GENERAL PLAN AMENDMENT 2013-001, SPECIFIC PLAN AMENDMENT 2013-001, DEVELOPMENT AGREEMENT 2013-002, AND AGREEMENT FOR EXCHANGE OF REAL PROPERTY BETWEEN CITY OF TUSTIN AND SOUTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT
TUSTIN, CALIFORNIA

MCAS TUSTIN SPECIFIC PLAN ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT ADDENDUM/INITIAL STUDY

Prepared for:

City of Tustin
300 Centennial Way
Tustin, California 92780

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Table of Contents

List of Figures

List of Tables

Appendices

1. Introduction

1.1 Project Summary

The Project consists of an agreement between the South Orange County Community College District (SOCCCD or District) and the City of Tustin (City) called the Agreement for the Exchange of Real Property (Exchange Agreement). The Exchange Agreement delineates the terms and processes associated with the exchange of the ultimate ownership of approximately 22 acres of land within the former Marine Corps Air Station (MCAS) Tustin, an area now referred to as "Tustin Legacy." The Project also includes an amendment to the MCAS Tustin Specific Plan to modify the permitted land uses and land use intensities in parts of Neighborhood A and to construct an extension of Bell Avenue as a Secondary Arterial; a General Plan Amendment (GPA) to add the Bell Avenue extension to the City's circulation plan and correct preexisting inconsistencies with the MCAS Tustin Specific Plan; a Development Agreement and Amended Conveyance Agreement between SOCCCD and the City (DA) and associated implementation documents; and an agreement for the funding and construction of Bell Avenue.

The objectives of the Project are to rationalize property boundaries to create larger, contiguous land areas for the City and SOCCCD, provide for a broader range of land uses in support of the objectives of the MCAS Tustin Specific Plan, and enhance circulation in the Project area by improving east-west connectivity between the existing Red Hill and Armstrong Avenues.

The Project will be approved, carried out, and implemented by the City and SOCCCD. The City and SOCCCD will be taking an action (i.e., approval) on the Project; therefore, pursuant to CEQA, California Code of Regulations, Title 14, Chapter 3, known as the CEQA Guidelines, Section 15051(c), both the City and SOCCCD are considered the Lead Agencies. The City and SOCCCD have agreed that since the City will consider the project before SOCCCD, the City will be the Lead Agency pursuant to CEQA Guidelines Section 15051(d), and SOCCCD will be the responsible agency. The City and SOCCCD have agreed to jointly conduct the CEQA analysis.

1.2 Organization of Addendum

The organization of this CEQA document is according to the following sections:

Section 1: Introduction
Section 2: Project Description
Section 3: Environmental Evaluation
Section 4: Summary of Mitigation Measures
Section 5: Sources/Acronyms
Section 6: Report Preparers
Appendix

This Addendum incorporates the Environmental Checklist Form from Appendix G of the State CEQA Guidelines as the Initial Study. The environmental issue impact questions contained in Section 3 of this document also conform to the required contents of this Environmental Checklist Form.

1.3 Previous Environmental Documentation

A Final Joint Program Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) for the Disposal and Reuse of Marine Corps Air Station (MCAS) Tustin was prepared by the City of Tustin and the Department of the Navy (Navy) in accordance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) dated October 1996, as amended by the Errata dated

September 1998. The Mitigation Monitoring and Reporting Program (MMRP) for the FEIS/EIR was adopted by the City on January 16, 2001 (Resolution 00-90). On March 3, 2001, a Record of Decision (ROD) was issued by the Navy approving the FEIS/EIR and the Specific Plan.

There have been one supplement and four addenda to the FEIS/EIR. The City of Tustin certified a supplement to the FEIS/EIR on December 4, 2004 and an addendum on April 3, 2006. The District certified an addendum on November 12, 2008 (SOCCCD Resolution 08-35) related to the approval of a Long Range Academic & Facilities Plan and a Long Range Academic Plan for the Advanced Technology & Education Park (ATEP) campus; an addendum on March 24, 2009 (SOCCCD Resolution 09-05) related to a Concept Plan for Phase 3A of the ATEP campus; and an addendum on December 5, 2011 (SOCCCD Resolution 11-38) related to an exchange of land between the District and the County of Orange. The original FEIS/EIR document, the supplement, and the City's and District's addenda are collectively referred to herein as the "FEIS/EIR." In addition, the City has certified multiple CEQA documents associated with prior amendments to the MCAS Tustin Specific Plan and development projects within Tustin Legacy.

Section 1.5.2 of the FEIS/EIR states that the FEIS/EIR is a Program EIR and it is intended to be used as the CEQA compliance document for all public and private actions made in furtherance of, the Specific Plan. The FEIS/EIR analyzed the environmental consequences of the Navy disposal and local community reuse of the MCAS Tustin per the Reuse Plan and the MCAS Tustin Specific Plan/Reuse Plan (referred to in this document as the Specific Plan). The CEQA analysis also analyzed the environmental impacts of certain "Implementation Actions" that the City of Tustin and City of Irvine must take to implement the MCAS Tustin Specific Plan, including but not limited to the adoption by the City of Tustin of the MCAS Tustin Specific Plan and adoption of the MCAS Tustin Redevelopment Plan.

The MCAS Tustin Specific Plan proposed and the FEIS/EIR analyzed a multi-year development period for the planned urban reuse project (Tustin Legacy). When individual activities within the Specific Plan are proposed, the lead agency is required to examine the individual activities to determine if their effects were fully analyzed in the FEIS/EIR. The agency can approve the activities as being within the scope of the project covered by the FEIS/EIR. If the agency finds that pursuant to Sections 15162, 15163, 15164, and 15183 of the CEQA Guidelines no new effects would occur, nor would a substantial increase in the severity of previously identified significant effects occur, then no supplemental or subsequent EIR is required.[1]

1.4 Purpose of this Addendum

Pursuant to Sections 15051 and 15367 of the State CEQA Guidelines, the City is the Lead Agency for the CEQA compliance associated with the Project because it will approve, carry out, and implement the Project and will be the first agency to approve the Project. SOCCCD will be a responsible agency.

Based on the analysis in this Initial Study and Addendum, the City and SOCCCD determined that the potential impacts of the Project were previously analyzed in or are substantially similar to the impacts analyzed in the FEIS/EIR and that none of the conditions identified in Public Resources Code Section 21166 or Section 15162 of the CEQA Guideless applies. The City and SOCCCD determined that they would prepare this Addendum to: (1) evaluate whether the Project's environmental impacts were already analyzed in the FEIS/EIR; (2) document the District's and City's findings with respect to the Project and its environmental determinations; and, (3) evaluate and document that a new, supplemental or subsequent EIR, Negative Declaration (ND), or Mitigated Negative Declaration (MND) or other CEQA document was not warranted.

This Addendum is the appropriate CEQA documentation for the project because:

[1] MCAS Tustin Zone Change (Specific Plan Amendment) 05-002, DDA and Development Plan Addendum, p. 1-1.

- the Project does not change the land uses that are currently permitted within the MCAS Tustin Specific Plan, the impacts of which have been previously analyzed in the FEIS/EIR;
- the Project would not permit an intensification of permitted uses that would lead to increased environmental impacts beyond those that are already identified in the FEIS/EIR;
- the Project does not modify previously-analyzed projects in any substantive way;
- no new mitigation measures are required;
- none of the conditions identified in Public Resources Code Section 21166 or Section 15162 of the CEQA Guideless applies; and,
- no new significant adverse project-specific or cumulative impacts in any environmental areas were identified, nor would any project-specific or cumulative impacts in any environmental areas be made worse as a result of implementing the Project.

1.5 Basis for an EIR Addendum

An agency may prepare an addendum to a prior EIR pursuant to CEQA Guidelines Section 15164 that states, in pertinent part, that: "The lead agency [...] shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR have occurred." An agency may prepare an addendum to document its decision that a subsequent EIR is not required. (CEQA Guidelines Section 15164, subdivisions (a) and (e) and Section 15162, subdivision (a))

The Project is consistent with and aids in the implementation of the MCAS Tustin Specific Plan. Specifically, the Project would not change the overall intent of the Education Village (PA-1), which is described as a "specialized educational environment with an array of public-serving uses" (MCAS Tustin Specific Plan, pg. 2-10). The uses permitted by the DA further SOCCCD's educational mission as discussed in SOCCCD's Long-Range Academic and Facilities Plan, dated October 2008 and which was the subject of an addendum certified on November 12, 2008 (SOCCCD Resolution 08-35). Further, relative to the overall Tustin Legacy development, the Project would not significantly change the intensity or scale of development approved in the Specific Plan, District's Conveyance Agreement, Long-Range Academic and Facilities Plan (LRP), and Concept Plan or analyzed in the previously certified FEIS/EIR. The Project rationalizes parcel configuration to allow for a more efficient use of property by creating contiguous, compact, and conventionally-shaped parcels for future development pursuant to the approved land uses that includes complimentary commercial, offices uses and light industrial uses, joint uses, and other collaborative arrangements to further SOCCCD's education objectives. As such, there are no new significant impacts resulting from the Project, nor is there any substantial increase in the severity of any previously identified environmental impacts. In addition, the circumstances under which the Project would be implemented would not result in new or more severe significant environmental impacts.

None of the conditions described in Section 15162 of the CEQA Guidelines have occurred. Specifically, there have not been: (1) changes to the Project that require major revisions to the previously certified FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions to the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete. The City and SOCCCD will continue to comply with the adopted applicable MMRPs.

1.6 Evaluation of Alternatives

CEQA requires a comparative evaluation of a Project and alternatives to the Project, including the "No Project" alternative. This Addendum relies on the FEIS/EIR for the evaluation of alternatives. The FEIS/EIR addressed a reasonable range of alternatives for the project. The City of Tustin is implementing Alternative 1 of the FEIS/EIR, and there is no information indicating that the City should implement a different alternative or that a different alternative is feasible.

Consistent with Section 15183 of the State CEQA Guidelines that identifies which environmental evaluation is required for projects that are consistent with a community plan or zoning, there is no need to address new alternatives in this Addendum. Additionally, there are no circumstances cited in Section 15162 of the State CEQA Guidelines, which require preparation of a subsequent EIR relative to alternatives.

1.7 Summary of Findings

Based on the initial study analysis and environmental checklist prepared for the Project and pursuant to Section 15162, 15163, 15164, and 15183 of the CEQA Guidelines, the City and SOCCCD have determined, on the basis of substantial evidence in the light of the whole record, that:

- The Project was examined in light of the FEIS/EIR and has been adequately analyzed in the FEIS/EIR because the Project does not substantively modify the previously-analyzed proposal included in the MCAS Tustin Specific Plan;
- The Project would not have any effects that were not already examined in the FEIS/EIR, no new mitigation measures are required, and there are no new significant adverse project-specific or cumulative impacts in any environmental areas that were identified, nor would any project-specific or cumulative impacts in any environmental areas be made worse as a result of implementing the Project;
- All feasible mitigation measures identified in the FEIS/EIR have been incorporated into subsequent actions that the City and SOCCCD commit to fully implement;
- There is no information indicating that a different Alternative should be implemented or is feasible under the MCAS Tustin Specific Plan;
- The Project does not propose substantial changes to the MCAS Tustin Specific Plan which would require major revisions to the FEIS/EIR due to new or substantially more severe significant environmental effects than previously analyzed in the FEIS/EIR;
- There have been no substantial changes in circumstances under which the Project would be undertaken that would require major revisions to the FEIS/EIR due to new or substantially more severe significant environmental effects than previously analyzed in the FEIS/EIR; and
- No new information of substantial importance as described in subsection (a)(3) of Section 15164 has been revealed that would require major revisions to the FEIS/EIR or its conclusions.

1.8 Intended Use of this Addendum

This Addendum, which includes the Environmental Checklist/Initial Study for the Project, will serve as the appropriate CEQA documentation for all applicable public agency decision-makers and the public regarding the objectives and components of the Project. The CEQA Guidelines defines an Initial Study as a preliminary analysis prepared by a Lead Agency to determine whether a new, supplemental, or

subsequent EIR, ND, or MND or other CEQA document must be prepared or to identify the significant environmental effects to be analyzed in an EIR.[2]

This Addendum has been prepared in accordance with the following:

- California Environmental Quality Act of 1970 (Public Resources Code Sections 21000-21177);
- California Code of Regulations, Title 14, Division 6, Chapter 3 (State CEQA Guidelines, Sections 15000-15387); and,
- SOCCCD guidelines for the implementation of CEQA.

This Addendum is intended to serve as the CEQA document for any activities by the City, SOCCCD, or any responsible or other agency's actions in implementing, approving, permitting, or carrying out the Project in any other way.

1.9 Environmental Checklist Form

This checklist and the following evaluation of environmental impacts takes into consideration the preparation of environmental documents prepared at an earlier stage in the Project. Therefore, the checklist and analysis evaluate whether the environmental effects of the Project were covered in the FEIS/EIR pursuant to Section 15162 and 15168 of the CEQA Guidelines.

The FEIS/EIR analyzed a multi-year development period for the Tustin Legacy planned urban reuse project. When individual development activities within the MCAS Tustin Specific Plan are proposed, the lead agency is required to examine individual activities to determine if their effects were fully analyzed in the FEIS/EIR. The lead agency can approve the activities as being within the scope of the project covered by the FEIS/EIR if the agency finds that pursuant to Sections 15162, 15163, 15164, and 15183 of the CEQA Guidelines that no new effects would occur, nor would a substantial increase in the severity of previously identified significant effects occur. Then the lead agency can determine that no supplemental or subsequent environmental document is required.

The Project will be approved, carried out, and implemented by the City and SOCCCD. As described in Section 1.1, the City is the lead agency. The City and SOCCCD have agreed to jointly prepare this comprehensive Environmental Checklist to determine if the Project is within the scope of the FEIS/EIR and if new effects would occur as a result of the Project and to document their findings in this Addendum.

1.9.1 Project Title

Agreement for Exchange of Real Property between City of Tustin and South Orange County Community College District

1.9.2 Lead Agency Name, Address and Contact Person

City of Tustin
300 Centennial Way
Tustin, California 92780
Attention: Elizabeth Binsack, Community Development Director
(714) 573-3140

[2] California Code of Regulations, Title 14, Division 6, Chapter 3 (State CEQA Guidelines), Sections 15365 and 15367.

1.9.3 Responsible Agency Name, Address and Contact Person

South Orange County Community College District
28000 Marguerite Parkway
Mission Viejo, CA 92692
Attention: Dr. Debra Fitzsimons, Vice Chancellor
(949) 582-4664

1.9.4 Project Location

West of Armstrong Avenue, north and south of Valencia Avenue, east of Red Hill Avenue and north of future Warner Avenue within the Tustin Legacy development (former MCAS Tustin).

1.9.5 Project Sponsors' Names and Addresses

City of Tustin
300 Centennial Way
Tustin, California 92780
Attention: Elizabeth Binsack, Community Development Director

South Orange County Community College District
28000 Marguerite Parkway
Mission Viejo, CA 92692
Attention: Dr. Debra Fitzsimons, Vice Chancellor

1.9.6 General Plan Designation – Existing

MCAS Tustin Specific Plan

1.9.7 Zoning - Existing

MCAS Tustin Specific Plan (SP-1 Specific Plan).

The Specific Plan designation for the Project site is Education Village (PA 1), located within Neighborhood A.

1.9.8 Other Public Agencies Approvals Required

Both the Tustin City Council and the SOCCCD Board of Trustees must approve the Exchange Agreement and the Development Agreement and Amended Conveyance Agreement and associated implementation documents.

1.9.9 Environmental Factors Potentially Affected

Any environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. The following table provides a summary of these environmental issue areas.

Table 1. Environmental Factors Potentially Affected

☐	Aesthetics	☐	Hazards/Hazardous Materials	☐	Public Services
☐	Agriculture Resources	☐	Hydrology/Water Quality	☐	Recreation
☐	Air Quality	☐	Land Use and Planning	☐	Transportation/Circulation
☐	Biological Resources	☐	Mineral Resources	☐	Utilities/Service Systems
☐	Cultural Resources	☐	Noise	☐	Mandatory Findings of Significance
☐	Geology and Soils	☐	Population and Housing		

1.9.10 Environmental Determination

Based on this initial evaluation, the following table identifies the environmental determination.

Table 2. Environmental Determination

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	☐
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	☐
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	☐
I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	☐
I find that although the proposed project could have an effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided, mitigated or overridden pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	☒

Signature Date

Elizabeth Binsack, Community Development Director
City of Tustin

2. Project Description

2.1 Project Site Location and Composition

The Project site is located in the City of Tustin in the County of Orange within the former MCAS Tustin, now referred to as "Tustin Legacy" (regional map in Figure 1). Although MCAS Tustin's boundary covered an area within the cities of Irvine and Tustin, Tustin Legacy encompasses only the area within the City of Tustin. Tustin Legacy is a 1,511-acre mixed-use project, which will ultimately include housing, various commercial businesses, a various light industrial uses, schools, and community and regional parks. Portions of Tustin Legacy are developed, including an approximately one-million-square-foot outdoor shopping mall called "The District," single-and multi-family home communities, an elementary school, a homeless/transitional shelter, an abused and neglected children facility, a sheriff academy facility, Phase I of the ATEP campus and focal parks. The city of Santa Ana borders Tustin Legacy to the south and southwest.

Tustin Legacy is in close proximity to five freeways: the Costa Mesa (SR-55), Santa Ana (I-5), Laguna (SR-133), Garden Grove (SR-22), and San Diego (I-405) freeways (see Figure 1). Major roadways bordering Tustin Legacy include Red Hill Avenue on the west, Edinger Avenue/Irvine Center Drive on the north, Jamboree Road on the east, and Barranca Parkway on the south. Jamboree Road provides access to the Eastern Transportation Corridor (SR-261 toll road). John Wayne Airport is located approximately 3.5 miles to the south, and the Tustin Metrolink Commuter Rail Station is located approximately 1½ miles to the northeast of the Project site. The Project site is located near the northwestern corner of Tustin Legacy.

The Project site consists of 89 acres located within PA 1, which is a 128.3-acre portion of Neighborhood A (Figure 2). To the west of the Project site is Red Hill Avenue, north is a vacant site that is planned for a public community park, east is Armstrong Avenue, and south is a future extension of Warner Avenue and Rancho Santiago Community College District (RSCCD) Sheriff's Training Academy (Figure 3).

Owners of the 89 acres include the City, SOCCCD, and the Navy. The SOCCCD's parcel will ultimately be built out as the Advanced Technology & Education Park (ATEP). Navy land ownership in the project area will decrease over time in favor of the other landowners and the County of Orange, as hazardous materials are removed and lands become available for development. During the clean-up process, Navy lands are controlled by the other three local owners under Lease in Furtherance of Conveyance (LIFOC) agreements. Table 3 provides a breakdown of land ownership in the project area.

Table 3. Existing Project Site Planning Areas

Planning Area	Owner	Fee Ownership Acreage	LIFOC Acreage
1-B	Navy	--	10.0
1-D	Navy	--	2.4
1-E	SOCCCD	1.9	--
1-G	City of Tustin	15.0	--
1-H	SOCCCD/Navy	29.9	19.8
1-I	SOCCCD/Navy	6.7	3.3
TOTALS		53.5	35.5
		89.0	

To date, there has been no demolition of former military facilities or construction of new buildings within City-owned land in Neighborhood A. Within the ATEP site, the District has completed development at the northwest corner of Valencia Avenue and Lansdowne Road (15445 Lansdowne Road), where Phase I of

the ATEP campus consists of 14,676 square feet of classrooms, laboratories, offices, food services and support space on a one-acre parcel. On the northeast corner of Valencia Avenue and Lansdowne Road, a 104-space parking lot serves the existing ATEP Campus. The approved ATEP Phase 3A Concept Plan permits development of a further 28 acres of the ATEP site with 305,000 square feet of various educational and support uses. Demolition of all former military structures on the ATEP site was completed in 2012. The foundations of prior military buildings and related infrastructure continue to be present south of Valencia Avenue; however, demolition of the foundations has been permitted and demolition is planned in 2013.

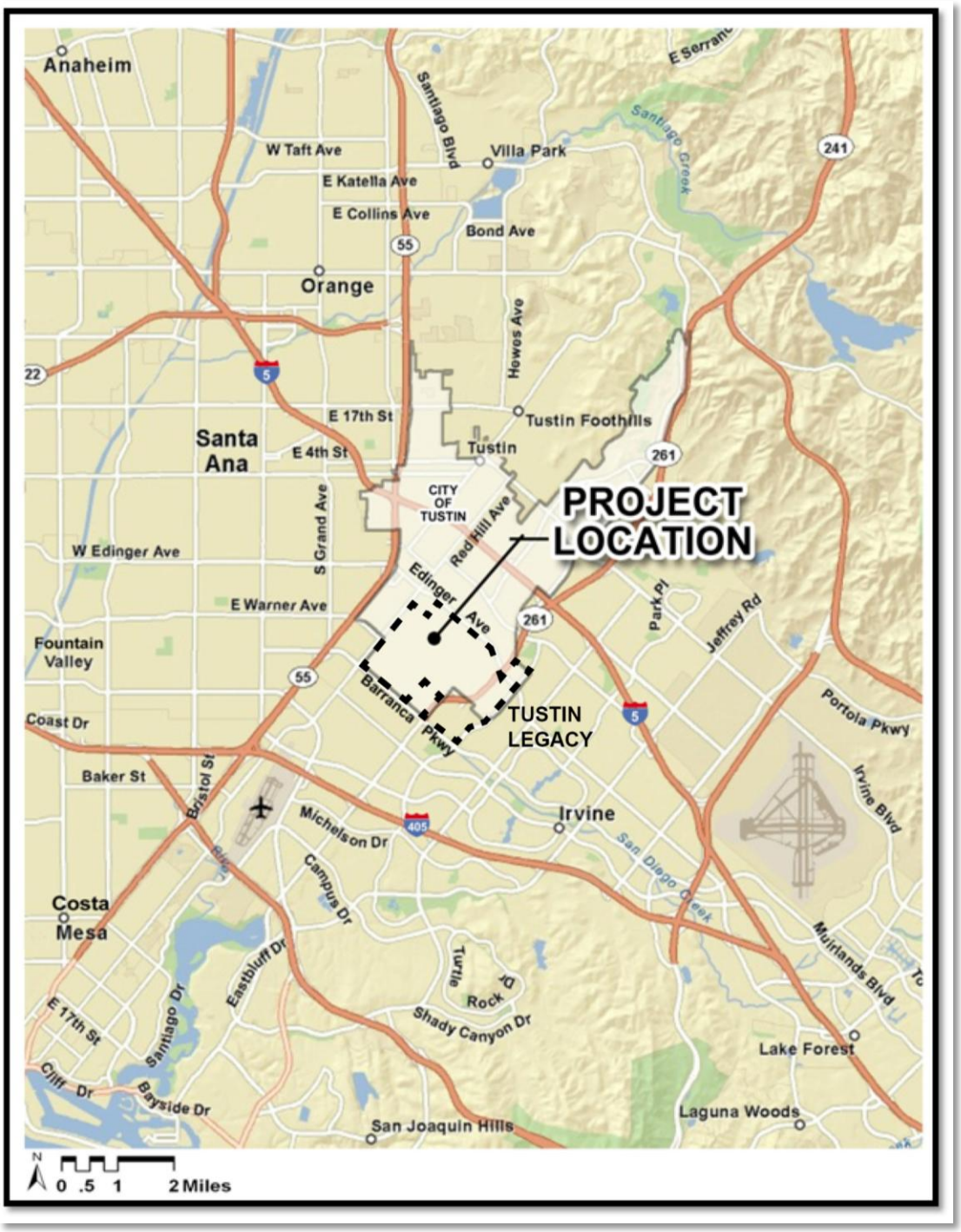

Figure 1 Regional Map

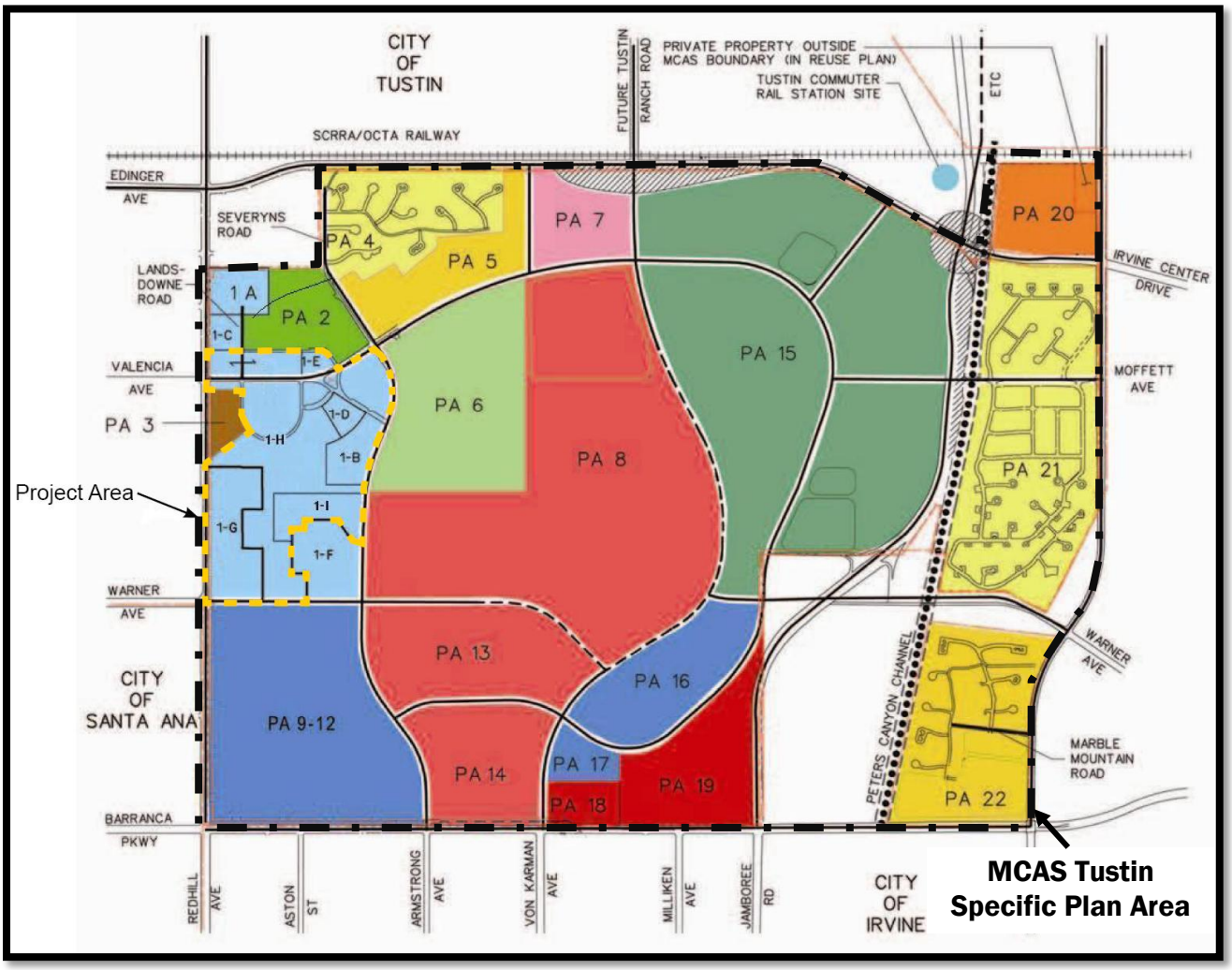

Figure 2 Project Site Boundaries

Surrounding uses are listed in Table 4 and mapped in Figure 3. Existing PAs and their respective owners are mapped in Figure 4.

Table 4. Surrounding Land Uses

DIRECTION	LAND USE	CURRENT OWNER	EXISTING CONDITION
Project Site	Sheriff's Training Facility (Neighborhood A, PA 1-B)	Navy	Existing Military Buildings
	ATEP Campus (Neighborhood A, Planning Areas (PA) 1-E, 1-H, 1-I)	SOCCCD/Navy	Multi-phase development in progress
	Educational Village (PA 1-G)	City of Tustin	Existing Military Buildings and Vacant Land
	Child Care Facility (PA 1-D)	City of Tustin/Navy	Existing Military Buildings
North	Community Park (Neighborhood A, PA 2)	City of Tustin/Navy	Vacant Land
North	Elementary School (Neighborhood A, PA 1-A)	Tustin Unified School District	Developed
Northwest	Abused Children's Shelter (Neighborhood A, PA 1-C - partial)	County of Orange	Developed
Northeast	Medium Density Residential (Neighborhood B, PAs 4 & 5)	Private	Under development
West	Orange County Rescue Mission (Neighborhood A, PA 3)	Orange County Rescue Mission	Developed
West of Red Hill Ave.	Commercial and light manufacturing	Private	Developed
East	Urban Regional Park (Neighborhood C, PA 6)	County of Orange/Navy	Existing Military Buildings
South	Commercial/Office (Neighborhood D, PA 8)	City/Navy	Vacant
Southeast	Mixed Use (Neighborhood E, PAs 9-12)	City/Navy	Vacant
Southeast	Sheriff's Training Academy (Neighborhood A, PA 1-F)	RSCCD	Developed

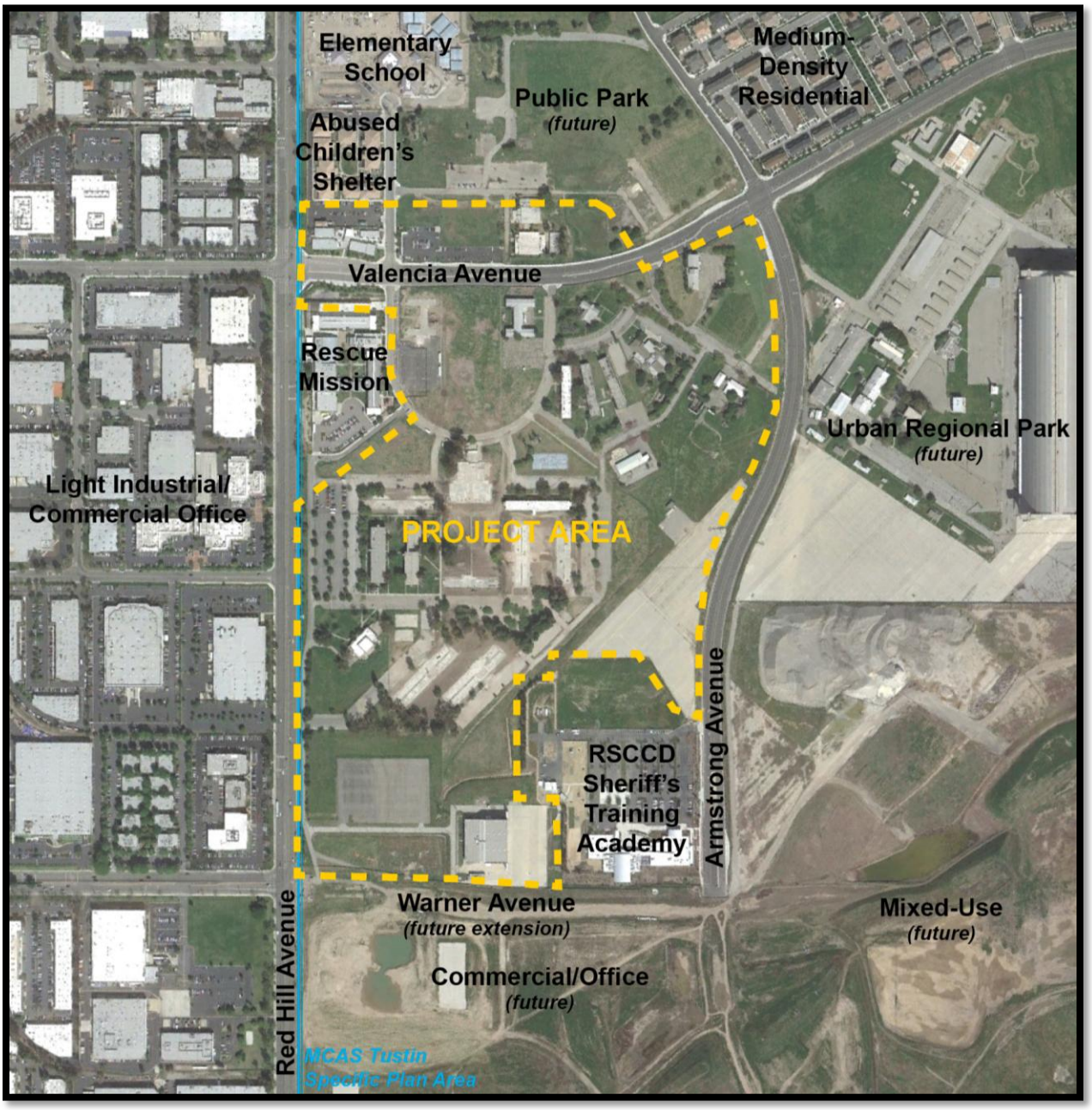

Figure 3 Site Vicinity Land Uses

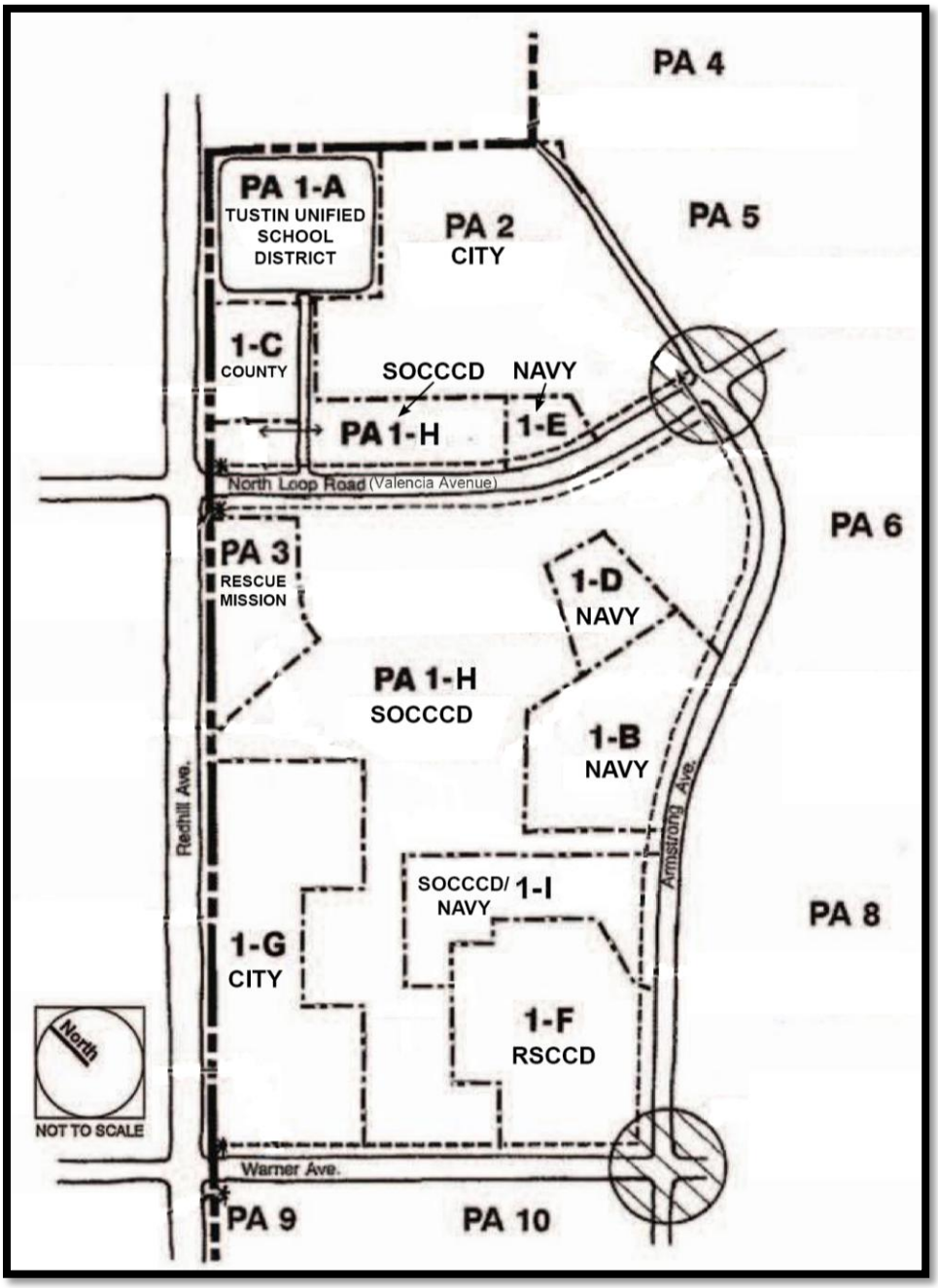

Figure 4 Existing Planning Areas and Current Owners

2.2 Project Description

The Project consists of an agreement between the SOCCCD) and the City called the Agreement for the Exchange of Real Property (Exchange Agreement). The Exchange Agreement delineates the terms and processes associated with the exchange of the ultimate ownership of approximately 22 acres of land.

Associated with the exchange of property are five other main components: 1) a GPA to: a) recognize the SPA described in number 2) below; and, b) add the Bell Avenue extension to the City's circulation plan as a Secondary Arterial; 2) an amendment to the MCAS Tustin Specific Plan to: a) add an extension of Bell Avenue as a Secondary Arterial to the circulation plan; and, b) modify permitted land uses and land use intensities in parts of Neighborhood A; 3) a Development Agreement and Amended Conveyance Agreement (DA) between SOCCCD and the City and related implementation documents that outline the allowed land uses, assignment of vehicle trips and building square footages consistent with the proposed SPA, development impact fee amounts and process for conveying land from the Navy; 4) an Infrastructure Construction and Payment Agreement for Bell Avenue (Bell Avenue Agreement); and, 5) construction of the extension of Bell Avenue. Each of these components are described in more detail below.

2.2.1 Exchange Agreement between City and SOCCCD

An Exchange Agreement between the City and SOCCCD is proposed to delineate the terms and processes associated with the exchange of the ultimate ownership of land currently within the respective parties' ownership in fee or in the form of a lease or sublease. The Exchange Agreement provides for an exchange of 6 sites covering 22 acres within Neighborhood A, as shown in Figure 5. Table 5 details the ownership interests and to which party each area is transferred. In addition to rationalizing property boundaries for both the City and SOCCCD, the land exchange will allow for creation of a new public (City-owned) right-of-way for the extension of Bell Avenue from Red Hill Avenue to Armstrong Avenue.

Two parcels included in the Exchange Agreement are currently owned by the Navy. Such lands are expected to be transferred to the City and SOCCCD once a Finding of Suitability to Transfer (FOST) is issued by the Navy for the lands. Once issued, the FOST will document that the Navy has determined the parcels environmentally suitable for transfer and that either all remediation necessary to protect human health and the environment has been completed or is in place and operating properly and successfully such that development can safely occur on the site.

Table 5. Detail of Areas Transferred Between City and SOCCCD

	Acreage Transferred to Each Party			
	City		**SOCCCD**	
	Sublease	**Fee**	**Sublease**	**Fee**
Area 1		6.8		
Area 2				6
Area 3	Retained by City for Bell Ave			
Area 4		1.4		
Area 5	1.1			
Area 6				3
Area 7	3			
Area 8			2.4	
Area 9		1		
Area 10			Retained by SOCCCD	
Subtotal (w/o Bell)	**3**	**7.8**	**2.4**	**9**
Total (w/o Bell)	**10.8**		**11.4**	
Subtotal (w/Bell)	**4.1**	**9.2**	**2.4**	**9**
Total (w/ Bell)	**13.3**		**11.4**	

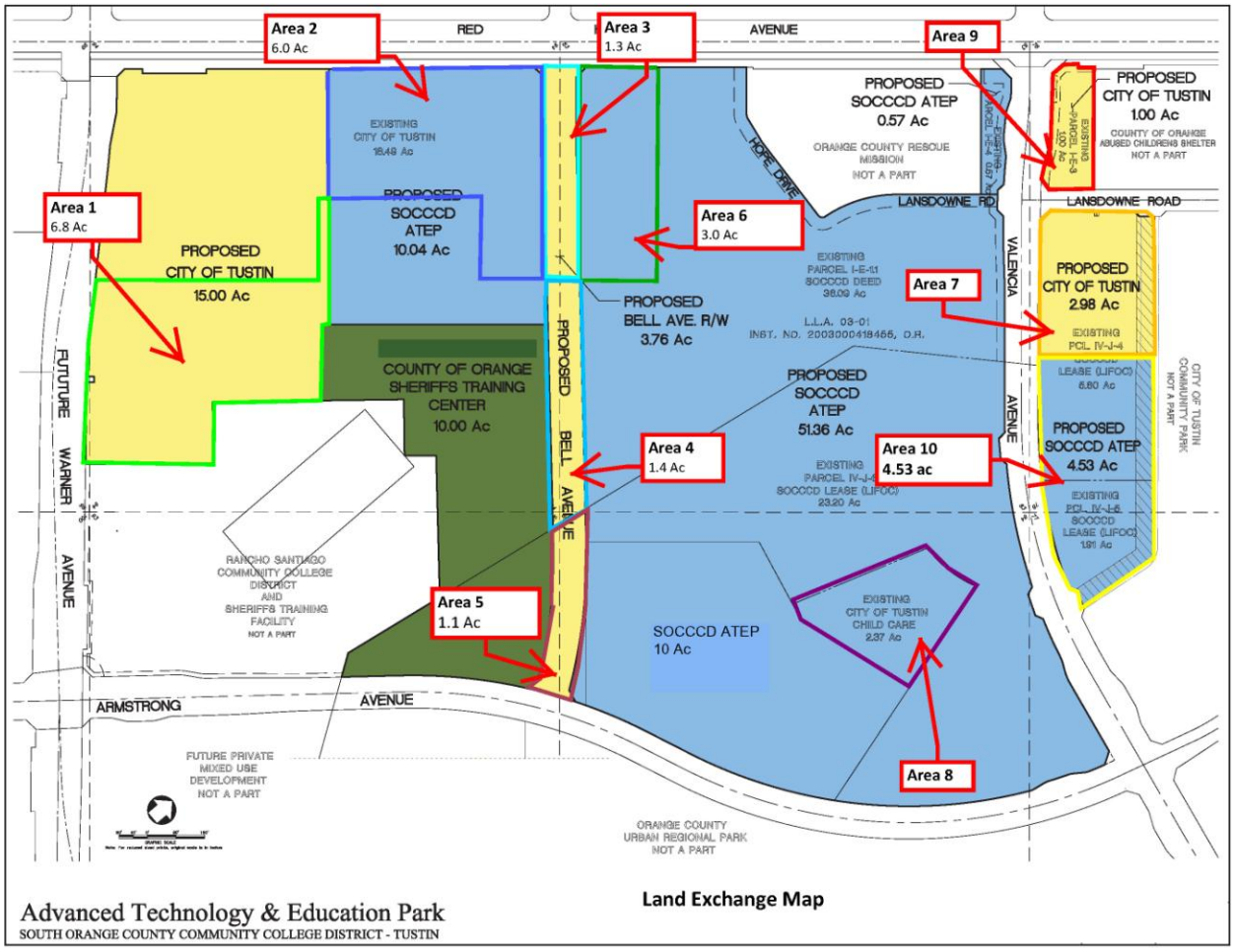

Figure 5 Exchange Parcels

2.2.2 General Plan Amendment

An amendment to the Tustin General Plan is proposed to identify the presence of a new SPA number associated with the MCAS Tustin Specific Plan, to note the floor area ratio (FAR) permitted for uses by the SPA, and to add Bell Avenue to the City's circulation plans as a Secondary Arterial with a Class II bicycle lane between Red Hill and Armstrong Avenues. No General Plan land use changes are proposed. The SPA is described below in section 2.2.3 and the extension of Bell Avenue is described in section 2.2.6.

