPPs that apply to this impact.         Project Design Features	Less than significant	Less than significant
therefore would increase the use of existing park and recreation facilities.	There are no PDFs of the 2012 Modified Project that apply. Applicable Mitigation Measures from the 2011 Certified EIR		
	No mitigation measures were identified in the 2011 Certified EIR.		
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.		
5.11-2 The 2012 Modified Project would involve development and/or dedication of parkland in accordance with the	Plans, Programs, and Policies There are no PPPs that apply to this impact.	Less than significant	Less than significant
ARDA. The impact of such development is analyzed throughout Chapter 5 of this DSSIER.	<b>Project Design Features</b> There are no PDFs of the 2012 Modified Project that apply.		
Chapter 5 of and DobiEK.	<b>Applicable Mitigation Measures from the 2011 Certified EIR</b> No mitigation measures were identified in the 2011 Certified EIR.		
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.		
5.12 TRANSPORTATION AND TRAFFIC			
5.12-1 The 2012 Modified Project would result in significant impacts at a number of intersections for the Year 2015, Year 2030 and Post-2030 scenarios, as compared to the 2011 Approved Project	<ul> <li>Plans, Programs, and Policies         There are no PPPs that apply to this impact.     </li> <li>Project Design Features         PDF 12-1 The 2012 Modified Project's optional conversion of non-residential     </li> </ul>		<b>Significant and unavoidable</b> For the 2011 Approved Project the 2011 Certified EIR concluded that all intersection and
	square footage to residential units, if implemented, will be subject to a		roadway/freeway/tollway/ram

( <b>5</b>	Table 1-1			
Environmental Impact	rironmental Impacts, Mitigation Measures and Levels of Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation	
	<ul> <li>traffic analysis to assess traffic impacts, if any, due to the change in land use and will include a reduction in allowable Multi-Use intensity in terms of equivalent traffic generation (excluding DB units) based on AM peak, PM peak, and ADT. Conversions to other non-residential uses within the Multi-Use category, if implemented, will also be subject to a traffic analysis to assess traffic impacts, if any, and shall be reflected in terms of equivalent traffic generation based on AM peak, PM peak, and ADT.</li> <li>Applicable Mitigation Measures from the 2011 Certified EIR</li> <li>The following mitigation measures were included in the 2011 Certified EIR. These mitigation measures are also included in the 2012 Modified Project, and additional mitigation measures have been added for the purposes of this DSSEIR. This DSSEIR proposes to make certain modifications to the mitigation measures adopted by the City for the Approved Project. In addition, the language of TRAN 1 from the Certified EIR is proposed to be modified as indicated below. Modifications to the original mitigation measure are identified in strikeout text to indicate deletions and underlined text to signify additions.</li> <li>TRAN1 was modified by the City and approved as shown with 2nd AVTTM 17008 (PC Resolution 11-3109). References to Existing Planning Area 30 are proposed to be removed since the 2012 Modified Project's proposed GPA/ZC consolidates Existing PAs 30 and 51 into one PA to be designated Combined PA 51.</li> </ul>		segments would operate at acceptable levels of service with the existing, non-existing, or planned improvements. However, the traffic analysis assumed that the cumulative impact of the 2011 Approved Project traffic along with other regional growth at the identified ramp and freeway locations would be mitigated through a combination of regional programs that are the responsibility of other agencies. Therefore, the 2011 Certified EIR concluded that cumulative freeway/tollway ramp impacts would remain significant and unavoidable if these programs are not implemented by the agencies with the responsibility to do so.	
	TRAN1Prior to the approval of any final map of a subsequent subdivision map (other than a financing and conveyance map) allocating for any land use, excluding single family land uses (single family land use includes single family detached and single family attached projects), parks, schools, daycare, and religious institutions, that allocates building intensity within Planning Areas 30 and 51, and prior to issuances of any building permits for permanent improvements within Planning Areas 30 and 51, the landowner or subsequent project applicant shall either (i) apply for annexation of any areas within the final map to the Irvine Spectrum Transportation Management Association (TMA) ("Spectrumotion") in accordance with Article X		Traffic impacts of the 2012 Modified Project have been identified by analyzing the study area circulation system based on existing traffic conditions and Years 2015, 2030 and Post-2030 future traffic conditions. In some cases, new project impacts that were not mitigated by improvements identified in the	

Summary of Envi	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation	
Environmental Impact	<ul> <li>of the recorded Declaration of Covenants, Conditions and Restrictions (CC&amp;Rs) for the Irvine Spectrum TMA, including any supplementary or amended CC&amp;Rs, to reduce traffic, air quality and noise impacts or (ii) develop and implement a similar transportation management plan containing the elements and meeting the criteria described below as approved by the Director of Public Works. The transportation management plan shall be implemented via payment of assessment dues to an organization similar to Spectrumotion for all land uses, with the exceptions noted above. While affordable housing units will be included, their assessment fees will be covered by other remaining adjacent land uses. The implementation (payment of assessment dues) for either option described above shall occur prior to issuance of building permit(s):</li> <li>Transportation Management Plan (TMP)</li> <li>The development and implementation of a Transportation Management Plan is an identified mitigation measure to manage transportation access for Planning Areas 30 and 51. This document summarizes the key elements of the TMP.</li> <li>A. Introduction</li> <li>The purpose of this document is to provide an outline for a comprehensive TMP for the Planning Areas 30 and 51 ("Great Park TMP"). This report is not intended to provide the specific details of the plan, but rather to highlight the key components and provide direction for subsequent detailed planning and implementation activities. When preparation of the TMP is undertaken, all of the agency and stakeholders will be invited to provide input.</li> </ul>	Miligation	North Irvine Transportation Mitigation (NITM) Program have been identified for 2012 Modified Project development scenarios. Recommended additional mitigation measures for each impacted location are presented in tables (see TRAN-5 through TRAN-12). If there are intersections where identified improvements may not be feasible due to cost, right-of-way concerns, or community opposition, traffic impacts would remain significant and unavoidable. In addition, as with the 2011 Approved Project, certain impacts are assumed to be mitigated through a combination of regional programs that are the responsibility of other agencies. If those measures are not implemented for reasons outside the City's control, certain traffic impacts of the 2012 Modified Project would remain significant and unavoidable.	
	The applicant may elect to annex Combined PA 51 and a portion of Planning Area 30 into the Irvine Spectrum Transportation Management Association (Spectrumotion). Spectrumotion is a private, non-profit Transportation Management Association (TMA) formed to reduce traffic congestion in Irvine Spectrum.			