2.2.3 Specific Plan Amendment

The SPA is limited to Neighborhood A, Planning Area 1 of the MCAS Tustin Specific Plan.

2.2.3.1 Amendment to Sub-Planning Areas

The SPA modifies sub-planning area boundaries within PA 1, and adds three new sub-planning areas (1-J, 1-K, and 1-L). Figure 6 shows Neighborhood A with the new sub-planning areas. Table 6 lists existing and proposed sizes of the Neighborhood A planning areas.

Table 6. Detail of Existing and Proposed Planning Areas within Neighborhood A

Planning Area	Existing Net Acreage	Proposed Net Acreage	Change in Net Acreage
PA 1	***124.7***	***120.9***	**– 3.8**
1-A	10.0	10.0	–
1-B	10.0	10.0	–
1-C	4.0	4.0	–
1-D	2.4	2.4	–
1-E	1.9	4.5	+ 2.6
1-F	15.0	15.0	–
1-G	14.9	11.4	– 3.5
1-H	56.5	36.6	– 19.9
1-I	10.0	10.0	–
1-J	*New PA*	4.0	+ 4.0
1-K	*New PA*	3.0	+ 3.0
1-L	*New PA*	10.0	+ 10.0
PA 2	***24.1***	***24.1***	**–**
PA 3	***5.1***	***5.1***	**–**
Total Neighborhood A	**153.9**	**150.1**	**– 3.8**
Right-of-Way (total for all Specific Plan areas)	***173.4***	***177.2***	***3.8***

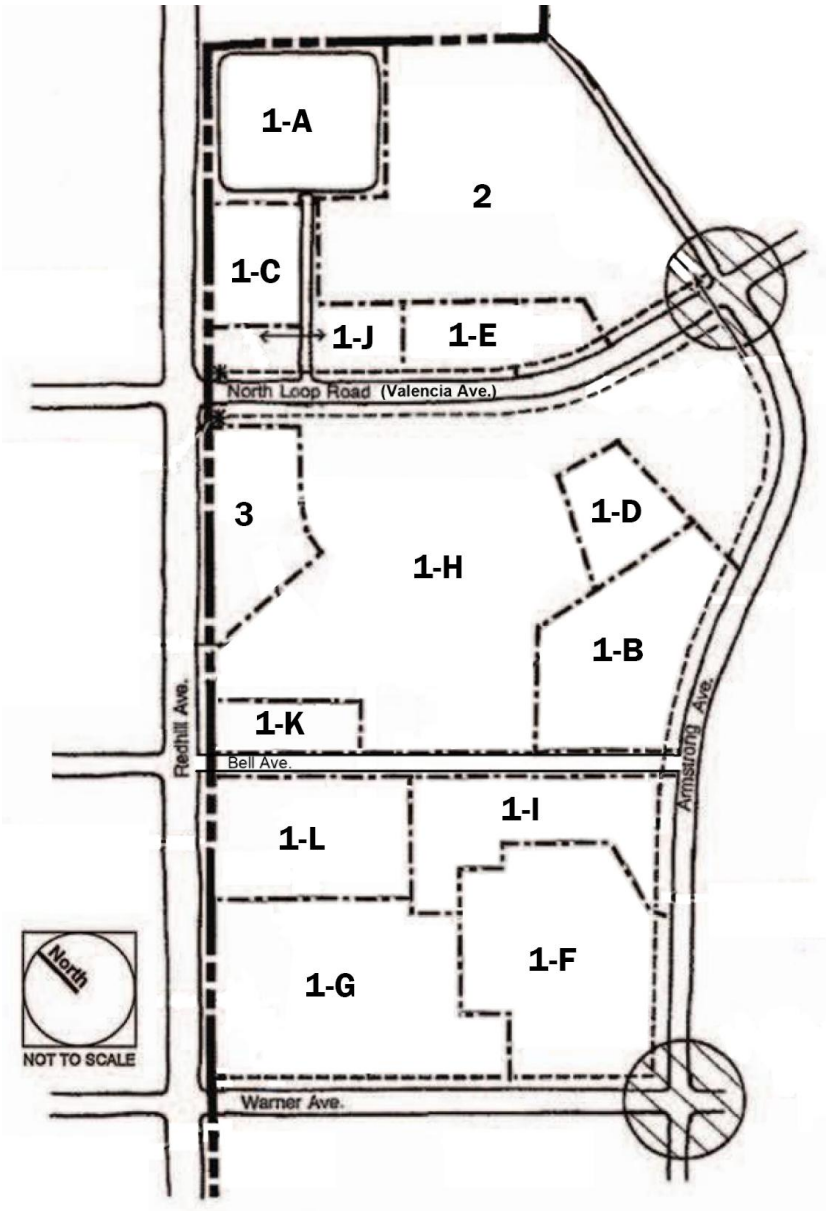

Figure 6 Proposed Planning Area Boundaries

2.2.3.2 Bell Avenue

Similar to the GPA, the SPA would add to the circulation plan an extension of Bell Avenue as a Secondary Arterial with a Class II bike lane between Red Hill Avenue and Armstrong Avenue. The Project Traffic Study (Appendix A) determined that with the extension of Bell Avenue, increased roadway capacity is available in the circulation system. The Bell Avenue extension would reduce traffic congestion at the Red Hill Avenue/Warner Avenue intersection and the Red Hill Avenue/Valencia Avenue intersection, and provides an alternative route for motorists accessing Tustin Legacy. These factors permit the increase of the current vehicle trip cap for the MCAS Tustin Specific Plan. The trip cap for Neighborhood A is the maximum number of trips that new development can create without requiring additional environmental review for traffic. The current trip cap was evaluated in the FEIS/EIR. The prior trip cap for the ATEP site

was 5,470 ADT and for the City parcels 1,672 ADT. As detailed in section 3.16, with the construction of Bell Avenue, levels of peak-hour traffic congestion would decrease at several locations despite the increased development square footage included in the Project.

The Traffic Study determined that, based on the size and configuration of the Bell Avenue extension, average daily trip (ADT) volumes (the measure used in establishing the MCAS Tustin Specific Plan trip cap) may be increased by 10,000 ADT without triggering significant adverse effects on the roadway system. This additional roadway capacity is proposed to be split evenly between properties owned by the City and SOCCCD (that is, each entity would be permitted an additional 5,000 ADT). The City anticipates that only about 25 percent of its allocation of 5,000 ADT (up to 1,250 ADT) would be used within Neighborhood A; the remaining trips (3,750 ADT) would be made available for additional development in other areas of Tustin Legacy. The full amount of these trips will not be needed because the City recently amended the MCAS Specific Plan to include government office uses in Neighborhood A to accommodate an expected relocation of the Army Reserve operations from the southern boundary of Tustin Legacy. A total of 1,250 ADT is sufficient for the Army Reserve operations. The specific location of where the balance of these trips will be assigned has not been determined and the City will determine at that time whether subsequent CEQA and traffic analysis may be needed when the trips are allocated to a specific location within Tustin Legacy. The proposed increase in trips is negligible compared to the overall MCAS Tustin Specific Plan planned trip count of 216,440 ADT.

The City and SOCCCD are entering into an agreement for the funding and construction of Bell Avenue to ensure the roadway is timely constructed. Further, there are two other sources of trips that are assigned to Neighborhood A, but are not allocated to a specific parcel: (1) 6,220 trips associated with the "Tustin Facility" and (2) 2,683 trips related to commercial uses in Planning Area 1. The FEIS/EIR analyzed impacts assuming these 8,903 trips will be assigned to Neighborhood A parcels. However, with this project, the City has determined it is unlikely that these 8,903 unallocated trips will be assigned to parcels in Neighborhood A. The 5,000 trips being assigned to SOCCCD's parcel are less than the combined number of 8,903 unallocated trips, and therefore, as is demonstrated in the traffic impact analysis, the impacts are not expected to exceed that amount previously analyzed. The City will determine whether subsequent CEQA and traffic analysis will be needed when these 8,903 trips are assigned to a parcel. Until the City makes this determination, it is speculative to and not reasonable to assume the trips will be assigned to parcels in Neighborhood A.

2.2.3.3 Amended List of Allowed Land Uses in Neighborhood A

Referencing the proposed planning areas shown in Figure 6, permitted land uses would be amended on PA 1-B, 1-E, 1-H, I-K, and I-L to explicitly include various types of complimentary commercial, office and light industrial uses, joint uses, and other collaborative arrangements to further SOCCCD's education objectives. The Conveyance Agreement, Long Range Academic and Facilities Plan, and ATEP Phase 3A Concept Plan all identify and permit various office and commercial uses, including (as a partial list): office and retail service uses; office facilities used for basic and applied research, testing, and consulting; and industrial/commercial business incubators supporting educational programs. The proposed changes to the list of allowed uses would remove ambiguity related to commercial and light industrial uses on the ATEP site. Such uses would be permitted in these planning areas only if the Exchange Agreement is executed.

Additionally, such uses would be permitted in PA 1-B, but only in the event an exchange of land occurs between the City and SOCCCD and if an agreement is reached between the County and SOCCCD for County's future ownership of PA 1-I. Such uses would also be permitted in PA 1-I in the event an exchange of land does not occur between the County of Orange and SOCCCD and an agreement is not reached between the County and SOCCCD for County's future ownership of PA 1-I. (This exchange of land was

analyzed in a prior Addendum to the FEIS/EIR, approved December 5, 2011 by the SOCCCD Board of Trustees, and is not part of this project.)

All uses permitted by the SPA would continue to be subject to trip caps established by the Specific Plan, as amended by the analysis provided below in relation to additional development capacity resulting from the Bell Avenue extension.

2.2.3.4 Change in Allowed Square Footage on ATEP Site

Under the DA all buildings to be constructed on the SOCCCD Property will be designed only for Land Use Category 1 and Land Use Category 2 uses. Uses in Land Use Category 1 consist of uses that are education-oriented, including all facilities normally found on college campuses, such as classrooms; labs; administration facilities; student support; cafeteria and food services; bookstore; photocopy services; dormitory and student housing; workforce center; maintenance/security/storage facilities and structures; security and guard houses, gates and other security facilities and structures; student health services; other uses which include facilities for traditional and non-traditional advanced education (extension and/or advanced degree opportunities), adult education, continuing education, vocational, job and educational training, and other education and training.

The educational activities in buildings categorized as Land Use Category 1 may be undertaken by public, non-profit or for-profit educational institutions; provided, however, that a substantial portion of the educational activities in Land Use Category 1 Building Area will be conducted by public or non-profit educational institutions. Building Area devoted to uses in Land Use Category 1 which are not strictly educational (Service Uses), e.g., food services, may be conducted by for-profit entities under contract with educational institutions without affecting the character of such Building Area as Land Use Category 1. In addition, educational institutions regularly agree to permit other entities to use facilities primarily devoted to education from time to time in exchange for a payment or other consideration. Also within Land Use Category 1 are other uses (Supportive Uses) that are accessory and subordinate with the educational uses above. Supportive uses support the educational purpose of the education-oriented uses described above, provided they do not exceed more than ten percent (10%) of the total Building Area developed under Land Use Category 1 including but not limited to the following: minor support commercial, office and retail service uses; a post office, medical/dental clinics; laboratories and office facilities used for basic and applied research, testing and consulting; industrial/commercial business incubators which support educational programs or provide educational opportunities, or commercial studios (i.e. sound stages and their support facilities, such as mill shops, technical production facilities, and production offices).

Uses in Land Use Category 2 consist of non-educational, income producing uses, including private sector uses, provided that such uses do not adversely impact the trip cap under the MCAS Tustin Specific Plan or other environmental impact category thresholds in the CEQA Documentation, or require a Specific Plan Amendment or further environmental documentation. Up to 100 percent of the Building Area on the SOCCCD Property may be dedicated to Land Use Category 1 uses. At build-out, at least 51 percent of the building area on the SOCCCD property must be devoted to Land Use Category 1 Uses.

The building area will not exceed that permitted pursuant to allocation of ADT's to the SOCCCD property. As specific development proposals are considered for the Project site, ADT calculations will be required, using the trip generation rates previously identified in the FEIS/EIR, to show that the trip cap is not exceeded. While a specific development proposal is not included in this analysis, two preliminary calculations have been produced to provide examples of typical development amounts that could result from development in two scenarios, described below and summarized in Table 7.

The first scenario assumes the ATEP site would be developed with approximately 51 percent academic uses (Land Use Category 1) and 49 percent general office uses (Land Use Category 2). Using the FEIS/EIR trip generation rates, a total of 1,087,970 square feet of development (including 554,870 square feet of academic space and 533,100 square feet of office space) would be permitted on the ATEP campus. This is an increase in development capacity of 194,119 square feet from the 893,851 square feet previously permitted on the ATEP site.

The second scenario assumes the ATEP site would be developed with 100 percent academic uses (Land Use Category 1). Again using the MCAS Tustin Specific Plan trip generation rates, a total of 1,710,780 square feet (all academic space) would be permitted on the ATEP campus. This is an increase in development capacity of 816,929 square feet from the 893,851 square feet previously permitted on the ATEP site.

Table 7. Potential Development Scenarios within Trip Cap

	FEIS/EIR Development Scenario (sq. ft.)	Scenario 1 (sq. ft.)	Increase in Potential Development (sq. ft.)
Academic (Land Use Category 1)	893,851	554,870	--
General Office (Land Use Category 2)	--	533,100	--
Total	***893,851***	***1,087,970***	***194,119***
		Scenario 2 (sq. ft.)	
Academic (Land Use Category 1)	893,851	1,710,780	816,929
Total	***893,851***	***1,710,780***	***816,929***

No specific development proposal for the project area is currently being considered by the City or SOCCCD. When there are specific development proposals, SOCCCD will analyze the proposed project and determine whether additional CEQA analysis will be needed at that time. This is consistent with the purpose of the FEIS/EIR document, which serves as a program-level document with subsequent activities being examined in greater detail through additional environmental analysis (CEQA Guidelines Section 15168). Limiting the scope of analysis in this Addendum to the Project elements that are known at this time is also consistent with CEQA Guidelines Section 15145, which discourages discussion of speculative impacts.

2.2.4 Development Agreement and Amended and Restated Conveyance Agreement between City and SOCCCD

The Project includes a Development Agreement clarifying ministerial project review requirements to avoid duplicative reviews between the City and the Division of the State Architect and simplifying development review procedures. The Development Agreement is included within an Amended and Restated Conveyance Agreement and includes related implementation documents.

2.2.5 Infrastructure Construction and Payment Agreement for Bell Avenue

Related to the construction of Bell Avenue, the City and SOCCCD have drafted an Infrastructure Construction and Payment Agreement (Bell Avenue Agreement), which delineates the design and construction responsibility, approval process and allocation of costs. The construction of Bell Avenue and this Agreement are part of the project analyzed by this Addendum.

2.2.6 Extension of Bell Avenue

As part of the Project, a 1/3-mile extension of Bell Avenue is proposed. This would extend Bell Avenue from its current terminus at Red Hill Avenue to a new intersection at Armstrong Avenue. The extension would be a Secondary Arterial-level roadway with a 92-foot right-of-way, four travel lanes, a painted median allowing left turns, Class II bicycle lanes, and sidewalks. A signalized intersection may be located approximately at the midpoint along the roadway extension, depending on the future development configuration on either side of Bell Avenue. Construction of Bell Avenue is occur in 2017 would take approximately six to eight months.

3. Environmental Evaluation and Explanation of Checklist Responses

This checklist and the following evaluation of environmental impacts take into consideration the preparation of an environmental document (the FEIS/EIR) which fully analyzed the Project.

The Project does not involve any changes in development intensity or modification in development standards. The checklist and initial study evaluate whether the conditions identified in Sections 15162 and 15168 of the CEQA Guidelines have occurred and require the preparation of a subsequent EIR, supplemental EIR, ND, or MND.

The following information is presented for each of the topical issues presented in the Initial Study environmental checklist:

- Existing Conditions
- Project Impact Evaluation
    - Potentially Significant Impact
    - Less than Significant with Mitigation
    - Less than Significant Impact
    - No Impact – a check mark in the No Impact box equates to No Substantial Change from Previous Analysis (FEIS/EIR)
- Mitigation Measures
- Sources

3.1 Aesthetics

3.1.1 Existing Conditions

The existing ATEP campus buildings and associated parking (located north of Valencia Avenue) were constructed in 2007. Areas south of Valencia Avenue still have remnants of the former MCAS Tustin (constructed between 1943 and 1988), including asphalt-paved streets and parking lots, concrete sidewalks, building foundations, landscaping/groundcover, and underground utilities. All of the former military buildings on the SOCCCD parcels have been demolished.

City-owned parcels contain remnants of the former MCAS Tustin. These structures have not been used in over a decade and are in varying stages of decay.

3.1.2 Project Impact Evaluation

a) Would the project have a substantial adverse effect on a scenic vista?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project substantially degrade the existing visual character or quality of the Site and its surroundings?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Response to a-d:

No Impact Due to No Substantial Change from Previous Analysis. The Project would not cause aesthetic impacts that were not previously analyzed in the FEIS/EIR. The Project proposes to permit uses that are substantially the same as proposed in the Specific Plan and previously analyzed in the FEIS/EIR. Even though the Project would allow for increased building area and FAR, the proposed land exchange and

associated approvals would not change the future development condition that was analyzed in the FEIS/EIR because there would be no change to building height restrictions, setbacks, signage, and other development standards – the key elements that would affect aesthetics. The FEIS/EIR anticipated that former MCAS buildings located on the Project site would be demolished and replaced with new construction. Visual changes to the Project vicinity have already occurred with the development of ATEP Phase I, the RSCCD's Sheriff's Training Academy, the County's Abused Children's Shelter, residential neighborhoods north and south of Valencia Avenue, the construction of the Tustin Unified School District's Heritage Elementary School, as well as the demolition of buildings on the ATEP site.

There are no new or increased significant adverse project-specific or cumulative impacts with regard to aesthetics and visual quality that would occur as a result of the implementation of the Project. There is no new information relative to aesthetics and visual quality that was not in existence at the time the FEIS/EIR was prepared. Therefore, the Project and its implementation are consistent with the FEIS/EIR. No new mitigation measures are required in relation to impacts to aesthetics and visual quality.

The visual impacts of planned construction in Neighborhood A were analyzed in the FEIS/EIR, and there would be no new or substantially different aesthetic impacts as a result of the Project. Future construction on the properties would comply with the site development standards in the Specific Plan. Therefore, the overall intensity of the future development and the general character of the Project site would not be substantially altered by the Project.

The implementation of the Project would exchange properties between the District and City of Tustin. Future construction of the Project would continue the visual change from the abandoned military facilities onsite to an education- and public-services-oriented development. This visual change, as part of the overall visual change of the former base to the larger Tustin Legacy development was not a significant impact in the FEIS/EIR. There are no designated scenic vistas in the Project area; therefore, the Project would not result in a substantial adverse effect on a scenic vista. The Project site is also not located within the vicinity of a designated state scenic highway. The Project would not change the conclusions of the historical analysis of the historic blimp hangars from the FEIS/EIR relative to visual changes since the Project would not affect these hangars.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to aesthetics. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR were certified as complete.

Mitigation/Monitoring Required: No new impacts or substantially more severe aesthetic impacts would result from the approval and implementation of the Project; therefore, no new or revised mitigation measures are required for aesthetics and visual quality. In addition, there are no applicable mitigation measures contained in the City's 2012 City of Tustin Annual MMRP Report (2012 MMRP) for the FEIS/EIR with regard to aesthetics and visual quality. No refinements related to the Project are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required.

Mitigation/Monitoring Measures Not Being Implemented: Mitigation Measure Vis-1, regarding urban design plan adoption in conjunction with any zoning ordinance amendments, is the responsibility of others to implement, and therefore is not within the Project's responsibility to implement.

Sources:
Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas (LRP)
ATEP LARP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-84, 4-109 through 4-114), Addendum (pp. 5-3 through 5-8), and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
Tustin General Plan
2012 City of Tustin Annual Mitigation Monitoring Reports
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43

3.2 Agriculture and Forest Resources

3.2.1 Existing Conditions

There were no agricultural uses on the Site in the recent past. There are currently no agricultural uses on the Site.

3.2.2 Project Impact Evaluation

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

d) Result in the loss of forest land or conversion of forest land to non-forest use?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

e) Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Response to a-e:

No Impact Due to No Substantial Change from Previous Analysis. The Project would not cause impacts to agriculture and forest resources that were not previously analyzed in the FEIS/EIR. There continue to be no agricultural resources on the property. There are no new or increased significant adverse project-specific or cumulative impacts with regard to agricultural resources that are identified as a result of the approval and implementation of the Project. The impacts of the development of the properties has already been analyzed in the FEIS/EIR. There is no new information relative to agricultural resources that was not in existence at the time the FEIS/EIR was prepared. Therefore, no new mitigation measures are required in relation to impacts to agricultural resources.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to agricultural resources. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation Monitoring Required: In certifying the FEIS/EIR, the Tustin City Council adopted Findings of Fact and Statement of Overriding Considerations on January 16, 2001 concluding that impacts to agricultural resources on other areas of MCAS Tustin were unavoidable (Resolution No. 00-90). No mitigation is required.

Mitigation/Monitoring Not Being Implemented: No new impacts or substantially more severe impacts will result from the District's and County's approval and implementation of the Project; therefore, no new or revised mitigation measures are required for agricultural resources. In addition, there are no applicable mitigation measures contained in the City's approved MMRP for the FEIS/EIR with regard to agricultural resources. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required.

Sources:
Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-84, 4-109 through 4-114), Addendum (pp. 5-8 through 5-10), and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
Tustin General Plan
2012 City of Tustin Annual Mitigation Monitoring Reports
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43

3.3 Air Quality

3.3.1 Existing Conditions

The Site is presently not in use. Former military buildings on the ATEP site have been demolished. Remnant structures remain on City-owned lands.

3.3.2 Project Impact Evaluation

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

d) Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

e) Would the project create objectionable odors affecting a substantial number of people?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Response to a-e:

No Impact Due to No Substantial Change from Previous Analysis. The Project would not cause impacts to air quality that were not previously analyzed in the FEIS/EIR. The Tustin City Council adopted Findings and a Statement of Overriding Considerations for the FEIS/EIR on January 16, 2001 to address significant unavoidable short-term (construction), long-term (operational), and cumulative air quality impacts for the Specific Plan. The City also adopted mitigation measures (AQ-1, AQ-2, AQ-3, and AQ-4) to reduce these unavoidable adverse impacts.

Consistent with the findings in the FEIS/EIR, implementation of future development on the Project site could result in significant unavoidable short-term construction air quality impacts because it is a part of the "project" analyzed in the FEIS/EIR for which this finding was made. Construction activities associated with the Project site were previously addressed in the FEIS/EIR. The Proposed Project modifies the project analyzed in the FEIS/EIR by including an extension to Bell Avenue, construction of between 194,109 and 816,929 square feet of academic and office space beyond the previously-analyzed amounts, and an increase in the trip cap. These modifications to the original MCAS Tustin Specific Plan project are assessed in a technical report titled Air Quality and Greenhouse Gas Impact Analyses (AQIA), prepared by Giroux & Associates in April 2013 (Appendix B).

As shown in Table 8, construction-period emissions resulting from the development of Bell Avenue and the subsequent construction of buildings on the Project site would be below South Coast Air Quality Management District (SCAQMD) daily emissions thresholds for construction, and there would be not be a significant construction-period air quality impact from the Project.

Table 8. Construction Activity Emissions

	Maximum Daily Emissions (pounds/day)					
	ROG	**NOx**	**CO**	**SO_2**	**PM-10**	**PM-2.5**
2014 (Bell Avenue Construction)	6.4	50.8	30.2	0.1	9.8	6.3
2020 (Facilities Construction)	68.1	35.6	42.8	0.1	8.9	5.3
2021 (Facilities Construction)	67.8	26.4	41.3	0.1	8.8	1.3
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No
Maximum daily emissions assume implementation of all standard SCAQMD requirements. Source: AQIA Table 9 (Appendix B).						

As shown in Table 9, operational emissions resulting from an increased trip cap of 10,000 ADT would be below SCAQMD daily emissions thresholds for operations, and there would not be a significant operational-period air quality impact from the Project.

Table 9. Operational Period Emissions

	Maximum Daily Emissions (pounds/day)					
Source	**ROG**	**NOx**	**CO**	**SO2**	**PM-10**	**PM-2.5**
Area	21.4	0.0	0.0	0.0	0.0	0.0
Energy	0.4	3.5	2.9	0.0	0.3	0.3
Mobile	19.8	35.8	156	0.8	80.6	3.8
Total	41.6	39.3	158.9	0.8	80.9	4.1
SCAQMD Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	No	No	No	No	No	No

Source: AQIA Table 11 (Appendix B)

Based on the above analysis (with additional detail, including modeling results, in Appendix B), there would be no new or increased significant adverse project-specific or cumulative impacts with regard to air quality that would occur as a result of the approval and implementation of the Project that was not previously analyzed in the FEIS/EIR. There is no substantial new information that shows there will be different or more significant long-term and/or cumulative impacts on the environment as a result of the Project than described in the FEIS/EIR. Therefore, the Project and its implementation are consistent with and previously analyzed in the FEIS/EIR and no new mitigation measures are required in relation to impacts to air quality.

Although the Project analyzed in this Addendum would not independently create significant air quality impacts, the broader project on the MCAS Tustin site was found in the FEIS/EIR to result in significant unavoidable air quality impacts. Consistent with these findings, development on the Project site could also result in significant unavoidable long-term and cumulative air quality impacts because it is part of the "project" analyzed in the FEIS/EIR for which this finding was made. Mitigation measures included in the FEIS/EIR will be implemented as appropriate by the City and SOCCCD. The City and SOCCCD will implement Mitigation Measures AQ-1 through AQ-3. The implementation of Mitigation Measure AQ-4 is the responsibility of the City and/or the City of Irvine, and is not within the responsibility of the SOCCCD.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to air quality. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation/Monitoring Required: Specific air quality mitigation measures have been adopted by the Tustin City Council in certifying the FEIS/EIR for both operational and construction-related activities for development at Tustin Legacy. The mitigation measures for air quality impacts that are applicable to the Project during the future implementation stages (i.e., construction) include Mitigation Measures AQ-1 and AQ-2. The City and SOCCCD would implement Mitigation Measure AQ-1 by complying with South Coast Air Quality Management District Rules to reduce short-term air pollutant emissions. Mitigation Measure AQ-2 would be implemented by requiring the use of low volatile organic compound (VOC) architectural coatings for all interior and exterior painting operations. Mitigation Measure AQ-3 which relates to Transportation Demand Management Plan (TDM) will be implemented for new non-residential projects with 100 or more employees and expanded projects where additional square footage would result in a total of 100 or more employees.

As stated above, the FEIS/EIR also concludes that Specific Plan-related operational air quality impacts are significant and cannot be fully mitigated. A Statement of Overriding Considerations for the FEIS/EIR was adopted by the Tustin City Council on January 16, 2001 to address significant unavoidable short-term, long-term, and cumulative air quality impacts associated with all development of the Specific Plan. No new mitigation measures are required. The Project will implement the relevant mitigation measures of the 2012 MMRP that are applicable to the Project.

Mitigation/Monitoring Not Being Implemented: All relevant mitigation measures will be implemented by the City and SOCCCD (AQ-1 through AQ-3) or the City independently (AQ-4).

Sources:
Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-143 through 3-153, pp. 4-207 through 4-230, pp. 7-41 through 7-42, and Addendum (pp. 5-10 through 5-28) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
Resolution No. 00-90
Tustin General Plan
2012 City of Tustin Annual Mitigation Monitoring Reports
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43
District Conveyance Agreement
Stantec – Traffic Study (Appendix A)
Giroux & Associates – Air Quality and Greenhouse Gas Impact Analyses (Appendix B)

3.4 Biological Resources

3.4.1 Existing Conditions

Underground and surface-level features of former military buildings, asphalt-paved streets and parking lots, concrete sidewalks and pads, and landscaping/groundcover from the former MCAS Tustin facilities are scattered across the Project site. There is no southwestern pond turtle habitat on the Project site.

3.4.2 Project Impact Evaluation

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery Sites?	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact

	☐	☐	☐	☒

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a-f:

No Impact Due to No Substantial Change from Previous Analysis. The Project would not cause impacts to biological resources that were not previously analyzed in the FEIS/EIR. The FEIS/EIR analyzed the future development of the whole of Neighborhood A and the associated biological impacts. No new areas will be developed under the Project. There are no new or increased significant adverse project-specific or cumulative impacts with regard to biological resources that would occur as a result of the adoption and implementation of the Project. In 2010, the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Game (CDFG) determined that the ATEP Site does not contain land that is subject to their jurisdiction or that warrants their oversight. There is no other new information relative to biological resources that was not in existence at the time the FEIS/EIR was prepared. Therefore, the Project and its implementation are consistent with the FEIS/EIR and no new mitigation measures are required in relation to impacts on biological resources. Based on current delineations of wetlands and jurisdictional waters, the Project will not affect wetlands or jurisdictional waters. The impacts resulting from the implementation of the Project, if any, would be those identified in the FEIS/EIR.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to biological resources. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation/Monitoring Required: The mitigation measures applicable during implementation of the Project have been identified in the City's 2012 MMRP. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required for implementation (i.e., construction) of the Project. The Project will implement the relevant mitigation measures of the adopted MMRP and as stated in the 2012 MMRP. The City and SOCCCD would not need to implement Mitigation Bio-1 because the Project would not affect jurisdictional waters of the U.S. or vegetated wetlands. With regard to Mitigation

Bio-2, Bio-3, and Bio-4, which deal with capture and relocation of pond turtles and restoration of pond turtle habitat, these measures do not apply to the Project because no ponds exist on the Project site.

Mitigation/Monitoring Not Being Implemented: As discussed above, an additional survey on the Project site will be conducted prior to obtaining a grading permit as required by the existing mitigation measures. If the Site continues to reveal no presence of southwestern pond turtles, Mitigation Measures Bio-1, Bio-2, Bio-3, and Bio-4 would not be implemented as part of the Project.

Sources:
Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP EIR Addendum as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-75 through 3-82, pp. 4-103 through 4-108, pp. 7-26 through 7-27, and Addendum (pp. 5-28 through 5-40) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
Tustin General Plan
2012 City of Tustin Annual Mitigation Monitoring Reports
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43

3.5 Cultural and Paleontological Resources

3.5.1 Existing Conditions

Numerous archaeological surveys have been conducted at the former MCAS Tustin Site. There are no cultural resources identified on the Project site in the FEIS/EIR.

3.5.2 Project Impact Evaluation

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project directly or indirectly destroy a unique paleontological resource or Site or unique geologic feature?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

d) Would the project disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a-d:

No Impact Due to No Substantial Change from Previous Analysis. The Project would not cause impacts to cultural resources that were not previously analyzed in the FEIS/EIR. The Project proposes to develop the same areas as proposed in the Specific Plan and previously analyzed in the FEIS/EIR. The Project would not cause impacts to cultural resources. The impacts of the Specific Plan on cultural resources, including any that may be present on the Project site, were considered in the FEIS/EIR.

It is possible that previously unidentified buried archeological or paleontological resources within the Project site could be discovered during grading and other construction activities. With the inclusion of Mitigation Measures Arch-2, Paleo-1 and Paleo-2, which require construction monitoring for cultural and paleontological resources, potential impacts to these resources can be reduced to a level of insignificance as found in the FEIS/EIR.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to cultural and paleontological resources. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation/Monitoring Required: The City and SOCCCD would implement Mitigation Measure Arch-2 by retaining a County-certified archaeologist and conducting the required consultations prior to obtaining grading permits. The City and SOCCCD would implement Mitigation Measures Paleo-1 and Paleo-2 by retaining a County-certified paleontologist and complying with the requirements of the established Paleontology Resources Management Plan (PRMP) for Tustin Legacy.

Mitigation/Monitoring Not Being Implemented: Other mitigation measures for cultural resources in the FEIS/EIR and City's 2012 MMRP are not applicable to the Project site and are the responsibility of others to implement.

Sources:
Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-68 through 3-74, pp. 4-93 through 4-102, pp. 7-24 through 7-26, Addendum (pp. 5-40 through 5-45) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
2012 City of Tustin Annual Mitigation Monitoring Reports
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43

3.6 Geology and Soils

3.6.1 Existing Conditions

There are no known geotechnical conditions that would preclude implementation of the Project. Geotechnical conditions on the Project site are similar to geotechnical conditions throughout Tustin Legacy.

3.6.2 Project Impact Evaluation

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: *i)* Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: *ii)* Strong seismic ground shaking?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: *iii)* Seismic-related ground failure, including liquefaction?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: *iv)* Landslides?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project result in substantial soil erosion or the loss of topsoil?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a-e:

No Impact Due to No Substantial Change from Previous Analysis. Implementation of the Project would not cause any direct impacts to geology and soils. The Project proposes to develop the same areas as proposed in the Specific Plan and previously analyzed in the FEIS/EIR. There are no new or increased significant adverse project-specific or cumulative impacts with regard to geology and soils that are identified as a result of the adoption and implementation of the Project. There is no new information relative to geology and soils that was not in existence at the time the FEIS/EIR as prepared. Therefore, the Project and its implementation are consistent with the FEIS/EIR and no new mitigation measures are required in relation to impacts to geology and soils.

The FEIS/EIR found that impacts to soils and geology resulting from implementation of the Specific Plan would include non-seismic hazards (such as local settlement, regional subsidence, expansive soils, slope instability, erosion, and mudflows) and seismic hazards (such as surface fault displacement, high-intensity ground shaking, ground failure and lurching, seismically-induced settlement, and flooding associated with dam failure). The FEIS/EIR concluded that compliance with state and local regulations and standards, along with established engineering procedures and techniques, would avoid unacceptable risk or the creation of significant impacts related to geotechnical issues. No substantial change is expected during implementation of the Project from the analysis previously completed in the certified FEIS/EIR.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to geology and soils. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation/Monitoring Required: No new impacts or substantially more severe impacts will result from the adoption and implementation of the Project; therefore, no new or revised mitigation measures are required for geology and soils. In addition, there are no mitigation measures contained in the City's 2012 MMRP with regard to geology and soils. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required.

Mitigation/Monitoring Not Being Implemented: There are no new or revised mitigation measures for geology and soils. In addition, there are no mitigation measures contained in the City's 2012 MMRP with regard to geology and soils.

Sources:
Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-88 through 3-97, pp. 4-115 through 4-123, pp. 7-28 through 7-29, and Addendum (pp. 5-46 through 5-49) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
Tustin General Plan
2012 City of Tustin Annual Mitigation Monitoring Reports
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43

3.7 Greenhouse Gas Emissions

3.7.1 Existing Conditions

Emitting greenhouse gases (GHGs) into the atmosphere is not itself an adverse environmental effect. Rather, it is the increased accumulation of GHGs in the atmosphere that may result in global climate change. The consequences of that climate change can cause adverse environmental effects. Due to the complex physical, chemical, and atmospheric mechanisms involved in global climate change, it is not possible to predict the specific impact, if any, to global climate change from one project's relatively small incremental increase in emissions.

3.7.2 Project Impact Evaluation

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a-b:

No Impact Due to No Substantial Change from Previous Analysis. Implementation of the Project would not result in any substantial increase in GHG emissions compared to the Specific Plan analyzed in the FEIS/EIR. The Project modifies the project analyzed in the FEIS/EIR by including an extension to Bell Avenue, construction of academic and office space beyond the previously-analyzed amounts, and an increase in the trip cap. These modifications to the MCAS Tustin Specific Plan as amended project are assessed in the AQIA (Appendix B). In order to assess the GHG emissions impacts, the AQIA report assumed the construction of an additional 816,929 square feet of academic space beyond that currently permitted. The report also analyzed the impacts associated with 194,109 square feet of academic and office space; however, because the larger amount of square feet would result in greater emissions, the following only references the emissions associated with the greater square footage number. Emissions associated with the lower square footage number can be found in Appendix B.

Table 10 shows calculated GHG emissions resulting from Project implementation. The table includes operational emissions as well as construction emissions amortized over 30 years, as required by SCAQMD. On December 5, 2008 the SCAQMD Governing Board adopted an interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 metric tons (MT) of CO_2 equivalent per year. The threshold applies primarily to industrial facilities. No threshold for residential or commercial development has been promulgated. In the absence of any adopted thresholds for roadway and commercial facilities projects, the AQIA uses the 10,000 MT/year recommendation as a guideline for this impact analysis.

Table 10. Greenhouse Gas Emissions

Source	Metric Tons of CO_2e (tons/year) Business as Usual	Reduction*	Residual
Energy Utilization	**4,055.1**	30.2%	2,830.5
Mobile (Transportation)	**6,241.8**	18.5%	5,087.1
Solid Waste Generation	**483.1**	0.0%	483.1
Water Consumption	**392.1**	19.0%	317.6
Annualized Construction	**55.1**	0.0%	55.1
Total	**11,227.2**	**21.8%****	**8,773.4**
SCAQMD Interim Threshold	**10,000**		**10,000**
Exceeds Threshold?	**Yes**		**No**

Source: AQIA Tables 15 and 16 (Appendix B).
* Reduction based on in-place programs by 2020
** Weighted average

The GHG emissions identified in Table 10 provides two scenarios. The first scenario assumes the continuation of "business as usual" (BAU) practices throughout the Project development timeframe and the second assumes implementation of existing programs that when implemented, will substantially reduce the GHG emissions associated with transportation and energy consumption as the major contributors to operational GHG emissions. These programs include the Corporate Average Fuel Efficiency (CAFÉ) standards, the Renewable Portfolio Standards (RPS), the Low Carbon Fuel Standard, and required electrical energy efficiency increases associated with building construction.

Existing mandatory programs will reduce statewide GHG emissions by varying amounts depending on the source of the activity that results in GHG emissions. The reductions listed in Table 10 are exclusive of any additional initiatives undertaken by SOCCCD for GHG reduction, which are likely to include, but not be limited to Leadership in Energy and Environmental Design (LEED) certification of buildings. With the implementation of the established programs, the projected GHG emissions will be reduced below the adopted SCAQMD interim threshold for GHG emissions, and there would not be a significant operational-period air quality impact from the Project.

Therefore, there are no new or increased significant adverse project-specific or cumulative impacts with regard to GHG emissions that are identified as a result of the adoption and implementation of the Project. The Project and its implementation are consistent with the FEIS/EIR and, no new mitigation measures are required in relation to impacts to GHG emissions.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to climate change. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation/Monitoring Required: No new impacts or substantially more severe impacts would result from implementation of the Project; therefore, no new or revised mitigation measures are required with regard to climate change. In addition, there are no mitigation measures contained in the City's 2012 MMRP for the Specific Plan FEIS/EIR with regard to GHG emissions. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required.

Mitigation/Monitoring Not Being Implemented: There are no new or revised mitigation measures for climate change, and no mitigation measures are contained in the City's 2012 MMRP for the Specific Plan/Reuse Plan FEIS/EIR with regard to climate change.

Sources:
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP, as amended by the October and November 2008 Erratas
ATEP LRAP, as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin
MCAS Tustin Specific Plan/Reuse Plan
District Conveyance Agreement
Tustin General Plan
Irvine Ranch Water District 2005 Urban Water Management Plan, November 2005
Irvine Ranch Water District 2000 Water Resources Master Plan
Stantec – Traffic Study (Appendix A)
Giroux & Associates – Air Quality and Greenhouse Gas Impact Analyses (Appendix B)

3.8 Hazards and Hazardous Materials

3.8.1 Existing Conditions

The entire MCAS Tustin site was reviewed for hazardous materials prior to start of redevelopment activities. Federal regulations require the Navy to complete remediation of hazardous materials prior to conveyance of properties to other landowners. Portions of the Project site are presently undergoing remediation, and therefore remain under Navy ownership. These areas are available for limited used by the future owners (the City and SOCCCD) under a LIFOC agreement. They will not be conveyed to the future owners until the Navy determines that its remediation of hazards and hazardous materials in these areas have sufficiently progressed to the point that the property can safely be developed.

Asbestos-containing materials (ACMs) and lead-based paint (LBP) were identified in previous surveys within the Project site. There are well-established existing laws and procedures for remediating these two conditions. Remediation of these conditions have been addressed as part of a building demolition program on SOCCCD properties, and will also be implemented by the City as demolition proceeds on their properties. The demolition work was previously approved by the SOCCCD and is not a part of the Project. The presence of these two conditions in the military buildings has been thoroughly analyzed in the previously-certified FEIS/EIR, and does not affect the implementation of the Project.

3.8.2 Project Impact Evaluation

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

d) Would the project be located on a Site, which is included on a list of hazardous materials Sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

h) Would the project 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a-h:

No Impact Due to No Substantial Change from Previous Analysis. Implementation of the Project will not cause any direct impacts to hazards and hazardous materials. There are no new or increased significant adverse project-specific or cumulative impacts with regards to hazards and hazardous materials that are identified as a result of the adoption and implementation of the Project. There is no new information relative to hazards and hazardous materials that was not in existence at the time the FEIS/EIR was prepared. Therefore, the Project and its implementation are consistent with the FEIS/EIR and no new mitigation measures are required in relation to impacts from hazards and hazardous materials.

The FEIS/EIR included a detailed discussion of the historic and then-current hazardous material use and hazardous waste generation within the Specific Plan area. The Navy is responsible for planning and executing environmental restoration programs in response to releases of hazardous substances for MCAS Tustin. The FEIS/EIR concluded that the implementation of the Specific Plan would not have a significant environmental impact from the hazardous wastes, substances, and materials on the property during construction or operation since the Navy would implement various remedial actions pursuant to the Compliance Programs that would remove, manage, or isolate potentially hazardous substances in soils and groundwater. As identified in the FEIS/EIR, the Project site is within the boundaries of the Airport Environs Land Use Plan (AELUP) and is subject to height restrictions. The Project does not propose changes to the 100-foot height limitation included in the Specific Plan. The Project site is not located in a wildland fire hazard area.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to hazards and hazardous materials. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation/Monitoring Required: No new impacts or substantially more severe impacts will result from implementation of the Project; therefore, no new or revised mitigation measures are required with regard to hazards and hazardous materials. In addition, there are no mitigation measures contained in the City's 2012 MMRP with regard to hazards and hazardous materials. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required.

Mitigation/Monitoring Not Being Implemented: There are no new or revised mitigation measures for hazards and hazardous materials, and no mitigation measures are contained in the City's 2012 MMRP for the Specific Plan/Reuse Plan FEIS/EIR with regard to hazards and hazardous materials.

Sources:
Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
Phase I Environmental Site Assessment Report for ATEP prepared by LandAmerica Assessment Corporation dated November 8, 2007
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-106 through 3-117, pp. 4-130 through 4-138, pp. 7-30 through 7-31, and Addendum (pp. 5-49 through 5-55) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
Navy's *Draft Final Finding of Suitability to Transfer for Parcels 23, 29, 34, 35, and 36, and Portions of 1, 16, 17, 24, 27, 28, 40, and 41* (FOST), dated April 2, 2002, and the *Finding of Suitability to Lease for Carve-Out Areas 5, 6, 7, 8, 9, 10, 11* (FOSL), dated April 26, 2002

Department of Navy correspondence and documents regarding the status of remediation efforts underway
Documents related to the ATEP Campus that were reviewed at the report repository located at the former MCAS - El Toro, Building 307
Final Amended Site Management Plan Fiscal Year 2009 Update – former Marine Corps Air Station Tustin, Tustin, CA, dated November 2008 and prepared by BRAC PMO West.
Federal Conveyance document
District Conveyance document
Airport Environs Land Use Plan (AELUP)
Tustin General Plan
2012 City of Tustin Annual Mitigation Monitoring Reports
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43

3.9 Hydrology and Water Quality

3.9.1 Existing Conditions

Surface water runoff from the Project site generally flows east to Armstrong Avenue to existing 72-inch and 36-inch diameter drainpipes and south to Warner Avenue to a planned 36-inch diameter drainpipe.

3.9.2 Project Impact Evaluation

a) Would the project violate any water quality standards or waste discharge requirements?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project substantially alter the existing drainage pattern of the 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?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

d) Would the project substantially alter the existing drainage pattern of the Site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

e) Would the project create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

f) Would the project otherwise substantially degrade water quality?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

h) Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

j) Would the project inundation by seiche, tsunami, or mudflow?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a-j:

No Impact Due to No Substantial Change from Previous Analysis. The Project will not cause direct impact to hydrology and water quality. While the project would permit an increased development square footage, all such development would be required to comply with then-current Water Quality Management Plan

(WQMP) requirements imposed by the Santa Ana Regional Water Quality Control Board. Additionally, the Project does not include any change to setbacks or other development standards that impact drainage. Any changes in drainage resulting from construction of Bell Avenue will be compliant with the master drainage plan in place for MCAS Tustin, as analyzed in the FEIS/EIR. Construction of the roadway will also require preparation of a WQMP. There are no new or increased significant adverse project-specific or cumulative impacts with regard to hydrology/water quality that are identified as a result of the adoption and implementation of the Project. There is no new information relative to hydrology/water quality that was not in existence at the time the FEIS/EIR was prepared. Therefore, the Project and its implementation are consistent with the FEIS/EIR and no new mitigation measures are required in relation to impacts to hydrology/water quality.

As concluded in the FEIS/EIR, preparation of a WQMP for future development projects on the Project sites in compliance with all applicable regulatory standards would reduce water quality impacts from development activities to a level of insignificance. The Project would not result in new or substantially more severe impacts to water quality than what was previously identified in the FEIS/EIR. The Specific Plan considered the development of education-oriented and public services land uses on the Project site. Future development would require preparation of a WQMP that limits off-site stormwater flows. The Project would not result in an increase of impervious surface area from the amount that was previously analyzed in the Specific Plan. The Project proposes no change to the drainage pattern and water management systems previously analyzed in the FEIS/EIR. The drainage pattern and water management systems in the Project site vicinity would remain consistent with the Tustin Legacy Master Drainage Plan. Therefore, the analysis and conclusions in the FEIS/EIR relative to impacts related to groundwater supply, groundwater levels, or local recharge have not changed substantially. In addition, no change to the backbone drainage system is proposed. Therefore, no new or more severe impacts related to drainage patterns, drainage facilities, and potential flooding would result from the Project.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to hydrology and water quality. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation/Monitoring Required: Compliance with existing rules and regulations would reduce any potential impacts related to water quality and groundwater to a level of insignificance and no new mitigation is required. The mitigation measures applicable during implementation (i.e., construction) of the Project have been identified in the City's adopted MMRP. Mitigation Measures WQ-1, WQ-2, and WQ-4 establish requirements related to preparation of a Stormwater Pollution Prevention Plan, compliance with Waste Discharge Requirements, and preparation of a Water Quality Management Plan, respectively. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required for implementation of the Project. The Project will implement the relevant mitigation measures of the adopted MMRP and as stated in the FEIS/EIR and 2012 MMRP.

Mitigation/Monitoring Not Being Implemented: Mitigation Measure WQ-3 requires others to participate in the RWQCB's Nitrogen and Selenium Management Program (NSMP) Working Group and contribute to funding and implementing the Working Plan. Because this mitigation measure is the responsibility of others to implement, it does not fall within the responsibility of the Project to implement.

Sources:

Field Observations
Consultation with Psomas Engineering
Existing Water Quality Management Plan (WQMP)
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP, as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-98 through 3-105, pp. 4-124 through 4-129, pp. 7-29 through 7-30, and Addendum (pp. 5-56 through 5-92) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
Tustin General Plan
2012 City of Tustin Annual Mitigation Monitoring Reports
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43

3.10 Land Use and Planning

3.10.1 Existing Conditions

The SOCCCD approved the Long Range Academic and Facilities Plan, which pertains to the ATEP portion of the project area, in November 2008. Phase 1, the existing one-acre ATEP campus, is currently offering educational programs. The Phase 3A Concept Plan, a 28-acre expansion of the ATEP campus, was approved and CEQA review (in the form of an Addendum to the FEIS/EIR) was completed by the District in March 2009. The former military buildings on the SOCCCD parcels have been demolished.

No specific development for the County Parcel has been proposed. The County parcel is still under the control of the Navy, and will remain so until the FOST is issued. Remnants of former MCAS Tustin buildings and infrastructure remain on the site, but are vacant and unused.

3.10.2 Project Impact Evaluation

a) Would the project physically divide an established community?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a-c:

No Impact Due to No Substantial Change from Previous Analysis: Implementation of the Project will not cause any direct impacts to land use and planning. There would be no change to building height restrictions, setbacks, signage, and other development standards. Development intensity (the amount of total square footage and corresponding FAR) would be permitted to increase, but this increase would be negligible compared to the total amount of planned development within Tustin Legacy, and would continue to be subject to trip caps imposed by the MCAS Tustin Specific Plan. The Project includes an increase in the trip cap as a result of increased roadway capacity provided by the Bell Avenue extension.

There are no new or increased significant adverse project-specific or cumulative impacts with regard to land use and planning that are identified as a result of the adoption and implementation of the Project. There is no new information relative to land use and planning that was not in existence at the time the FEIS/EIR was prepared. Therefore, the Project and its implementation are consistent with the FEIS/EIR and no new mitigation measures are required in relation to impacts to land use planning.

The Project would not physically divide any Specific Plan land use (no community exists in the area of the Project), conflict with the Specific Plan, or conflict with any habitat conservation plan or natural community conservation plan. The project aids in the build-out of Tustin Legacy by rationalizing property ownership boundaries and improving accessibility from Red Hill Avenue.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to land use and planning. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR were certified as complete.

Mitigation/Monitoring Required: The FEIS/EIR concludes that there would be no significant unavoidable land use impacts. The Project and its implementation do not result in new or increased land use impacts in comparison to those previously identified in the FEIS/EIR. The mitigation measures applicable to the Project were implemented following adoption of the MCAS Tustin Specific Plan. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required. The District and County will implement the relevant mitigation measures of the adopted MMRP that are applicable to the Project.

Mitigation Measures LU-2(m), (n), (o), (p), (q), (r), and (s) are addressed in Section 3.13.

Mitigation/Monitoring Not Being Implemented: Mitigation Measures LU-1 and LU-2 required the Cities of Tustin and Irvine respectively to amend their General Plans and zoning ordinances for the Tustin Legacy Project, and therefore are not within the responsibility of the Project. LU-2(a) requires that infrastructure construction be properly phased by the Cities of Tustin and Irvine, and therefore is not within the responsibility of the Project. LU-2(b) is not applicable to the SOCCCD since no recording of subdivision maps is proposed as part of the Project. Per the City's adopted 2012 MMRP, the SOCCCD recorded the necessary easements for the Property and Mitigation Measure LU-2(b) has been fulfilled.

Mitigation Measure LU-2(c), regarding funding construction of capital improvements, does not apply to the SOCCCD because the City exempted the SOCCCD's property from fair-share backbone infrastructure fees (per section 4.7.1.2 of the District Conveyance Agreement). The Exchange Agreement provides that the exemption applies to the currently County-owned parcel (proposed PA 1-B) once it is transferred to the SOCCCD. Measures LU-2(g) and (i) are not applicable because the Project site is not within the 100-year flood plain (see Federal Emergency Management Agency (FEMA) Map dated August 9, 2002), and thus these Mitigation Measures are not within the responsibility of the Project. Mitigation Measure LU-2(h), regarding obtaining regulatory agency approvals prior to construction of regional flood control facilities, is not within the responsibility of the Project because it only applies to the Tustin Legacy developer(s). Mitigation Measure LU-2(j), regarding local drainage systems, is not applicable because no subdivision maps are being recorded as part of the Project. Mitigation Measure LU-2(k), regarding the completion of drainage studies prior to grading for new development, is not applicable because the

Project does not include any grading or construction activities. Mitigation Measure LU-2(l), regarding an agreement with the Orange County Flood Control District for fair-share contributions to flood control facilities, is not applicable because no subdivision maps are being recorded as part of its Project and the Mitigation Measure only applies to the City of Tustin. In addition, the City exempted the SOCCCD's Property from fair-share backbone infrastructure fees per section 4.7.1.2 of the Conveyance Agreement. Mitigation Measure LU-2(t) is not applicable because no school fees are required for the Project. Mitigation Measure LU-2(u) is not applicable because the Project does not require a contribution to park facilities. Mitigation Measure LU-2(v) is not applicable to projects within the City of Tustin, and therefore is not within the Project's responsibility to implement. Measure LU-2(w), regarding the creation of a landscape maintenance district, is applicable to the Tustin Legacy developer, and therefore, is not within the Project's responsibility to implement. Finally, Mitigation Measure LU-2(x) is not applicable to the Project because no subdivision map is proposed as part of the Project, the Project is not adjacent to the Barranca Channel, and the City will provide any necessary bikeways along Red Hill Avenue.

Sources: Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas (LRP)
ATEP LRAP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-3 through 3-17, pp. 4-3 through 4-13, pp. 7-16 through 7-18, and Addendum (pp. 5-92 through 5-95) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
Tustin General Plan
2012 City of Tustin Annual Mitigation Monitoring Reports
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43
FEMA Map Nos. 06059C0279J and 06059C0283J revised December 3, 2009

3.11 Mineral Resources

3.11.1 Existing Conditions

There are no known mineral resources located on the ATEP Site.

3.11.2 Project Impact Evaluation

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project result in the loss of availability of a locally-important mineral resource recovery Site delineated on a local general plan, specific plan or other land use plan?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a-b:

No Impact Due to No Substantial Change from Previous Analysis: The Project would not cause new impacts to mineral resources that were not previously analyzed in the FEIS/EIR. There are no new or increased significant adverse project-specific or cumulative impacts with regard to mineral resources that are identified as a result of the adoption and implementation of the Project. There is no new information relative to mineral resources that was not in existence at the time the FEIS/EIR was prepared. Therefore, the Project and its implementation are consistent with the FEIS/EIR and no new mitigation measures are required in relation to impacts to mineral resources.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to mineral resources. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR were certified as complete.

Mitigation/Monitoring Required: No new impacts or substantially more severe impacts would result from implementation of the Project; therefore, no new or revised mitigation measures are required for mineral resources. In addition, there are no mitigation measures contained in the City's 2012 MMRP for the FEIS/EIR with regard to mineral resources. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required.

Mitigation/Monitoring Not Being Implemented: There are no new or revised mitigation measures for

mineral resources, and no mitigation measures are contained in the MMRP for the FEIS/EIR with regard to mineral resources.

Sources: Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (p. 3-91), and Addendum (pp. 5-95) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
Tustin General Plan

3.12 Noise

3.12.1 Existing Conditions

The ambient noise environment on the Project site is influenced by the surrounding roadways, the RSCCD's Sheriff's Training Academy, a rail line located north of Edinger Avenue, and construction and remediation activities on surrounding parcels.

3.12.2 Project Impact Evaluation

a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a-f:

No Impact Due to No Substantial Change from Previous Analysis: Implementation of the Project will not cause any substantial impacts to noise. The Project would permit an increased trip cap of 10,000 ADT. Noise associated with this increase in vehicular movements was assessed in the Traffic Noise Impact Analysis (NIA) prepared by Giroux & Associates in March 2013 (Appendix C). Noise impacts are considered significant if they expose persons to levels in excess of standards established in local general plans or noise ordinances or create a substantial noise impact. In most environmental analyses, "substantial" is taken to mean a level that is clearly perceptible to humans. In practice, this is at least a +3 decibel (dB) increase. This threshold of significance was applied to the Project in the NIA. The primary land use in the vicinity of the Project site that would be impacted by any increase in noise is the Orange County Rescue Mission.

Table 11 describes projected noise levels 50 feet from roadway centerline post Project construction, assuming the addition of 10,000 ADT. The dB levels shown in the table are adjusted to the Community Noise Equivalent Level (CNEL) standard, which adds an artificial increment to evening and nighttime noise measurements to account for the greater sensitivity to noise of receptors during these hours.

Table 11. Traffic Noise Impact Analysis

Road Segment	2035 No Project	2035 + Project	Project Impact	Increase ≥3 dB?
Red Hill Avenue/				
S of Warner	70.1	70.2	0.1	No
S of Bell	69.5	69.9	0.4	No
Bell - Valencia	70.4	71.4	1.0	No
N of Valencia	69.5	70.2	0.7	No
Valencia/				
E of Red Hill	67.5	65.6	-1.9	No
W of Armstrong	66.9	64.7	-2.2	No
Armstrong/				
S of Valencia	62.2	64.2	2.0	No
N of Warner	62.2	62.2	0.0	No
Warner/				
W of Red Hill	70.5	70.2	-0.3	No
E of Red Hill	70.2	69.0	-1.2	No
W of Armstrong	69.8	68.6	-1.2	No
E of Armstrong	69.3	68.4	-0.9	No
Source: NIA Table 2 (Appendix C).				

As shown in Table 11, many roadways are expected to experience a decrease in traffic noise when the Bell Avenue extension is complete due to a shifting in traffic patterns resulting from the diverted traffic. Both Valencia Avenue and Warner Avenue are anticipated to experience up to a 2 dB reduction in traffic noise levels.

Traffic noise along Armstrong Avenue south of Valencia Ave. could experience a noise increase of +2 dB CNEL at 50 feet from the roadway centerline, but this is less than the level of human detection and less than the significance threshold. Additionally, the "with project" future traffic noise level is still less than 65 dB CNEL, the noise compatibility threshold adopted by the City of Tustin for exterior residential use. The next highest project-associated traffic noise increase is on Red Hill Avenue between Bell Avenue and Valencia Avenue. This +1.0 dB CNEL increase is similarly less than significance thresholds and would not create a detectable noise increase. Traffic noise associated with the addition of 10,000 trips is therefore not expected to create a significant noise impact.

Short-term noise impacts were analyzed in the FEIS/EIR; implementation of the Project would be required to comply with applicable adopted mitigation measures and state and local regulations and standards, along with established engineering procedures and techniques, thus avoiding significant short-term construction-related noise impacts. The Project site is not located within the 60 CNEL contour for airport operations. Therefore, implementation of the Project would not involve the development of any noise-sensitive land uses susceptible to excessive noise related aircraft operations within the 60 CNEL.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to noise. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR were certified as complete.

Mitigation/Monitoring Required: The FEIS/EIR concludes that with implementation of identified mitigation measures, there would be no significant impacts related to noise. The Project does not increase the severity of the noise impacts previously identified in the FEIS/EIR. Therefore, no refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required. Mitigation Measure N-3 will apply to the project during construction. Mitigation Measure N-4 will apply to the City in relation to noise studies adjacent to Warner and Harvard Avenues.

Mitigation/Monitoring Not Being Implemented: Mitigation Measure N-1 is not applicable to the Project, as no residential buildings are being reused as part of the Project. Mitigation Measure N-2, regarding noise studies on surrounding properties during design of the intersection at Tustin Ranch Road at Edinger Avenue, have been completed by the City of Tustin.

Sources: Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-154 through 3-162), and Addendum (pp. 5-96 through 5-99) and Final Supplement #1

MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
Tustin General Plan
2012 City of Tustin Annual Mitigation Monitoring Reports
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43
Giroux & Associates – Traffic Noise Impact Analysis (Appendix C)

3.13 Population and Housing

3.13.1 Existing Conditions

There is no housing and associated population on the ATEP Site.

3.13.2 Project Impact Evaluation

a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a-c:

No Impact Due to No Substantial Change from Previous Analysis: Implementation of the Project would have no impacts to population and housing. There are no new or increased significant adverse project-specific or cumulative impacts with regard to population and housing that are identified as a result of the adoption and implementation of the Project. There is no new information relative to population and housing that was not in existence at the time the FEIS/EIR was prepared. Therefore, the Project and its implementation are consistent with the FEIS/EIR and no new mitigation measures are required in relation to impacts to population and housing.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to population and housing. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or

mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation/Monitoring Required: No new impacts or substantially more severe impacts would result from implementation of the District's adoption and implementation of the Project; therefore, no new or revised mitigation measures are required for population and housing. In addition, there are no mitigation measures contained in the City's 2012 MMRP for the FEIS/EIR with regard to population and housing. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required.

Mitigation/Monitoring Not Being Implemented: There are no mitigation measures contained in the City's 2012 MMRP for the FEIS/EIR with regard to population and housing. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required.

Sources: Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-18 through 3-34, pp. 4-14 through 4-29, pp. 7-18 through 7-19, Addendum (pp. 5-101 through 5-112) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
District Conveyance Agreement
Tustin General Plan
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43

3.14 Public Services

3.14.1 Existing Conditions

Fire

The Orange County Fire Authority (OCFA) provides fire protection to the Project site and Tustin Legacy.

Police

Police protection services for the SOCCCD properties is provided by the Irvine Valley College Police Department, and for all other Project site properties by the Tustin Police Department.

Schools

There are no K-12 school facilities on the Project site.

Parks

There are no existing parks on the Project site.

Other

The Project site will ultimately be owned entirely by the City and SOCCCD. The City and SOCCCD will develop public service facilities on the Project site.

3.14.2 Project Impact Evaluation

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Response to a:

No Impact Due to No Substantial Change from Previous Analysis: Implementation of the Project will not cause any significant impacts to public services. There are no new or increased significant adverse project-specific or cumulative impacts with regard to public services and facilities that are identified as a result of the adoption and implementation of the Project. There is no new information relative to public

services and facilities that was not in existence at the time the FEIS/EIR was prepared. Therefore, the Project and its implementation are consistent with the FEIS/EIR and no new mitigation measures are required in relation to impacts to public services and facilities.

Fire Protection

Fire protection for the Project site was discussed and analyzed in the FEIS/EIR. The Project results in no changes to that previous analysis, and no increased or new environmental effects on the environment from those previously analyzed in the FEIS/EIR.

Implementation of the Project will require compliance with existing OCFA regulations regarding construction materials and methods, emergency access, water mains, fire flow, fire hydrants, sprinkler systems, building setbacks, and other relevant regulations. Adherence to these regulations will reduce the risk of uncontrollable fire and increase the ability to efficiently provide fire protection services to the Site. Construction of Bell Avenue will enhance OCFA access to the Project site and have a beneficial impact on fire protection. Pursuant to the FEIS/EIR, the existing fire stations in the Project vicinity with additional fire fighting personnel and equipment will meet the demands created by the Project and other development within Tustin Legacy. In addition, the city has started construction of an additional fire station at the intersection of Edinger Avenue and Kensington Park Drive, less than one mile east of the Project site. No new or expanded facilities were identified as being required and therefore no physical impacts were identified.

Police Protection

Police protection for the Project site was discussed and analyzed in the FEIS/EIR. The Project results in no changes to that previous analysis, and no increased or new environmental effects on the environment from those previously analyzed in the FEIS/EIR.

The Irvine Valley College Police Department has a similar level of law enforcement capabilities as Tustin Police Department officers, including the capacity to cite and arrest offenders. They also have access to the emergency radio network that is shared with the Tustin Police Department, Orange County Sheriff's Department, OCFA, and other emergency personnel. The SOCCCD property is patrolled and serviced 24 hours per day by a combination of the Irvine Valley College police and security services that are under the management of the Irvine Valley College police. Tustin Police Department officers would respond to requests for assistance on the County-owned parcel.

Implementation of the Project would not increase the need for police protection services in addition to what was anticipated in the FEIS/EIR.

Schools

The Project does not include any residential development. Therefore, the Project does not generate K-12 students and there is no impact to schools. Neither the City nor the SOCCCD would be required to pay school development fees consistent with Senate Bill (SB) 50 of 1998.

Parks

Consistent with the Specific Plan, the Project does not include any park development. PA 2, located north of Valencia Avenue and the ATEP campus, is identified in the Specific Plan as a "Community Park." PA 6, located across Armstrong Avenue from the Project site, is identified as an "Urban Regional Park." There is no change to the proposed park uses in PAs 2 and 6 as a result of the Project.

Other Public Facilities

The FEIS/EIR concluded that public facilities would be provided according to a phasing plan to meet projected needs as development of the Specific Plan proceeded. The Project would not increase the demand more than what was already analyzed in the previously certified FEIS/EIR.

Mitigation/Monitoring Required: The FEIS/EIR concluded that there would be no significant unavoidable impacts related to public services. The Project and its implementation would not result in any new or increased impacts to public services beyond those identified in the FEIS/EIR. Therefore, no new mitigation measures are required. Because the Project does not involve any development on the Project site, no mitigation measures related to public services apply to the Project.

The City and SOCCCD would implement Mitigation Measure LU-2(m) by ensuring adequate public services are included to serve the Project as a result of the adoption and implementation of the Project, as described in the 2012 MMRP. Under Mitigation Measure LU-2, the City is responsible for ensuring that adequate fire protection, police protection, library, and parks and recreational facilities needed to adequately serve the Tustin Legacy Project is provided as necessary. The City will implement Mitigation Measure LU-2(n). The City and SOCCCD will implement Mitigation Measures LU-2(o) by coordinating directly with the OCFA regarding potential fire protection impacts of the Project. SOCCCD's Fire Master Plan has already been reviewed and approved by OCFA as part of Phase 1 of the ATEP Campus. Mitigation Measures LU-2 (p), (q), and (r), related to fire protection, will be implemented as specific developments are proposed for the Project site. Mitigation Measure LU-2(s), regarding police protection, has been implemented by the SOCCCD, and the Tustin Police Department has been consulted regarding the existing ATEP Campus and the development of MCAS Tustin. The City and SOCCCD will continue to coordinate with the Tustin Police Department on issues related to the policing of the Project site.

Mitigation/Monitoring Not Being Implemented: Mitigation Measure LU-2(t) regarding the payment of school fees is not applicable to the Project, and therefore is not within the responsibility of the Project. Mitigation Measures LU-2(u) and (v) regarding the contribution of park facilities are also not applicable to the Project, and are therefore not within the responsibility of the Project. Mitigation Measure LU-2(w) regarding the creation of a landscape maintenance district is the responsibility of the Tustin Legacy master developer, and therefore is not within the responsibility of the Project. Mitigation Measure LU-2(x) regarding agreements with the County of Orange Harbors and Beaches and the City of Tustin for trail improvements are not applicable to the Project, and are therefore not within the responsibility of the Project.

Sources:
Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
Consolations with Irvine Valley College Police Chief
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-47 through 3-57, pp. 4-56 through 4-80, pp. 7-21 through 7-22, and Addendum (pp. 5-112 through 5-122) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
District Conveyance Agreement
Tustin General Plan
2012 City of Tustin Annual Mitigation Monitoring Reports
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43

3.15 Recreation

3.15.1 Existing Conditions

Consistent with the Specific Plan, there are no public recreational facilities on the ATEP Site.

3.15.2 Project Impact Evaluation

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Does the project include recreational facilities or require the construction, expansion, or recreational facilities, which might have an adverse physical effect on the environment?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a-b:

No Impact Due to No Substantial Change from Previous Analysis. The Project would not result in an increase of development intensity or change in uses that would result in increased use of existing parks or recreational facilities. There are no new or increased significant adverse project-specific or cumulative impacts with regard to recreation that are identified as a result of the adoption and implementation of the Project. There is no new information relative to recreation that was not in existence at the time the FEIS/EIR was prepared and no new mitigation measures are required in relation to impacts to recreation.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to recreation. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation/Monitoring Required: No new impacts or substantially more severe impacts would result from the implementation of the Project; therefore, no new or revised mitigation measures are required for recreation. In addition, there are no mitigation measures contained in the City's MMRP for the FEIS/EIR with regard to recreation or recreational facilities. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required.

Mitigation/Monitoring Not Being Implemented: There are no new or revised mitigation measures for recreation or recreational facilities, and there are no mitigation measures contained in the City's MMRP for the FEIS/EIR with regard to recreation or recreational facilities.

Sources: Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-47 through 3-57, pp. 4-56 through 4-80, pp. 7-21 through 7-22, and Addendum (pp. 5-122 through 5-127) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
Tustin General Plan
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43

3.16 Transportation/Traffic

3.16.1 Existing Conditions

Major roadways near the Project site include:

- Warner Avenue, a six-lane major arterial, to the south (planned);
- Red Hill Avenue to the west, currently six lanes and an eight-lane major arterial at future buildout;
- Valencia Avenue, a four-lane secondary arterial, to the north; and
- Armstrong Avenue, a four-lane secondary arterial, to the east.

Access to the Project site is primarily from Armstrong Avenue. Armstrong Avenue currently terminates at Warner Avenue; as Tustin Legacy builds-out, it will be extended to Barranca Parkway.

3.16.2 Project Impact Evaluation

a) Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

e) Would the project result in inadequate emergency access?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a – f:

No Impact Due to No Substantial Change from Previous Analysis. The Project enhances access to Tustin Legacy and increases local roadway capacity through a 1/3 mile extension of Bell Avenue, at a Secondary Arterial design standard. Increasing local roadway capacity allows an increased intensity of development on the Project site without creating new or more significant traffic impacts. A Traffic Study was prepared by Stantec in April 2013 (Appendix A) to determine the impacts the Bell Avenue extension would have on local roadway conditions, and to calculate the number of trips that could be added to the Project site without creating a significant traffic impact. Future traffic conditions were projected using the Irvine Transportation Analysis Model and the Tustin Legacy Traffic Model.

The current trip cap for the ATEP site is 5,470 ADT and for the City parcels 1,672 ADT. The overall MCAS Tustin planned trip count is 216,440 ADT. Based on the size and configuration of the Bell Avenue extension, the Traffic Study estimates the increased local roadway capacity could serve an additional 10,000 ADTs. This additional roadway capacity is proposed to be split evenly between properties owned by the City and SOCCCD (that is, each entity would be permitted an additional 5,000 ADT). The City anticipates that only about 25 percent of its allocation of 5,000 ADT (up to 1,250 ADT) would be used within Neighborhood A; the remaining trips (3,750 ADT) would be made available for additional development in other areas of Tustin Legacy. The full amount of these trips will not be needed because the City recently amended the MCAS Specific Plan to include government office uses in Neighborhood A to accommodate an expected relocation of the Army Reserve operations from the southern boundary of Tustin Legacy. A total of 1,250 ADT is sufficient for the Army Reserve operations. The specific location of the remaining trips has not been determined and subsequent traffic analysis may be needed when the trips are allocated to a specific location within Tustin Legacy. No specific development proposal is included in this project scope for the City parcels; for the purposes of traffic impacts analysis, it is assumed the City-owned parcel would be developed with 360,000 square feet of office development and 39,360 square feet of other commercial development, for a total of 399,360 square feet. This results in an increased ADT of 1,240. Regardless of the nature of development the City chooses to implement on its

parcel, such development must be consistent with the MCAS Tustin Specific Plan's approved land uses (as amended by the SPA), and would be subject to the trip cap for Neighborhood A.

Table 12 shows calculated project trip generation resulting from two the development scenarios considered. Scenario 1 increases the previously-approved amount of development on the ATEP site by 194,119 square feet, with the total square footage of the development being allocated to 51 percent educational and 49 percent office uses. Scenario 2 increases the previously-approved amount of development on the ATEP site by 816,929 square feet, with the entire development devoted to educational uses. As shown in the table, due to the differing trip generation rates between educational and office uses, the two development scenarios would produce essentially the same number of ADTs.

Table 12. Project Trip Generation

			AM Peak Hour			PM Peak Hour			
Land Use	**Amount**	**Unit**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**ADT**
NO-PROJECT									
ATEP									
Learning Center	893.85	TSF	589	63	652	135	304	439	5,471
City Parcel									
Tustin Facility	TBD	SG	332	101	433	227	476	703	6,220
TOTAL NO-PROJECT			**921**	**164**	**1,085**	**362**	**780**	**1,142**	**11,691**
WITH-PROJECT									
ATEP Scenario 1 – 51% academic, 49% office									
Learning Center	554.87	TSF	366	40	406	83	189	272	3,397
General Office	533.10	TSF	880	122	1,002	165	795	960	7,075
TOTAL			1,246	162	1,408	248	984	1,232	10,472
DIFFERENCE (Scenario 1 vs. No Project)			**657**	**99**	**756**	**113**	**680**	**793**	**5,001**
ATEP Scenario 2 – 100% academic									
Learning Center	1,710.78	TSF	1,129	120	1,249	257	582	838	10,470
DIFFERENCE (Scenario 2 vs. No Project)			**540**	**57**	**597**	**122**	**278**	**399**	**4,999**
City Parcel									
Commercial	39.36	TSF	39	25	64	112	122	234	2,683
General Office	360.00	TSF	594	83	677	112	536	648	4,777
TOTAL			633	108	741	224	658	882	7,460
DIFFERENCE			**301**	**7**	**308**	**-3**	**182**	**179**	**1,240**
TOTAL WITH-PROJECT – Scenario 1			**1,879**	**270**	**2,149**	**472**	**1,642**	**2,114**	**17,932**
TOTAL DIFFERENCE – Scenario 1			**958**	**106**	**1,064**	**110**	**862**	**972**	**6,241**
TOTAL WITH-PROJECT – Scenario 2			**1,762**	**228**	**1,990**	**481**	**1,240**	**1,720**	**17,930**
TOTAL DIFFERENCE – Scenario 2			**841**	**64**	**905**	**119**	**460**	**578**	**6,239**
Trip Rates									
Learning Center		TSF	.66	.07	.73	.15	.34	.49	6.12

Commercial	TSF	1.00	.64	1.64	2.85	3.09	5.94	68.17
General Office	TSF	1.65	.23	1.88	.31	1.49	1.80	13.27
Tustin Facility	SG	3.32	1.01	4.33	2.27	4.76	7.03	62.20

Note: No-Project land uses shown here are consistent with the Specific Plan Amendment approved in 2010.
SG = Special Generator; TBD = To Be Determined; TSF = Thousand Square Feet
Source: Traffic Study Tables 2-1 and 4-1 (Appendix A).

Using the peak-hour trip generation figures in the table above, Table 13 shows 2035 intersection capacity utilization (ICU) figures and the associated level of service (LOS) conditions at major local intersections. The No Project condition shown below assumes implementation of the MCAS Tustin Specific Plan as most recently amended, in 2010. The With-Project projections are based on Scenario 1 trip generation figures. As shown in Table 12, above, trip generation from Scenario 1 is higher than Scenario 2 during peak hours, although the count of ADTs is essentially the same. The performance standard for intersections in the Project vicinity is LOS D, which equates to an ICU not exceeding 0.90. As shown in the table below, several intersections would see improvements in peak hour conditions as a result of the increased capacity offered by the Bell Avenue extension. All of the evaluated intersections would continue to operate at above the minimum service standard of LOS D; therefore, there is no significant impact related to a decrease in service levels.

Table 13. 2035 Intersection LOS Summary

		No-Project				With-Project					
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Difference	
Intersection		**ICU**	**LOS**	**ICU**	**LOS**	**ICU**	**LOS**	**ICU**	**LOS**	**AM**	**PM**
1.	Armstrong & Valencia	.52	A	.45	A	.44	A	.40	A	-.08	-.05
2.	Armstrong & Warner	.37	A	.45	A	.37	A	.40	A	.00	-.05
3.	Red Hill & Warner	.67	B	.60	A	.66	B	.61	B	-.01	.01
4.	Red Hill & Valencia	.56	A	.73	C	.62	B	.69	B	.06	-.04
5.	Red Hill & Bell	.56	A	.50	A	.70	C	.75	C	.14	.25
6.	Armstrong & Bell	--	--	--	--	.59	A	.60	A	n/a	n/a

n/a = not applicable
Source: Traffic Study Table 3-1 (Appendix A).

The Traffic Study also evaluated requirements for site access, including lane geometry at the new Bell Avenue intersections. Signal warrants and left-turn storage length requirements were analyzed. The analysis concludes that an appropriate design for the Bell Avenue extension, including the two major intersections at either end of the extension (at Red Hill and Armstrong Avenues), is feasible, and construction of the roadway extension can be accommodated with no adverse traffic conditions on other parts of the circulation system. Proper engineering of the roadway extension would therefore avoid any potential safety hazards due to design features.

The Project does not involve any increase in permitted heights on the site, and would not be expected to have any impact on air traffic patterns at John Wayne Airport or any other aviation facility.

The Project, by providing an additional access route to the Project site and Tustin Legacy, would have a positive impact on emergency access to existing and future development in the area.

The Project includes a Class II bicycle lane and sidewalks along Bell Avenue. No public transit facility is proposed, as no bus route currently exists or is planned for the Bell Avenue extension. The bicycle lane and sidewalk would be beneficial to bicyclists and pedestrians. The GPA and SPA associated with the Project would identify a new Class II bicycle facility along the Bell Avenue extension. With these amendments, the project would not conflict with any adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities.

There are no new or increased significant adverse project-specific or cumulative impacts with regard to traffic and transportation that are identified as a result of the adoption and implementation of the Project. There is no new information relative to traffic and transportation that was not in existence at the time the FEIS/EIR was prepared and no new mitigation measures are required in relation to impacts to traffic and transportation.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to recreation. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation/Monitoring Required: The mitigation measures applicable during implementation of the Project have been identified in the City's adopted MMRP. Mitigation Measure T/C-1 requires that prior to the approval of a site development permit, the City of Tustin must review and approve the proposed traffic control and operations plans that would minimize the traffic impacts of proposed construction activity. The plans shall address roadway and lane closures, truck hours and routes, and notification procedures for planned short-term or interim changes in traffic patterns. Mitigation Measures T/C-2 through T/C-9, IA-1, IA-2, and IA-5 are implemented by the City of Tustin and/or the City of Irvine. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required for implementation (i.e., construction) of the Project. The Project will implement the relevant mitigation measures of the adopted MMRP and as stated in the 2012 MMRP. No new impacts or substantially more severe impacts will result from the District's adoption and implementation of the Project than originally considered by the previously certified FEIS/EIR. Therefore, no new or revised mitigation measures are required.

Mitigation/Monitoring Measures Not Being Implemented: Mitigation Measure IA-3 requires that prior to approval of a development permit, the City of Tustin shall review traffic information provided for the project by the project developer. The City is required to evaluate project traffic impacts utilizing the circulation system and capacity assumptions included in the FEIS/EIR. Compliance with this Mitigation Measure has been completed through the Traffic Study prepared by Stantec and included in Appendix A to this Addendum. The project would not exceed traffic capacity thresholds or require the implementation of traffic mitigation measures. With the approval of the Amended and Restated Conveyance Agreement, no further action is required in compliance with Mitigation Measure IA-5. For Mitigation Measures IA-6 and IA-7, the City has determined that no off-site roadway improvements are needed on the Project site.

Sources: Field Observations

ATEP – District and County Land Swap Traffic Evaluation Technical Memorandum by Austin-Foust Associates, May 2011
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
City of Tustin Traffic Analysis Requirements
SOCCCD ATEP Phase 3A Traffic Circulation Analysis prepared by Austin-Foust Associates, February 2009
SOCCCD ATEP Phase 3A Parking Analysis prepared by Austin-Foust Associates, February 2009
"Marine Corps Air Station (MCAS) Tustin Disposal and Reuse Traffic Study" prepared by Austin-Foust Associates (Appendix F to the FEIS/EIR)
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-118 through 3-142, pp. 4-139 through 4-206, pp. 7-32 through 7-42, and Addendum (pp. 5-127 through 5-147) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
District Conveyance Agreement
Tustin General Plan
2012 City of Tustin Annual Mitigation Monitoring Reports
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43
Stantec – Traffic Study (Appendix A)

3.17 Utilities and Service Systems

3.17.1 Existing Conditions

All dry utilities (electricity, cable, telephone, and gas) and wet utilities (water, wastewater and reclaimed water) are located in the streets surrounding the Project site. Existing development on the ATEP campus and the RSCCD Sheriff's Training Academy sites connect to these utilities.

3.17.2 Project Impact Evaluation

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

e) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Responses to a-g:

No Impact Due to No Substantial Change from Previous Analysis: The Project would not result in any changes to the utilities plan presented in the Specific Plan. Any demolition, removal, replacement, and connection with new underground utilities and service systems in the adjoining streets would occur as previously analyzed in the FEIS/EIR. The Project's increased size of 194,119 square feet (based on the more likely scenario of 51 percent academic space and 49 percent office space) to 816,929 square feet (based on the less likely scenario of 100 percent academic space) would yield only a negligible impact on utilities compared to the full scope of the MCAS Tustin Specific Plan, which included up to 4,601 residential units and over 11.4 million square feet of commercial, institutional, and recreational buildings. The full scope of this much larger development was evaluated in the FEIS/EIR as Alternative 1; however, the MCAS Tustin Specific Plan was ultimately approved with 10.4 million square feet of nonresidential land uses. There is approximately 1 million square feet of nonresidential uses that was fully analyzed in the FEIS/EIR but was not incorporated into the MCAS Tustin Specific Plan. The Project represents fewer square feet than the excess square footage analyzed in the FEIS/EIR and therefore the Project impacts have already been assessed in the FEIS/EIR.

As individual buildings are proposed on the Project site, an evaluation of utility needs will occur to ensure the appropriate connections are provided. Project facilities would comply with local and State code requirements related to water efficiency and the minimization of wastewater and solid waste generation. Impacts related to these utilities were evaluated in the FEIS/EIR, and the project would result in only a negligible change in the water use and wastewater and solid waste generation. Relative to stormwater, the Project would be required to prepare and implement a WQMP consistent with then-current standards. This would result in substantial on-site water retention and infiltration, thereby reducing off-site drainage flows and minimizing impacts to the local drainage system. All storm drains would be designed in compliance with the Tustin Legacy Master Drainage Plan.

Based on the foregoing, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent or supplemental EIR or other environmental document to evaluate Project impacts or mitigation measures with regard to utilities and service systems. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation/Monitoring Required: No new impacts or substantially more severe impacts would result from adopting or implementing the Project; therefore, no new or revised mitigation measures are required for public utilities. In addition, there are no mitigation measures contained in the City's MMRP for the FEIS/EIR with regard to public utilities. No refinements are necessary to the FEIS/EIR mitigation measures and no new mitigation measures are required.