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	Spectrumotion promotes, markets, and subsidizes alternatives to solo-commuting and assists the business community in complying with trip reduction related requirements. Membership is mandatory to property owners with deed restrictions requiring participation in the TMA. Membership dues provide the funding for the Association and its programs, which offer a variety of employer and commuter services focused on reducing vehicular trip generation.		
	In the event that the applicant elects not to annex into Spectrumotion, a TMP similar to that provided by Spectrumotion will be developed and implemented. This document sets forth the components of the TMP should it be necessary.		
	B. Transportation Management Plan Framework		
	The key elements of the Great Park TMP are set forth below:		
	New Hire Orientation: Inform newly hired employees of commuting services available to them.		
	Public Transportation Pass Sales: Provide a central location for purchase of passes to available transit services ((i.e., OCTA buses, Metrolink, Amtrak, etc.).		
	Vanpool and Carpool Formation Assistance: Perform all of the administrative work necessary to establish van pools and car pools.		
	On-site Promotions: Hold rideshare promotions at work sites and assist in employer assistance promotions.		
	Telecommuting/Alternative Work Schedule Consulting: Assist employers in developing and implementing a telecommuting or alternative work schedule program.		
	Personalized Commute Consulting: Provide a personalized commute		

Summarv of Env	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation		
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigatio
	profile to any commuter, which includes carpool match list containing the names of other commuters in the North Irvine Sphere that live and work near each other.		
	Website: Maintain a website with all of their program information available.		
	Rideshare Promotions: Conduct high visibility rideshare promotions as a means to advertise its services.		
	Subsidies: To the extent financially feasible, offer subsidies to assist in the formation of vanpools, the formation of carpools, and to encourage the trying of transit services.		
	Public Agency Coordination: Work closely with various public and quasi- public agencies to improve bus and commuter rail service to the Spectrum and North Irvine Sphere areas.		
	C. Transportation Management Plan Implementation		
	As part of the TMP, a process will be established to monitor its effectiveness in reducing peak hour trip generation in the Combined PA <del>30 and</del> 51. Provision shall be made for the Plan to be modified as appropriate to enhance its effectiveness.		
	TRAN-2 Following adoption of a land use plan and circulation plan for the Great Park property and before the issuance of any building permits within the base property, the City of Irvine shall request a cooperative study with OCTA and other affected jurisdictions to amend the Orange County Master Plan of Arterial Highways (MPAH). Marine Way, Trabuco Road from the SR-133 toll way to "O" Street (formerly College Road), and Ridge Valley (formerly "Y" Street) should be included on the MPAH.		
	TRAN-3 Prior to issuance of the first building permit for dwelling units or non-		

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			r Mitigation
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	residential square footage, a Fee Reallocation Study shall be completed to recalculate the NITM Fees reflecting any fair share allocation modifications. The landowner or subsequent property owner shall submit the Fee Reallocation Study under a separate cover to be approved by the Director of Public Works, in consultation with the NITM Advisory Committee.		
	TRAN-4 Prior to approval of the last final map for the 2011 Approved Project (or any portion thereof in the event that the final map is approved in multiple phases), the landowner or subsequent property owner shall pay its fair share of the costs of the following mitigation in an amount to be mutually agreed upon between the landowner or subsequent property owner and the City and reflective of the costs of the mitigation at the time of payment:		
	• 286 Jeffrey Road & Roosevelt: Restripe the existing eastbound approach to provide a shared through/ right turn lane within the existing right-of-way.		
	• 361 Bake Parkway & Portola Parkway: Restripe the existing northbound approach to provide a shared through/left lane (which currently exists as a through lane) within the existing right-of-way and modify the existing traffic signal operation for a north/south split phase signal operation. Alternatively, restripe the existing northbound approach to provide dual left turn lanes in combination with a single through lane and single right turn lane within the existing right-of-way, and modify signal operation to include northbound right turn overlap phase.		
	<ul> <li>374 Lake Forest &amp; Portola Parkway (Pending Projects analysis impact): Convert the existing northbound approach from de-facto right-turn to a dedicated right-turn, and modify the existing traffic signal operation to include right turn overlap phase.</li> </ul>		
	Additional Mitigation Measures for the 2012 Modified Project		

## Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	<ul> <li>TRAN5 (For specific Project-related non-NITM improvements): In conjunction with the submittal of any tentative tract maps/tentative parcel maps for the Project within Combined PA 51, the landowner or subsequent project applicant shall prepare, subject to review and approval of the City, the required tentative tract map/tentative parcel map (TTM/TPM) level traffic study per City Resolution No. 03-61. This traffic study will verify whether the intersection locations listed below, which have been identified as impacted in this SSEIR, are projected to be impacted by the subject project of the Interim Year Analysis. For those intersections impacted by subject project of the TTM/TPM traffic study, the tentative tract map/tentative parcel map will be conditioned to construct the necessary improvements that have been identified in the TTM/TPM traffic study. For those intersections listed below, which are not projected to be impacted by the subject project of the TTM/TPM traffic study, and prior to approval of the last final map for the 2012 Modified Project (or any portion thereof in the event that the final map is approved in multiple phases), the land owner or subsequent property owner shall construct, pay fair share of the costs or enter into an agreement with the City to establish the mechanism in which the funds generated by the mitigations shall be provided and utilized by Caltrans, City of Lake Forest, City of Tustin and/or City of Irvine toward implementing the improvements.</li> <li>16. Newport &amp; Irvine – Modification of signal to provide a northbound right turn overlap phase. (2030, Option 2) Improvement no longer needed if Pending projects are approved.</li> <li>221. Culver &amp; Bryan – Addition of a westbound defacto right turn lane. (2030, Option 2) Improvement no longer needed if Pending projects are approved.</li> </ul>		