Mitigation/Monitoring Not Being Implemented: There are no new or revised mitigation measures for public utilities, and no mitigation measures are contained in the MMRP with regard to public utilities.

Sources:
Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP LRP Addendum/Initial Study as amended by November 2008 Errata
ATEP LRP as amended by the October and November 2008 Erratas
ATEP LRAP as amended by the October 2008 Errata
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 3-35 through 3-46, pp. 4-32 through 4-55, pp. 7-20 through 7-21, and Addendum (pp. 5-147 through 5-165) and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
District Conveyance Agreement
Integrated Resource Management letter dated October 2008
Tustin General Plan
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43

3.18 Mandatory Findings of Significance

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	Potentially Significant Impact ☐	Less than Significant With Mitigation Incorporation ☐	Less than Significant Impact ☐	No Impact ☒

Response to a-c:

No Impact Due to No Substantial Change from Previous Analysis: The FEIS/EIR previously considered all environmental impacts associated with the implementation of the Specific Plan, including mandatory findings of significance associated with the implementation of the Project. The Project would not expand the area of development and would not impact any natural habitats or other areas inhabited by sensitive species. The Project would marginally increase development potential compared to the full scope of the MCAS Tustin Specific Plan evaluated in the FEIS/EIR. The Project would not cause unmitigated environmental effects that were not already examined in the FEIS/EIR. There are no new mitigation measures required and there are no new significant adverse project-specific or cumulative impacts in any environmental areas that were identified, nor would any project-specific or cumulative impacts in any environmental areas be made worse as a result of the Project. All feasible mitigation measures identified in the FEIS/EIR will be incorporated into subsequent actions that the District and County commit to fully implement. Therefore, the Project does not create any impacts that have not previously been addressed by the FEIS/EIR.

Further, none of the conditions identified in CEQA Guidelines Section 15162 exist that would trigger the need to prepare a subsequent EIR to evaluate Project impacts or mitigation measures with regard to environmental impacts. Specifically, there have not been: (1) changes to the Project that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; (2) substantial changes with respect to the circumstances under which the Project is undertaken that require major revisions of the previous FEIS/EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or (3) the availability of new information of substantial importance relating to significant effect or mitigation measures or alternatives that was not known and could not have been known when the FEIS/EIR was certified as complete.

Mitigation/Monitoring Required: No new impacts or substantially more severe impacts would result from the Project; therefore, no new or revised mitigation measures are required.

Mitigation/Monitoring Not Being Implemented: There are no new or revised mitigation measures for mandatory findings of significance and no mitigation measures are contained in the MMRP with regard to mandatory findings of significance.

Sources:
Field Observations
ATEP Phase 3A Concept Plan Addendum/Initial Study
ATEP Long-Range Plan (LRP) Addendum/Initial Study as amended by November 2008 Errata
ATEP Long-Range Academic & Facilities Plan, as amended by the October and November 2008 Erratas (LRP)
ATEP Long-Range Academic Plan, as amended by the October 2008 Errata (LRAP)
FEIS/EIR for Disposal and Reuse of MCAS Tustin (pp. 5-4 through 5-11) and Addendum and Final Supplement #1
MCAS Tustin Specific Plan/Reuse Plan (pp. 3-35 through 3-62, pp. 3-70 through 3-81, pp. 3-82 through 3-88, and pp. 3-104 through 3-137)
City of Tustin Resolution Nos. 00-90, 04-77, and 06-43
Tustin General Plan

4. Summary of Mitigation Measures

Project impacts and required mitigation (if necessary) are discussed in the environmental issue topical areas in Section 3 above – Environmental Evaluation. Based on the previously certified FEIS/EIR, the environmental evaluation determined that no new mitigation is needed for the Project. The following table (Table 14) lists the Specific Plan FEIS/EIR Mitigation Measures that are applicable to the Project.

Table 14. Specific Plan FEIS/EIR
Mitigation Measures Applicable to Project Site

No.	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
LU-2 (d)	Prior to the issuance of permits for any public improvements or development project, a development applicant shall submit to the City of Tustin and City of Irvine, as applicable, information from IRWD which outlines required facilities necessary to provide adequate potable water and reclaimed water service to the development.	Prior to the issuance of permits for any public improvements or development project.	Project developer	Community Development Department (Tustin and/or Irvine, as appropriate)	**SOCCCD (ATEP):** All easements for Phase I project have been recorded; however, dedication of easements, right-of-ways, or other land determined necessary to construct adequate utility infrastructure and facilities to serve future phases of development as determined by the City, SOCCCD or other utility providers will need to be defined with each phase and recorded.
LU-2 (e)	Prior to the issuance of building permits, the project developer shall ensure that fire hydrants capable of flows in amounts approved by the OCFA are in place and operational to meet fire flow requirements.	Prior to the issuance of the certificates of use and occupancy.	Project developer	Community Development Department (Tustin and/or Irvine, as appropriate); OCFA	**SOCCCD (ATEP):** OCFA has determined that the project plans and data show adequate flows to serve Phase 1 of the project; OCFA will need to determine adequate flows for all future phases.
LU-2 (f)	Prior to the issuance of permits for any public improvements or development project, a development applicant shall submit to the City of Tustin and City of Irvine, as applicable, information from IRWD, OCSD, or the City of Tustin which outlines required facilities necessary to provide adequate sanitary sewage service to the development.	Prior to the issuance of permits for any public improvements or development project.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	**SOCCCD (ATEP):** IRWD and OCSD have determined there will be adequate facilities to serve the Phase 1 project; determinations will be made for all future phases.
LU-2 (k)	Prior to any grading for any new development, the following drainage studies shall be	Prior to any grading for any new	Project developer	Tustin Building Division or Public Works Department	**SOCCCD (ATEP):** Grading and drainage plans

Table 14. Specific Plan FEIS/EIR
Mitigation Measures Applicable to Project Site

No.	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	submitted to and approved by the City of Tustin, City of Irvine, and/or OCFCD, as applicable:	development.		(Tustin and/or Irvine, as applicable)	approved by the City and improvements installed for Phase 1 of project; however, grading and drainage plans will need to be submitted and approved by the City and improvements installed in conjunction with future phases.
	(1) A drainage study including diversions (i.e., off-Site areas that drain onto and/or through the project site), with justification and appropriate mitigation for any proposed diversion.	Prior to any grading for any new development.	Project developer	Tustin Building Division or Public Works Department (Tustin and/or Irvine, as applicable)	
	(2) A drainage study evidencing that proposed drainage patterns would not result in increased 100-year peak discharges within and downstream of the project limits, and would not worsen existing drainage conditions at storm drains, culverts, and other street crossing including regional flood control facilities. The study shall also propose appropriate mitigation for any increased runoff causing a worsening condition of any existing facilities within or downstream of project limits. Implementation of appropriate interim or ultimate flood control infrastructure construction must be included.	Prior to any grading for any new development.	Project developer	Tustin Building Division or Public Works Department (Tustin and/or Irvine, as applicable)	
	(3) Detailed drainage studies indicating how, in conjunction with the drainage conveyance systems included applicable swales, channels, street flows, catch basins, storm drains, and flood water retarding, building pads are made safe from runoff inundation which may be expected from all storms up to and	Prior to any grading for any new development.	Project developer	Tustin Building Division or Public Works Department (Tustin and/or Irvine, as applicable)	

Table 14. Specific Plan FEIS/EIR
Mitigation Measures Applicable to Project Site

No.	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	including the theoretical 100-year flood.				
LU-2 (m)	General The City of Tustin and the City of Irvine, each within its respective jurisdiction, shall ensure that adequate fire protection, police protection, and parks and recreation facilities (including bikeways/trails) needed to adequately serve the reuse plan area shall be provided as necessary. To eliminate any negative impact the project could have on each community's general fund, financing mechanisms including but not limited to developer fees, assessment district financing and/or tax increment financing (in the event that a redevelopment project area is created for the Site), shall be developed and used as determined appropriate by each City. Specifically; (1) Applicants for private development projects shall be required to enter into an agreement with the City of Tustin or the City of Irvine, as applicable, to establish a fair-share mechanism to provide needed fire and police protection services, libraries, and parks and recreation facilities (including bikeways) through the use of fee schedules, assessment district financing, Community Facility District financing, or other mechanisms as determined appropriate by each respective city.	Prior to final map recordation or building permit issuance.	Project Developer Property recipients	Tustin Community Development Department, Police Department, or Parks Department or the City of Irvine, and/or OCFA, as appropriate.	**SOCCCD (ATEP):** (1) Pursuant to the Conveyance Agreement, SOCCCD is required to construct all on-site improvements; however, the City has exempted SOCCCD from City CFD-funded Tustin Legacy Backbone Infrastructure costs is educational. Phase 1 of the project has been developed as an educational use; however, SOCCCD adopted a Long Range Plan on November 3, 2008 and submitted a Concept Plan for Phase 3A that may not clearly identify the primary use as educational as the City has informed SOCCCD. As a result SOCCCD may be subject to a required future contribution to Tustin Legacy Backbone Infrastructure for non-educational uses, and is still subject to assessments from outside utility purveyors regardless of primary use of project as well as landscape maintenance easements.

Table 14. Specific Plan FEIS/EIR
Mitigation Measures Applicable to Project Site

No.	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	(2) Recipients of property through public conveyance process shall be required to mitigate any impacts of their public uses of property on public services and facilities.				(2) Pursuant to the Conveyance Agreement, SOCCCD is required to construct all on-site improvements; however, SOCCCD is exempted from Tustin Legacy Backbone Infrastructure costs provided that proposed uses on the project site are educational. Phase 1 of the project has been developed as an educational use and the Phase 3A Concept Plan approved in July 2010 authorized up to 305,000 square feet of uses. In the event non-educational uses are proposed in the future, SOCCCD will be subject to required Fair Share Contributions to Tustin Legacy Backbone Infrastructure for the non-educational uses, and in any event would still be subject to assessments from outside utility purveyors regardless of primary use of the site.
LU-2 (o)	Fire Protection/Emergency Medical Services Prior to the first final map recordation or building permit issuance for development (except for financing and reconveyance purposes), the project developer could be	Prior to the first final map recordation or building permit issuance for development (except for financing	Project developer	Tustin Community Redevelopment Agency and the City of Irvine	**SOCCCD (ATEP):** The SOCCCD received building permits via the Division of the State Architect for Phase I. No additional Fair Share Contribution toward Tustin

Table 14. Specific Plan FEIS/EIR
Mitigation Measures Applicable to Project Site

No.	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	required to enter into an agreement with the City of Tustin or City of Irvine/OCFA, as applicable, to address impacts of the project on fire services. Such agreement could include participation for fire protection, personnel and equipment necessary to serve the project and eliminate any negative impacts on fire protection services.	and re-conveyances purposes).			Legacy Backbone Infrastructure, including fire facilities required for educational uses. SOCCCD will be responsible for any Fair Share Contributions required for Tustin Legacy Backbone Infrastructure, including the Fire Station in Tustin Legacy for any non-educational uses that occur on the site.
LU-2 (p)	Prior to issuance of building permits, the project developer shall work closely with the OCFA to ensure that adequate fire protection measures are implemented in the project.	Prior to issuance of building permits.	Project developer	Community Development Department (Tustin and/or Irvine as applicable)	**SOCCCD (ATEP):** Fire Master Plan for Phase 1 of project reviewed and approved by OCFA - installation complete; however, a complete Fire Master Plan for future phases will need to be reviewed and approved by OCFA.
LU-2 (q)	Prior to issuance of building permits for phased projects, the project developer shall submit a construction phasing plan to the OCFA demonstrating that emergency vehicle access is adequate.	Prior to issuance of building permits for phased projects.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	**SOCCCD (ATEP):** Fire Master Plan for Phase 1 of project reviewed and approved by OCFA - installation complete; however, a complete Fire Master Plan for future phases will need to be reviewed and approved by OCFA.
LU-2 (r)	Prior to the issuance of building permits, the project developer shall submit a fire hydrant location plan for the review and approval of the Fire Chief and ensure that fire hydrants capable of flows in amounts approved by the OCFA are in	Prior to issuance of building permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	**SOCCCD (ATEP):** Fire Master Plan for Phase 1 of project reviewed and approved by OCFA - installation complete; however, a complete Fire

Table 14. Specific Plan FEIS/EIR
Mitigation Measures Applicable to Project Site

No.	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	place and operational to meet fire flow requirements.				Master Plan for future phases will need to be reviewed and approved by OCFA.
LU-2 (s)	Police Protection Prior to issuance of building permits, the project developer shall work closely with the respective Police Department to ensure that adequate security precautions are implemented in the project.	Prior to issuance of building permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	**SOCCCD (ATEP):** The Tustin Police Department has reviewed the Phase 1 project; however, the Tustin Police Department will need to review all future phases.
Arch-2	Prior to issuance of grading permits, the cities of Tustin and Irvine shall each require applicants of individual development projects to retain, as appropriate a country-certified archaeologist. If buried resources are found during grading within the reuse plan area, a qualified archaeologist would need to assess the Site significance and perform the appropriate mitigation. The Native American view point shall be considered during this process. This could include testing or data recovery. Native American consultation shall also be initiated during this process.	Prior to issuance of grading permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	**SOCCCD (ATEP):** The SOCCCD retained an archaeologist for project construction of Phase 1; however, an archaeologist will also need to be obtained for construction of any future phases.
Paleo-1	The cities of Tustin and Irvine shall each require applicants of individual development projects to comply with the requirements established in a PRMP prepared for the Site, which details the methods to be used for surveillance of construction grading, assessing finds, and actions to be taken in the event that unique paleontological resources are discovered during construction.	Prior to issuance of grading permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	**SOCCCD (ATEP):** The SOCCCD shall be required to retain an archaeologist for all phased ATEP construction.

Table 14. Specific Plan FEIS/EIR
Mitigation Measures Applicable to Project Site

No.	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
Paleo-2	Prior to the issuance of a grading permit, project applicants shall provide written evidence to each city, that a county-certified paleontologist has been retained to conduct salvage excavation of unique paleontological resources if they are found.	Prior to issuance of grading permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	**SOCCCD (ATEP):** The SOCCCD shall be required to retain a paleontologist for all phased ATEP construction.
Bio-1	The project proponents of any development affecting jurisdictional waters of the U.S. or vegetated wetlands shall obtain Section 404, Section 1602, and other permits as necessary. A replacement ratio for affected wetland resources shall be determined in consultation with regulatory agencies as part of the permitting process. The actions proposed on Peters Canyon Channel shall be mitigated by the OCFCD who is the project proponent for flood control improvements.	Prior issuance of grading permits or any public improvements within pond turtle habitat.	Project developer	Tustin Community Development Department and/or OCFCD, as appropriate	**SOCCCD (ATEP):** The U.S. Army Corps of Engineers and California Department of Fish and Wildlife have determined that the existing drainage ditches are not subject to their jurisdiction. Regional Water Quality Control Board has determined they will not regulate the drainage ditches.
Bio-2	Based on calculations with the California Department of Fish & Game ("CDFG"), City of Tustin, or a project proponent as applicable, an off-Site relocation Site for southwestern pond turtles captured on Site shall be identified that is as close to the Reuse Plan area as possible and that is sustainable in perpetuity.	Prior to issuance of grading permits or any public improvements within pond turtle habitat.	City of Tustin and/or project developer, as appropriate	Tustin Community Development Department	**SOCCCD (ATEP):** The SOCCCD would be responsible for arrangements with CDFG for relocation of any found turtles.
Bio-3	Permits from the CDFG shall be obtained for live-capture of the turtles and for transporting them to the relocation Site.	Prior to issuance of grading permits or any public improvements within pond turtle habitat.	Project developer	Tustin Community Development Department	**SOCCCD (ATEP):** The SOCCCD would be responsible for arrangements with CDFG for relocation of any turtles found.
Bio-4	A project proponent shall negotiate with the CDFG or other agency or organization as appropriate, for relocation of turtles and/or	Ongoing	City of Tustin and/or project developer, as	Tustin Community Development Department	**SOCCCD (ATEP):** The SOCCCD would be responsible for arrangements

Table 14. Specific Plan FEIS/EIR
Mitigation Measures Applicable to Project Site

No.	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	contribution of funds to improve, restore, or create a relocation Site as turtle habitat, in conjunction with any regulatory permits necessary.		appropriate		with CDFG for relocation of any turtles found.
T/C-1	Construction In conjunction with the approval of a Site development permit, the City of Tustin and the City of Irvine, as applicable (for that portion of the reuse plan within Irvine), shall require each developer to provide traffic operations and control plans that would minimize the traffic impacts of proposed construction activity. The plans shall address roadway and lane closures, truck hours and routes, and notification procedures for planned short-term or interim changes in traffic patterns. The City of Tustin and the City of Irvine, as applicable, shall ensure that the plan would minimize anticipated delays at major intersections. Prior to approval, the City of Tustin or the City of Irvine, as applicable shall review the proposed traffic control and operations plans with any affected jurisdiction.	Prior to Site development permit.	Project developer	Public Works Department (Tustin or Irvine, as applicable)	**SOCCCD (ATEP):** Routes provided to and approved by Public Works for Phase 1 of the project; however, all routes for future phases will need to be provided to and approved by Public Works.
T/C - 1A-3	Prior to the approval of (1) a Planning Area Concept Plan pursuant to Section 4.2 of the Specific Plan, (2) a Site development permit, or (3) a vesting tentative map for new square footage (not for financing or conveyance purposes), a project developer shall provide traffic information consistent with the provisions of the Specific Plan, the FEIS/EIR and the requirements of the City of Tustin Traffic	Prior to the approval of (1) a Planning Area Concept Plan pursuant to Section 4.2 of the Specific Plan, (2) a Site development permit, or (3) a vesting tentative map for	Project developer	Tustin Community Development and Public Works Departments	**SOCCCD (ATEP):** Phase I of the ATEP Campus is complete. A Phase 3A Traffic Analysis was completed, which showed the Phase 3A Concept Plan is within the trip budget established for the Learning Village and density as determined by the capacity

Table 14. Specific Plan FEIS/EIR
Mitigation Measures Applicable to Project Site

No.	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	Engineer. The traffic information shall (a) identify and assign traffic circulation mitigation measures required in the REIS/EIR pursuant to the Phasing Plan described in Table 4.12-10 of the FEIS/EIR (see Table 5 at the end of the Mitigation Monitoring and Reporting Program); (b) evaluate the effects of either the delay of any previously committed circulation improvements or the construction of currently unanticipated circulation improvements; and (c) utilize the circulation system and capacity assumptions within the FEIS/EIR and any additional circulation improvements completed by affected jurisdictions for the applicable timeframe of analysis.	new square footage (not for financing or conveyance purposes).			assumptions of the FEIS/EIR. Similarly, this land exchange is within the trip budget established for the Learning Village and density as determined by the capacity assumptions of the FEIS/EIR.
AQ-1	If determined feasible and appropriate on a project-by-project basis, the City of Tustin and the City of Irvine, as applicable, shall require individual development projects to implement one or more of the following control measures, if not already required by the SCAQMD under Rule 403: - Apply water twice daily, or chemical soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas or unpaved road surfaces at all actively disturbed Sites. - Develop a construction traffic management plan that includes, but is not limited to, rerouting construction trucks off congested	Prior to issuance of grading or building permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	**SOCCCD (ATEP):** Requirements were fulfilled by the SOCCCD during construction for Phase 1; however, future phases will be subject to the AQMD rules which require air pollutant emissions to not create nuisance off-site.

Table 14. Specific Plan FEIS/EIR Mitigation Measures Applicable to Project Site					
No.	**Measure**	**Timing and Implementation**	**Mitigation Compliance Responsibility**	**Mitigation Monitoring and Enforcement Responsibility**	**Status**
	streets, consolidating truck deliveries, and providing dedicated turn lanes for movement of construction trucks and equipment on-site and off-site. - Use electricity from power poles rather than temporary diesel or gasoline powered generators. - Reduce traffic speeds on all unpaved roads to 15 mph or less. - Pave construction roads that have a traffic volume of more than 50 daily trips by construction equipment or 150 total daily trips for all vehicles. - Apply approved chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for four days or more). - Replace ground cover in disturbed areas as quickly as possible. - Enclose, cover, water twice daily, or apply approved soil binders according to manufacturers' specifications, to exposed piles of gravel, sand, or dirt. - Cover all trucks hauling dirt, sand, soil, or other loose materials, and maintain at least				

Table 14. Specific Plan FEIS/EIR
Mitigation Measures Applicable to Project Site

No.	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	two feet of freeboard (i.e., minimum vertical distance between top of the load and top of the trailer). - Sweep streets at the end of the day if visible soil material is carried over to adjacent roads (use water sweepers with reclaimed water when feasible). - Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the Site each trip.				
AQ-2	Unless determined by the City of Tustin and the City of Irvine, as applicable, to be infeasible on a project-by-project basis due to unique project characteristics, each city shall require individual development projects to use low VOC architectural coatings for all interior and exterior painting operations.	Prior to issuance of grading or building permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	**SOCCCD (ATEP):** Responsibility of SOCCCD but will be imposed in City conditions of approval on entitlements pursuant to the Conveyance Agreement.
AQ-3	Prior to the issuance of development permits for new non-residential projects with 100 or more employees, and expanded projects where additional square footage would result in a total of 100 or more employees, the City of Tustin and the City of Irvine, as applicable, shall impose a mix of TDM measures which, upon estimation, would result in an average vehicle ridership of at least 1.5, for each development with characteristics that would be reasonably conducive to successful implementation of such TDM measures. These TDM measures may include one or more of the	Prior to issuance of development permits for new non-residential projects with 100 or more employees and expanded projects where additional square footage would result in a total of 100 or more employees	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	**SOCCCD (ATEP):** SOCCCD will be required to implement TDM measures if applicable

Table 14. Specific Plan FEIS/EIR Mitigation Measures Applicable to Project Site					
No.	**Measure**	**Timing and Implementation**	**Mitigation Compliance Responsibility**	**Mitigation Monitoring and Enforcement Responsibility**	**Status**
	following, as determined appropriate and feasible by each city on a case-by-case basis: - Establish preferential parking for carpool vehicles. - Provide bicycle parking facilities. - Provide shower and locker facilities. - Provide carpool and vanpool loading areas. - Incorporate bus stop improvements into facility design. - Implement shuttles to shopping, eating, recreation, and/or parking and transit facilities. - Construct remote parking facilities. - Provide pedestrian circulation linkages. - Construct pedestrian grade separations. - Establish carpool and vanpool programs. - Provide cash allowances, passes, and other public transit and purchase incentives. - Establish parking fees for single occupancy vehicles. - Provide parking subsidies for rideshare vehicles. - Institute a computerized commuter rideshare matching system. - Provide a guaranteed ride-home program for ridesharing. - Establish alternative work week, flex-time, and compressed work week schedules. - Establish telecommuting or work-at-home programs. Provide additional vacation and compensatory leave incentives. - Provide on-site lunch rooms/cafeterias and				

Table 14. Specific Plan FEIS/EIR
Mitigation Measures Applicable to Project Site

No.	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	commercial service such as banks, restaurants, and small retail. - Provide on-site day care facilities. - Establish an employee transportation coordinator(s).				
N-3	- For new development within the reuse area, the City of Tustin and City of Irvine, as applicable, shall ensure that interior and exterior noise levels do not exceed those prescribed by state requirements and local city ordinances and general plans. Plans demonstrating noise regulation conformity shall be submitted for review and approval prior to building permits being issued to accommodate reuse.	Prior to issuance of building permits.	Project Developer	Community Development Department (Tustin and/or Irvine, as applicable)	**SOCCCD (ATEP):** Phase 1 of the project is complete. The project was required to comply with the City's noise standards, and will be required for all future phases.
WQ-1	Prior to the approval of grading plans, the project developers shall provide written evidence to the Department of Public Works that it has filed a Notice of Intent with the State Water Resources Control board in order to obtain coverage under the latest approved General Construction Permit. Pursuant to the permit requirements, developers shall develop a Stormwater Pollution Prevention Plan (SWPPP) that incorporates Best Management Practices for reducing or eliminating sediment and other construction-related pollutants in the Site runoff.	Prior to approval of grading plans.	Project Developer	Community Development Department (Tustin and/or Irvine, as applicable)	Notice of Intent is on file with Community Development Department and/or Public Works Department.
WQ-2	Prior to approval of a grading plans, the Department of Public Works shall confirm that	Prior to approval of grading plans.	Project Developer	Community Development Department (Tustin and/or	Projects were reviewed for compliance with the General

Table 14. Specific Plan FEIS/EIR Mitigation Measures Applicable to Project Site					
No.	**Measure**	**Timing and Implementation**	**Mitigation Compliance Responsibility**	**Mitigation Monitoring and Enforcement Responsibility**	**Status**
	the contractors specifications require compliance with the latest approved General Waste Discharge Requirements issued by the Santa Ana Regional Water Quality Control Board to govern discharges from construction dewatering and water line/sprinkler line testing should they occur during construction. Developers shall comply with these regulations including provisions requiring notification, testing and reporting of dewatering and testing-related discharges, which shall mitigate any impacts of such discharges.			Irvine, as applicable)	Waste Discharge Requirements.
WQ-4	To mitigate post-construction surface water and long-term groundwater discharge water quality impacts, prior to issuance of grading permits, developers shall prepare a project WQMP, which shall be submitted to the City of Tustin or City of Irvine, as applicable, for approval. The WQMP shall be prepared in compliance with all MS4 Permit requirements (including DAMP and LIP requirements), and at a minimum shall contain the following elements: - a) An Integrated Water Conservation/Storm Water Runoff and Subdrain Discharge Water Quality Management Program. This program shall integrate into the storm drainage and water quality control system facilities and systems to capture, recycle and conserve low flows, which may include irrigation returns and subdrain discharges, to reduce, to the extent	Prior to issuance of grading permits.	Project Developer	Community Development Department (Tustin and/or Irvine, as applicable)	Prior to issuance of grading permits, each development is required to submit a Water Quality Management Plan, which identifies applicable best practices.

Table 14. Specific Plan FEIS/EIR
Mitigation Measures Applicable to Project Site

No.	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	feasible, post-development low flow surface runoff and groundwater discharge volumes. The program shall also implement one or more treatment control technologies developed under the NSMP and available at the time of project approval for nutrient and selenium removal. - b) Site Planning and Design BMPs. The WQMP shall incorporate Site design BMPs described in the Model WQMP attached as Exhibit 7.11 to the DAMP to the extent feasible and appropriate in light of proposed land uses. - c) Source Control BMPs. The WQMP shall incorporate source control BMPs described in the Model WQMP attached as Exhibit 7.11 to the DAMP to the extent feasible and appropriate in light of proposed land use. - d) Treatment Control BMPs. The WQMP shall incorporate treatment control BMPs described in the Model WQMP attached as Exhibit 7.11 to the DAMP.				
WQ-5	As required by DAMP and the MS4 Permit, as well as the Cooperative Agreement DO2-119 between the City of Tustin, OCFCD, and County of Orange, a Water Quality Technical Report ("WQTR") shall be prepared prior to the	Prior to issuance of grading permits.	Project Developer	Community Development Department (Tustin and/or Irvine, as applicable)	Prior to issuance of grading permits, each development is required to submit a WQMP, which identifies applicable best practices.

Table 14. Specific Plan FEIS/EIR Mitigation Measures Applicable to Project Site					
No.	**Measure**	**Timing and Implementation**	**Mitigation Compliance Responsibility**	**Mitigation Monitoring and Enforcement Responsibility**	**Status**
	issuance of grading permits. The WQTR shall quantitatively and qualitatively (as appropriate) assess planned BMPs to be included in the WQMP to confirm that the treatment and hydrologic controls included in the SWPPP and WQMP will be sufficient to assure that project discharges will not cause a violation of applicable water quality standards.				

5. Sources/Acronyms

5.1 Sources

The following sources were consulted in the preparation of this Initial Study.

Field Observations

Austin-Foust Associates, Inc., May 2011. *ATEP – District and County Land Swap Traffic Evaluation Technical Memorandum.*

Austin-Foust Associates, Inc., February 2009. *South Orange County Community College District (SOCCCD) Advanced Technology & Education Park at Tustin Legacy Phase 3A Traffic Circulation Analysis.*

BRAC PMO West, November 2008. *Final Amended Site Management Plan Fiscal Year 2009 Update Former Marine Corps Air Station Tustin, Tustin, California.*

City of Tustin, July 23, 2008. *Letter to Raghu Mathur, Ed.D., Chancellor, South Orange County Community College District re: Preliminary Draft Long Range Academic and Facilities Plan (Review and Comment).*

City of Tustin and Department of the Navy, 1998. *FEIS/EIR for Disposal and Reuse of MCAS Tustin and Addendum.*

City of Tustin, Revised April 2007. *2007 Annual Mitigation Monitoring and Status Report for Final Joint Environmental Impact Statement/Environmental Impact Report For the Disposal and Reuse of MCAS Tustin.*

City of Tustin, Revised February 2008. *2008 Revised Mitigation Monitoring and Status Report for Final Joint Environmental Impact Statement/Environmental Impact Report For the Disposal and Reuse of MCAS Tustin.*

City of Tustin, Reuse Plan adopted October 31, 1996, amended September 8, 1998, Specific Plan adopted by City Council Ordinance No. 1257 on February 3, 2003, and Specific Plan Amendment Adopted by City Council Ordinance No. 1311 on April 17, 2006. MCAS Tustin Specific Plan/Reuse Plan.

City of Tustin General Plan

City of Tustin Resolutions (including environmental checklists) regarding Tustin Legacy: 00-90; 04-32; 04-73; 04-74; 04-76; 04-77; 05-28; 05-35; 05-37; 05-38; 05-40; 05-71; 05-75; 05-76; 05-77; 05-78; 06-42; 06-43; 07-92; 08-09; 08-18; 08-38; 08-39; 08-42; 08-53.

City of Tustin, September 6, 2011. Environmental Analysis Checklist for Specific Plan Amendment (SPA) 11-003, Minor Text Amendments.

Giroux & Associates, March 29, 2013. *Air Quality and GHG Impact Analyses: ATEP Bell Avenue Project.*

Giroux & Associates, March 29, 2013. *Traffic Noise Impact Analysis: ATEP Bell Avenue Project.*

RGP Planning & Development Services, November 2008. *South Orange County Community College District ATEP Advanced Technology & Education Park Long-Range Academic Plan and Facilities Plan, as amended by the October and November 2008 Erratas (LRP).*

RGP Planning & Development Services, November 2008. *South Orange County Community College District ATEP Advanced Technology & Education Park Long-Range Academic Plan, as amended by the October 2008 Errata (LRAP).*

RGP Planning & Development Services, July 2008. *CEQA Addendum/Initial Study for Advanced Technology Education Park (ATEP) Long Range Academic and Facilities Plan (LRP).*

RGP Planning & Development Services, October 2008. *CEQA Addendum/Initial Study and Appendices errata for Advanced Technology Education Park (ATEP) Long Range Academic and Facilities Plan (LRP).*

South Orange County Community College District, April 22, 2004. "Agreement Between the City of Tustin and The South Orange County Community College District For Conveyance of a Portion of MCAS, Tustin and The Establishment of an Advanced Technology Educational Campus" (the "District Conveyance Agreement").

South Orange County Community College District, November 2008. *Resolution 08-35 Adopting the Addendum as Amended by the Errata dated November 2008 to the Final Environmental Impact Statement/Environment Impact Report for the Disposal and Reuse of the MCAS Tustin and the MCAS Tustin Specific Plan/Reuse Plan dated October 1996, as Amended by the Errata dated September 1998 pursuant to the California Environmental Quality Act for the Project, the Long-Range Academic and Facilities Plan dated June 2008 and as Amended by the Errata dated October 2008 and the Errata dated November 2008, and the Long-Range Academic Plan dated June 2008 and as Amended by the Errata dated October 2008.*

South Orange County Community College District, March 2009. *ATEP Phase 3A Concept Plan.*

Stantec, April, 2013. *Advanced Technology and Education Park (ATEP) Traffic Study.*

State of California, California Code of Regulations

5.2 Acronyms

ACM	asbestos-containing materials
ADT	average daily trips
AELUP	Airport Environs Land Use Plan
ATEP	Advanced Technology & Education Campus
BMP	best management practices
CDFW	California Department of Fish & Wildlife
CEQA	California Environmental Quality Act
City	City of Tustin
CNEL	community noise equivalent level
County	County of Orange
RWQCB	Regional Water Quality Control Board
DAMP	Drainage Area Management Plan
District	South Orange County Community College District
DSA	Division of the State Architect
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EV	education village
FAR	floor area ratio
FEIS/EIR	Program Final Joint EIS/EIR for the Disposal and Reuse of Marine Corps Air Station (MCAS) Tustin (SCH No. 94071005).
FEMA	Federal Emergency Management Agency
FOST	Finding of Suitability to Transfer
GHG	greenhouse gas
ICU	intersection capacity utilization
LBP	lead-based paint
LEED	Leadership in Energy and Environmental Design
LID	low-impact development
LIFOC	Lease in Furtherance of Conveyance
LOS	Level of Service
LRAP	Long-Range Academic Plan
LRP	Long-Range Academic and Facilities Plan
MBTA	Migratory Bird Treaty Act
MCAS	Marine Corps Air Station
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
Navy	Department of Navy
ND	Negative Declaration
NEPA	National Environmental Policy Act
NSMP	Nitrogen and Selenium Management Program
OCFA	Orange County Fire Authority
OCFCD	Orange County Flood Control District
OCHCA	Orange County Health Care Agency
OCSD	Orange County Sanitation District
OCTA	Orange County Transportation Authority
PA	planning area
Reuse Plan	MCAS Tustin Specific Plan (previously MCAS Tustin Reuse/Specific Plan)
ROD	Record of Decision
RSCCD	Rancho Santiago Community College District
SARWQCB	Santa Ana Regional Water Quality Control Board
SB	Senate Bill

SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCH	State Clearinghouse
SF	square feet
SOCCCD	South Orange County Community College District
SPA	Specific Plan Amendment
Specific Plan	MCAS Tustin Specific Plan (previously MCAS Tustin Reuse/Specific Plan)
SR	state route
SRP	Short Range Plan
SWPPP	Stormwater Pollution Prevention Plan
TSF	thousand square feet
Tustin Legacy	former MCAS Tustin Site
VOC	volatile organic compounds
WQMP	Water Quality Management Plan
WQTR	Water Quality Technical Report

6. Report Preparers

The following professional firms and team members were involved in the preparation of the CEQA documentation for the proposed amendment to the MCAS Tustin Specific Plan.

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- Rafik Albert, AICP, LEED AP, Associate

Stantec (formerly Austin-Foust Associates)

- Krys Saldivar

Giroux & Associates

- Hans Giroux
- Sara Gerrick

Appendix A Traffic Study (April 2013)

Appendix A

Advanced Technology and Education Park (ATEP) Traffic Study

April 2013 Draft Report

Prepared For: SOCCCD

2073007510

Advanced Technology and Education Park (ATEP) Traffic Study

April 9, 2013

Draft Report

Prepared for:

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Submitted by:

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Table of Contents

List of Figures

List of Tables

1.0 Introduction

This report presents the findings of a traffic study carried out for the proposed changes to Tustin Legacy Neighborhood A. The purpose of this report is to identify and evaluate how the proposed project differs from the original Specific Plan and any subsequent approved Specific Plan amendments in terms of traffic impacts pursuant to City-adopted California Environmental Quality Act (CEQA) thresholds of significance. The traffic study is in support of the Specific Plan Amendment and is a Supplemental to the previously approved EIR/EIS carried out for Tustin Legacy. It should be noted that the Specific Plan land uses as well as the circulation system that were assumed in previous Tustin Legacy studies outside the proposed project site as carried out for the 2010 Specific Plan Amendment are included here.

1.1 Project Description

The project includes proposed changes to South Orange County Community College District's (SOCCCD) Advanced Technology and Education Park (ATEP) campus and a parcel owned by the City of Tustin. The easterly extension of Bell Avenue from its existing terminus at Red Hill Avenue to Armstrong Avenue is also part of the proposed project as the extension provides additional capacity to the surrounding circulation system allowing increases in land use intensity in the ATEP campus and the city-owned parcel south of ATEP. Collectively the land use changes and extension hereinafter will be called the "proposed project." The results of the proposed project will be compared to conditions without the extension and land uses according to the Specific Plan Amendment approved in 2010.

The land uses that are part of the proposed project are comprised of a 51/49 mix of learning center and office uses. The land uses in the city's parcel are assumed as community commercial and general office uses whereas previously a special generator was identified for the parcel.

Direct project access is provided by Valencia Avenue, Warner Avenue, Armstrong Avenue and the easterly extension of Bell Avenue from Red Hill Avenue to Armstrong Avenue (see Figure 1-1). Valencia Avenue, Armstrong Avenue and Bell Avenue are four-lane secondary arterials and Warner Avenue and is a six-lane major arterial. No direct project access is assumed to Red Hill Avenue which is a six- to seven-lane major arterial and forms the border to the west. The I-5, SR-55 and I-405 Freeways as well as Edinger Avenue are nearby facilities acting as regional conduits to the proposed project site.

Figure 1-2 illustrates the location of the proposed project in Planning Area 1 of Tustin Legacy Neighborhood A.

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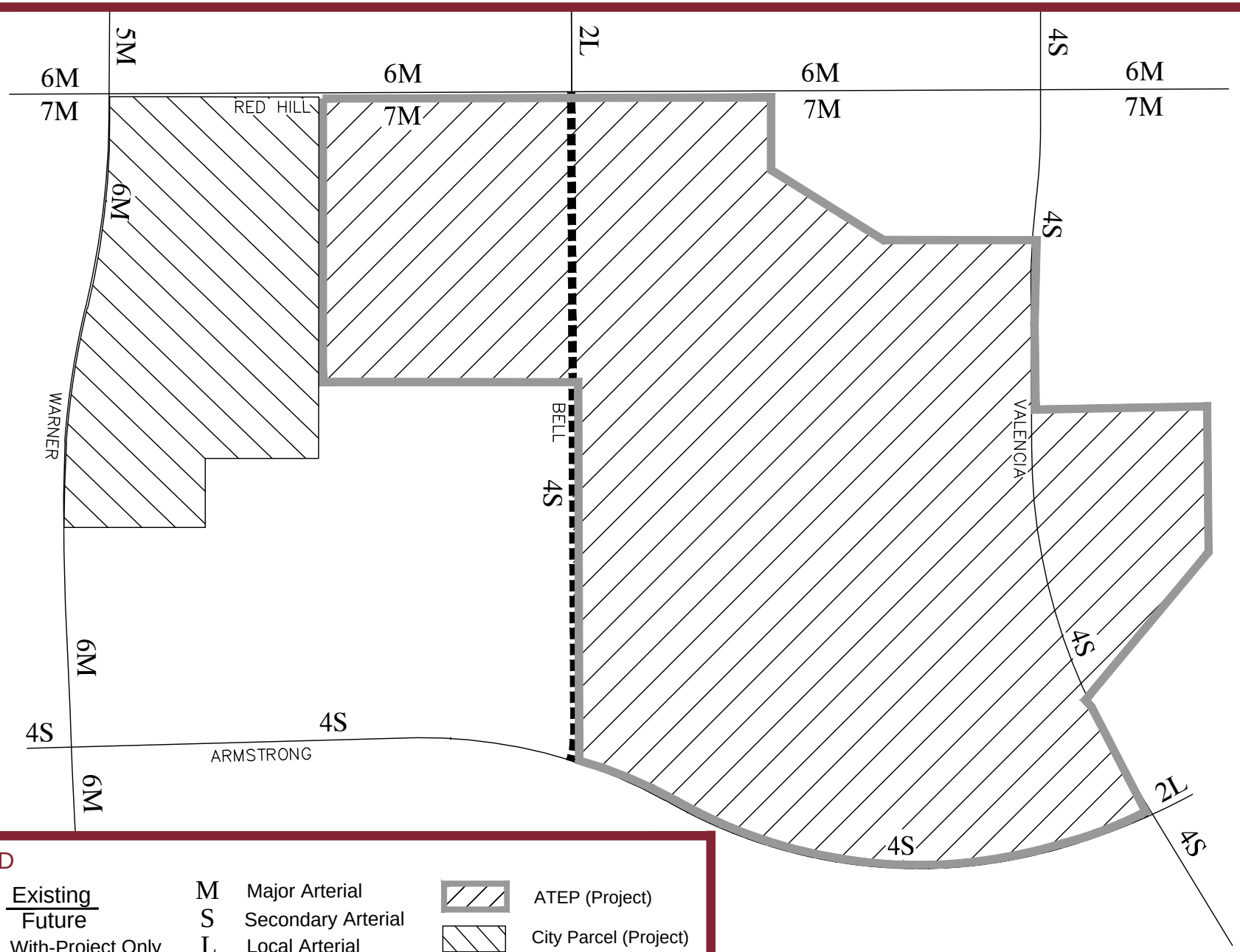

LEGEND

XX / YY	Existing / Future	M	Major Arterial		ATEP (Project)
▬ ▬ ▬	With-Project Only	S	Secondary Arterial		City Parcel (Project)
		L	Local Arterial		City Parcel (Project)

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Project Location
and Surrounding Circulation System

Figure 1-1

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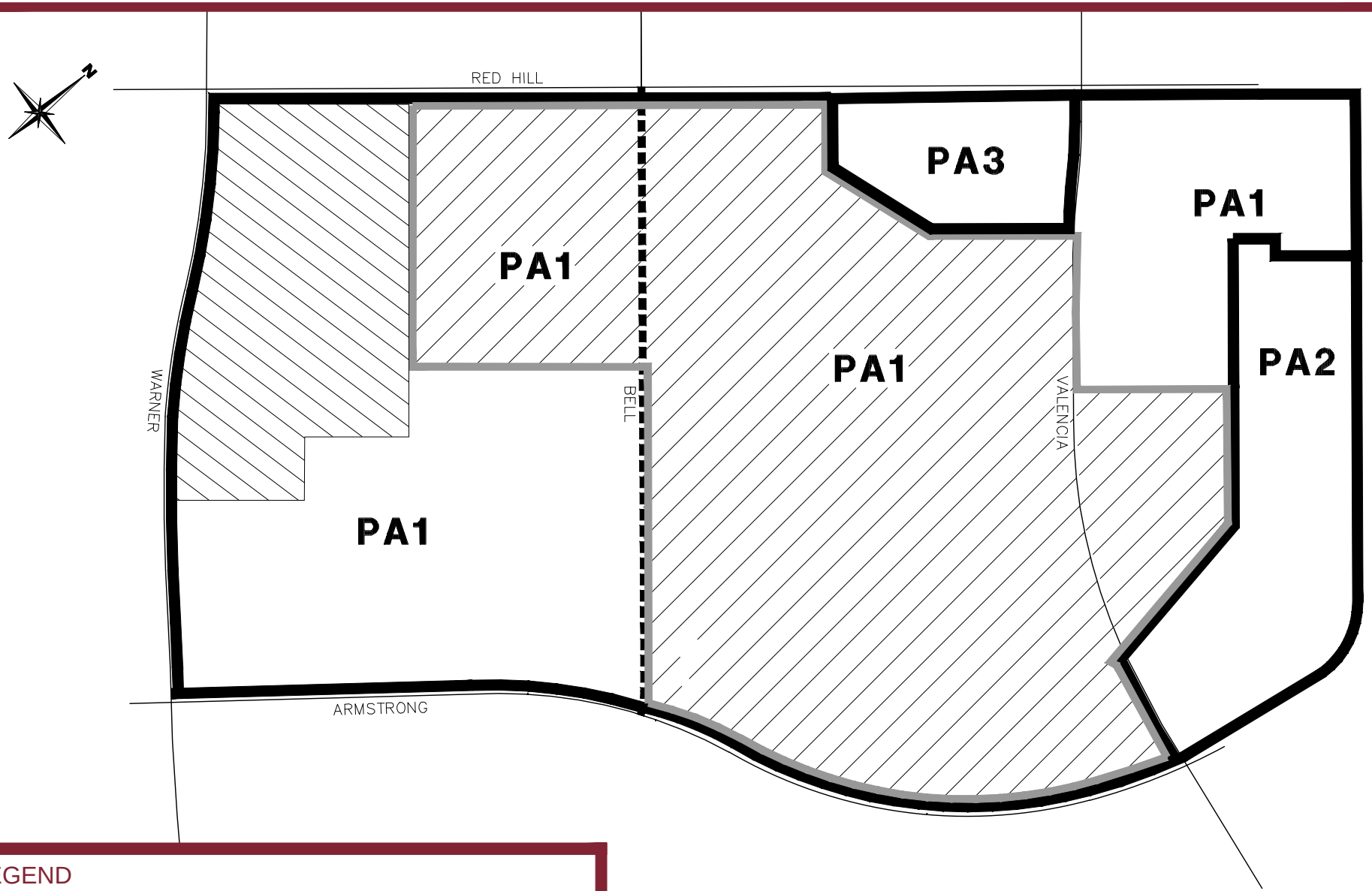

LEGEND

- ATEP (Project)
- Planning Area
- City Parcel (Project)
- With-Project Only

Stantec

Neighborhood A Planning Areas

Figure 1-2

1.2 Analysis Scope and Methodology

As per past Specific Plan Amendment traffic studies, the proposed project will be analyzed under conditions that assume buildout of the entire Tustin Legacy. As previously mentioned, the purpose of this report is to identify and evaluate how the proposed project differs from the original Specific Plan and any subsequent approved Specific Plan amendments in terms of traffic impacts. Therefore existing conditions will not be presented.