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			Mitigation
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	• 286. Jeffrey & Roosevelt – Conversion of the eastbound shared through/right lane into a through lane and addition of a second right turn lane. (Post-2030, Options 1 & 2)		
	<ul> <li>290. Jeffrey &amp; Barranca – Application of PA9C-identified ATMS. (2030. Options 1 &amp; 2)</li> </ul>		
	• 291. Jeffrey & Alton – Provision of an eastbound standard right-turn lane with right-turn overlap resulting in an ultimate eastbound lane configuration of 2 left-turn lanes, 2 through lanes, and 1 right-turn lane. (Post-2030, Options 1 & 2)		
	• 303. Sand Canyon & I-5 NB ramp/Marine Way – Conversion of the northbound defacto right turn lane to a standard right turn lane with right turn overlap signal operation. (2030, Options 1 & 2)		
	<ul> <li>306. Sand Canyon &amp; Oak Canyon - Fair Share contribution towards – conversion of the westbound shared through/right lane to a single through lane and conversion of the westbound right-turn lane into a free-right turn lane, as identified in the PA40/12 GPA/ZC. (2030, Options 1 &amp; 2) Improvement no longer needed if Pending projects are approved.</li> </ul>		
	<ul> <li>321. Laguna Canyon &amp; Old Laguna Canyon – Application of ATMS, subject to approval by the Director of Public Works. Alternate improvement is the addition of a fourth northbound through lane. (Post-2030, Options 1 &amp; 2) Improvement no longer needed if Pending projects are approved.</li> </ul>		
	• 366. Bake & Rockfield – Fully funded LFTM improvement: Conversion of a westbound through lane to a third left turn lane.		

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			r Mitigation
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigatio
	(2030, Options 1 & 2)		
	TRAN6 (For specific Project-related NITM improvements): The NITM Program provides a funding mechanism for the coordinated and phased installation of required traffic and transportation improvements established in connection with land use entitlements for City of Irvine Planning Areas 1, 5, 6, 8, 9, 40 and 51. As established by City Ordinance No. 03-20, Combined PA 51 is included in this program and, as such, is required to pay its fair share towards the List of NITM Improvements included within the established NITM Program. The following Project impacted locations are included in the NITM List of Improvements and thus, payment of NITM fees will mitigate the Combined PA 51 project's fair share responsibility towards these improvements:		
	• 228. Culver & Barranca – Conversion of the westbound defacto right- turn lane to a through lane. (2030, Options 1 & 2)		
	<ul> <li>424. Los Alisos &amp; Rockfield – Addition of a southbound right turn lane. (2030, Option 1) Improvement no longer needed if Pending projects are approved.</li> </ul>		
	• I-5 Northbound Off-ramp to Jamboree – Addition of a second drop lane from the I-5 to the Jamboree off-ramp. (2030, Option 1)		
	TRAN7 (If pending projects are approved, Project-related non-NITM improvements): In the event that all of the pending (not approved) projects analyzed are approved and in conjunction with the submittal of any tentative tract maps/tentative parcel maps for the Project within Combined PA 51, the landowner or subsequent project applicant shall prepare, subject to review and approval of the City, the required tentative tract map/tentative parcel map (TTM/TPM) level traffic study per City Resolution No. 03-61. This traffic study will verify whether the intersection locations listed below, which have been identified as		

## Table 1-1 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation Level of Significance Plans, Programs, and Polices [PPPs], Before Additional Level of Significance Project Design Features [PDFs], and Mitigation Measures [MM] After Additional Mitigation Environmental Impact Mitigation impacted in this SSEIR, are projected to be impacted by the subject project of the Interim Year Analysis. For those intersections impacted by subject project of the TTM/TPM traffic study, the tentative tract map/tentative parcel map will be conditioned to construct the necessary improvements that have been identified in the TTM/TPM traffic study. For those intersections listed below, which are not projected to be impacted by the subject project of the TTM/TPM traffic study, and prior to approval of the last final map for the 2012 Modified Project (or any portion thereof in the event that the final map is approved in multiple phases), the land owner or subsequent property owner shall construct, pay fair share of the costs or enter into an agreement with the City to establish the mechanism in which the funds generated by the mitigations shall be provided and utilized by Caltrans, City of Lake Forest, City of Tustin and/or City of Irvine toward implementing the improvements. 54. Browning & Irvine – Application of ATMS, subject to approval ٠ by City of Tustin. (2030, Options 1 & 2) • 286. Jeffrey & Roosevelt - Conversion of the eastbound shared through/right lane into a through lane and addition of a second right turn lane. (Post-2030, Options 1 & 2) 290. Jeffrey & Barranca - Application of PA9C-identified ATMS. . 291. Jeffrey & Alton - Provision of an eastbound standard right-turn ٠ lane with right-turn overlap resulting in an ultimate eastbound lane configuration of 2 left-turn lanes, 2 through lanes, and 1 right-turn lane. (2030 & Post-2030, Options 1, Post-2030, Option 2) 303. Sand Canyon & I-5 NB ramp/Marine Way - Conversion of the • northbound defacto right turn lane to a standard right turn lane with