Average daily traffic (ADT) and peak hour analyses will be used to verify if the proposed land use and internal circulation changes affect the off-site roadway system when compared to the project that was the subject of the approved EIR/EIS. The methodology proposed is to evaluate long-range peak hour capacity utilization at the major off-site intersections near the proposed project.

The analysis in this report identifies potential impacts of the proposed project based on long-term 2035 future traffic conditions. Future traffic conditions were prepared using the Irvine Transportation Analysis Model (ITAM) and the Tustin Legacy Traffic Model (TLTM). The project site, which has been the subject of previous analyses, was last approved as part of the Specific Plan Amendment in 2010.

The forecasts for the proposed project are based on the newly released ITAM 12 Year 2035 Baseline Version. For purposes of this traffic analysis, the no-project assumes that the project site contains uses according in the Specific Plan.

1.2.1 Study Area

Analysis of the peripheral intersections will determine the extent of the study area (i.e., there are no significant impacts with the proposed project). The intent is to show that the overall distribution of the Legacy area traffic is similar to that estimated previously, and therefore the assumptions regarding project mitigation responsibilities remain unchanged.

Previous analyses indicated that the study area defined in this traffic study as the area bounded by Valencia Avenue to the north, Armstrong Avenue to the east, Warner Avenue to the south and Red Hill Avenue to the west is sufficient limits to analyze the proposed project impacts. During the course of this study no-project versus with-project traffic forecast data were reviewed and the results were used to determine if significant or adverse project impacts occur beyond the study area boundary based on the circulation system performance criteria applied in the study. Based on the findings of the project traffic impact analysis, no expansion of the study area beyond the limits presented here is warranted.

1.2.2 Traffic Model Background

As previously mentioned, the traffic forecast data for the proposed project was prepared using the ITAM 12 Year 2035 Baseline version and the Tustin Legacy Traffic Model (TLTM). The ITAM traffic forecasting model is a focused sub-area model derived from the Orange County Transportation

Analysis Model (OCTAM 3.4 with modified OCP-2010 socioeconomic data assumed). The OCTAM is maintained by the Orange County Transportation Authority (OCTA), and ITAM 12 has been developed according to the Orange County sub-area traffic modeling guidelines adopted by the OCTA. The OCTA has certified the ITAM traffic model as being consistent with the OCTAM regional model. The ITAM uses a 2035 time frame for traffic forecasting with corresponding assumptions with respect to local and regional transportation improvements. The TLTM is used for local access and is based on ITAM.

Nearby major cumulative projects such as the Irvine Business Complex (IBC) Vision Plan and Pacific Center East project (near Edinger Avenue and Del Amo Avenue) are assumed in the background conditions as well as socioeconomic data growth projections according to the OCP-2010 that are inherent in ITAM and derived from OCTAM. The Tustin Legacy is assumed built out per the Specific Plan outside of the project site.

1.3 Performance Criteria

In this report, a set of performance criteria is utilized to identify future level of service (LOS) deficiencies on the study area circulation system and also to define impacts and peak hour intersection capacity utilization (ICU) values of significance. According to the Highway Capacity Manual (HCM) summarized in Table 1-1, traffic LOS is designated "A" through "F" with LOS "A" representing free flow conditions and LOS "F" representing severe traffic congestion. The intersection criteria involve the use of peak hour ICU values. The ICU ranges that correspond to LOS "A" through "F" are presented in Table 1-2. By practice, the ICU methodology assumes that intersections are signalized. LOS "D" (ICU not to exceed .90) is the performance standard for the intersections in the study area.

The performance criteria presented in Table 1-3 are based on LOS calculation methodology and performance standard that have been used by the City of Tustin and by the OCTA as part of the Congestion Management Program (CMP). The performance criteria applied here is the same as used in previous traffic analyses for the area. When the project causes the intersection to exceed the performance standard (LOS "D"), mitigation is required to bring the intersection back to an acceptable level of service. If the intersection is already deficient (i.e., exceeds the performance standard) under no-project conditions and the project contributes further to the deficiency by increasing the ICU by .02 or more, mitigation is required to bring the location back to no-project level of service conditions.

1.4 References

1. "Tustin Legacy Traffic Analysis," Austin-Foust Associates, Inc., February 22, 2006.
2. "MCAS Tustin Specific Plan/Reuse Plan Specific Plan Amendment 2011-04" Prepared for City of Tustin, the Local Redevelopment Authority, April 3, 2012.

Table 1-1 Level of Service Descriptions – Signalized Intersections

Levels of service (LOS) for signalized intersections are defined in terms of control delay as follows:	
LOS	**Description**
A	LOS A describes operations with low control delay, up to 10 seconds per vehicle. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	LOS B describes operations with control delay greater than 10 and up to 20 seconds per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than the LOS A, causing higher levels of delay.
C	LOS C describes operations with control delay greater than 20 and up to 35 seconds per vehicle. These higher delays may result from only fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	LOS D describes operations with control delay greater than 35 and up to 55 seconds per vehicle. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	LOS E describes operations with control delay greater than 55 and up to 80 seconds per vehicle. These high delay values generally indicate poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent.
F	LOS F describes operations with control delay in excess of 80 seconds per vehicle. This level, considered unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high V/C ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.
Source: Highway Capacity Manual 2010, Transportation Research Board of the National Academies.	

Table 1-2 Intersection Level of Service Ranges (ICU Methodology)

Level of Service (LOS)	Intersection Capacity Utilization (ICU)
A	.00 – .60
B	.61 – .70
C	.71 – .80
D	.81 – .90
E	.91 – 1.00
F	Above 1.00

Table 1-3 Performance Criteria for Intersections Analyzed Within the Study Area

V/C Calculation Methodology

Level of service based on peak hour intersection capacity utilization (ICU) values calculated using the following assumptions:

Saturation Flow Rate: 1,700 vehicles per hour per lane
Clearance Interval: .05
Right-Turn-On-Red Utilization Factor*: .75

* "De facto" right-turn lane is assumed in the ICU calculation if 19 feet from edge to outside of through-lane exists and parking is prohibited during peak periods.

Performance Standard

All study area intersections: Level of Service D (peak hour ICU less than or equal to .90).

Mitigation Requirement

For ICU greater than the acceptable level of service, mitigation of the project contribution is required to bring intersection back to acceptable level of service where the deficiency is caused by the project or to no-project conditions or better where the project adds to a an already deficient condition and the project contribution is .02 or greater (i.e., more than 1.0 percent).

2.0 Project Description

The proposed project is comprised of changes to land uses in the Advanced Technology and Education Park (ATEP) campus and city parcel south of ATEP along with the Bell Avenue connection. The proposed project is located in Planning Area 1 in Tustin Legacy Neighborhood A. This chapter describes the traffic characteristics of the proposed project including the project access points. The trip generation estimates and traffic distribution patterns associated with the proposed project are then presented. This project description information is applied in the traffic impact analysis section of this report to analyze the project under year 2035 conditions.

2.1 Project Location and Access

The proposed project illustrated in Figure 2-1 is bounded by Valencia Avenue to the north, Armstrong Avenue to the east, existing Sheriff's Academy on County-owned land and Rancho Santiago Community College to the southeast, city parcel to the south/southwest and Red Hill Avenue to the west. The connection of Bell Avenue as a four-lane secondary arterial between Red Hill Avenue and Armstrong Avenue is also part of the project. Figure 2-1 also shows the preliminary ATEP access points on Bell Avenue and Valencia Avenue, all of which are full access. The primary access to the ATEP campus is assumed to be located on Valencia Avenue and Warner Avenue is the primary access for the city parcel south of ATEP.

According to the 2010 Specific Plan Amendment (also referred to in this report as the "No-Project"), Bell Avenue is not extended and access to the northern uses within Neighborhood A is via Valencia Avenue and via Warner Avenue for the southern uses. Bell Avenue when extended from Red Hill Avenue to Armstrong Avenue will provide additional access to these uses. For purposes of the analysis, it is assumed that the city parcel has full access only on Warner Avenue. The district's access is dependent on the anticipated location of parking on Bell Avenue and Valencia Avenue. This analysis assumes that around 60 percent of the district's uses north of Bell Avenue access Valencia Avenue compared to 40 percent on Bell Avenue. Existing uses such as the Sheriff's Academy and Rancho Santiago Community College District will continue to operate and have access to Armstrong Avenue.

2.2 Trip Generation

As previously mentioned, the project site, which has been the subject of previous traffic analyses, was last approved in 2010 as part of the Specific Plan Amendment carried out at that time. For this traffic analysis, the no-project conditions assumed for the future (year 2035) include the currently approved learning center of 893,850 square feet in ATEP and Tustin facility (essentially a bank of trips of undetermined land uses) in the city's parcel south of ATEP. The land uses that are part of the proposed project are comprised of a 51/49 mix of learning center and office

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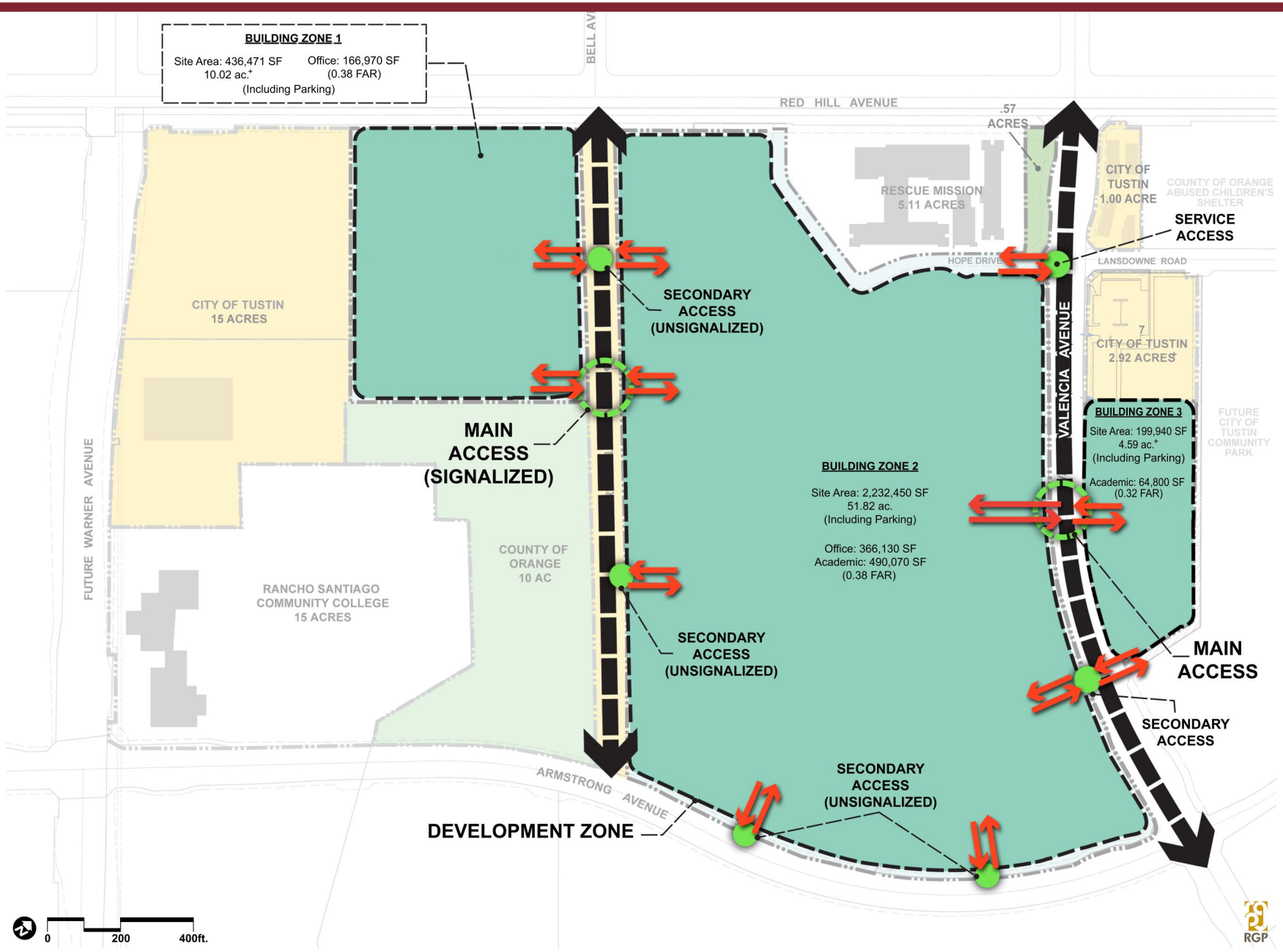

Advanced Technology and Education Park

Figure 2-1

uses. The land uses in the city's parcel are assumed as community commercial and general office uses whereas previously a special generator was identified for the parcel.

The land uses and trip generation on the project site for year 2035 under no-project and with-project conditions are summarized in Table 2-1. As indicated in Table 2-1 and according to the trip generation estimates, the proposed project at buildout will generate around 2,149 AM and 2,114 PM peak hour trips and 17,932 daily trips. The with-project traffic forecasts, which includes the entire buildout of the project, results in increased trip generation differences of1,064 AM peak hour trips, 972 PM peak hour trips and 6,241 daily trips when compared to no-project conditions.

As previously mentioned, the Bell Avenue extension, which is also part of the proposed project, provides additional capacity to the surrounding circulation system allowing increases in land use intensity in the ATEP campus and the city-owned parcel south of ATEP that result in an additional 10,000 daily trips. This daily trip increase is divided equally between the city and ATEP, and although not shown in the previous table, the city's remaining trips are assumed in other parts of the Tustin Legacy. The land uses will be placed in neighborhoods that would not result in significant impacts, i.e., Neighborhood G or Planning Area 7 in Neighborhood B.

2.3 Trip Distribution

Trip distribution patterns for the project site were developed using the ITAM traffic model and are presented in Figure 2-2 for year 2035. The trip distribution patterns are based on the model's distribution of daily project traffic. These percentages differ slightly in the peak hours, and the traffic model uses the individual peak hour distribution patterns to assign peak hour trips.

Table 2-1 Project Site Trip Generation Summary

Land Use	Amount	Unit	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	ADT
NO-PROJECT									
ATEP									
Learning Center	893.85	TSF	589	63	652	135	304	439	5,471
City's Parcel									
Tustin Facility	TBD	SG	332	101	433	227	476	703	6,220
TOTAL NO-PROJECT			**921**	**164**	**1,085**	**362**	**780**	**1,142**	**11,691**
WITH-PROJECT									
ATEP									
Learning Center	554.87	TSF	366	40	406	83	189	272	3,397
General Office	533.10	TSF	880	122	1,002	165	795	960	7,075
TOTAL			1,246	162	1,408	248	984	1,232	10,472
DIFFERENCE			**657**	**99**	**756**	**113**	**680**	**793**	**5,001**
City's Parcel									
Commercial	39.36	TSF	39	25	64	112	122	234	2,683
General Office	360	TSF	594	83	677	112	536	648	4,777
TOTAL			633	108	741	224	658	882	7,460
DIFFERENCE			**301**	**7**	**308**	**-3**	**182**	**179**	**1,240**
TOTAL WITH-PROJECT			**1,879**	**270**	**2,149**	**472**	**1,642**	**2,114**	**17,932**
TOTAL DIFFERENCE			**958**	**106**	**1,064**	**110**	**862**	**972**	**6,241**
Trip Rates									
Learning Center		TSF	.66	.07	.73	.15	.34	.49	6.12
Commercial		TSF	1.00	.64	1.64	2.85	3.09	5.94	68.17
General Office		TSF	1.65	.23	1.88	.31	1.49	1.80	13.27
Tustin Facility		SG	3.32	1.01	4.33	2.27	4.76	7.03	62.20

Note: No-Project land uses shown here are consistent with the Specific Plan Amendment approved in 2010.

Abbreviations: ADT – Average Daily Trips; ATEP – Advanced Technology and Education Park; SG – Special Generator; TBD – To Be Determined; TSF – Thousand Square Feet

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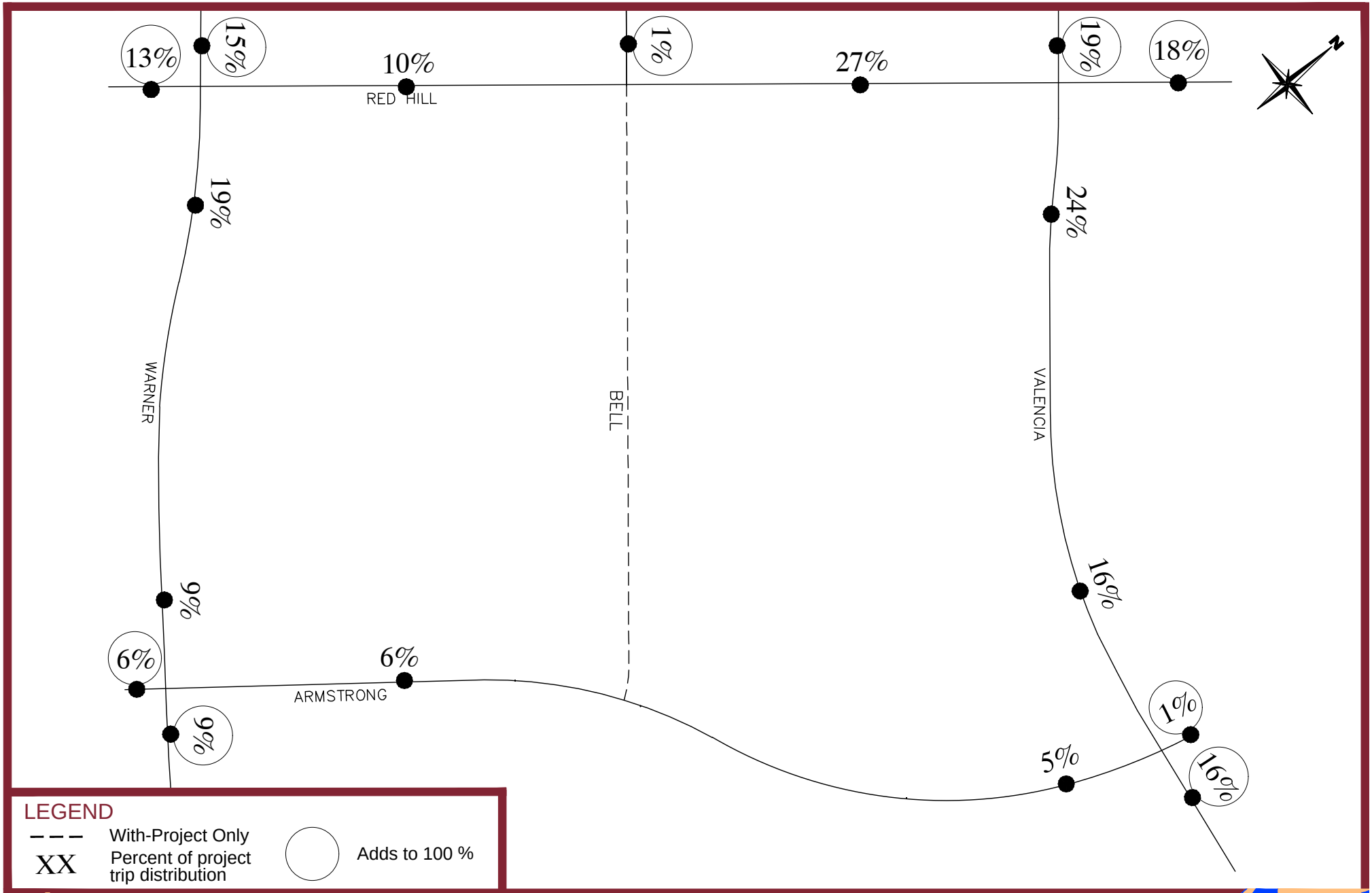

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2035 Project Trip Distribution

Figure 2-2

3.0 Year 2035 Project Impact Analysis

This chapter analyzes the impacts of the proposed project on year 2035 traffic conditions in the traffic analysis study area. The potential traffic impacts of the project are assessed based on a comparison of 2035 no-project and with-project conditions.

3.1 Year 2035 Traffic Impacts

As discussed in Chapter 1.0, the recent release of the Irvine Transportation Analysis Model Version 12 (ITAM 12) and the Tustin Legacy Traffic Model (TLTM) were used to prepare the year 2035 no-project and with-project traffic forecasts that are applied in the analysis.

The following sub-sections summarize the resulting 2035 no-project and with-project traffic conditions for arterial roads and intersections.

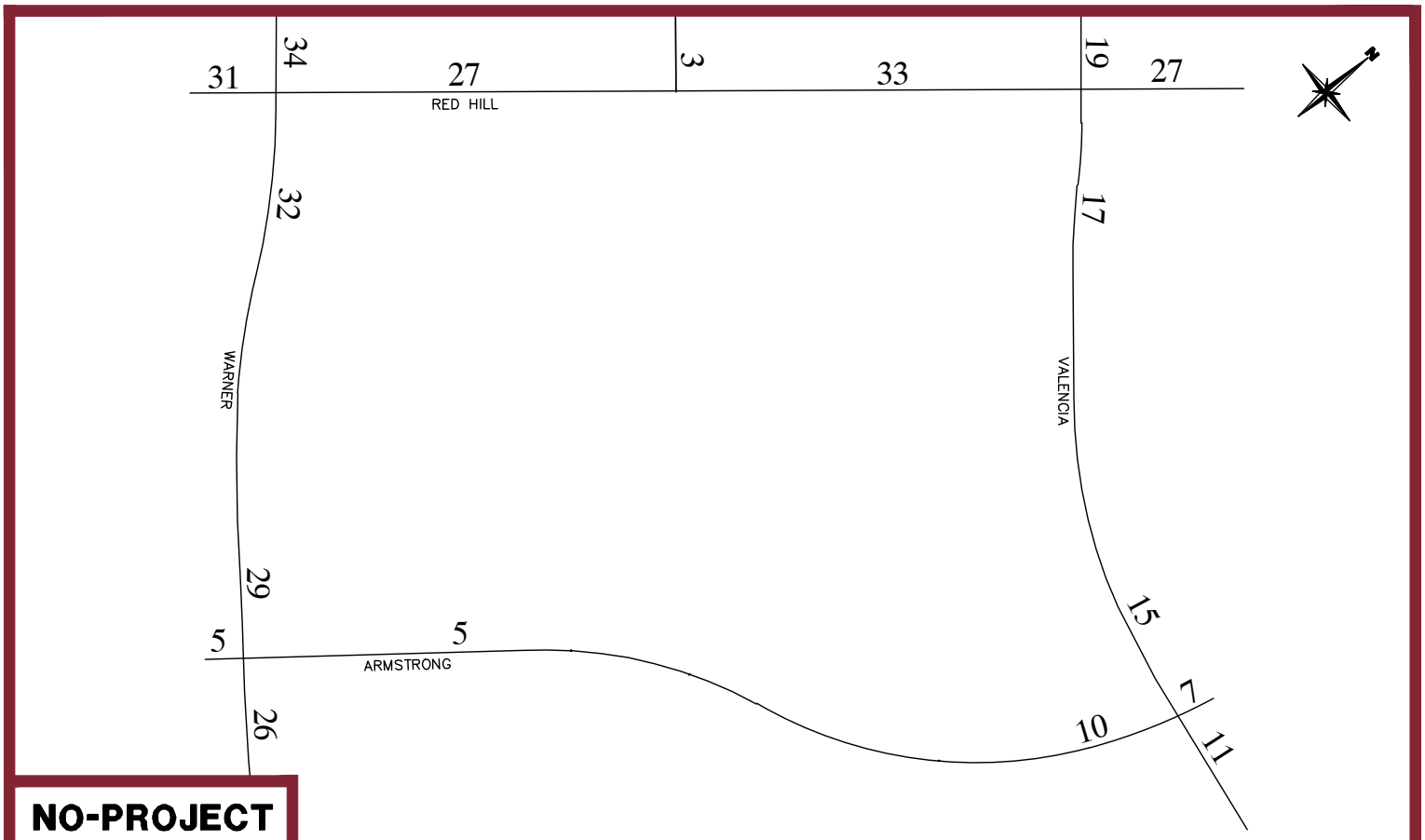
3.1.1 Average Daily Traffic Volumes

Year 2035 no-project and with-project average daily traffic (ADT) volumes are illustrated in Figure 3-1. The introduction of Bell Avenue as a four-lane secondary is beneficial to the circulation system surrounding the project site. It provides additional east-west capacity parallel to Warner Avenue and Valencia Avenue thereby relieving traffic along these roadways. The additional capacity allows increased intensity in the Advanced Technology and Education Park (ATEP) campus as well as in the city's parcel south of ATEP.

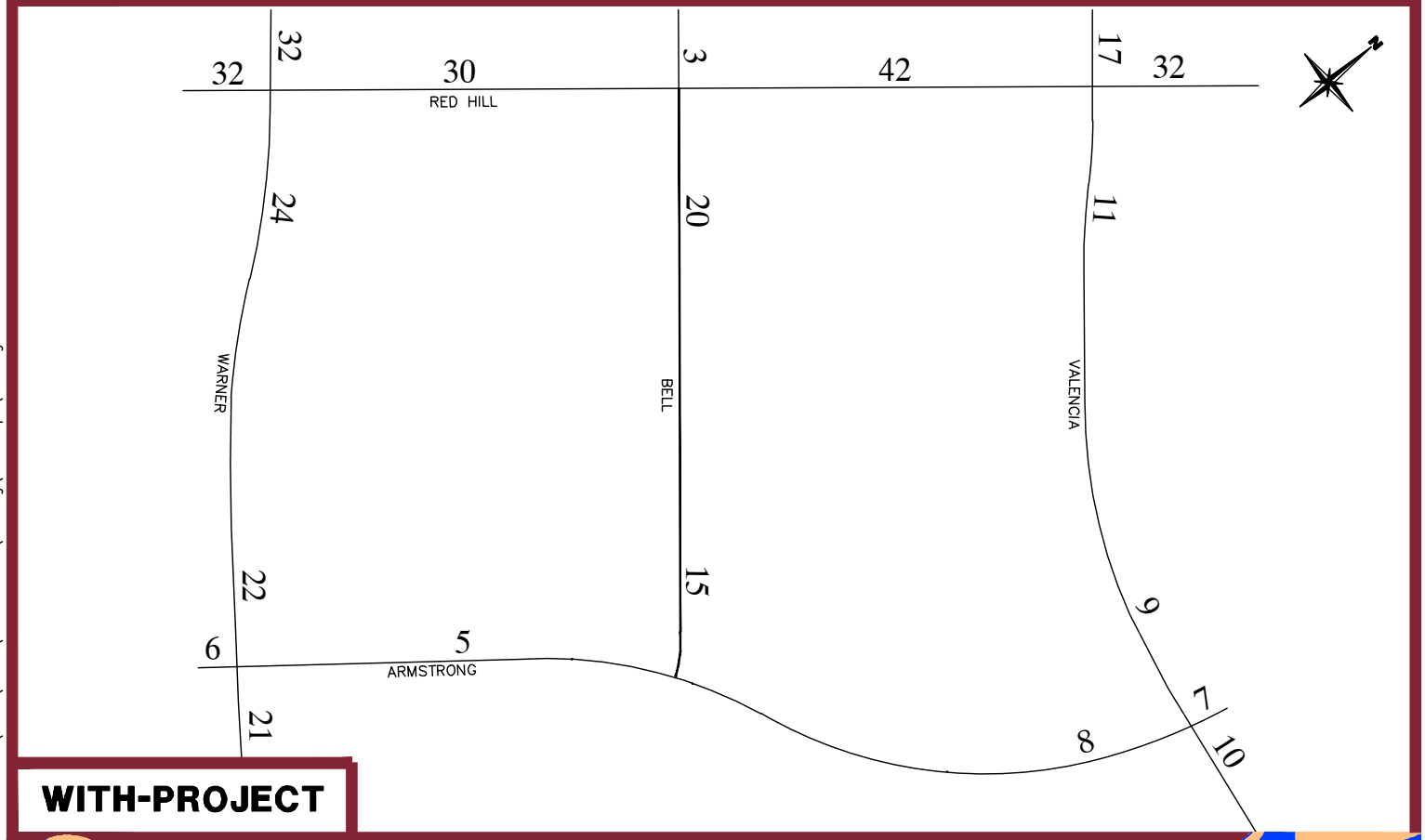
The highest volume increase with the project is 9,000 ADT on Red Hill Avenue just north of Bell Avenue which increases from 33,000 to 42,000 ADT well within the capacity of a six-lane major arterial. The highest volume decrease with the project occurs on Warner Avenue just east of Red Hill Avenue which decreases from 32,000 to 24,000 ADT.

3.1.2 Peak Hour Intersection Levels of Service

Figures 3-2 and 3-3 illustrate the year 2035 no-project and with-project AM and PM peak hour volumes at the intersections analyzed in the study area. The 2035 peak hour volumes along with the corresponding future lane configurations for the intersections analyzed (see Figures 3-4 and 3-5) result in the intersection capacity utilization (ICU) values summarized in Table 3-1 (ICU calculation worksheets are included in Appendix A). Based on the intersection LOS performance criteria and impact thresholds outlined in Chapter 1.0, no intersection location analyzed in the study area is adversely impacted by the proposed project in the year 2035 ICU analysis (i.e., all intersections with the project are forecast to operate at level of service "D" (LOS D) or better).



NO-PROJECT



WITH-PROJECT

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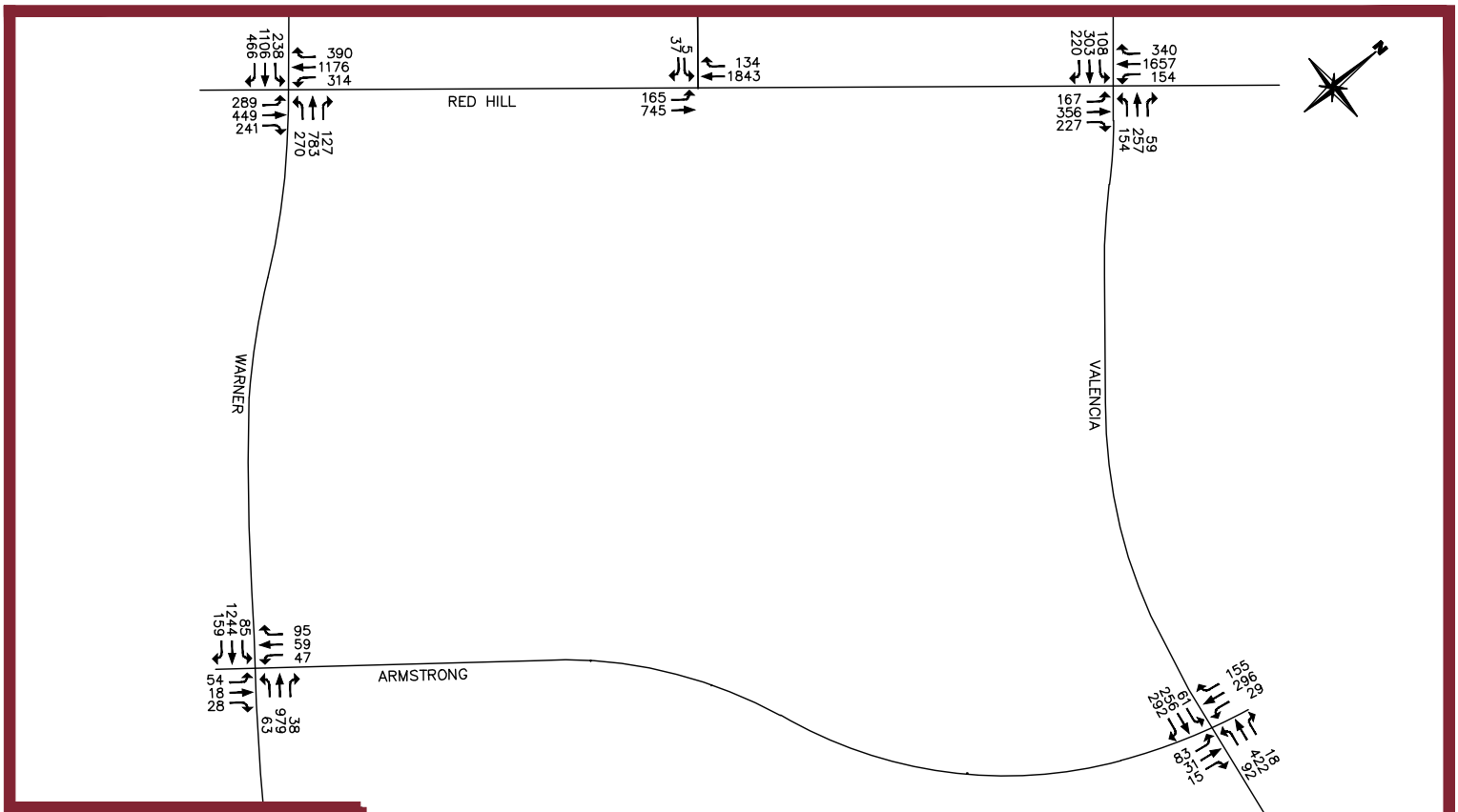
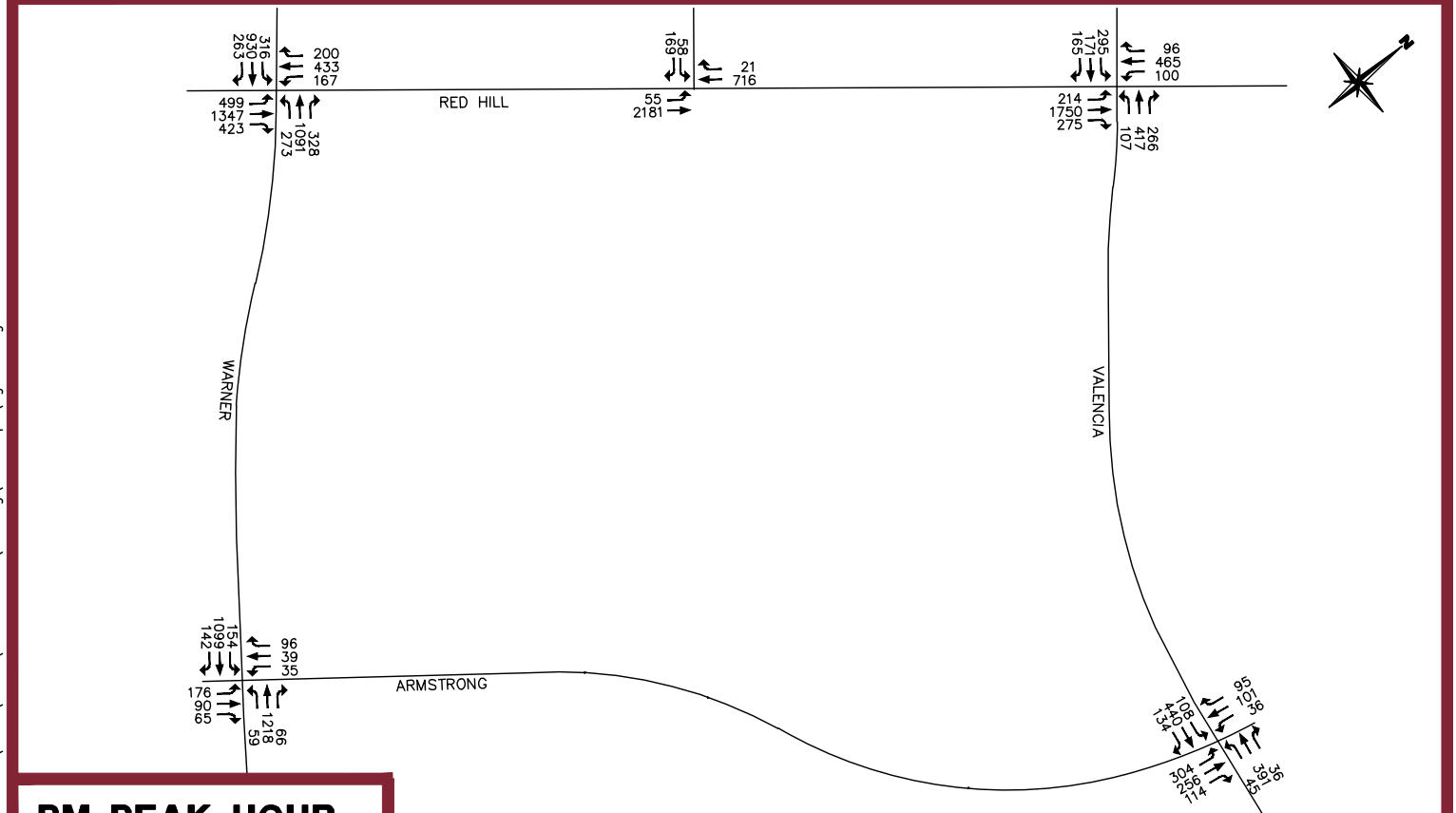
2035 ADT Volumes (000s)

Figure 3-1



AM PEAK HOUR



PM PEAK HOUR

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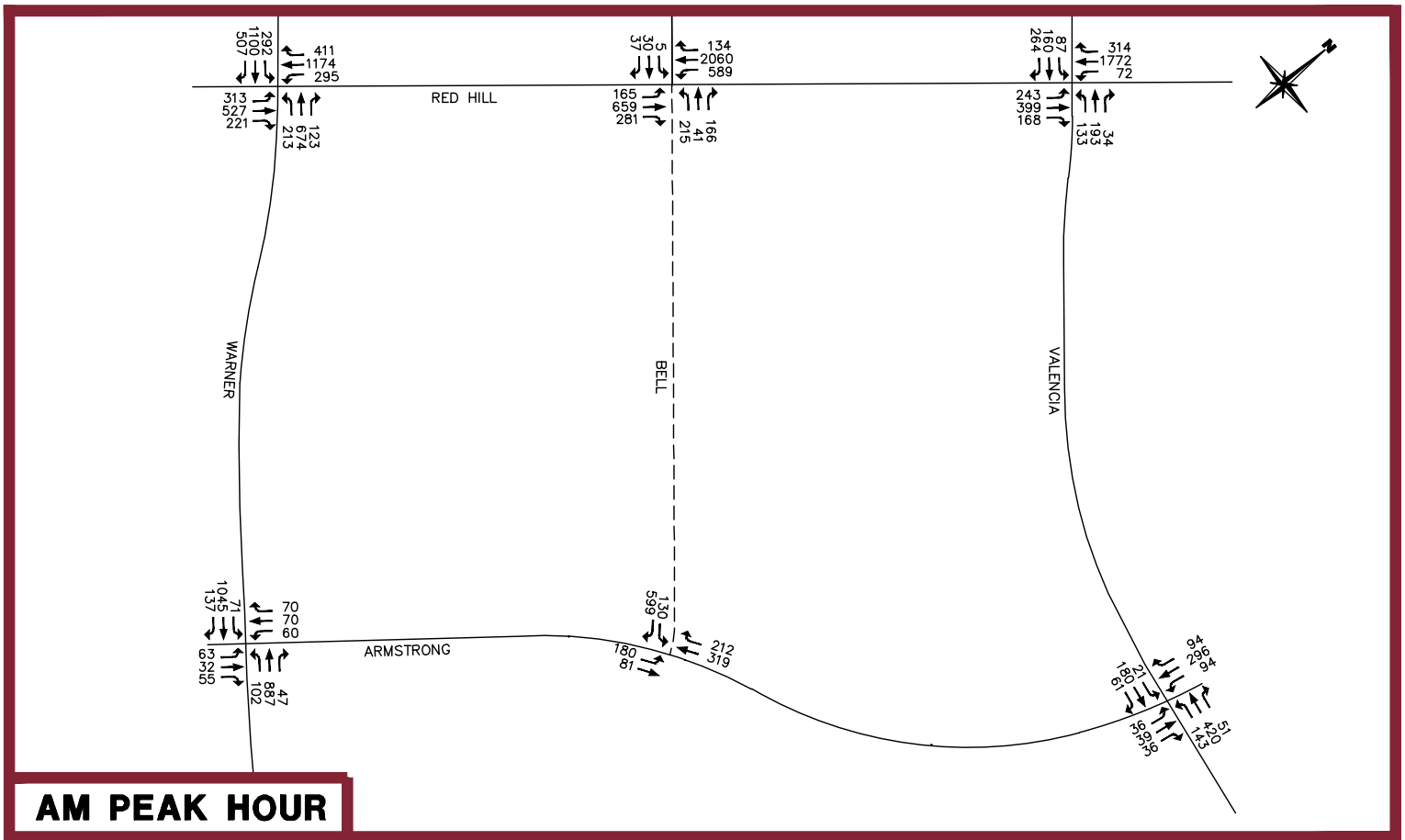
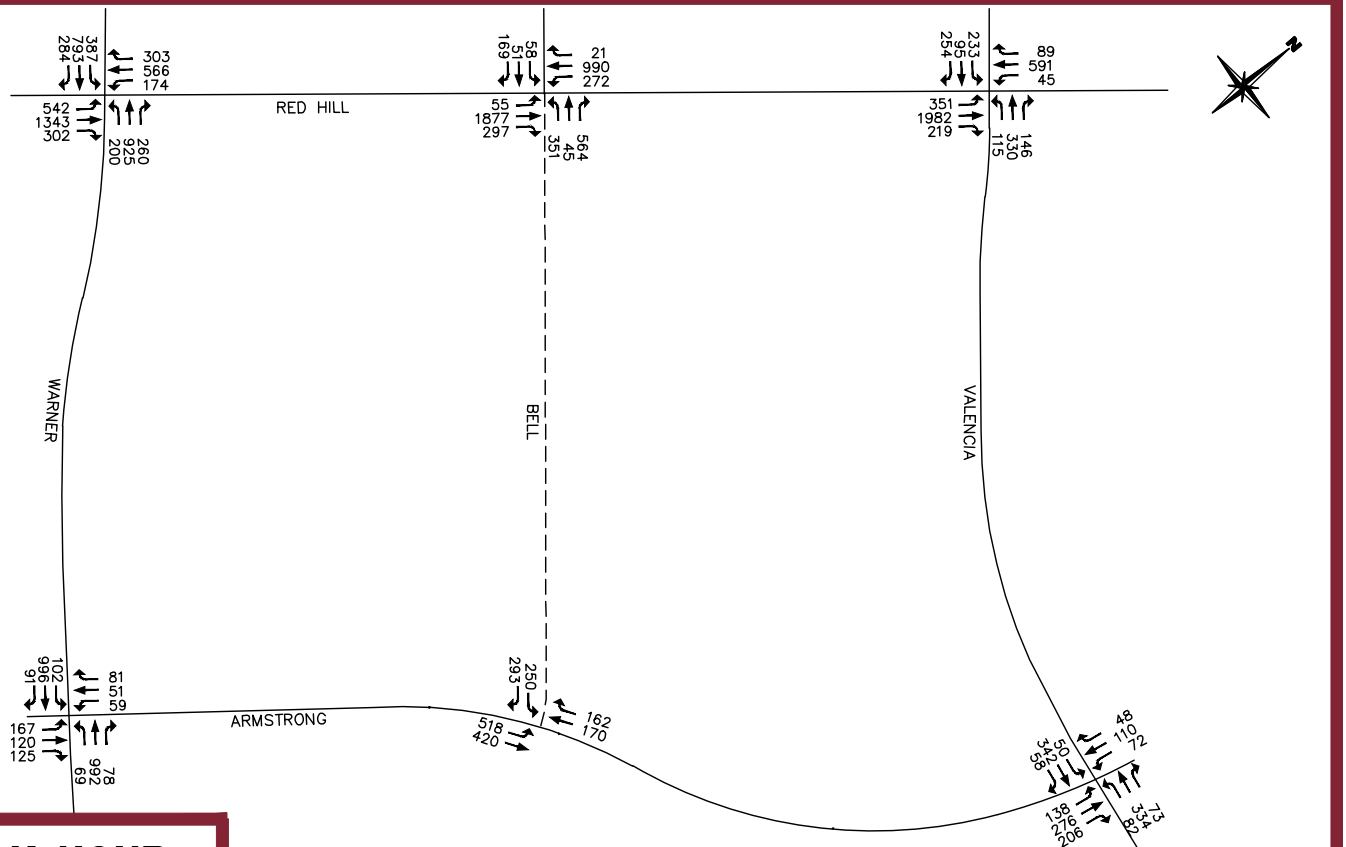
2035 Peak Hour Volumes
- No-Project

Figure 3-2



AM PEAK HOUR



PM PEAK HOUR

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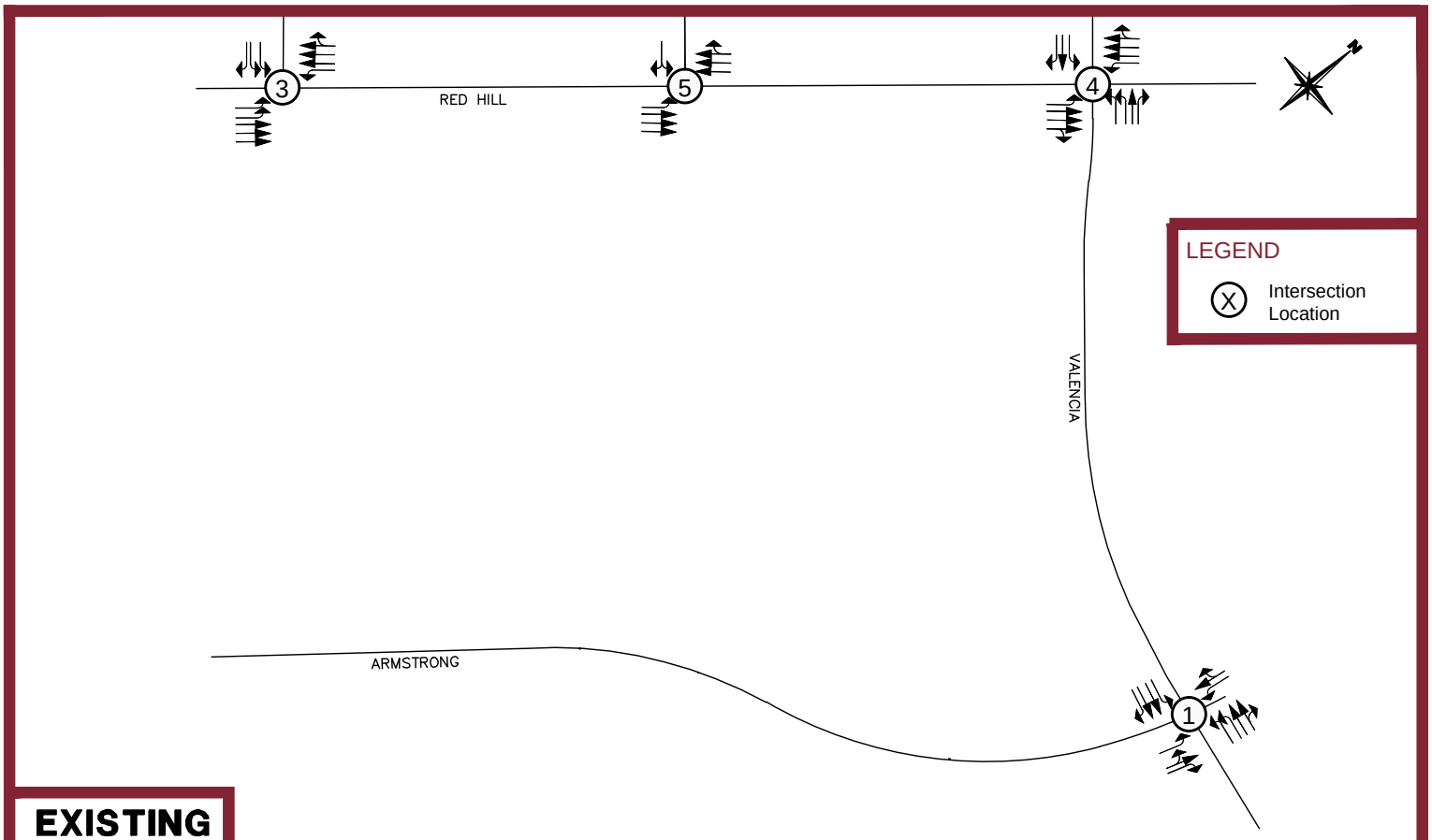
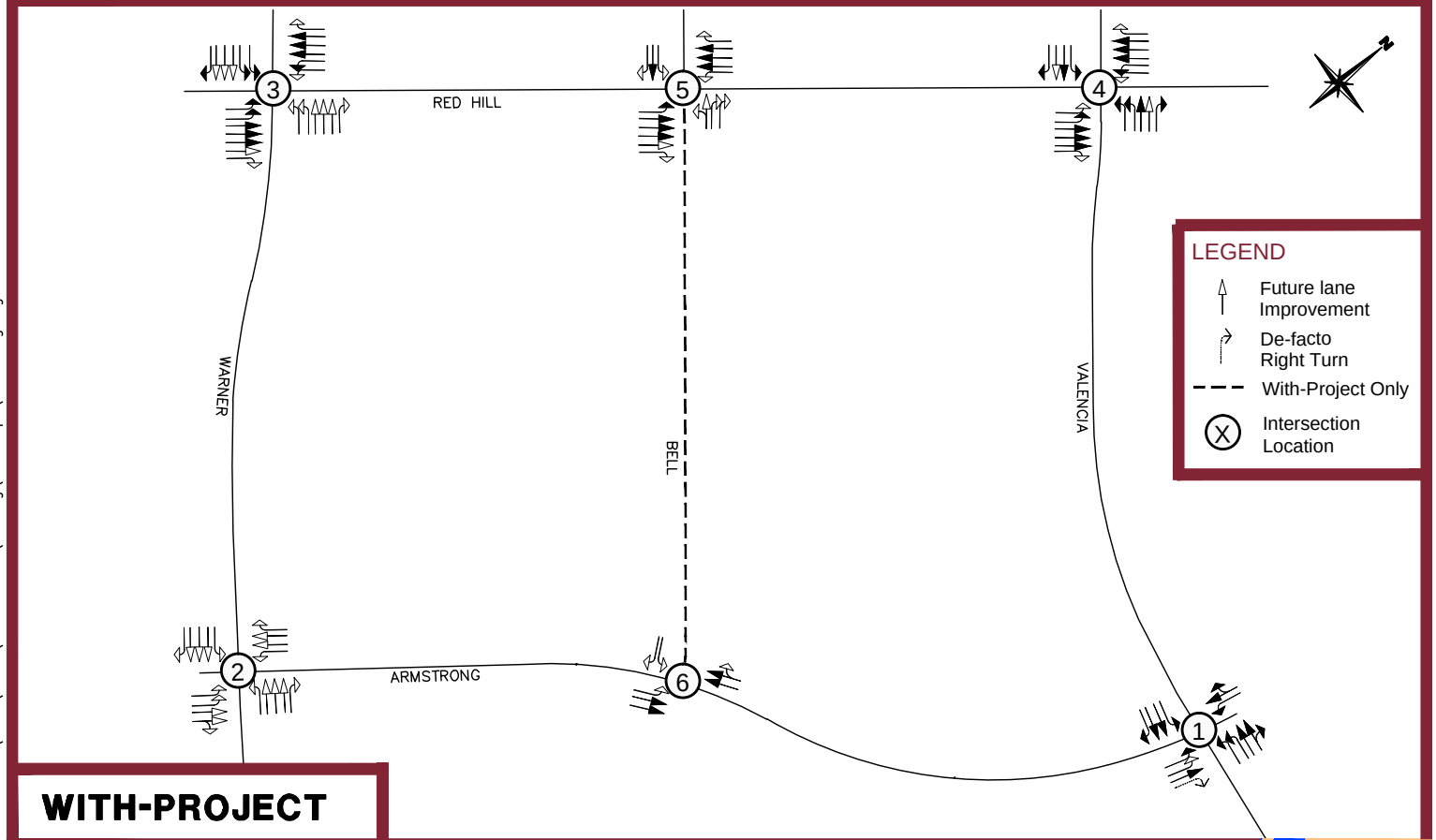
2035 Peak Hour Volumes
- With-Project

Figure 3-3



EXISTING



WITH-PROJECT

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Intersection Lane Configurations
Existing and With-Project

Figure 3-4

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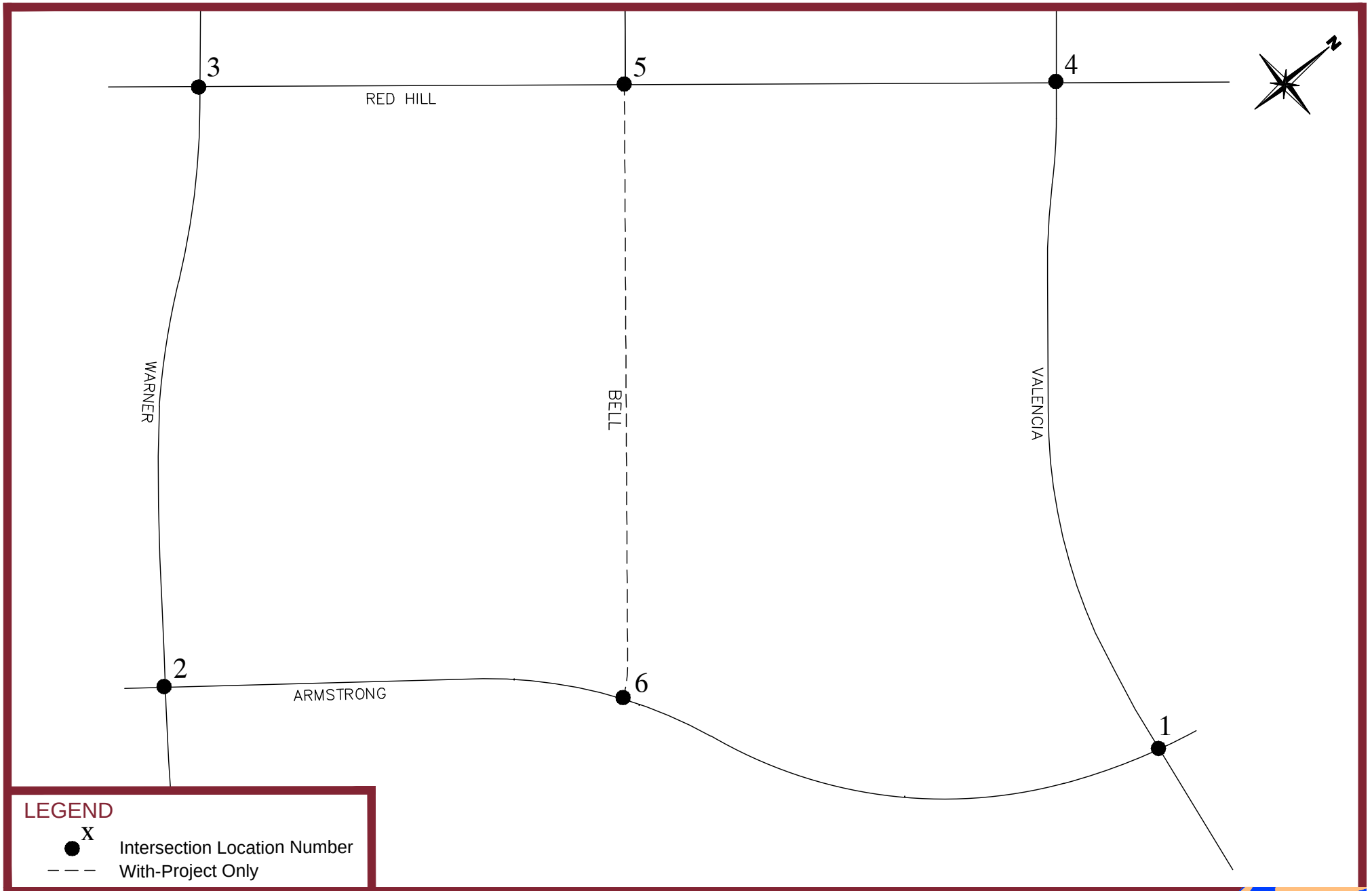


Intersection Location Map

Figure 3-5

Table 3-1 2035 Intersection LOS Summary

Intersection	No-Project				With-Project				Difference	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
1. Armstrong & Valencia	.52	A	.45	A	.44	A	.40	A	-.08	-.05
2. Armstrong & Warner	.37	A	.45	A	.37	A	.40	A	.00	-.05
3. Red Hill & Warner	.67	B	.60	A	.66	B	.61	B	-.01	.01
4. Red Hill & Valencia	.56	A	.73	C	.62	B	.69	B	.06	-.04
5. Red Hill & Bell	.56	A	.50	A	.70	C	.75	C	.14	.25
6. Armstrong & Bell	--	--	--	--	.59	A	.60	A	.59	.60

Notes:

[1]See Intersection Location Map in Figure 3-5.

[2]See Table 1-2 for LOS ranges based on ICU.

Abbreviations: ICU – intersection capacity utilization
LOS – level of service

3.2 Year 2035 Findings and Conclusions

The results of the project impact analysis for year 2035 did not indicate any new significant impacts with the project. Full development of the proposed project including the easterly extension of Bell Avenue from Red Hill Avenue to Armstrong Avenue and improvements associated with the current Specific Plan were assumed.

4.0 Special Issues

This chapter presents special issues in two subject areas. The first subject covers the qualitative analysis of an all-academic alternative to the Advanced Technology and Education Park (ATEP) campus instead of a mix of academic and office. The second subject covers the potential impacts of the two intersections changed or formed by the extension of Bell Avenue from its existing terminus at Red Hill Avenue to Armstrong Avenue. The evaluation of the two intersections includes determining the need for signalization and left-turn storage length requirements.

4.1 ATEP Academic Alternative

In the event that South Orange County Community College District (SOCCCD) builds the ATEP site as all-academic rather than a mix of academic/general office, the square footage of the learning center would be higher assuming that the trip generation is equivalent to the ATEP academic/general office project mix. In addition to different square footage, the peak hour volumes also differ (see Table 4-1). However the difference is opposite. The peak hour volumes are lower for an all-academic use at ATEP compared to a project with academic/general office mix. It can be concluded, that the findings presented in the previous chapter would still apply if the uses at ATEP change from academic and general office to all-academic.

4.2 Bell Avenue

Two intersections change or form when Bell Avenue is extended from its existing terminus at Red Hill Avenue to Armstrong Avenue. An evaluation is carried out at these two intersections which includes determining the need for signalization and left-turn storage length requirements.

4.2.1 Signalization

Traffic signal warrants based on peak hour volumes as adopted by the Federal Highway Administration and Caltrans were used here to determine the need for signalization. In applying this warrant, the volumes of both the major and minor street must meet or exceed those shown on the curves in Figures 4-1 and 4-2 for rural and urban conditions, respectively.

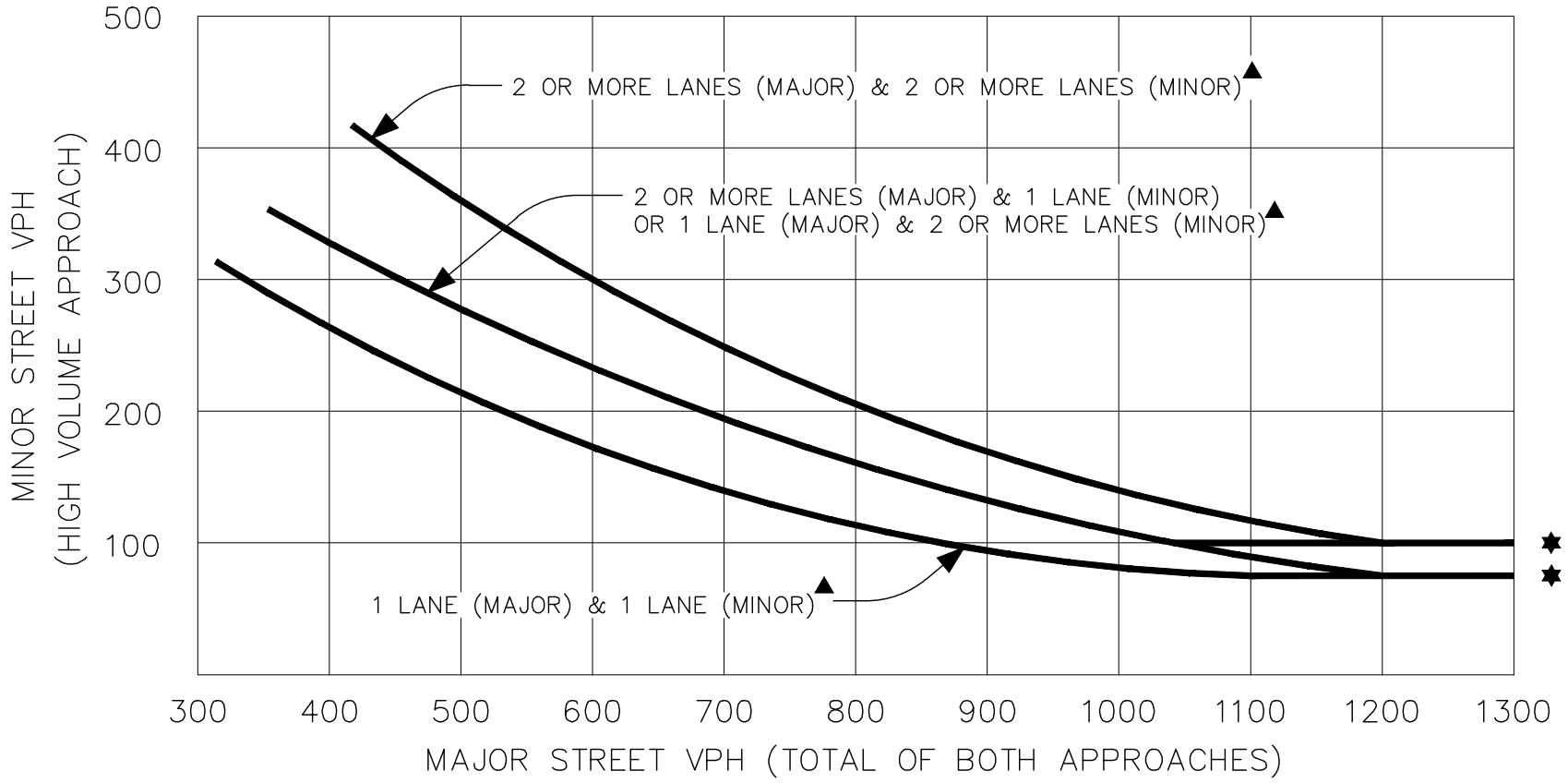
Determining the major street approach for the signal warrant involves calculating the number of vehicles approaching the intersection on both major street legs. The highest total volume for either the continuous east and west approach or the north and south approach during either AM and PM is determined to be the major street approach for both peak hours. The minor street peak hour signal warrant volume is the number of peak hour vehicles approaching the intersection on only the highest volume leg. The highest volume for either the AM or PM determines the minor approach for both peak hours.

Table 4-1 ATEP Project Alternative Trip Generation Comparison

Land Use	Amount	Unit	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	ADT
WITH-PROJECT									
ATEP Proposed									
Learning Center	554.87	TSF	366	40	406	83	189	272	3,397
General Office	533.10	TSF	880	122	1,002	165	795	960	7,075
TOTAL			1,246	162	1,408	248	984	1,232	10,472
ATEP Alternative									
Learning Center	1,710.78	TSF	1,129	120	1,249	257	582	838	10,470
DIFFERENCE			**-117**	**-42**	**-159**	**9**	**-402**	**-394**	**-2**
Trip Rates									
Learning Center		TSF	.66	.07	.73	.15	.34	.49	6.12
General Office		TSF	1.65	.23	1.88	.31	1.49	1.80	13.27

Note: No-Project land uses shown here are consistent with the Specific Plan Amendment approved in 2010.

Abbreviations: ADT – Average Daily Trips ATEP – Advanced Technology and Education Park
TSF – Thousand Square Feet



▲ NOTE: THESE CURVES ARE RECOMMENDED FOR USE IN AREAS OF RURAL CLASSIFICATION (i.e. POSTED SPEED LIMIT ON THE MAJOR STREET IS 40 MPH OR HIGHER).

★ NOTE: 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES, AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

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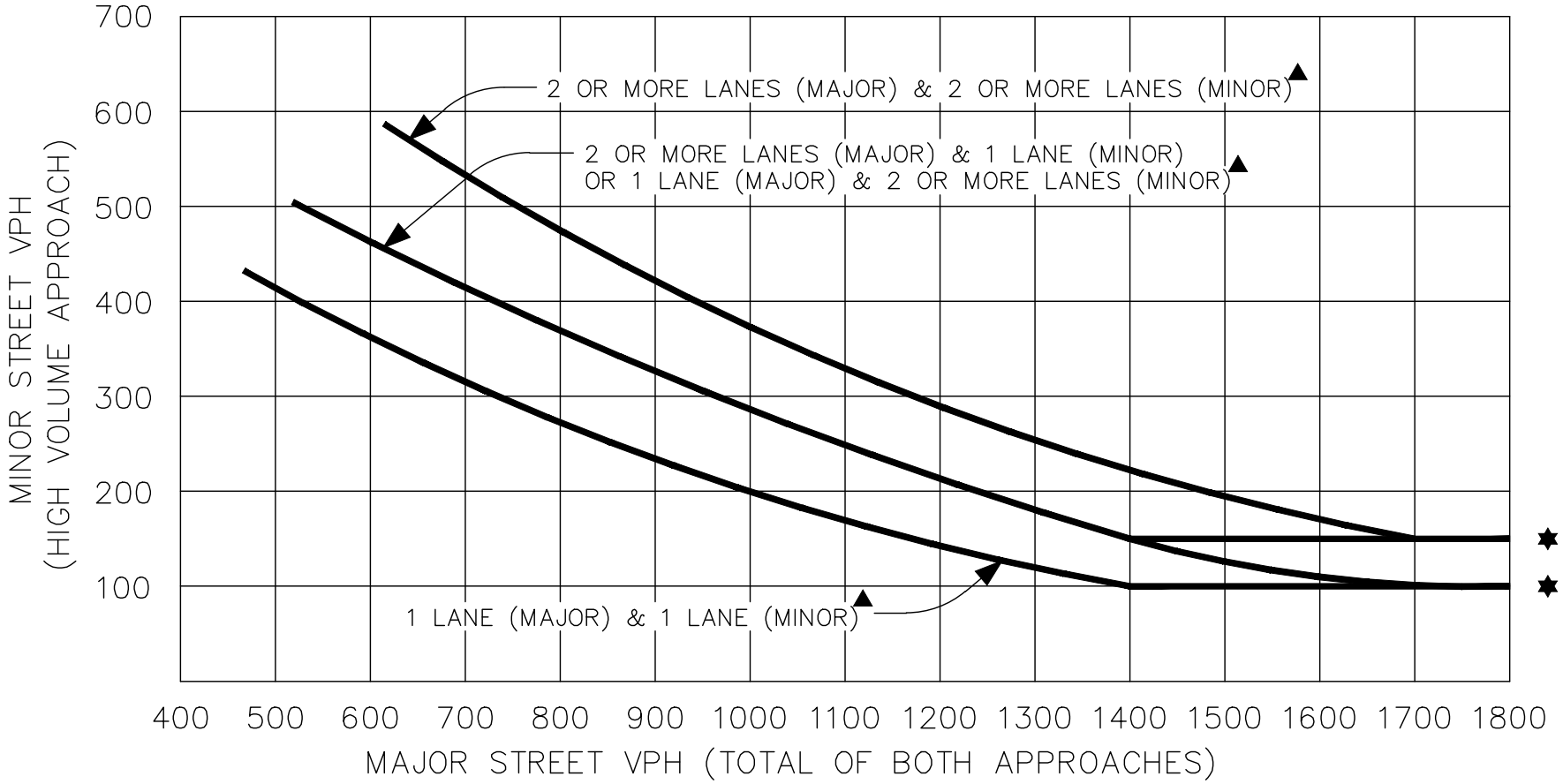
Peak Hour Signal Warrants
(Higher Speeds/Rural Areas)

Figure 4-1



▲ NOTE: THESE CURVES ARE RECOMMENDED FOR USE IN AREAS OF URBAN CLASSIFICATION (i.e. POSTED SPEED LIMIT ON THE MAJOR STREET IS 70 km/h or 35 MPH OR LESS).

★ NOTE: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES, AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

Source: MUTCD – Figure 4C-3

Stantec

Peak Hour Volume Warrant
(Lower Speeds/Urban Areas)

Figure 4-2

Rural or urban classifications are determined by the posted speed on the major street. Warrants are based on rural when the speed on the major street is 40 miles per hour (mph) or higher. For urban areas, the speed on the major street is 35 mph or lower. The two Bell Avenue intersections in the study area are analyzed here for year 2035 conditions. The warrants at the Red Hill Avenue and Bell Avenue intersection are based on rural due to the higher speeds along Red Hill Avenue. Lower speeds are expected on Armstrong Avenue therefore the signal warrant analysis at the Armstrong Avenue and Bell Avenue intersection is based on urban.

The signal warrant analysis for 2035 with project conditions is summarized in Table 4-2, and based on the application of the warrant, both intersections require traffic signals. Typically, signals are not installed until signal warrants are met.

4.2.2 Left-Turn Storage

Left-turn pocket lengths at the two Bell Avenue intersections for new left-turn movements were estimated based on the highest peak hour volume under year 2035 conditions previously presented in Figure 3-3. Where pocket lengths exceed the standard 150 feet for public roadways, the length is based on one foot per peak hour left-turn volume (highest of AM and PM) and rounded into increments of 10. The worst-case estimated left-turn storage length requirements for the intersections analyzed are summarized in Table 4-3. It should be noted that the storage length requirement could be minimized with special signal treatments such as two left-turn phases (i.e., both at the beginning and end of the signal cycle).

Table 4-2 2035 Peak Hour Signal Warrant Summary

Intersection (North/South Rd & East/West Rd)	Direction	AM Peak Hour	PM Peak Hour
5. Red Hill Avenue (Major) & Bell Avenue & Auto Center Drive (Minor)			
Major Approach	Northbound	1,105	2,229
	Southbound	2,783	1,283
	Total	3,888	3,512
Minor Approach	Westbound	422	960
Satisfies Warrant (Higher Speeds/Rural Areas)?		Yes	Yes
6. Armstrong Avenue (Major) & Bell Avenue			
Major Approach	Northbound	261	938
	Southbound	531	332
	Total	792	1,270
Minor Approach	Eastbound	729	543
Satisfies Warrant (Lower Speeds/Urban Areas)?		Yes	Yes

Table 4-3 2035 Left-Turn Storage Length Requirements

Intersection (N/S Rd & E/W Rd)	Movement	Peak Hour	Volume	Lanes	Volume/Lane	Length
5. Red Hill & Bell	SBL	AM	589	1	589	590'
	WBL	PM	351	1	396*	400'
6. Armstrong & Bell	NBL	PM	518	1	518	520'
	EBL	PM	250	1	250	250'

* Lane is shared with ET volumes so ET volume is included in the volume/lane calculation.

Abbreviations:

ET – Eastbound Through
N,S,E,W – North, South, East, West

5.0 Findings and Conclusions

This report presents the findings of a traffic study carried out for the proposed changes to Tustin Legacy Neighborhood A. The purpose of this report was to identify and evaluate how the proposed project differs from the original Specific Plan and any subsequent approved Specific Plan amendments in terms of traffic impacts pursuant to City-adopted California Environmental Quality Act (CEQA) thresholds of significance. The traffic study is in support of the Specific Plan Amendment and is a Supplemental to the previously approved EIR/EIS carried out for Tustin Legacy. The Specific Plan land uses and the circulation system that were assumed in previous Tustin Legacy studies outside the proposed project site as carried out for the 2010 Specific Plan Amendment are included here.

The traffic impacts of the proposed project in Neighborhood A in Tustin Legacy were identified by analyzing the traffic conditions for the study area circulation system based on year 2035 time frame. In each case, traffic conditions under no-project and with-project were compared to identify the potential traffic impacts of the project. The project site assumes the current approval (from the 2010 Specific Plan Amendment) for the site under year 2035 no-project conditions, and the proposed project changes are assumed to be fully developed under year 2035 with-project conditions including the extension of Bell Avenue to Armstrong Avenue.

The circulation system performance criteria applied in the analysis are based on level of service (LOS) calculation methodologies and performance standards for intersections that have been used by previous reports in the Tustin Legacy.

The results of the year 2035 project impact analysis, which are presented in detail in Chapter 3.0 of this report, indicate that the proposed project is not forecast to significantly impact any intersections in the study area (see Table 3-1). Therefore no project mitigation measures are required The intersection LOS summaries presented in Chapter 3.0 indicated that enough capacity is available to accommodate the proposed project with all intersections operating at LOS "D" or better in the study area.

The results of the analysis presented in Chapter 4.0 indicate that the proposed project meets the requirements for site access including the lane geometry at the new Bell Avenue intersections. Adequate design of these two intersections and the Bell Avenue extension itself will accommodate the proposed project with no adverse traffic conditions on other parts of the circulation system.

Appendix A

Intersection Capacity Utilization (ICU) Worksheets

Appendix A Intersection Capacity Utilization (ICU) Worksheets

This appendix summarizes information pertaining to the intersection analysis portion of the traffic study for the proposed project. Intersection location reference map is provided in Figure A-1 for the project study area. The AM and PM peak hour intersection capacity utilization (ICU) worksheets for year 2035 no-project and with-project conditions future traffic analysis scenarios analyzed in the study area are presented in the following order by intersection:

ICU Calculation Methodology

The ICU calculation procedure is based on a critical movement methodology that shows the amount of capacity utilized by each critical movement at an intersection. A capacity of 1,700 vehicles per hour per lane is assumed together with a .05 clearance interval. A "de facto" right-turn lane is used in the ICU calculation for cases where a curb lane is wide enough to separately serve both through and right-turn traffic (typically with a width of 19 feet or more from curb to outside of through-lane with parking prohibited during peak periods). Such lanes are treated the same as striped right-turn lanes during the ICU calculations, but they are denoted on the ICU calculation worksheets using the letter "d" in place of a numerical entry for right-turn lanes.

The methodology also incorporates a check for right-turn capacity utilization. Both right-turn-on-green (RTOG) and right-turn-on-red (RTOR) capacity availability are calculated and checked against the total right-turn capacity need. If insufficient capacity is available, then an adjustment is made to the total capacity utilization value. The following example shows how this adjustment is made.

Example for Northbound Right

1. Right-Turn-On-Green (RTOG)

If NBT is critical move, then:
RTOG = V/C (NBT)
Otherwise,
RTOG = V/C (NBL) + V/C (SBT) - V/C (SBL)

2. Right-Turn-On-Red (RTOR)

If WBL is critical move, then:
RTOR = V/C (WBL)
Otherwise,
RTOR = V/C (EBL) + V/C (WBT) - V/C (EBT)

3. Right-Turn Overlap Adjustment

If the northbound right is assumed to overlap with the adjacent westbound left, adjustments to the RTOG and RTOR values are made as follows:

RTOG = RTOG + V/C (WBL)
RTOR = RTOR - V/C (WBL)

4. Total Right-Turn Capacity (RTC) Availability For NBR

RTC = RTOG + factor x RTOR
Where factor = RTOR saturation flow factor (75%)

Right-turn adjustment is then as follows: Additional ICU = V/C (NBR) – RTC

A zero or negative value indicates that adequate capacity is available and no adjustment is necessary. A positive value indicates that the available RTOR and RTOG capacity does not adequately accommodate the right-turn V/C, therefore the right-turn is essentially considered to be a critical movement. In such cases, the right-turn adjustment is noted on the ICU worksheet and it is included in the total capacity utilization value. When it is determined that a right-turn adjustment is required for more than one right-turn movement, the word "multi" is printed on the worksheet instead of an actual right-turn movement reference, and the right-turn adjustments are cumulatively added to the total capacity utilization value. In such cases, further operational evaluation is typically carried out to determine if under actual operational conditions, the critical right-turns would operate simultaneously, and therefore a right-turn adjustment credit should be applied.

Shared Lane V/C Methodology

For intersection approaches where shared usage of a lane is permitted by more than one turn movement (e.g., left/through, through/right, left/through/right), the individual turn volumes are evaluated to determine whether dedication of the shared lane is warranted to any one given turn movement. The following example demonstrates how this evaluation is carried out:

Example for Shared Left/Through Lane

1. Average Lane Volume (ALV)

$$ALV = \frac{\text{Left-Turn Volume + Through Volume}}{\text{Total Left + Through Approach Lanes (including shared lane)}}$$

2. ALV for Each Approach

$$ALV\ (Left) = \frac{\text{Left-Turn Volume}}{\text{Left Approach Lanes (including shared lane)}}$$

$$\text{ALV (Through)} = \frac{\text{Through Volume}}{\text{Through Approach Lanes (including shared lane)}}$$

3. Lane Dedication is Warranted

If ALV (Left) is greater than ALV then full dedication of the shared lane to the left-turn approach is warranted. Left-turn and through V/C ratios for this case are calculated as follows:

$$\text{V/C (Left)} = \frac{\text{Left-Turn Volume}}{\text{Left Approach Capacity (including shared lane)}}$$

$$\text{V/C (Through)} = \frac{\text{Through Volume}}{\text{Through Approach Capacity (excluding shared lane)}}$$

Similarly, if ALV (Through) is greater than ALV then full dedication to the through approach is warranted, and left-turn and through V/C ratios are calculated as follows:

$$\text{V/C (Left)} = \frac{\text{Left-Turn Volume}}{\text{Left Approach Capacity (excluding shared lane)}}$$

$$\text{V/C (Through)} = \frac{\text{Through Volume}}{\text{Through Approach Capacity (including shared lane)}}$$

4. Lane Dedication is not Warranted

If ALV (Left) and ALV (Through) are both less than ALV, the left/through lane is assumed to be truly shared and each left, left/through or through approach lane carries an evenly distributed volume of traffic equal to ALV. A combined left/through V/C ratio is calculated as follows:

$$\text{V/C (Left/Through)} = \frac{\text{Left-Turn Volume + Through Volume}}{\text{Total Left + Through Approach Capacity (including shared lane)}}$$

This V/C (Left/Through) ratio is assigned as the V/C (Through) ratio for the critical movement analysis and ICU summary listing.

If split phasing has not been designated for this approach, the relative proportion of V/C (Through) that is attributed to the left-turn volume is estimated as follows:

If approach has more than one left-turn (including shared lane), then:

V/C (Left) = V/C (Through)

If approach has only one left-turn lane (shared lane), then:

$$\text{V/C (Left)} = \frac{\text{Left-Turn Volume}}{\text{Single Approach Lane Capacity}}$$

If this left-turn movement is determined to be a critical movement, the V/C (Left) value is posted in brackets on the ICU summary printout.

These same steps are carried out for shared through/right lanes. If full dedication of a shared through/right lane to the right-turn movement is warranted, the right-turn V/C value calculated in step three is checked against the RTOR and RTOG capacity. When an approach contains more than one shared lane (e.g., left/through and through/right), steps one and two listed above are carried out for the three turn movements combined. Step four is carried out if dedication is not warranted for either of the shared lanes. If dedication of one of the shared lanes is warranted to one movement or another, step three is carried out for the two movements involved, and then steps one through four are repeated for the two movements involved in the other shared lane.