	Table 1-1         Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Summary of Envir				
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation	
· · · · ·	right turn overlap signal operation. (2030, Options 1 & 2)	-		
	<ul> <li>366. Bake &amp; Rockfield – Fully funded LFTM improvement: Conversion of a westbound through lane to a third left turn lane. (2030, Options 1 &amp; 2)</li> </ul>			
	• 417. El Toro & Portola – Fully funded LFTM improvement: Addition of a southbound right turn overlap phase. (2030, Options 1 & 2)			
	TRAN8 (If pending projects are approved, For specific Project-related NITM improvements): The NITM Program provides a funding mechanism for the coordinated and phased installation of required traffic and transportation improvements established in connection with land use entitlements for City of Irvine Planning Areas 1, 5, 6, 8, 9, 40 and 51. As established by City Ordinance No. 03-20, Combined PA 51 is included in this program and, as such, is required to pay its fair share towards the List of NITM Improvements included within the established NITM Program. In the event that all of the pending (not approved) projects analyzed are approved, the following Project impacted locations are included in the NITM List of Improvements and thus, payment of NITM fees will mitigate the Combined PA 51 project's fair share responsibility towards these improvements:			
	• 228. Culver & Barranca – Conversion of the westbound defacto right- turn lane to a through lane. (2030, Options 1 & 2)			
	• I-5 NB Off-ramp to Jamboree – Addition of a second drop lane from the I-5 to the Jamboree off-ramp. (2030 & Post-2030, Option 1 & 2)			
	TRAN9 (Caltrans Fair Share): Prior to approval of the last final map for the 2012 Modified Project (or any portion thereof in the event that the final map is approved in multiple phases), the land owner or subsequent property owner shall make a good-faith effort to enter into a fair share			

Summary of Envir	Table 1-1 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigatio	
	agreement with Caltrans and the City of Irvine to establish its fair share allocation towards the future implementation of the following freeway facility improvements. It may not be possible to successfully negotiate the agreement with Caltrans. Fair share contribution shall be calculated using the same methodology for determining fair share contributions as included in the North Irvine Transportation Mitigation Program. The Agreement shall establish the mechanism in which the funds generated by the Project's fair share mitigations shall be provided and utilized by Caltrans and/or City of Irvine toward implementing the following improvements:			
	<ul> <li>I-5 Northbound, north of Culver – Directional capacity enhancement equivalent to a single general purpose lane. (2030, Options 1 &amp; 2)</li> <li>I-5 Northbound, north of Jeffrey – Directional capacity enhancement equivalent to a single general purpose lane. (2030, Options 1 &amp; 2) Improvement no longer needed if Pending projects are approved.</li> </ul>			
	<ul> <li>I-405 Northbound, north of Jeffrey – Directional capacity enhancement equivalent to a single general purpose lane. (2030 and Post-2030, Options 1 &amp; 2) Improvement no longer needed if Pending projects are approved.</li> </ul>			
	TRAN10 ( <b>If pending projects are approved, Caltrans Fair Share</b> ): In the event that all of the pending (not approved) projects analyzed are approved, and prior to approval of the last final map for the 2012 Modified Project (or any portion thereof in the event that the final map is approved in multiple phases), the land owner or subsequent property owner shall make a good-faith effort to enter into a fair share agreement with Caltrans and the City of Irvine to establish its fair share allocation towards the future implementation of the following freeway facility improvements. It may not be possible to successfully negotiate the agreement with Caltrans. Fair share contribution shall be calculated using the same methodology for			

Table 1-1 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	determining fair share contributions as included in the North Irvine Transportation Mitigation Program. The Agreement shall establish the mechanism in which the funds generated by the Project's fair share mitigations shall be provided and utilized by Caltrans and/or City of Irvine toward implementing the following improvements:		
	• SR-133 northbound loop on-ramp at Barranca Parkway – Conversion of the HOV preferential lane to a second metered mixed-flow lane (2015, Option 2)		
	• I-5 Northbound, north of Culver – Directional capacity enhancement equivalent to a single general purpose lane. (2030, Options 1 & 2)		
	TRAN11 (Rockfield MPAH Amendment) The City of Irvine shall submit a request to OCTA and other affected jurisdictions to amend the Orange County Master Plan of Arterial Highways (MPAH) to eliminate the extension of Rockfield Boulevard from the eastern project boundary to Marine Way.		
	TRAN12 ( <b>If Rockfield MPAH Amendment not approved by OCTA</b> ) In the event that the Rockfield MPAH change does not occur and the Rockfield connection to Marine Way is ultimately constructed, and in addition to previously identified Post-2030 Option 1 improvements, the land owner or subsequent property owner shall enter into a fair share agreement with the City of Irvine and shall make a good-faith effort to enter into a fair share agreement with Caltrans to establish its fair share allocation towards the future implementation of the conversion of the HOV preferential lane at the SR-133 northbound loop on-ramp at Barranca Parkway to a second metered mixed-flow lane. It may not be possible to successfully negotiate the agreement with Caltrans. The fair share contribution shall be advanted uping the series matched along for determining foir characters.		
	calculated using the same methodology for determining fair share contributions as included in the North Irvine Transportation Mitigation Program. The Agreement shall establish the mechanism in which the		

Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	funds generated by the Project's fair share mitigations shall be provided and utilized by Caltrans and/or City of Irvine. For Option 2, the mitigations as indicated in TRAN5 through TRAN10 remain unchanged in the event that the Rockfield MPAH change does not occur and the Rockfield connection to Marine Way is ultimately constructed.		
5.12-2: Like the 2011 Approved Project, the 2012 Modified Project complies with adopted policies, plans, and programs for alternative transportation.	Plans, Programs, and Policies         There are no PPPs that apply to this impact.         Project Design Features         There are no PDFs of the 2012 Modified Project that apply.         Applicable Mitigation Measures from the 2011 Certified EIR         No mitigation measures were identified in the 2011 Certified EIR.         Additional Mitigation Measures for the 2012 Modified Project	Less than significant	Less than significant
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.		
5.12 UTILITIES AND SERVICE SYSTEMS	3		
WATER SERVICES			
5.13.1-1 Existing and planned IRWD water supplies and delivery systems are adequate to meet the 2012 Modified Project's forecasted water demand as compared to the 2011 Approved Project.	<ul> <li>Plans, Programs, and Policies</li> <li>PPP 13-1 Requirement to Use Recycled Water: Irvine Ranch Water District (IRWD) will identify areas within the Sub Area Master Plan that are capable of receiving service from the IRWD's recycled water system, and will determine the feasibility of providing recycled water service to these areas. IRWD will also review applications for new permits to determine the feasibility of providing recycled water service to these applicants. If recycled water service is determined by IRWD to be feasible, applicants for new water service shall be required to install on-site facilities to accommodate both potable water and recycled water service in accordance with IRWD's Rules and Regulations.</li> </ul>	Less than significant	Less than significant

Summary of Enviro	Table 1-1           nmental Impacts, Mitigation Measures and Levels o	f Sianificance After	r Mitigation
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	PPP 13-2 Connection Fees: The Project Applicant shall enter into agreement or agreements as necessary with IRWD to establish the appropriate financial fair share costs to be borne by the project proponent. Fair share costs may include, but are not limited to, those associated with the preparation of studies necessary to analyze the needs of the 2012 Modified Project and infrastructure expansion necessary to serve the 2012 Modified Project.		
	PPP 13-3 Fire Flow Analysis: In accordance with IRWD requirements, each tentative tract map in the 2012 Modified Project must provide a fire flow analysis. If the analysis identifies any deficiencies, the developer will be responsible for any water system improvements associated with the development project required to rectify the deficiencies and meet IRWD fire flow requirements.		
	<b>Project Design Features</b> PDFs 4-3, 4-4, and 4-5 apply.		
	<b>Applicable Mitigation Measures from the 2011 Certified EIR</b> No mitigation measures were identified in the 2011 Certified EIR.		
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.	-	
WASTEWATER	·		
5.13.2-1 IRWD has adequate wastewater treatment capacity to meet the 2012 Modified Project's estimated	Plans, Programs, and Policies PPP 13-2 applies.	Less than significant	Less than significant
wastewater generation, and project development would not require construction of new or expanded	<b>Project Design Features</b> PDF 4-3 applies.		
wastewater treatment facilities as compared to the 2011 Approved Project	Applicable Mitigation Measures from the 2011 Certified EIR No mitigation measures were identified in the 2011 Certified EIR.		
	Additional Mitigation Measures for the 2012 Modified Project No additional mitigation measures are required.		

Heritage Fields Project 2012 GPA/ZC Draft Second Supplemental EIR

	Table 1-1				
Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation					
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation		
5.13.2-2 The 2012 Modified Project's development would not require expansion and extensions of existing IRWD sewers as compared to the 2011 Approved Project.	<ul> <li>Plans, Programs, and Policies</li> <li>PPP 13-2 applies.</li> <li>Project Design Features</li> <li>PDF 4-3 applies.</li> <li>Applicable Mitigation Measures from the 2011 Certified EIR</li> <li>No mitigation measures were identified in the 2011 Certified EIR.</li> </ul>	Less than significant	Less than significant		
	Additional Mitigation Measures for the 2012 Modified Project           No additional mitigation measures are required.				
SOLID WASTE					
5.13 Like the 2011 Approved Project, there is sufficient landfill capacity in the region for 2012 Modified Project- generated solid waste.	<ul> <li>Plans, Programs, and Policies</li> <li>PPP 13-4 The City Construction and Demolition (C&amp;D) Debris Recycling and Reuse ordinance requires that 1) all residential projects of more than one unit, 2) nonresidential developments on 5,000 square feet or larger, and 3) nonresidential demolition/renovations with more than 10,000 square feet of building recycle or reuse a minimum of 75 percent of concrete and asphalt and 50 percent of nonhazardous debris generated.</li> <li>PPP 13-5 The City adopted a Zero Waste program in 2007 to approach waste management. The City recovers approximately 66 percent of its waste for recycling and composting, which exceeds the state's AB 939 waste diversion goals. Furthermore, waste haulers establish rate schedules according to bin size and frequency of collection. Commercial customers that subscribe to smaller bins (e.g., 2 cubic-yard bins) are routinely charged</li> </ul>	Less than significant	Less than significant		
	<ul> <li>less by haulers. This pricing structure encourages waste reduction and recycling, and tends to minimize hauler pickups.</li> <li>PPP 13-6 The Irvine Sustainable Community Initiative (Initiative Ordinance 10-11), adopted by the voters of the City as Initiative Measure S on November 2, 2010, and certified by the City Council on December 14, 2010, became effective December 24, 2010. The ordinance was adopted to ratify and implement policies in support of renewable energy and environmental</li> </ul>				