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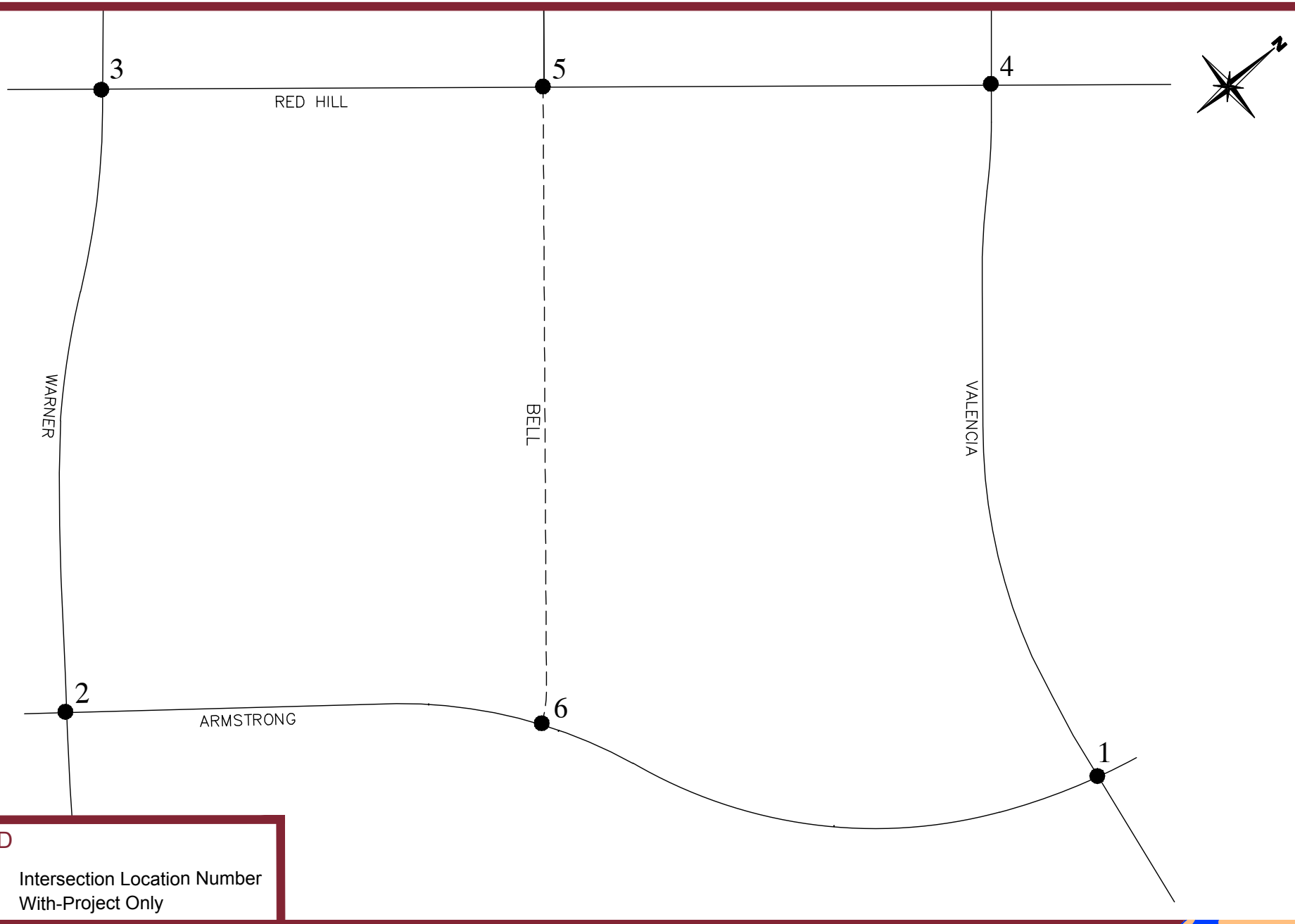

LEGEND

X — Intersection Location Number

– – – With-Project Only

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Intersection Location Map

Figure A-1

1. Armstrong & Valencia

No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	83	.02*	304	.09*
NBT	1	1700	31	.02	256	.15
NBR	d	1700	15	.01	114	.07
SBL	1	1700	29	.02	36	.02
SBT	1	1700	296	.27*	101	.12*
SBR	0	0	155		95	
EBL	1	1700	61	.04*	108	.06*
EBT	2	3400	256	.08	440	.13
EBR	1	1700	292	.17	134	.08
WBL	2	3400	92	.03	45	.01
WBT	2	3400	422	.13*	391	.13*
WBR	0	0	18		36	
Right Turn Adjustment			EBR	.01*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.52**		**.45**

With-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	36	.01*	138	.04
NBT	1	1700	39	.02	276	.16*
NBR	d	1700	36	.02	206	.12
SBL	1	1700	94	.06	72	.04*
SBT	1	1700	296	.23*	110	.09
SBR	0	0	94		48	
EBL	1	1700	21	.01*	50	.03*
EBT	2	3400	180	.05	342	.10
EBR	1	1700	61	.04	58	.03
WBL	2	3400	143	.04	82	.02
WBT	2	3400	420	.14*	334	.12*
WBR	0	0	51		73	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.44**		**.40**

2. Armstrong & Warner

No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	54	.02*	176	.05
NBT	2	3400	18	.01	90	.05*
NBR	0	0	28	.02	65	
SBL	1	1700	47	.03	35	.02*
SBT	2	3400	59	.02*	39	.01
SBR	1	1700	95	.06	96	.06
EBL	1	1700	85	.05	154	.09*
EBT	3	5100	1244	.24*	1099	.22
EBR	1	1700	159	.09	142	.08
WBL	1	1700	63	.04*	59	.03
WBT	3	5100	979	.19	1218	.24*
WBR	1	1700	38	.02	66	.04
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.37**		**.45**

With-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	63	.02	167	.05
NBT	2	3400	32	.02*	120	.07*
NBR	0	0	55	.03	125	.07
SBL	1	1700	60	.04*	59	.03*
SBT	2	3400	70	.02	51	.02
SBR	1	1700	70	.04	81	.05
EBL	1	1700	71	.04	102	.06*
EBT	3	5100	1045	.20*	996	.20
EBR	1	1700	137	.08	91	.05
WBL	1	1700	102	.06*	69	.04
WBT	3	5100	887	.17	992	.19*
WBR	1	1700	47	.03	78	.05
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.37**		**.40**

3. Red Hill & Warner

No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	289	.09*	499	.15
NBT	4	6800	449	.07	1347	.20*
NBR	1	1700	241	.14	423	.25
SBL	2	3400	314	.09	167	.05*
SBT	3	5100	1176	.23*	433	.08
SBR	1	1700	390	.23	200	.12
EBL	2	3400	238	.07	316	.09*
EBT	3	5100	1106	.22*	930	.18
EBR	1	1700	466	.27	263	.15
WBL	2	3400	270	.08*	273	.08
WBT	3	5100	783	.15	1091	.21*
WBR	1	1700	127	.07	328	.19
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.67**		**.60**

With-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	313	.09*	542	.16*
NBT	4	6800	527	.08	1343	.20
NBR	1	1700	221	.13	302	.18
SBL	2	3400	295	.09	174	.05
SBT	3	5100	1174	.23*	566	.11*
SBR	1	1700	411	.24	303	.18
EBL	2	3400	292	.09	387	.11*
EBT	3	5100	1100	.22*	793	.16
EBR	1	1700	507	.30	284	.17
WBL	2	3400	213	.06*	200	.06
WBT	3	5100	674	.13	925	.18*
WBR	1	1700	123	.07	260	.15
Right Turn Adjustment			EBR	.01*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.66**		**.61**

4. Red Hill & Valencia

No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	167	.05*	214	.06
NBT	3	5100	356	.07	1750	.34*
NBR	1	1700	227	.13	275	.16
SBL	2	3400	154	.05	100	.03*
SBT	3	5100	1657	.32*	465	.09
SBR	1	1700	340	.20	96	.06
EBL	1	1700	108	.06	295	.17*
EBT	2	3400	303	.09*	171	.05
EBR	1	1700	220	.13	165	.10
WBL	2	3400	154	.05*	107	.03
WBT	2	3400	257	.08	417	.12*
WBR	1	1700	59	.03	266	.16
Right Turn Adjustment					WBR	.02*
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.56**		**.73**

With-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3400	243	.07*	351	.10
NBT	3	5100	399	.08	1982	.39*
NBR	1	1700	168	.10	219	.13
SBL	2	3400	72	.02	45	.01*
SBT	3	5100	1772	.35*	591	.12
SBR	1	1700	314	.18	89	.05
EBL	1	1700	87	.05*	233	.14*
EBT	2	3400	160	.05	95	.03
EBR	1	1700	264	.16	254	.15
WBL	2	3400	133	.04	115	.03
WBT	2	3400	193	.06*	330	.10*
WBR	1	1700	34	.02	146	.09
Right Turn Adjustment			EBR	.04*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.62**		**.69**

5. Red Hill & Bell

No-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	165	.10*	55	.03
NBT	4	6800	745	.11	2181	.32*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	3	5100	1843	.39*	716	.14
SBR	0	0	134		21	
EBL	0	0	5		58	
EBT	1	1700	0	.02*	0	.13*
EBR	0	0	37		169	
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.56**		**.50**

With-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	165	.10*	55	.03
NBT	4	6800	659	.10	1877	.28*
NBR	1	1700	281	.17	297	.17
SBL	1	1700	589	.35	272	.16*
SBT	3	5100	2060	.40*	990	.19
SBR	1	1700	134	.08	21	.01
EBL	1	1700	5	.00	58	.03*
EBT	1	1700	30	.02	51	.03
EBR	1	1700	37	.02	169	.10
WBL	0	0	215		351	
WBT	1	1700	41	.15*	45	.23*
WBR	2	3400	166	.05	564	.17
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.70**		**.75**

6. Armstrong & Bell

With-Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1700	180	.11*	518	.30*
NBT	2	3400	81	.02	420	.12
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	2	3400	319	.16*	170	.10*
SBR	0	0	212		162	
EBL	1	1700	130	.08*	250	.15*
EBT	0	0	0		0	
EBR	1	1700	599	.35	293	.17
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Right Turn Adjustment			EBR	.19*		
Clearance Interval				.05*		.05*
TOTAL CAPACITY UTILIZATION				**.59**		**.60**

Appendix B Air Quality and Greenhouse Gas Impact Analyses (April 2013)

Appendix B

AIR QUALITY and GHG IMPACT ANALYSES

ATEP BELL AVENUE PROJECT

CITY OF TUSTIN, CALIFORNIA

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April 3, 2013

Project No.: P13-013 AQ

CLIMATE AND METEOROLOGY

The project site's climate, as with all Southern California, is dominated by the strength and position of the semi-permanent high pressure pattern over the Pacific Ocean near Hawaii. It creates cool summers, mild winters, and infrequent rainfall. It drives the cool daytime sea breeze, and it maintains comfortable humidity levels and ample sunshine after the frequent morning clouds dissipate. Unfortunately, the same atmospheric processes that create the desirable living climate combine to restrict the ability of the atmosphere to disperse the air pollution generated by the large population attracted in part by the desirable climate. Portions of the Los Angeles Basin therefore experience some of the worst air quality in the nation for certain pollutants.

The City of Tustin has an annual average temperature high of 76 degrees and a low of 60 degrees. Daily and seasonal oscillations of temperature are small because of the moderating effects of the nearby oceanic thermal reservoir. In contrast to the steady temperature regime, rainfall is highly variable. Measurable precipitation occurs mainly from early November to mid-April, but total amounts are generally small. Tustin averages 13 inches of rain annually with January as the wettest month.

Winds in the project vicinity display several characteristic regimes. During the day, especially in summer, winds are from the south in the morning and from the west in the afternoon. Daytime wind speeds are 7 – 9 miles per hour on average. At night, especially in winter, the land becomes cooler than the ocean, and an offshore wind of 3-5 miles per hour develops. Early morning winds are briefly from the southeast parallel to the coastline before the daytime on-shore flow becomes well established again. One other important wind regime occurs when high pressure occurs over the western United States that creates hot, dry and gusty Santa Ana winds from the north and northeast across Tustin.

The net effect of the wind pattern on air pollution is that any locally generated emissions will be carried offshore at night and toward inland Orange County by day. Daytime ventilation is much more vigorous. Unless daytime winds rotate far into the north and bring air pollution from developed areas of the air basin into Tustin, warm season air quality is much better in the project vicinity than in inland valleys of the air basin. Both summer and winter air quality in the project area is generally good.

In addition to winds that control the rate and direction of pollution dispersal, Southern California is notorious for strong temperature inversions that limit the vertical depth through which pollution can be mixed. In summer, coastal areas are characterized by a sharp discontinuity between the cool marine air at the surface and the warm, sinking air aloft within the high pressure cell over the ocean to the west. This marine/subsidence inversion allows for good local mixing, but acts like a giant lid over the basin. Air starting onshore at the beach is relatively clean, but becomes progressively more polluted as sources continue to add pollution from below without any dilution from above. Because of Tustin's location relative to the ocean, the incoming marine air during warm season onshore flow contains little air pollution. Local air quality is not substantially affected by the regional subsidence inversions.

A second inversion type forms on clear, winter nights when cold air off the mountains sinks to the surface while the air aloft remains warm. This process forms radiation inversions. These inversions, in conjunction with very light winds, trap pollutants such as automobile exhaust near their source. During the long nocturnal drainage flow from land to sea, the exhaust pollutants continually accumulate within the shallow, cool layer of air near the ground. Some areas of Orange County thus may experience elevated levels of carbon monoxide and nitrogen oxides because of this winter radiation inversion condition. However, the coastal areas of Orange County have not substantially been affected by limited nocturnal mixing effects (no elevated levels of CO) in approximately 10 years. Both types of inversions occur throughout the year to some extent, but the marine inversions are very dominant during the day in summer, and radiation inversions are much stronger on winter nights when nights are long and air is cool. The governing role of these inversions in atmospheric dispersion leads to a substantially different air quality environment in summer in the South Coast Air Basin than in winter.

AIR QUALITY SETTING

AMBIENT AIR QUALITY STANDARDS (AAQS)

In order to gauge the significance of the air quality impacts of the proposed ATEP Bell Avenue project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended several times in air quality problem areas like Southern California. In 2003, the Environmental Protection Agency (EPA) adopted a rule, which extended and established a new attainment deadline for ozone for the year 2021. Because the State of California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 1. Sources and health effects of various pollutants are shown in Table 2.

The Federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. Environmental Protection Agency (EPA) review all national AAQS in light of currently known health effects. EPA was charged with modifying existing standards or promulgating new ones where appropriate. EPA subsequently developed standards for chronic ozone exposure (8+ hours per day) and for very small diameter particulate matter (called "PM-2.5"). New national AAQS were adopted in 1997 for these pollutants.

Planning and enforcement of the federal standards for PM-2.5 and for ozone (8-hour) were challenged by trucking and manufacturing organizations. In a unanimous decision, the U.S. Supreme Court ruled that EPA did not require specific congressional authorization to adopt national clean air standards. The Court also ruled that health-based standards did not require preparation of a cost-benefit analysis. The Court did find, however, that there was some inconsistency between existing and "new" standards in their required attainment schedules. Such attainment-planning schedule inconsistencies centered mainly on the 8-hour ozone standard. EPA subsequently agreed to downgrade the attainment designation for a large number of communities to “non-attainment” for the 8-hour ozone standard.

Table 1

Ambient Air Quality Standards						
Pollutant	**Averaging Time**	**California Standards** [1]		**National Standards** [2]		
		Concentration [3]	**Method** [4]	**Primary** [3,5]	**Secondary** [3,6]	**Method** [7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM10)	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15 µg/m^3		
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[8]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)		53 ppb (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[9]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[9]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[9]	—	
Lead[10,11]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[11]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[12]	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[10]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page …

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (2/7/12)**

Table 1 (continued)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

8. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively.

9. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

   Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

10. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

11. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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Table 2
Health Effects of Major Criteria Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	• Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter.	• Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO_2)	• Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions.	• Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O_3)	• Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	• Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	• Contaminated soil.	• Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	• Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions.	• Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	• Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.	• Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO_2)	• Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes.	• Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Evaluation of the most current data on the health effects of inhalation of fine particulate matter prompted the California Air Resources Board (ARB) to recommend adoption of the statewide PM-2.5 standard that is more stringent than the federal standard. This standard was adopted in 2002. The State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a federal clean air standard, but only requires continued progress towards attainment.

Similarly, the ARB extensively evaluated health effects of ozone exposure. A new state standard for an 8-hour ozone exposure was adopted in 2005, which aligned with the exposure period for the federal 8-hour standard. The California 8-hour ozone standard of 0.07 ppm is more stringent than the federal 8-hour standard of 0.075 ppm. The state standard, however, does not have a specific attainment deadline. California air quality jurisdictions are required to make steady progress towards attaining state standards, but there are no hard deadlines or any consequences of non-attainment. During the same re-evaluation process, the ARB adopted an annual state standard for nitrogen dioxide ($NO_{2)}$ that is more stringent than the corresponding federal standard, and strengthened the state one-hour NO_2 standard.

As part of EPA's 2002 consent decree on clean air standards, a further review of airborne particulate matter (PM) and human health was initiated. A substantial modification of federal clean air standards for PM was promulgated in 2006. Standards for PM-2.5 were strengthened, a new class of PM in the 2.5 to 10 micron size was created, some PM-10 standards were revoked, and a distinction between rural and urban air quality was adopted. In December, 2012, the federal annual standard for PM-2.5 was reduced from 15 $\mu g/m^3$ to 12 $\mu g/m^3$ which matches the California AAQS. The severity of the basin's non-attainment status for PM-2.5 may be increased by this action and thus require accelerated planning for future PM-2.5 attainment.

In response to continuing evidence that ozone exposure at levels just meeting federal clean air standards is demonstrably unhealthful, EPA had proposed a further strengthening of the 8-hour standard. Draft standards were published. The proposed future 8-hour standard was 0.065 ppm. Environmental organizations generally praised this proposal. Most manufacturing, transportation or power generation groups opposed the new standard as economically unwise in an uncertain fiscal climate. In response to these concerns, the revision to the 8-hour federal ozone standard was placed on indefinite hold.

A new federal one-hour standard for nitrogen dioxide (NO_2) has also recently been adopted which is more stringent than the existing state standard. Despite the additional stringency of the federal NO_2 standard, air quality monitoring data in the South Coast Air Basin (SCAB) suggests that this standard is met in the region. The federal primary standard for sulfur dioxide (SO_2) were similarly modified in 2010. Because California requires use of lower sulfur fuel and burns negligible amounts of sulfur-bearing coal, SO_2 is not a problem pollutant in the State.

BASELINE AIR QUALITY

Existing and probable future levels of air quality in the project area can be best inferred from ambient air quality measurements conducted by the SCAQMD at its Costa Mesa monitoring station on Verde Drive. This station monitors most pollutants such as smog, as well as primary vehicular pollutants such as carbon monoxide. Respirable particulate air pollution is not monitored at Costa Mesa. The nearest representative station monitoring station for particulates is at the Mission Viejo monitoring station at 26081 Via Para. Table 3 summarizes the last six years of published data from these resources. The following conclusions can be drawn from this data:

a. Photochemical smog (ozone) levels infrequently exceeds standards. The 1-hour state ozone standard has been exceeded only once in all days in the past six years near Costa Mesa while the 8-hour state standard has been violated an on less than one percent of all days.

b. Measurements of carbon monoxide and nitrogen dioxide indicate low baseline levels in comparison to the most stringent standards.

c. Respirable dust (PM-10) levels only rarely exceed the state standard, while the less stringent federal PM-10 standard has not been violated since PM-10 measurements began at Mission Viejo.

d. The federal ultra-fine particulate (PM-2.5) standard of 35 $\mu g/m^3$ has been exceeded less than one percent of measurement days (four times in the last six years).

Although complete attainment of every clean air standard is not yet imminent, extrapolation of the steady improvement trend suggests that such attainment could occur within the reasonably near future.

Table 3

Project Area Air Quality Monitoring Summary – 2006-2011
(Days Standards Were Exceeded and Maximum Observed Levels)

Pollutant/Standard	2006	2007	2008	2009	2010	2011
Ozone						
1-Hour > 0.09 ppm (S)	0	0	0	0	1	0
8-Hour > 0.07 ppm (S)	0	2	5	3	2	2
8- Hour > 0.075 ppm (F)	0	0	3	0	1	1
Max. 1-Hour Conc. (ppm)	0.074	0.082	0.094	0.087	0.097	0.093
Max. 8-Hour Conc. (ppm)	0.062	0.073	0.080	0.072	0.076	0.077
Carbon Monoxide						
1-Hour > 20. ppm (S)	0	0	0	0	0	0
1-Hour > 9. ppm (S, F)	0	0	0	0	0	0
Max 1-Hour Conc. (ppm)	3.5	4.5	3.0	2.7	2.4	2.9
Max 8-Hour Conc. (ppm)	3.0	3.1	2.0	2.2	2.1	2.2
Nitrogen Dioxide						
1-Hour > 0.18 ppm (S)	0	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.101	0.074	0.081	0.065	0.070	0.061
Inhalable Particulates (PM-10)						
24-Hour > 50 $\mu g/m^3$ (S)	1/50	3/57	0/55	1/60	0/58	0/61
24-Hour > 150 $\mu g/m^3$ (F)	0/50	0/57	0/55	0/60	0/58	0/61
Max. 24-Hr. Conc. ($\mu g/m^3$)	56.	74.	41.	55.	34.	47.
Ultra-Fine Particulates (PM-2.5)						
24-Hour > 35 $\mu g/m^3$ (F)	1/106	2/98	0/120	1/116	0/116	0/110
Max. 24-Hr. Conc. ($\mu g/m^3$)	46.9	46.8	32.6	39.2	19.9	33.4

S=State Standard
F=Federal Standard

Source: South Coast AQMD:
Costa Mesa-Mesa Verde Drive SCAQMD Air Monitoring Station (Ozone, CO, NOx)
Mission Viejo SCAQMD Air Monitoring Station (PM-10, PM-2.5)
DATA: www.arb.ca.gov/adam/

AIR QUALITY PLANNING

The Federal Clean Air Act (1977 Amendments) required that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that would bring the area into compliance with all national standards. The SCAB could not meet the deadlines for ozone, nitrogen dioxide, carbon monoxide, or PM-10. In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted an Air Quality Management Plan (AQMP) in 1979 and revised it several times as earlier attainment forecasts were shown to be overly optimistic.

The 1990 Federal Clean Air Act Amendment (CAAA) required that all states with air-sheds with "serious" or worse ozone problems submit a revision to the State Implementation Plan (SIP). Amendments to the SIP have been proposed, revised and approved over the past decade. The most current regional attainment emissions forecast for ozone precursors (ROG and NOx) and for carbon monoxide (CO) and for particulate matter are shown in Table 4. Substantial reductions in emissions of ROG, NOx and CO are forecast to continue throughout the next several decades. Unless new particulate control programs are implemented, PM-10 and PM-2.5 are forecast to slightly increase.

The Air Quality Management District (AQMD) adopted an updated clean air "blueprint" in August 2003. The 2003 Air Quality Management Plan (AQMP) was approved by the EPA in 2004. The AQMP outlined the air pollution measures needed to meet federal health-based standards for ozone by 2010 and for particulates (PM-10) by 2006. The 2003 AQMP was based upon the federal one-hour ozone standard which was revoked late in 2005 and replaced by an 8-hour federal standard. Because of the revocation of the hourly standard, a new air quality planning cycle was initiated.

With re-designation of the air basin as non-attainment for the 8-hour ozone standard, a new attainment plan was developed. This plan shifted most of the one-hour ozone standard attainment strategies to the 8-hour standard. As previously noted, the attainment date was to "slip" from 2010 to 2021. The updated attainment plan also includes strategies for ultimately meeting the federal PM-2.5 standard.

Because projected attainment by 2021 requires control technologies that do not exist yet, the SCAQMD requested a voluntary "bump-up" from a "severe non-attainment" area to an "extreme non-attainment" designation for ozone. The extreme designation will allow a longer time period for these technologies to develop. If attainment cannot be demonstrated within the specified deadline without relying on "black-box" measures, EPA would have been required to impose sanctions on the region had the bump-up request not been approved. In April 2010, the EPA approved the change in the non-attainment designation from "severe-17" to "extreme." This reclassification sets a later attainment deadline, but also requires the air basin to adopt even more stringent emissions controls.

Table 4

South Coast Air Basin Emissions Forecasts (Emissions in tons/day)

Pollutant	2008[a]	2010[b]	2015[b]	2020[b]
NOx	917	836	667	561
ROG	632	596	545	525
CO	3,344	3,039	2,556	2,281
PM-10	308	314	328	340
PM-2.5	110	110	111	113

[a]2008 Base Year.
[b]With current emissions reduction programs and adopted growth forecasts.

Source: California Air Resources Board, California Emissions Projection Analysis Model, 2009

In other air quality attainment plan reviews, EPA has disapproved part of the SCAB PM-2.5 attainment plan included in the AQMP. EPA has stated that the current attainment plan relies on PM-2.5 control regulations that have not yet been approved or implemented. It is expected that a number of rules that are pending approval will remove the identified deficiencies. If these issues are not resolved within the next several years, federal funding sanctions for transportation projects could result. The 2012 AQMP update that was recently adopted by the SCAQMD focuses heavily on PM-2.5 control and is expected to remedy identified PM-2.5 planning deficiencies.

Projects such as the proposed ATEP Bell Avenue do not directly relate to the AQMP in that there are no specific air quality programs or regulations governing general development. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less-than-significant just because the proposed development is consistent with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis.

AIR QUALITY IMPACT

STANDARDS OF SIGNIFICANCE

Air quality impacts are considered "significant" if they cause clean air standards to be violated where they are currently met, or if they "substantially" contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, would also be considered a significant impact.

Appendix G of the California CEQA Guidelines offers the following five tests of air quality impact significance. A project would have a potentially significant impact if it:

a. Conflicts with or obstructs implementation of the applicable air quality plan.

b. Violates any air quality standard or contributes substantially to an existing or projected air quality violation.

c. Results in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

d. Exposes sensitive receptors to substantial pollutant concentrations.

e. Creates objectionable odors affecting a substantial number of people.

Primary Pollutants

Air quality impacts generally occur on two scales of motion. Near an individual source of emissions or a collection of sources such as a crowded intersection or parking lot, levels of those pollutants that are emitted in their already unhealthful form will be highest. Carbon monoxide (CO) is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the South Coast Air Basin (SCAB) for PM-10, an aggressive dust control program is required to control fugitive dust during project construction.

Secondary Pollutants

Many pollutants, however, require time to transform from a more benign form to a more unhealthful contaminant. Their impact occurs regionally far from the source. Their incremental regional impact is minute on an individual basis and cannot be quantified except through complex photochemical computer models. Analysis of significance of such emissions is based

upon a specified amount of emissions (pounds, tons, etc.) even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

Because of the chemical complexity of primary versus secondary pollutants, the SCAQMD has designated significant emissions levels as surrogates for evaluating regional air quality impact significance independent of chemical transformation processes. Projects with daily emissions that exceed any of the following emission thresholds are recommended by the SCAQMD to be considered significant under CEQA guidelines.

Table 5
Daily Emissions Thresholds

Pollutant	Construction	Operations
ROG	75	55
NOx	100	55
CO	550	550
PM-10	150	150
PM-2.5	55	55
SOx	150	150
Lead	3	3

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- Project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation

- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP and in other than planned locations for the project's build-out year.

- Project could generate vehicle trips that cause a CO hot spot.

The SCAQMD CEQA Handbook also identifies various secondary significance criteria related to toxic, hazardous or odorous air contaminants. Except for the small diameter particulate matter ("PM-2.5") fraction of diesel exhaust generated by heavy construction equipment, there are no secondary impact indicators associated with project construction and operational roadway use.

For PM-2.5 exhaust emissions, recently adopted policies require the gradual conversion of delivery fleets to diesel alternatives, or the use of "clean" diesel if their emissions are demonstrated to be as low as those from alternative fuels. Because health risks from toxic air contaminants (TAC's) are cumulative over an assumed 70-year lifespan, measurable off-site public health risk from diesel TAC exposure would occur for only a brief portion of a project lifetime, and only in dilute quantity.

SENSITIVE RECEPTORS

Air quality impacts are analyzed relative to those persons with the greatest sensitivity to air pollution exposure. Such persons are called "sensitive receptors." Sensitive population groups include young children, the elderly and the acutely and chronically ill (especially those with cardio-respiratory disease). Residential areas adjacent to a proposed site are considered to be sensitive to air pollution exposure because they may be occupied for extended periods, and residents may be outdoors when exposure is highest. The Orange County Rescue Mission, which contain religious based temporary transitional housing units for the homeless, as well as public and private transitional housing units northeast of the ATEP campus, are considered the closest sensitive receptors.

CONSTRUCTION ACTIVITY IMPACTS

Dust is typically the primary concern during construction of new buildings. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Emission rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). These parameters are not known with any reasonable certainty prior to project development and may change from day to day. Any assignment of specific parameters to an unknown future date is speculative and conjectural.

Because of the inherent uncertainty in the predictive factors for estimating fugitive dust generation, regulatory agencies typically use one universal "default" factor based on the area disturbed assuming that all other input parameters into emission rate prediction fall into midrange average values. This assumption may or may not be totally applicable to site-specific conditions on the proposed project site. As noted previously, emissions estimation for project-specific fugitive dust sources is therefore characterized by a considerable degree of imprecision.

Average daily PM-10 emissions during site grading and other disturbance are shown estimated to be about 10 pounds per acre. This estimate presumes the use of reasonably available control measures (RACMs). The SCAQMD requires the use of best available control measures (BACMs) for fugitive dust from construction activities.

Current research in particulate-exposure health suggests that the most adverse effects derive from ultra-small diameter particulate matter comprised of chemically reactive pollutants such as sulfates, nitrates or organic material. A national clean air standard for particulate matter of 2.5 microns or smaller in diameter (called "PM-2.5") was adopted in 1997. A limited amount of

construction activity particulate matter is in the PM-2.5 range. PM-2.5 emissions are estimated to comprise 10-20 percent of PM-10.

In addition to fine particles that remain suspended in the atmosphere semi-indefinitely, construction activities generate many larger particles with shorter atmospheric residence times. This dust is comprised mainly of large diameter inert silicates that are chemically non-reactive and are further readily filtered out by human breathing passages. These fugitive dust particles are therefore more of a potential soiling nuisance as they settle out on parked cars, outdoor furniture or landscape foliage rather than any adverse health hazard.

CalEEMod was developed by the SCAQMD to provide a model by which to calculate both construction emissions and operational emissions from a variety of land use projects. It calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions.

Although exhaust emissions will result from on and off-site heavy equipment, the exact types and numbers of equipment will vary among contractors such that such emissions cannot be quantified with certainty. Estimated construction emissions were modeled using CalEEMod2011.1.1 to identify maximum daily emissions for each pollutant during project construction. Construction emissions include all emissions associated with the construction equipment, worker trips, and on-road diesel trucks.

The Bell Avenue roadway extension was modeled separately from the proposed structural facilities. The Bell Avenue extension was modeled as an "asphalt surface" to ensure off-gasing emissions are accounted for.

The project proposes a total of 194,109 square feet of construction (modeled in this study as a 2-year college and office use) over the project lifetime. Although build-out is not anticipated to occur all at once, modeling as such provides a worst case estimate as all emissions are condensed into a single intense period of activity. If daily construction emissions thresholds are not exceeded for this condensed scenario, then more piecemeal construction activity, spread out over a possible 20 year time frame will not exceed emissions thresholds.

The modeled prototype construction equipment fleet and schedule is indicated in Table 6 and based on CalEEMod defaults for a project of this size.

Table 6

Construction Activity Equipment Fleet
Roadway Construction (194,109 sf)

Phase Name and Duration	Equipment
Site Preparation (5 days)	3 Dozers
	4 Loader/Backhoes
Grading (8 days)	1 Excavator
	1 Grader
	3 Loader/Backhoes
	1 Dozer
Paving (6 months)	2 Mixers
	1 Paver
	2 Paving Equipment
	2 Rollers
	1 Loader/Backhoe

Construction Activity Equipment Fleet
Facilities Construction

Phase Name and Duration	Equipment
Site Preparation (5 days)	3 Dozers
	4 Loader/Backhoes
Grading (8 days)	1 Excavator
	1 Grader
	3 Loader/Backhoes
	1 Dozer
Construction (230 days)	1 Crane
	3 Forklifts
	1 Generator Set
	3 Loader/Backhoes
	1 Welder
Paving (20 days)	2 Mixers
	1 Paver
	2 Paving Equipment
	2 Rollers
	1 Loader/Backhoe

Utilizing this indicated equipment fleet shown in Tables 6 the following worst case daily construction emissions are calculated by CalEEMod and are listed in Table 7.

Table 7

Construction Activity Emissions
Maximum Daily Emissions (pounds/day)

Maximal Construction Emissions	ROG	NOx	CO	SO_2	PM-10	PM-2.5	CO_2 (e)
2014 (Roadway)							
Unmitigated	6.4	50.8	30.2	0.1	20.8	12.4	5,640.5
Mitigated	6.4	50.8	30.2	0.1	9.8	6.3	5,640.5
2018 (Facilities)							
Unmitigated	5.1	38.0	25.0	0.1	20.0	11.6	5,618.7
Mitigated	5.1	38.0	25.0	0.1	9.0	5.6	5,618.7
2019 (Facilities)							
Unmitigated	60.3	12.3	12.0	0.0	1.2	0.9	1,867.7
Mitigated	60.3	12.3	12.0	0.0	1.2	0.9	1,867.7
SCAQMD Thresholds	75	100	550	150	150	55	-

Peak daily construction activity emissions are estimated be below SCAQMD CEQA thresholds without the need for added mitigation. The only model-based mitigation measured applied for this project was watering exposed dirt surfaces at least three times per day as required per SCAQMD Rule 403 (Fugitive Dust), to minimize the generation of fugitive dust

Also analyzed was full build-out of 816,929 square feet for a 2-year college use. Table 8 details the default CalEEMod equipment fleet and default activity durations.

Table 8
Construction Activity Equipment Fleet
Facilities Construction (816,929 sf)

Phase Name and Duration	Equipment
Site Preparation (10 days)	3 Dozers
	4 Loader/Backhoes
Grading (30 days)	1 Excavator
	1 Grader
	3 Loader/Backhoes
	2 Scrapers
	1 Dozer
Construction (300 days)	1 Crane
	3 Forklifts
	1 Generator Set
	3 Loader/Backhoes
	1 Welder
Paving (20 days)	2 Pavers
	2 Paving Equipment
	2 Rollers

Utilizing this equipment fleet and activity durations the following worst case daily construction emissions are calculated by CalEEMod and are listed in Table 9.

Table 9

Construction Activity Emissions
Maximum Daily Emissions (pounds/day)

Maximal Construction Emissions	ROG	NOx	CO	SO_2	PM-10	PM-2.5	CO_2 (e)
2020 (2-year college)							
Unmitigated	68.1	35.6	42.8	0.1	19.7	11.3	11,261.3
Mitigated	68.1	35.6	42.8	0.1	8.9	5.3	11,261.3
2021 (2-year college)							
Unmitigated	67.8	26.4	41.3	0.1	8.8	1.3	11,203.7
Mitigated	67.8	26.4	41.3	0.1	8.8	1.3	11,203.7
SCAQMD Thresholds	75	100	550	150	150	55	-

Again, emissions are less than their respective SCAQMD thresholds.

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief period due to the lack of health risk associated with such a brief exposure. Activity over a large area as proposed by this project will operate for only a small number of days near any possible sensitive receptor. Because diesel exhaust exposure health risk is a cumulative lifetime effect, the few days of concentrated exposure has minimal impact when diluted over a full lifetime.

OPERATIONAL IMPACTS

The proposed project, including both SOCCCD and City development, would produce up to 10,000 average daily trips (ADT) from full occupancy and vehicular travel, in excess of the vehicle trips previously analyzed by other environmental documents. Commercial uses also generate small quantities of area source emissions derived from organic compounds from cleaning products, landscape maintenance, etc. The contribution of these sources is incorporated into the analysis below.

Operational emissions for proposed uses were calculated using CalEEMod 2011.1.1. for an assumed project build-out year of 2020 for the and are shown in Table 10. Average trip lengths were provided by the project traffic consultant to over-ride the model default values.

Table 10
Proposed Commercial Daily Operational Impacts
(194,109 sf, 10,000 daily trips)

	Operational Emissions (lbs/day)						
Source	**ROG**	**NOx**	**CO**	**SO2**	**PM-10**	**PM-2.5**	**CO2**
Area	5.1	0.0	0.0	0.0	0.0	0.0	0.0
Energy	0.1	0.6	0.6	0.0	0.0	0.0	801.1
Mobile	29.9	47.6	256.5	0.7	75.6	3.7	53,297.5
Total	**35.1**	**48.2**	**256.1**	**0.7**	**75.6**	**3.7**	**54,098.6**
SCAQMD Threshold	55	55	550	150	150	55	-
Exceeds Threshold?	No	No	No	No	No	No	NA

Source: CalEEMod Output in Appendix

Project operational emissions will be at a less-than-significant level.

Table 11 provides the operational impacts associated with the construction of 816,929 square feet of construction for a 2-year college plus 10,000 average daily trips. Operational emissions for proposed uses were calculated using CalEEMod 2011.1.1. for an assumed project build-out year of 2030 as shown in Table 11.

Table 11
Proposed Commercial Daily Operational Impacts
(816,929 sf, 10,000 daily trips)

	Operational Emissions (lbs/day)						
Source	**ROG**	**NOx**	**CO**	**SO2**	**PM-10**	**PM-2.5**	**CO2**
Area	21.4	0.0	0.0	0.0	0.0	0.0	0.0
Energy	0.4	3.5	2.9	0.0	0.3	0.3	4201.6
Mobile	19.8	35.8	156.0	0.8	80.6	3.8	52,878.4
Total	**41.6**	**39.3**	**158.9**	**0.8**	**80.9**	**4.1**	**57,080.0**
SCAQMD Threshold	55	55	550	150	150	55	-
Exceeds Threshold?	No	No	No	No	No	No	NA

Source: CalEEMod Output in Appendix

For this development scenario, operational emissions are similarly less than significant.

CONSTRUCTION EMISSIONS MITIGATION

Construction activities are not anticipated to cause dust emissions to exceed SCAQMD CEQA thresholds. Nevertheless, mitigation through enhanced dust control measures is recommended for use because of the non-attainment status of the air basin and because of the proximity of existing homes. Recommended mitigation includes:

Fugitive Dust Control

- Suspend the use of all construction equipment during first-stage smog alerts.
- Apply soil stabilizers or moisten inactive areas.
- Prepare and implement a high wind dust control plan.
- Stabilize previously disturbed areas if subsequent construction is delayed.
- Apply water three times daily, or non-toxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas, unpaved road surfaces, and active construction areas.
- Cover all stock piles with tarps at the end of each day or as needed.
- Provide water spray during loading and unloading of earthen materials.
- Minimize in-out traffic from construction zone
- Cover all trucks hauling dirt, sand, or loose material or require all trucks to maintain at least two feet of freeboard
- Sweep streets daily if visible soil material is carried out from the construction site

Similarly, ozone precursor emissions (ROG and NOx) are calculated to be below SCAQMD CEQA thresholds. However, because of the non-attainment for photochemical smog, the use of reasonably available control measures for diesel exhaust is recommended. Combustion emissions control includes:

Exhaust Emissions Control

- Utilize well-tuned off-road construction equipment.
- Establish a preference for contractors using Tier 3 or better heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

GREENHOUSE GAS EMISSIONS

"Greenhouse gases" (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as "global warming." These greenhouse gases contribute to an increase in the temperature of the earth's atmosphere by transparency to short wavelength visible sunlight, but near opacity to outgoing terrestrial long wavelength heat radiation in some parts of the infrared spectrum. The principal greenhouse gases (GHGs) are carbon dioxide, methane, nitrous oxide, ozone, and water vapor. For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

California has passed several bills and the Governor has signed at least three executive orders regarding greenhouse gases. GHG statues and executive orders (EO) include AB 32, SB 1368, EO S-03-05, EO S-20-06 and EO S-01-07.

AB 32 is one of the most significant pieces of environmental legislation that California has adopted. Among other things, it is designed to maintain California's reputation as a "national and international leader on energy conservation and environmental stewardship." It will have wide-ranging effects on California businesses and lifestyles as well as far reaching effects on other states and countries. A unique aspect of AB 32, beyond its broad and wide-ranging mandatory provisions and dramatic GHG reductions are the short time frames within which it must be implemented. Major components of the AB 32 include:

- Require the monitoring and reporting of GHG emissions beginning with sources or categories of sources that contribute the most to statewide emissions.
- Requires immediate "early action" control programs on the most readily controlled GHG sources.
- Mandates that by 2020, California's GHG emissions be reduced to 1990 levels.
- Forces an overall reduction of GHG gases in California by 25-40%, from business as usual, to be achieved by 2020.
- Must complement efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminants.

Statewide, the framework for developing the implementing regulations for AB 32 is under way. Maximum GHG reductions are expected to derive from increased vehicle fuel efficiency, from greater use of renewable energy and from increased structural energy efficiency. Additionally, through the California Climate Action Registry (CCAR now called the Climate Action Reserve), general and industry-specific protocols for assessing and reporting GHG emissions have been

developed. GHG sources are categorized into direct sources (i.e. company owned) and indirect sources (i.e. not company owned). Direct sources include combustion emissions from on-and off-road mobile sources, and fugitive emissions. Indirect sources include off-site electricity generation and non-company owned mobile sources.

Greenhouse Gas Emissions Significance Thresholds

In response to the requirements of SB97, the State Resources Agency developed guidelines for the treatment of GHG emissions under CEQA. These new guidelines became state laws as part of Title 14 of the California Code of Regulations in March, 2010. The CEQA Appendix G guidelines were modified to include GHG as a required analysis element. A project would have a potentially significant impact if it:

- Generates GHG emissions, directly or indirectly, that may have a significant impact on the environment, or,

- Conflicts with an applicable plan, policy or regulation adopted to reduce GHG emissions.

Section 15064.4 of the Code specifies how significance of GHG emissions is to be evaluated. The process is broken down into quantification of project-related GHG emissions, making a determination of significance, and specification of any appropriate mitigation if impacts are found to be potentially significant. At each of these steps, the new GHG guidelines afford the lead agency with substantial flexibility.

Emissions identification may be quantitative, qualitative or based on performance standards. CEQA guidelines allow the lead agency to "select the model or methodology it considers most appropriate." The most common practice for transportation/combustion GHG emissions quantification is to use a computer model such as CalEEMod, as was used in the ensuing analysis.