Summary of Env	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation	
i	programs for a sustainable community. It outlines the City's direction for continuing to develop and implement programs geared towards green building, renewable energy and sustainability. For example, the City would continue to develop and implement recycling, zero waste or other innovative onsite business programs to divert waste from landfills and also continue to develop and implement the use of native, California-friendly and drought-tolerant landscaping.			
	PPP 13-7 Prior to the issuance of grading permits for a project that involves the demolition of an asphalt or concrete parking lot on site, the applicant shall submit a waste management plan demonstrating compliance with the requirements of Title 6, Division 7 of the City of Irvine Municipal Code relating to recycling and diversion of demolition waste as applicable to said project. Over the course of demolition or construction, the applicant shall ensure compliance with all code requirements related to the use of City-authorized waste haulers (Standard Condition 2.24).			
	PPP 13-8 Prior to the issuance of building permits for a project that involves new construction or that involves the demolition or renovation of existing buildings on site, the applicant shall comply with requirements of Title 6, Division 7 of the City of Irvine Municipal Code relating to recycling and diversion of construction and demolition waste as applicable to said project. Over the course of demolition or construction, the applicant shall ensure compliance with all code requirements related to the use of City-authorized waste haulers (Standard Condition 3.7).			
	<b>Project Design Features</b> There are no PDFs of the 2012 Modified Project that apply.			
	Applicable Mitigation Measures from the 2011 Certified EIRSW-1It is anticipated that much of the solid waste resulting from the demolition, dismantling, or other deconstruction of the aged structures and property, including but not limited to buildings and runways, at MCAS El Toro is contaminated with lead-based paints, asbestos, or other materials that may			

	Table 1-1			
Environmental Impact		ntal Impacts, Mitigation Measures and Levels of Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	<i>Significance After</i> Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	SW-2	render it unsuitable for recycling or reuse. At the sole cost and expense of the project applicant, in order to evaluate this condition and determine the feasibility of recycling of solid waste material from the MCAS El Toro site by ordinary means, a technical evaluation by a qualified environmental consultant must be conducted. The technical evaluation shall include sufficient sample testing of all types of solid waste materials to be generated by the project to analyze its composition. A copy of the full technical evaluation and its findings must be submitted to the City of Irvine Community Development Department. The City of Irvine must confirm the adequacy of the technical evaluation prior to authorizing the demolition, dismantling, or deconstruction project to proceed. If it is determined by the technical evaluation that material is contaminated and prohibited from being recycled by ordinary means, a further evaluation must be conducted to identify and evaluate other feasible methods approved by state law to divert the material from landfills. This may include the delivery of the waste material to other appropriate non-disposal or transformation facilities, such as "waste-to-energy" (WTE) plants. For that solid waste which is determined to be inappropriate for recycling (as that term is defined by California Public Resources Code Section 40180), the project applicant must submit a written plan to the City and implement such plan to ensure that 75% of the material, or the maximum amount feasible as determined by the technical evaluation, is diverted from		
	SW-3	the landfill through other methods that comply with state statutes and regulations. For that solid waste which the technical study deems to be suitable for recycling, the project applicant must submit a written plan to the City and implement such plan to ensure that solid waste material generated by the demolition, dismantling, or deconstruction project, land use operations and maintenance is collected by a City authorized solid waste hauler or recycling agent, and that a minimum of 75% of the solid waste from the project is diverted from landfills by recycling, as that term is defined by California Public Resources Code Section 40180 ("Recycling" does not		

Table 1-1           Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
Environmental Impact	P	Plans, Programs, and Polices [PPPs], roject Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
		include transformation, as defined in Public Resources Code Section 40201).		
	SW-4	To ensure ongoing compliance with these mitigation measures, the project applicant will be required to submit solid waste tonnage reports to the City of Irvine on City approved forms, accompanied by "weight ticket" receipts from state-certified disposal, nondisposal, or transformation facilities, on a quarterly basis to demonstrate that solid waste diversion has occurred in accordance with these required mitigation measures and in a manner that is consistent with, and not detrimental to, the efforts of the City of Irvine to comply with AB939.		
		To assure compliance with applicable statutes related to the disposal of solid waste, it is necessary for the City to require appropriate and effective mitigation measures to limit the disposal and ensure significant recycling of solid waste on-site.		
	SW-5	For green waste, the project applicant must submit a written plan to the City and implement such plan to ensure that the green waste material generated by landscape maintenance operations is collected by a City authorized waste hauler or recycling agent, that the maximum feasible amount of that collected green waste is recycled, and that a minimum of 50% of the green waste from the project is diverted from landfills by recycling, as that term is defined by California Public Resources Code Section 40180.		
		onal Mitigation Measures for the 2012 Modified Project itional mitigation measures are required.		
ELECTRICITY, NATURAL GAS, AND TEL				
5.13-4 Existing and/or proposed electricity, natural gas, and telecommunications facilities would be able to accommodate 2012 Modified Project-generated utility demands as compared to the 2011 Approved Project.	PPPs 4 Project PDF 4-	Programs, and Policies -3, 4-4, and 4-5 apply. t Design Features 7 applies. able Mitigation Measures from the 2011 Certified EIR	Less than significant	Less than significant

Heritage Fields Project 2012 GPA/ZC Draft Second Supplemental EIR

Summary of Env	ironmen	Table 1-1tal Impacts, Mitigation Measures and Levels of	Significance After	Mitigation
Environmental Impact		Plans, Programs, and Polices [PPPs], roject Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigatic
		gation measures were identified in the 2011 Certified EIR.		
		nal Mitigation Measures for the 2012 Modified Project tional mitigation measures are required.		
DDITIONAL MITIGATION MEASURE	S FROM T	HE 2011 CERTIFIED EIR AND ASSOCIATED MMRP		
The following mitigation measures that wer and 13-2 have also been incorporated into the		the MMRP for the 2011 Approved Project are not included above, however, th ified Project.	ney are incorporated into the 20	12 Modified Project. PPPs 13-1
foils and Geology				
	GS-1 GS-2	Prior to issuance of a building permit, the City of Irvine shall require that all development be designed in accordance with the seismic design provisions outlined in future proposed development geotechnical reports and specified in the latest Building Codes adopted by the City of Irvine. Compliance with this measure shall be verified by the Community Development Department. Prior to issuance of a building permit, as per existing City policies, geotechnical studies shall be prepared at the time specific development		
		<ul> <li>projects are proposed to address site specific geotechnical considerations. The scope of each geotechnical study is based on the underlying geotechnical conditions of the individual site. These reports will provide measures to prevent settlement.</li> <li>Prior to design and construction of any future developments within the project area, a comprehensive geotechnical evaluation, including development-specific subsurface exploration and laboratory testing, shall be conducted. The purpose of the subsurface evaluation is to:</li> </ul>		
		<ul> <li>a. Further evaluate the subsurface conditions in the area of the proposed structures.</li> <li>b. Provide specific data on potential geologic and geotechnical hazards.</li> <li>c. Provide information pertaining to the engineering characteristics of earth materials in the project area.</li> </ul>		
		From this data, recommendations for grading/earthwork, surface, and		

Table 1-1 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM	<i>Level of Significance</i> <i>Before Additional</i> <i>M] Mitigation</i>	Level of Significance After Additional Mitigation
	<ul> <li>subsurface drainage, temporary and/or permanent dewatering, foundar pavement structural sections, and other pertinent geotechnical design considerations may be formulated and shall be included in the gradin building plans for individual developments. General recommendation as follows:</li> <li>Seismic Ground Shaking - Measures to prevent risk of loss, inju death involving seismic ground shaking include constructing ner development to the latest adopted building codes. In addition, ner development should not be located near active earthquake faults</li> <li>Erosion or Loss of Topsoil – Erosion and sediment control meas shall be implemented as required by the City's Grading and Wat Quality ordinances.</li> <li>Where Expansive Soils Exist – Measures for the design of found slabs, flatwork and other improvements subject to drainage from expansive soils.</li> <li>Compliance with this measure shall be verified by the Community Development Department.</li> </ul>	ag and ns are ury or w ew s. sures ter dations,	
	<ul> <li>GS-3 Prior to issuance of building permits for the occupancy of any existing structure at the former MCAS El Toro, or occupancy of any existing structure if a building permit is not issued, a seismic evaluation of the structure including recommendations for seismic improvements requ compliance with current Building Codes for use of existing structures adopted by the City of Irvine and plans for any required seismic improvements shall be submitted to the Chief Building Official for reand approval.</li> </ul>	e ired for s	
	GS-4 Prior to issuance of a grading permit, detailed geotechnical and hydro reports shall be prepared prior to any development approval or gradin activities. These reports shall specifically address erosion control and surface runoff for both construction and long-term operations on the Recommendations contained in these reports to prevent soil erosion, siltation, and debris influx into the drainage system shall be impleme	ng 1 site.	

Heritage Fields Project 2012 GPA/ZC Draft Second Supplemental EIR

Table 1-1           Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	Compliance with this measure shall be verified by the Community Development Department.		
Biological Resources			
	PPP 13-1 All construction activities shall comply with the federal Migratory Bird Treaty Act of 1918 (MBTA). The MBTA governs the taking and killing of migratory birds, their eggs, parts, and nests and prohibits the take of any migratory bird, their eggs, parts, and nests. Compliance with the MBTA shall be accomplished by the following:		
	• If vegetation is to be cleared during the nesting season (March 1 to September 1), all suitable habitat shall be thoroughly surveyed for the presence of nesting birds by a qualified Biologist no more than 72 hours prior to clearing. The survey results shall be submitted by the Property Owner/Developer to the Director of Community Development.		
	• If any active nests are detected, the area shall be flagged and mapped on the construction plans along with a buffer distance to be determined by the qualified Biologist. The buffer area shall be avoided until the nesting cycle is complete or until the Biologist has determined that the nest has failed. In addition, the Biologist shall be present on the site to monitor the vegetation removal to ensure that any nests that were not detected during the initial survey are not disturbed.		
	PPP 13-2 All construction activities shall comply with Sections 3503, 3503.5 and 3513 of the California Fish and Game Code, which protect active nests of any raptor species, including common raptor species. Compliance with these codes shall be accomplished by the following:		
	• If vegetation is to be cleared during the raptor nesting season (February 1 to June 30), all suitable habitat within 300 feet of the Project sites shall be thoroughly surveyed for the presence of nesting raptors (including burrowing owl) by a qualified Biologist 72 hours		

Summary of Envi	Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation				
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation		
	<ul> <li>Provide Congrit outgot provide the property provide the property of the claim of the provided the property of the provided the</li></ul>				
	<ul><li>and Game (CDFG).</li><li>BIO-2 Prior to approval of a subdivision map for each project area, a wetland delineation shall be performed for all areas within the master plan sub-area that contain the potential for wetland habitat and/or jurisdictional waters.</li></ul>				

Table 1-1 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	<ul> <li>The loss of impacted wetlands shall be mitigated through the implementation of a wetland mitigation plan prepared and accepted by the appropriate agency (i.e., U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, California Department of Fish and Game). Wetlands impacted on-site shall be mitigated through on-site or off-site replacement, re-creation (i.e. within the proposed wildlife corridor), and/or revegetation as deemed acceptable by the appropriate jurisdictional agencies.</li> <li>BIO-3 The City shall continue to work with State and federal agencies during the implementation of the proposed project to implement the revegetation/restoration plan for the wildlife corridor. Measures such as sight and sound barriers, including artificial sound walls and natural diversions (e.g. hedges and tree lines) shall be incorporated into corridor design to ensure the viability of the corridor. The City shall implement the corridor consistent with the design criteria and viability analysis established in the OCGP FEIR.</li> </ul>		
	BIO-4 Prior to issuance of a grading permit for each project area, a complete inventory of all trees of trunk diameter at breast height (DBH) greater than six inches and any significant (as determined by a certified arborist selected by the City) plants on the project site, excluding those within the habitat preserve shall be prepared. This inventory shall be prepared by an arborist certified by the International Society of Arboriculture and shall include (but not be limited to) data for each tree such as species, variety, DBH, condition (excellent, good, fair, poor, dead), and any recommendations. All trees in this inventory shall be considered "Significant Trees" under the City of Irvine's Urban Forestry Ordinance (UFO) (Section 5-7-401 et al) and the UFO shall apply to all trees included in this inventory.		

Table 1-1			
Summary of Envi	ronmental Impacts, Mitigation Measures and Levels of Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Significance After Level of Significance Before Additional Mitigation	<i>Mitigation</i> Level of Significance After Additional Mitigatior
Paleontological Resources		Ū	<b>. .</b>
	<ul> <li>P-1 Prior to issuance of a grading permit for any portion of the project area, a qualified paleontologist shall be retained by the City or designee to carry out an appropriate paleontology investigation of the area proposed for grading. (A qualified paleontologist is defined as an individual with an M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques.) The City of Irvine has standard conditions applied prior to the issuance of grading permits when a project site includes potentially significant paleontological sites, and paleontological monitoring conditions have not been attached to the previous map approval. These standard conditions include retaining a qualified paleontologist, establishing procedures for cultural and scientific resource surveillance, and protection of any resources discovered during the grading process.</li> <li>When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them. In most cases, this fossil salvage can be completed in a short period of time. However, some fossils specimens (such as a complete large mammal skeleton) may require an extended salvage period. In these instances the paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert or halt grading to allow recovery of fossil remains in a timely manner. Because of the potential for the recovery of small fossil remains, such as isolated mammal teeth, it may be necessary in certain instances to set up a screen-washing operation on-site.</li> <li>Fossil remains collected during the monitoring and salvage portion of the mitigation program shall be cleaned, repaired, sorted, and cataloged. Compliance with this measure shall be verified by the Community Development Department.</li> </ul>		

Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation			
Cultural Resources			
	<ul> <li>CULT-1 Prior to subdivision for development, a detailed archaeological report(s) shall be prepared within PAs 51 and 30. This report(s) shall specifically address the potential for encountering archaeological resources at the time specific development is proposed. The report(s) shall provide recommendations to prevent degradation of archaeological resources such as site avoidance and data recovery. Recommendations contained in the report shall be implemented. Compliance with this measure shall be verified by the Community Development Department.</li> <li>CULT-2 Monitoring of excavation and grading activities associated with future development in PAs 51 and 30 shall be conducted by a certified archaeologist in accordance with the report required in Mitigation Measure Cult1. If resources are encountered in the course of ground disturbance, the archaeological testing program. The testing shall include recordation of artifacts, controlled removal of the materials, and an assessment of their importance under CEQA and the City's local guidelines. Compliance with this measure shall be verified by the Community Development.</li> <li>CULT-3 Prior to the issuance of grading permits and/or building permits for any future development in PAs 51 and 30, a detailed mitigation program shall be submitted by the applicant to the City of Irvine to address archaeological resources discovered during grading. Provisions of the program shall include an immediate evaluation of the find by a qualified archaeologist. If the find is determined to be a unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation shall be available. Work may continue on other parts of the construction site while archaeological resource during a perior to the issuance of grading permits when a project site includes potentially significant archaeological istic. These include recorditions applied prior to the issuance of grading permits when</li></ul>		

Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigatio
qualified archaeologist, establishing procedures for cultural and scientific resource surveillance, and protection of any resources discovered during the grading process. Compliance with this measure shall be verified by the Community Development Department.		
CULT-4 Prior to the issuance of any grading and/or building permits, a mitigation program shall be submitted by the developer to the City of Irvine to address the accidental discovery or recognition of any human remains. The program shall include the following:		
• There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:		
The county coroner must be contacted to determine that no investigation of the cause of death is required, and		
If the coroner determines the remains to be Native American:		
The coroner shall contact the Native American Heritage Commission within 24 hours.		
• The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.		
<ul> <li>The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriated dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or</li> <li>Where the following conditions occur, the landowner or his authorized representative chall rebury the Native American human remains and</li> </ul>		
	<ul> <li>qualified archaeologist, establishing procedures for cultural and scientific resource surveillance, and protection of any resources discovered during the grading process. Compliance with this measure shall be verified by the Community Development Department.</li> <li>CULT-4 Prior to the issuance of any grading and/or building permits, a mitigation program shall be submitted by the developer to the City of Irvine to address the accidental discovery or recognition of any human remains. The program shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:</li> <li>The county coroner must be contacted to determine that no investigation of the cause of death is required, and</li> <li>If the coroner determines the remains to be Native American:</li> <li>The coroner shall contact the Native American Heritage Commission within 24 hours.</li> <li>The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.</li> <li>The most likely descendent may make recommendations to the landowner or the person responsible for the exavation work, for means of treating or disposing of, with appropriated dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or</li> </ul>	<ul> <li>qualified archaeologist, establishing procedures for cultural and scientific resource surveillance, and protection of any resources discovered during the grading process. Compliance with this measure shall be verified by the Community Development Department.</li> <li>CULT-4 Prior to the issuance of any grading and/or building permits, a mitigation program shall be submitted by the developer to the City of Irvine to address the accidental discovery or recognition of any human remains. The program shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:</li> <li>The county coroner must be contacted to determine that no investigation of the cause of death is required, and</li> <li>If the coroner determines the remains to be Native American:</li> <li>The coroner shall contact the Native American Heritage Commission within 24 hours.</li> <li>The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.</li> <li>The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriated dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or</li> </ul>

## Table 1-1Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Plans, Programs, and Polices [PPPs], Project Design Features [PDFs], and Mitigation Measures [MM]	Level of Significance Before Additional Mitigation	Level of Significance After Additional Mitigation
	<ul> <li>location not subject to further subsurface disturbance.</li> <li>The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.</li> <li>The descendant identified fails to make a recommendation; or</li> <li>The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.</li> <li>Compliance with this measure shall be verified by the Community</li> </ul>		
	Development Department.		

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