The significance of those emissions then must be evaluated; the selection of a threshold of significance must take into consideration what level of GHG emissions would be cumulatively considerable. The guidelines are clear that they do not support a zero net emissions threshold. If the lead agency does not have sufficient expertise in evaluating GHG impacts, it may rely on thresholds adopted by an agency with greater expertise.

On December 5, 2008 the SCAQMD Governing Board adopted an Interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 Metric Tons (MT) CO_2 equivalent/year. The threshold applies primarily to industrial facilities. No threshold for residential or commercial development has been promulgated. In the absence of any adopted thresholds for roadway and commercial facilities projects, this 10,000 MT/year recommendation has been used as a guideline for this analysis.

Construction Activity GHG Emissions

In the unlikely event that the entire project were build out at once, CalEEMod predicts that the construction activities will generate the CO_2(e) emissions identified in Table 12. Because the SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime, the amortized annual total is also presented.

Table 12
Construction Emissions (Metric Tons CO_2(e))
(194,109 sf)

Year	Metric Tons CO_2(e)
2014 (Roadway Construction)	128.8
2018 (Facilities Construction)	522.0
2019 (Facilities Construction)	16.1
Total Construction	666.9
30 Year Annual Amortized Rate	22.2

*CalEEMod Output provided in appendix

GHG impacts from construction are considered less-than-significant.

Project Operational GHG Emissions

The input assumptions for operational GHG emissions calculations, and the GHG conversion from consumption to annual regional CO_2(e) emissions are summarized in the CalEEMod output files found in the appendix of this report. Table 10 provides operational emissions estimates associated with planned 2-year college and commercial uses totaling 194,109 square feet of new development with an associated 10,000 daily VMT. GHG emissions associated with the proposed project are less than the adopted 10,000 CO_2(e) threshold. Project operational GHG emissions impacts are, therefore, considered to be less-than-significant.

Table 13
GHG Operational Emissions
(194,109 sf, 10,000 daily trips)

Consumption Source	**MT CO_2(e) tons/year**
Energy Utilization	975.5
Mobile Source	6,241.8
Solid Waste Generation	98.5
Water Consumption	162.0
Annualized Construction	22.2
Total	**7,500.0**

GHG emissions for the 816,929 sf, 10,000 daily trips development scenario were also analyzed and are shown in Tables 14 through 16.

Table 14
Construction Emissions (Metric Tons CO_2(e))
(816,929 sf)

Year	Metric Tons CO_2(e)
2020 (Facilities Construction)	1,240.5
2021 (Facilities Construction)	411.3
Total Construction	1,651.8
30 Year Annual Amortized Rate	55.1

*CalEEMod Output provided in appendix

Table 15
GHG Operational Emissions
(816,929 sf, 10,000 daily trips)

Consumption Source	**MT CO_2(e) tons/year**
Energy Utilization	4,055.1
Mobile Source	6,241.8
Solid Waste Generation	483.1
Water Consumption	392.1
Annualized Construction	55.1
Total	11,227.2

The calculated GHG burden in Table 15 is based upon a continuation of "business as usual" (BAU) throughout the project development timeframe. There are, however, already a number of programs in place that will substantially reduce the GHG emissions associated with transportation and energy consumption as the major contributors to operational GHG emissions. These programs include:

- Vehicle Efficiency (Pavley, Assembly Bill 1493)
- Low Carbon Fuel Standard
- Tire Pressure Indicators
- Low Rolling Resistance Tires
- Low Friction Oils
- Goods Movement Efficiency
- Aerodynamic Efficiency
- Medium/Heavy Duty Hybrids
- Sustainable Community Initiatives (SB-375)
- 33% Renewables by 2020
- Lighting Efficiency
- Electrical Energy Efficiency
- Natural Gas Energy Efficiency
- Increased Combined Heat & Power
- Industrial Efficiency
- 33% Renewables by 2020 for Pumping Plants

Conservatively, existing mandatory programs will reduce statewide GHG emissions by at least 20 percent independent of any local initiatives for GHG reduction. For the proposed project, application of projected GHG "savings" from established programs to the project GHG burden produces the following emissions residual (MT/year):

Table 16
GHG Reductions through Statewide Programs
(816,929 sf, 10,000 daily trips)

Source	BAU	Reduction*	Residual
Energy Utilization	4,055.1	30.2%	2,830.5
Transportation	6,241.8	18.5%	5,087.1
Solid Waste	483.1	0.0%	483.1
Water Use	392.1	19.0%	317.6
Construction	55.1	0.0%	55.1
Total	11,227.2	21.8%	8,773.4

*from in-place programs by 2020
Reduction calculations from Riverside County Climate Action Plan, Section 5.1, "Reductions from Statewide Measures," Table 5.1 "Statewide Measures and Associated Emissions from the 2020 Inventory."

Whereas the project GHG impact under the BAU assumption would exceed the SCAQMD advisory significance threshold in terms of the annual emissions burden, sufficient mandatory measures are in place to reduce the total GHG emissions below the 10,000 CO_2(e) threshold.

APPENDIX

CALEEMOD2011.1.1 COMPUTER MODEL OUTPUT

ROADWAY CONSTRUCTION EMISSIONS

- Daily Emissions (lbs per day)
- Annual Emissions (tons per year)

FACILITIES CONSTRUCTION AND OPERATIONAL EMISSIONS
194,109 SF

- Daily Emissions (lbs per day)
- Annual Emissions (tons per year)

FACILITIES CONSTRUCTION AND OPERATIONAL EMISSIONS
816,929 SF

- Daily Emissions (lbs per day)
- Annual Emissions (tons per year)

Bell Ave Construction Tustin

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Other Asphalt Surfaces	3.8	Acre

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Southern California Edison
Climate Zone	8	**Precipitation Freq (Days)**	30		

1.3 User Entered Comments

Project Characteristics -

Land Use - Roadway Construction

Construction Phase - Site Prep: 5 days, Grading 8 days, Paving 120 days

Off-road Equipment - Grading: 1 excavator, 1 grader, 1 dozer, 3 loader/backhoes

Off-road Equipment - Paving: 2 mixers, 1 paver, 2 paving equipment, 2 rollers, 1 loader/backhoe

Off-road Equipment - Prep: 3 dozers, 4 loader/backhoes

Vehicle Trips -

Construction Off-road Equipment Mitigation -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	6.44	50.79	30.24	0.05	18.34	2.45	20.79	9.94	2.45	12.39	0.00	5,628.33	0.00	0.58	0.00	5,640.49
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	6.44	50.79	30.24	0.05	7.32	2.45	9.77	3.88	2.45	6.33	0.00	5,628.33	0.00	0.58	0.00	5,640.49
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**0.00**		**0.00**	**0.00**	**0.00**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**0.00**		**0.00**	**0.00**	**0.00**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	6.34	50.69	29.13	0.05		2.44	2.44		2.44	2.44		5,413.51		0.57		5,425.43
Total	**6.34**	**50.69**	**29.13**	**0.05**	**18.07**	**2.44**	**20.51**	**9.93**	**2.44**	**12.37**		**5,413.51**		**0.57**		**5,425.43**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.10	0.10	1.11	0.00	0.28	0.01	0.29	0.01	0.01	0.02		214.82		0.01		215.06
Total	**0.10**	**0.10**	**1.11**	**0.00**	**0.28**	**0.01**	**0.29**	**0.01**	**0.01**	**0.02**		**214.82**		**0.01**		**215.06**

3.2 Site Preparation - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.05	0.00	7.05	3.87	0.00	3.87						0.00
Off-Road	6.34	50.69	29.13	0.05		2.44	2.44		2.44	2.44	0.00	5,413.51		0.57		5,425.43
Total	**6.34**	**50.69**	**29.13**	**0.05**	**7.05**	**2.44**	**9.49**	**3.87**	**2.44**	**6.31**	**0.00**	**5,413.51**		**0.57**		**5,425.43**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.10	0.10	1.11	0.00	0.28	0.01	0.29	0.01	0.01	0.02		214.82		0.01		215.06
Total	**0.10**	**0.10**	**1.11**	**0.00**	**0.28**	**0.01**	**0.29**	**0.01**	**0.01**	**0.02**		**214.82**		**0.01**		**215.06**

3.3 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.55	0.00	6.55	3.31	0.00	3.31						0.00
Off-Road	4.03	30.78	20.33	0.03		1.67	1.67		1.67	1.67		3,530.19		0.36		3,537.76
Total	**4.03**	**30.78**	**20.33**	**0.03**	**6.55**	**1.67**	**8.22**	**3.31**	**1.67**	**4.98**		**3,530.19**		**0.36**		**3,537.76**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.08	0.08	0.92	0.00	0.23	0.01	0.24	0.01	0.01	0.02		179.02		0.01		179.22
Total	**0.08**	**0.08**	**0.92**	**0.00**	**0.23**	**0.01**	**0.24**	**0.01**	**0.01**	**0.02**		**179.02**		**0.01**		**179.22**

3.3 Grading - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.56	0.00	2.56	1.29	0.00	1.29						0.00
Off-Road	4.03	30.78	20.33	0.03		1.67	1.67		1.67	1.67	0.00	3,530.19		0.36		3,537.76
Total	**4.03**	**30.78**	**20.33**	**0.03**	**2.56**	**1.67**	**4.23**	**1.29**	**1.67**	**2.96**	**0.00**	**3,530.19**		**0.36**		**3,537.76**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.08	0.08	0.92	0.00	0.23	0.01	0.24	0.01	0.01	0.02		179.02		0.01		179.22
Total	**0.08**	**0.08**	**0.92**	**0.00**	**0.23**	**0.01**	**0.24**	**0.01**	**0.01**	**0.02**		**179.02**		**0.01**		**179.22**

3.4 Paving - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.72	17.02	11.52	0.02		1.41	1.41		1.41	1.41		1,650.79		0.24		1,655.93
Paving	0.08					0.00	0.00		0.00	0.00						0.00
Total	**2.80**	**17.02**	**11.52**	**0.02**		**1.41**	**1.41**		**1.41**	**1.41**		**1,650.79**		**0.24**		**1,655.93**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.11	0.11	1.23	0.00	0.31	0.01	0.32	0.01	0.01	0.02		238.69		0.01		238.96
Total	**0.11**	**0.11**	**1.23**	**0.00**	**0.31**	**0.01**	**0.32**	**0.01**	**0.01**	**0.02**		**238.69**		**0.01**		**238.96**

3.4 Paving - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.72	17.02	11.52	0.02		1.41	1.41		1.41	1.41	0.00	1,650.79		0.24		1,655.93
Paving	0.08					0.00	0.00		0.00	0.00						0.00
Total	**2.80**	**17.02**	**11.52**	**0.02**		**1.41**	**1.41**		**1.41**	**1.41**	**0.00**	**1,650.79**		**0.24**		**1,655.93**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.11	0.11	1.23	0.00	0.31	0.01	0.32	0.01	0.01	0.02		238.69		0.01		238.96
Total	**0.11**	**0.11**	**1.23**	**0.00**	**0.31**	**0.01**	**0.32**	**0.01**	**0.01**	**0.02**		**238.69**		**0.01**		**238.96**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Unmitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Other Asphalt Surfaces	8.90	13.30	7.40	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**	**0.00**	**0.00**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**	**0.00**	**0.00**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.00					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.00					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.00					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.00					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Bell Ave Construction Tustin

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Other Asphalt Surfaces	3.8	Acre

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Southern California Edison
Climate Zone	8	**Precipitation Freq (Days)**	30		

1.3 User Entered Comments

Project Characteristics -

Land Use - Roadway Construction

Construction Phase - Site Prep: 5 days, Grading 8 days, Paving 120 days

Off-road Equipment - Grading: 1 excavator, 1 grader, 1 dozer, 3 loader/backhoes

Off-road Equipment - Paving: 2 mixers, 1 paver, 2 paving equipment, 2 rollers, 1 loader/backhoe

Off-road Equipment - Prep: 3 dozers, 4 loader/backhoes

Vehicle Trips -

Construction Off-road Equipment Mitigation -

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.21	1.28	0.92	0.00	0.09	0.10	0.19	0.04	0.10	0.14	0.00	128.41	128.41	0.02	0.00	128.76
Total	**0.21**	**1.28**	**0.92**	**0.00**	**0.09**	**0.10**	**0.19**	**0.04**	**0.10**	**0.14**	**0.00**	**128.41**	**128.41**	**0.02**	**0.00**	**128.76**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.21	1.28	0.92	0.00	0.05	0.10	0.14	0.02	0.10	0.11	0.00	128.41	128.41	0.02	0.00	128.76
Total	**0.21**	**1.28**	**0.92**	**0.00**	**0.05**	**0.10**	**0.14**	**0.02**	**0.10**	**0.11**	**0.00**	**128.41**	**128.41**	**0.02**	**0.00**	**128.76**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.05	0.00	0.05	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.13	0.07	0.00		0.01	0.01		0.01	0.01	0.00	12.27	12.27	0.00	0.00	12.30
Total	**0.02**	**0.13**	**0.07**	**0.00**	**0.05**	**0.01**	**0.06**	**0.02**	**0.01**	**0.03**	**0.00**	**12.27**	**12.27**	**0.00**	**0.00**	**12.30**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.47	0.00	0.00	0.47
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.47**	**0.47**	**0.00**	**0.00**	**0.47**

3.2 Site Preparation - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.02	0.00	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.13	0.07	0.00		0.01	0.01		0.01	0.01	0.00	12.27	12.27	0.00	0.00	12.30
Total	**0.02**	**0.13**	**0.07**	**0.00**	**0.02**	**0.01**	**0.03**	**0.01**	**0.01**	**0.02**	**0.00**	**12.27**	**12.27**	**0.00**	**0.00**	**12.30**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.47	0.00	0.00	0.47
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.47**	**0.47**	**0.00**	**0.00**	**0.47**

3.3 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.03	0.00	0.03	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.12	0.08	0.00		0.01	0.01		0.01	0.01	0.00	12.81	12.81	0.00	0.00	12.83
Total	**0.02**	**0.12**	**0.08**	**0.00**	**0.03**	**0.01**	**0.04**	**0.01**	**0.01**	**0.02**	**0.00**	**12.81**	**12.81**	**0.00**	**0.00**	**12.83**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.62	0.00	0.00	0.62
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.62**	**0.62**	**0.00**	**0.00**	**0.62**

3.3 Grading - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.12	0.08	0.00		0.01	0.01		0.01	0.01	0.00	12.81	12.81	0.00	0.00	12.83
Total	**0.02**	**0.12**	**0.08**	**0.00**	**0.01**	**0.01**	**0.02**	**0.01**	**0.01**	**0.02**	**0.00**	**12.81**	**12.81**	**0.00**	**0.00**	**12.83**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.62	0.00	0.00	0.62
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.62**	**0.62**	**0.00**	**0.00**	**0.62**

3.4 Paving - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.16	1.02	0.69	0.00		0.08	0.08		0.08	0.08	0.00	89.83	89.83	0.01	0.00	90.11
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.16**	**1.02**	**0.69**	**0.00**		**0.08**	**0.08**		**0.08**	**0.08**	**0.00**	**89.83**	**89.83**	**0.01**	**0.00**	**90.11**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.07	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	12.42	12.42	0.00	0.00	12.43
Total	**0.01**	**0.01**	**0.07**	**0.00**	**0.02**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**12.42**	**12.42**	**0.00**	**0.00**	**12.43**

3.4 Paving - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.16	1.02	0.69	0.00		0.08	0.08		0.08	0.08	0.00	89.83	89.83	0.01	0.00	90.11
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.16**	**1.02**	**0.69**	**0.00**		**0.08**	**0.08**		**0.08**	**0.08**	**0.00**	**89.83**	**89.83**	**0.01**	**0.00**	**90.11**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.07	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	12.42	12.42	0.00	0.00	12.43
Total	**0.01**	**0.01**	**0.07**	**0.00**	**0.02**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**12.42**	**12.42**	**0.00**	**0.00**	**12.43**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Other Asphalt Surfaces	8.90	13.30	7.40	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Other Asphalt Surfaces	0					0.00	0.00	0.00	0.00
Total						**0.00**	**0.00**	**0.00**	**0.00**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Other Asphalt Surfaces	0					0.00	0.00	0.00	0.00
Total						**0.00**	**0.00**	**0.00**	**0.00**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.00**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Other Asphalt Surfaces	0 / 0					0.00	0.00	0.00	0.00
Total						**0.00**	**0.00**	**0.00**	**0.00**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Other Asphalt Surfaces	0 / 0					0.00	0.00	0.00	0.00
Total						**0.00**	**0.00**	**0.00**	**0.00**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.00	0.00	0.00	0.00
Unmitigated					0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Other Asphalt Surfaces	0					0.00	0.00	0.00	0.00
Total						**0.00**	**0.00**	**0.00**	**0.00**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Other Asphalt Surfaces	0					0.00	0.00	0.00	0.00
Total						**0.00**	**0.00**	**0.00**	**0.00**

9.0 Vegetation

ATEP Bell Ave Full Construction, Tustin

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Junior College (2Yr)	816.93	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Southern California Edison
Climate Zone	8	**Precipitation Freq (Days)**	30		

1.3 User Entered Comments

Project Characteristics -

Land Use - Junior College

Construction Phase - Site Prep: 10 days, Grading: 30 days, Construction 300 days, Paving: 20 days

Off-road Equipment - Construction: 1 crane, 3 forklifts, 1 gen set, 3 loader/backhoes, 1 welder

Off-road Equipment - Grading: 1 excavator, 1 grader, 1 dozer, 2 scrapers, 2 loader/backhoes

Off-road Equipment - Paving: 2 pavers, 2 paving equipment, 2 rollers

Off-road Equipment - Site Prep: 3 doxers, 4 backhoes

Vehicle Trips - Per Traffic Consultant-12.24 trips/tsf

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	68.14	35.60	42.77	0.12	18.34	1.50	19.72	9.93	1.50	11.31	0.00	11,251.31	0.00	0.48	0.00	11,261.31
2021	67.81	26.40	41.26	0.12	7.57	1.20	8.77	0.12	1.16	1.28	0.00	11,195.10	0.00	0.41	0.00	11,203.67
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	68.14	35.60	42.77	0.12	7.57	1.50	8.92	3.88	1.50	5.25	0.00	11,251.31	0.00	0.48	0.00	11,261.31
2021	67.81	26.40	41.26	0.12	7.57	1.20	8.77	0.12	1.16	1.28	0.00	11,195.10	0.00	0.41	0.00	11,203.67
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	21.36	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.38	3.48	2.92	0.02		0.00	0.26		0.00	0.26		4,176.15		0.08	0.08	4,201.57
Mobile	19.80	35.85	155.96	0.70	77.46	3.14	80.61	1.08	2.73	3.82		52,848.95		1.40		52,878.35
Total	**41.54**	**39.33**	**158.88**	**0.72**	**77.46**	**3.14**	**80.87**	**1.08**	**2.73**	**4.08**		**57,025.10**		**1.48**	**0.08**	**57,079.92**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	21.36	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.38	3.48	2.92	0.02		0.00	0.26		0.00	0.26		4,176.15		0.08	0.08	4,201.57
Mobile	19.80	35.85	155.96	0.70	77.46	3.14	80.61	1.08	2.73	3.82		52,848.95		1.40		52,878.35
Total	**41.54**	**39.33**	**158.88**	**0.72**	**77.46**	**3.14**	**80.87**	**1.08**	**2.73**	**4.08**		**57,025.10**		**1.48**	**0.08**	**57,079.92**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	4.50	32.69	22.37	0.05		1.37	1.37		1.37	1.37		5,413.51		0.40		5,421.98
Total	**4.50**	**32.69**	**22.37**	**0.05**	**18.07**	**1.37**	**19.44**	**9.93**	**1.37**	**11.30**		**5,413.51**		**0.40**		**5,421.98**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.06	0.71	0.00	0.28	0.01	0.29	0.00	0.01	0.01		188.12		0.01		188.28
Total	**0.07**	**0.06**	**0.71**	**0.00**	**0.28**	**0.01**	**0.29**	**0.00**	**0.01**	**0.01**		**188.12**		**0.01**		**188.28**

3.2 Site Preparation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.05	0.00	7.05	3.87	0.00	3.87						0.00
Off-Road	4.50	32.69	22.37	0.05		1.37	1.37		1.37	1.37	0.00	5,413.51		0.40		5,421.98
Total	**4.50**	**32.69**	**22.37**	**0.05**	**7.05**	**1.37**	**8.42**	**3.87**	**1.37**	**5.24**	**0.00**	**5,413.51**		**0.40**		**5,421.98**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.07	0.06	0.71	0.00	0.28	0.01	0.29	0.00	0.01	0.01		188.12		0.01		188.28
Total	**0.07**	**0.06**	**0.71**	**0.00**	**0.28**	**0.01**	**0.29**	**0.00**	**0.01**	**0.01**		**188.12**		**0.01**		**188.28**

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						0.00
Off-Road	5.22	35.54	28.65	0.07		1.49	1.49		1.49	1.49		7,272.08		0.47		7,281.90
Total	**5.22**	**35.54**	**28.65**	**0.07**	**8.67**	**1.49**	**10.16**	**3.31**	**1.49**	**4.80**		**7,272.08**		**0.47**		**7,281.90**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.08	0.06	0.79	0.00	0.31	0.01	0.32	0.00	0.01	0.01		209.02		0.01		209.20
Total	**0.08**	**0.06**	**0.79**	**0.00**	**0.31**	**0.01**	**0.32**	**0.00**	**0.01**	**0.01**		**209.02**		**0.01**		**209.20**

3.3 Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.38	0.00	3.38	1.29	0.00	1.29						0.00
Off-Road	5.22	35.54	28.65	0.07		1.49	1.49		1.49	1.49	0.00	7,272.08		0.47		7,281.90
Total	**5.22**	**35.54**	**28.65**	**0.07**	**3.38**	**1.49**	**4.87**	**1.29**	**1.49**	**2.78**	**0.00**	**7,272.08**		**0.47**		**7,281.90**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.08	0.06	0.79	0.00	0.31	0.01	0.32	0.00	0.01	0.01		209.02		0.01		209.20
Total	**0.08**	**0.06**	**0.79**	**0.00**	**0.31**	**0.01**	**0.32**	**0.00**	**0.01**	**0.01**		**209.02**		**0.01**		**209.20**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.12	13.66	16.71	0.03		0.68	0.68		0.68	0.68		2,982.97		0.19		2,986.94
Total	**2.12**	**13.66**	**16.71**	**0.03**		**0.68**	**0.68**		**0.68**	**0.68**		**2,982.97**		**0.19**		**2,986.94**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.11	11.94	8.00	0.04	1.25	0.35	1.60	0.03	0.32	0.35		3,681.32		0.05		3,682.46
Worker	1.35	1.09	13.52	0.04	5.26	0.17	5.44	0.07	0.16	0.23		3,584.70		0.14		3,587.74
Total	**2.46**	**13.03**	**21.52**	**0.08**	**6.51**	**0.52**	**7.04**	**0.10**	**0.48**	**0.58**		**7,266.02**		**0.19**		**7,270.20**

3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.12	13.66	16.71	0.03		0.68	0.68		0.68	0.68	0.00	2,982.97		0.19		2,986.94
Total	**2.12**	**13.66**	**16.71**	**0.03**		**0.68**	**0.68**		**0.68**	**0.68**	**0.00**	**2,982.97**		**0.19**		**2,986.94**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.11	11.94	8.00	0.04	1.25	0.35	1.60	0.03	0.32	0.35		3,681.32		0.05		3,682.46
Worker	1.35	1.09	13.52	0.04	5.26	0.17	5.44	0.07	0.16	0.23		3,584.70		0.14		3,587.74
Total	**2.46**	**13.03**	**21.52**	**0.08**	**6.51**	**0.52**	**7.04**	**0.10**	**0.48**	**0.58**		**7,266.02**		**0.19**		**7,270.20**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.93	12.33	16.59	0.03		0.57	0.57		0.57	0.57		2,982.97		0.17		2,986.58
Total	**1.93**	**12.33**	**16.59**	**0.03**		**0.57**	**0.57**		**0.57**	**0.57**		**2,982.97**		**0.17**		**2,986.58**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.05	11.33	7.53	0.04	1.25	0.33	1.58	0.03	0.30	0.33		3,689.80		0.05		3,690.86
Worker	1.30	1.01	12.75	0.04	5.26	0.17	5.44	0.07	0.16	0.23		3,530.86		0.14		3,533.76
Total	**2.35**	**12.34**	**20.28**	**0.08**	**6.51**	**0.50**	**7.02**	**0.10**	**0.46**	**0.56**		**7,220.66**		**0.19**		**7,224.62**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.93	12.33	16.59	0.03		0.57	0.57		0.57	0.57	0.00	2,982.97		0.17		2,986.58
Total	**1.93**	**12.33**	**16.59**	**0.03**		**0.57**	**0.57**		**0.57**	**0.57**	**0.00**	**2,982.97**		**0.17**		**2,986.58**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	1.05	11.33	7.53	0.04	1.25	0.33	1.58	0.03	0.30	0.33		3,689.80		0.05		3,690.86
Worker	1.30	1.01	12.75	0.04	5.26	0.17	5.44	0.07	0.16	0.23		3,530.86		0.14		3,533.76
Total	**2.35**	**12.34**	**20.28**	**0.08**	**6.51**	**0.50**	**7.02**	**0.10**	**0.46**	**0.56**		**7,220.66**		**0.19**		**7,224.62**

3.5 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	63.05					0.00	0.00		0.00	0.00						0.00
Off-Road	0.24	1.68	1.83	0.00		0.11	0.11		0.11	0.11		281.19		0.02		281.65
Total	**63.29**	**1.68**	**1.83**	**0.00**		**0.11**	**0.11**		**0.11**	**0.11**		**281.19**		**0.02**		**281.65**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.27	0.22	2.72	0.01	1.06	0.03	1.09	0.01	0.03	0.05		721.12		0.03		721.73
Total	**0.27**	**0.22**	**2.72**	**0.01**	**1.06**	**0.03**	**1.09**	**0.01**	**0.03**	**0.05**		**721.12**		**0.03**		**721.73**

3.5 Architectural Coating - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	63.05					0.00	0.00		0.00	0.00						0.00
Off-Road	0.24	1.68	1.83	0.00		0.11	0.11		0.11	0.11	0.00	281.19		0.02		281.65
Total	**63.29**	**1.68**	**1.83**	**0.00**		**0.11**	**0.11**		**0.11**	**0.11**	**0.00**	**281.19**		**0.02**		**281.65**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.27	0.22	2.72	0.01	1.06	0.03	1.09	0.01	0.03	0.05		721.12		0.03		721.73
Total	**0.27**	**0.22**	**2.72**	**0.01**	**1.06**	**0.03**	**1.09**	**0.01**	**0.03**	**0.05**		**721.12**		**0.03**		**721.73**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	63.05					0.00	0.00		0.00	0.00						0.00
Off-Road	0.22	1.53	1.82	0.00		0.09	0.09		0.09	0.09		281.19		0.02		281.60
Total	**63.27**	**1.53**	**1.82**	**0.00**		**0.09**	**0.09**		**0.09**	**0.09**		**281.19**		**0.02**		**281.60**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.26	0.20	2.57	0.01	1.06	0.03	1.09	0.01	0.03	0.05		710.29		0.03		710.87
Total	**0.26**	**0.20**	**2.57**	**0.01**	**1.06**	**0.03**	**1.09**	**0.01**	**0.03**	**0.05**		**710.29**		**0.03**		**710.87**

3.5 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	63.05					0.00	0.00		0.00	0.00						0.00
Off-Road	0.22	1.53	1.82	0.00		0.09	0.09		0.09	0.09	0.00	281.19		0.02		281.60
Total	**63.27**	**1.53**	**1.82**	**0.00**		**0.09**	**0.09**		**0.09**	**0.09**	**0.00**	**281.19**		**0.02**		**281.60**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.26	0.20	2.57	0.01	1.06	0.03	1.09	0.01	0.03	0.05		710.29		0.03		710.87
Total	**0.26**	**0.20**	**2.57**	**0.01**	**1.06**	**0.03**	**1.09**	**0.01**	**0.03**	**0.05**		**710.29**		**0.03**		**710.87**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.49	15.54	15.38	0.02		1.13	1.13		1.13	1.13		2,281.96		0.22		2,286.63
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.49**	**15.54**	**15.38**	**0.02**		**1.13**	**1.13**		**1.13**	**1.13**		**2,281.96**		**0.22**		**2,286.63**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.04	0.56	0.00	0.23	0.01	0.24	0.00	0.01	0.01		154.41		0.01		154.54
Total	**0.06**	**0.04**	**0.56**	**0.00**	**0.23**	**0.01**	**0.24**	**0.00**	**0.01**	**0.01**		**154.41**		**0.01**		**154.54**

3.6 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.49	15.54	15.38	0.02		1.13	1.13		1.13	1.13	0.00	2,281.96		0.22		2,286.63
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	**2.49**	**15.54**	**15.38**	**0.02**		**1.13**	**1.13**		**1.13**	**1.13**	**0.00**	**2,281.96**		**0.22**		**2,286.63**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.04	0.56	0.00	0.23	0.01	0.24	0.00	0.01	0.01		154.41		0.01		154.54
Total	**0.06**	**0.04**	**0.56**	**0.00**	**0.23**	**0.01**	**0.24**	**0.00**	**0.01**	**0.01**		**154.41**		**0.01**		**154.54**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	19.80	35.85	155.96	0.70	77.46	3.14	80.61	1.08	2.73	3.82		52,848.95		1.40		52,878.35
Unmitigated	19.80	35.85	155.96	0.70	77.46	3.14	80.61	1.08	2.73	3.82		52,848.95		1.40		52,878.35
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	9,999.22	9,999.22	988.49	20,397,687	20,397,687
Total	9,999.22	9,999.22	988.49	20,397,687	20,397,687

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Junior College (2Yr)	6.86	6.86	6.86	6.40	88.60	5.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.38	3.48	2.92	0.02		0.00	0.26		0.00	0.26		4,176.15		0.08	0.08	4,201.57
NaturalGas Unmitigated	0.38	3.48	2.92	0.02		0.00	0.26		0.00	0.26		4,176.15		0.08	0.08	4,201.57
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Junior College (2Yr)	35497.3	0.38	3.48	2.92	0.02		0.00	0.26		0.00	0.26		4,176.15		0.08	0.08	4,201.57
Total		**0.38**	**3.48**	**2.92**	**0.02**		**0.00**	**0.26**		**0.00**	**0.26**		**4,176.15**		**0.08**	**0.08**	**4,201.57**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Junior College (2Yr)	35.4973	0.38	3.48	2.92	0.02		0.00	0.26		0.00	0.26		4,176.15		0.08	0.08	4,201.57
Total		**0.38**	**3.48**	**2.92**	**0.02**		**0.00**	**0.26**		**0.00**	**0.26**		**4,176.15**		**0.08**	**0.08**	**4,201.57**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	21.36	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	21.36	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.18					0.00	0.00		0.00	0.00						0.00
Consumer Products	16.18					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**21.36**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.18					0.00	0.00		0.00	0.00						0.00
Consumer Products	16.18					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	**21.36**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**		**0.00**		**0.00**		**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

ATEP Bell Ave Full Construction, Tustin

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Junior College (2Yr)	816.93	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Utility Company**	Southern California Edison
Climate Zone	8	**Precipitation Freq (Days)**	30		

1.3 User Entered Comments

Project Characteristics -

Land Use - Junior College

Construction Phase - Site Prep: 10 days, Grading: 30 days, Construction 300 days, Paving: 20 days

Off-road Equipment - Construction: 1 crane, 3 forklifts, 1 gen set, 3 loader/backhoes, 1 welder

Off-road Equipment - Grading: 1 excavator, 1 grader, 1 dozer, 2 scrapers, 2 loader/backhoes

Off-road Equipment - Paving: 2 pavers, 2 paving equipment, 2 rollers

Off-road Equipment - Site Prep: 3 doxers, 4 backhoes

Vehicle Trips - Per Traffic Consultant-12.24 trips/tsf

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	7.67	3.86	5.34	0.01	0.99	0.18	1.17	0.12	0.17	0.29	0.00	1,239.41	1,239.41	0.05	0.00	1,240.51
2021	2.67	1.18	1.78	0.00	0.27	0.06	0.33	0.00	0.06	0.06	0.00	410.97	410.97	0.02	0.00	411.32
Total	**10.34**	**5.04**	**7.12**	**0.01**	**1.26**	**0.24**	**1.50**	**0.12**	**0.23**	**0.35**	**0.00**	**1,650.38**	**1,650.38**	**0.07**	**0.00**	**1,651.83**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	7.67	3.86	5.34	0.01	0.85	0.18	1.03	0.05	0.17	0.23	0.00	1,239.41	1,239.41	0.05	0.00	1,240.51
2021	2.67	1.18	1.78	0.00	0.27	0.06	0.33	0.00	0.06	0.06	0.00	410.97	410.97	0.02	0.00	411.32
Total	**10.34**	**5.04**	**7.12**	**0.01**	**1.12**	**0.24**	**1.36**	**0.05**	**0.23**	**0.29**	**0.00**	**1,650.38**	**1,650.38**	**0.07**	**0.00**	**1,651.83**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.07	0.64	0.53	0.00		0.00	0.05		0.00	0.05	0.00	4,029.98	4,029.98	0.16	0.07	4,055.11
Mobile	3.14	5.64	24.74	0.11	11.11	0.50	11.61	0.17	0.43	0.61	0.00	7,326.31	7,326.31	0.20	0.00	7,330.49
Waste						0.00	0.00		0.00	0.00	215.58	0.00	215.58	12.74	0.00	483.13
Water						0.00	0.00		0.00	0.00	0.00	354.74	354.74	1.24	0.04	392.05
Total	**7.11**	**6.28**	**25.27**	**0.11**	**11.11**	**0.50**	**11.66**	**0.17**	**0.43**	**0.66**	**215.58**	**11,711.03**	**11,926.61**	**14.34**	**0.11**	**12,260.78**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.07	0.64	0.53	0.00		0.00	0.05		0.00	0.05	0.00	4,029.98	4,029.98	0.16	0.07	4,055.11
Mobile	3.14	5.64	24.74	0.11	11.11	0.50	11.61	0.17	0.43	0.61	0.00	7,326.31	7,326.31	0.20	0.00	7,330.49
Waste						0.00	0.00		0.00	0.00	215.58	0.00	215.58	12.74	0.00	483.13
Water						0.00	0.00		0.00	0.00	0.00	354.74	354.74	1.24	0.04	392.05
Total	**7.11**	**6.28**	**25.27**	**0.11**	**11.11**	**0.50**	**11.66**	**0.17**	**0.43**	**0.66**	**215.58**	**11,711.03**	**11,926.61**	**14.34**	**0.11**	**12,260.78**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.09	0.00	0.09	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.16	0.11	0.00		0.01	0.01		0.01	0.01	0.00	24.55	24.55	0.00	0.00	24.59
Total	**0.02**	**0.16**	**0.11**	**0.00**	**0.09**	**0.01**	**0.10**	**0.05**	**0.01**	**0.06**	**0.00**	**24.55**	**24.55**	**0.00**	**0.00**	**24.59**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.82	0.00	0.00	0.82
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.82**	**0.82**	**0.00**	**0.00**	**0.82**

3.2 Site Preparation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.04	0.00	0.04	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.16	0.11	0.00		0.01	0.01		0.01	0.01	0.00	24.55	24.55	0.00	0.00	24.59
Total	**0.02**	**0.16**	**0.11**	**0.00**	**0.04**	**0.01**	**0.05**	**0.02**	**0.01**	**0.03**	**0.00**	**24.55**	**24.55**	**0.00**	**0.00**	**24.59**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.82	0.00	0.00	0.82
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.82**	**0.82**	**0.00**	**0.00**	**0.82**

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.13	0.00	0.13	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.08	0.53	0.43	0.00		0.02	0.02		0.02	0.02	0.00	98.93	98.93	0.01	0.00	99.06
Total	**0.08**	**0.53**	**0.43**	**0.00**	**0.13**	**0.02**	**0.15**	**0.05**	**0.02**	**0.07**	**0.00**	**98.93**	**98.93**	**0.01**	**0.00**	**99.06**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.72	2.72	0.00	0.00	2.72
Total	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.72**	**2.72**	**0.00**	**0.00**	**2.72**

3.3 Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.05	0.00	0.05	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.08	0.53	0.43	0.00		0.02	0.02		0.02	0.02	0.00	98.93	98.93	0.01	0.00	99.06
Total	**0.08**	**0.53**	**0.43**	**0.00**	**0.05**	**0.02**	**0.07**	**0.02**	**0.02**	**0.04**	**0.00**	**98.93**	**98.93**	**0.01**	**0.00**	**99.06**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.72	2.72	0.00	0.00	2.72
Total	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.72**	**2.72**	**0.00**	**0.00**	**2.72**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.24	1.52	1.85	0.00		0.08	0.08		0.08	0.08	0.00	300.30	300.30	0.02	0.00	300.70
Total	**0.24**	**1.52**	**1.85**	**0.00**		**0.08**	**0.08**		**0.08**	**0.08**	**0.00**	**300.30**	**300.30**	**0.02**	**0.00**	**300.70**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.13	1.30	0.99	0.00	0.13	0.04	0.17	0.00	0.04	0.04	0.00	369.56	369.56	0.01	0.00	369.68
Worker	0.15	0.12	1.44	0.00	0.53	0.02	0.55	0.01	0.02	0.03	0.00	344.86	344.86	0.01	0.00	345.16
Total	**0.28**	**1.42**	**2.43**	**0.00**	**0.66**	**0.06**	**0.72**	**0.01**	**0.06**	**0.07**	**0.00**	**714.42**	**714.42**	**0.02**	**0.00**	**714.84**

3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.24	1.52	1.85	0.00		0.08	0.08		0.08	0.08	0.00	300.30	300.30	0.02	0.00	300.70
Total	**0.24**	**1.52**	**1.85**	**0.00**		**0.08**	**0.08**		**0.08**	**0.08**	**0.00**	**300.30**	**300.30**	**0.02**	**0.00**	**300.70**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.13	1.30	0.99	0.00	0.13	0.04	0.17	0.00	0.04	0.04	0.00	369.56	369.56	0.01	0.00	369.68
Worker	0.15	0.12	1.44	0.00	0.53	0.02	0.55	0.01	0.02	0.03	0.00	344.86	344.86	0.01	0.00	345.16
Total	**0.28**	**1.42**	**2.43**	**0.00**	**0.66**	**0.06**	**0.72**	**0.01**	**0.06**	**0.07**	**0.00**	**714.42**	**714.42**	**0.02**	**0.00**	**714.84**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.08	0.48	0.65	0.00		0.02	0.02		0.02	0.02	0.00	105.51	105.51	0.01	0.00	105.64
Total	**0.08**	**0.48**	**0.65**	**0.00**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**105.51**	**105.51**	**0.01**	**0.00**	**105.64**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.04	0.43	0.33	0.00	0.04	0.01	0.06	0.00	0.01	0.01	0.00	130.13	130.13	0.00	0.00	130.17
Worker	0.05	0.04	0.48	0.00	0.19	0.01	0.19	0.00	0.01	0.01	0.00	119.34	119.34	0.00	0.00	119.44
Total	**0.09**	**0.47**	**0.81**	**0.00**	**0.23**	**0.02**	**0.25**	**0.00**	**0.02**	**0.02**	**0.00**	**249.47**	**249.47**	**0.00**	**0.00**	**249.61**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.08	0.48	0.65	0.00		0.02	0.02		0.02	0.02	0.00	105.51	105.51	0.01	0.00	105.64
Total	**0.08**	**0.48**	**0.65**	**0.00**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**105.51**	**105.51**	**0.01**	**0.00**	**105.64**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.04	0.43	0.33	0.00	0.04	0.01	0.06	0.00	0.01	0.01	0.00	130.13	130.13	0.00	0.00	130.17
Worker	0.05	0.04	0.48	0.00	0.19	0.01	0.19	0.00	0.01	0.01	0.00	119.34	119.34	0.00	0.00	119.44
Total	**0.09**	**0.47**	**0.81**	**0.00**	**0.23**	**0.02**	**0.25**	**0.00**	**0.02**	**0.02**	**0.00**	**249.47**	**249.47**	**0.00**	**0.00**	**249.61**

3.5 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	7.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.03	0.19	0.20	0.00		0.01	0.01		0.01	0.01	0.00	28.31	28.31	0.00	0.00	28.35
Total	**7.03**	**0.19**	**0.20**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**28.31**	**28.31**	**0.00**	**0.00**	**28.35**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.03	0.03	0.29	0.00	0.11	0.00	0.11	0.00	0.00	0.01	0.00	69.37	69.37	0.00	0.00	69.43
Total	**0.03**	**0.03**	**0.29**	**0.00**	**0.11**	**0.00**	**0.11**	**0.00**	**0.00**	**0.01**	**0.00**	**69.37**	**69.37**	**0.00**	**0.00**	**69.43**

3.5 Architectural Coating - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	7.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.03	0.19	0.20	0.00		0.01	0.01		0.01	0.01	0.00	28.31	28.31	0.00	0.00	28.35
Total	**7.03**	**0.19**	**0.20**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**28.31**	**28.31**	**0.00**	**0.00**	**28.35**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.03	0.03	0.29	0.00	0.11	0.00	0.11	0.00	0.00	0.01	0.00	69.37	69.37	0.00	0.00	69.43
Total	**0.03**	**0.03**	**0.29**	**0.00**	**0.11**	**0.00**	**0.11**	**0.00**	**0.00**	**0.01**	**0.00**	**69.37**	**69.37**	**0.00**	**0.00**	**69.43**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.46					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.06	0.07	0.00		0.00	0.00		0.00	0.00	0.00	9.95	9.95	0.00	0.00	9.96
Total	**2.47**	**0.06**	**0.07**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**9.95**	**9.95**	**0.00**	**0.00**	**9.96**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.10	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	24.01	24.01	0.00	0.00	24.03
Total	**0.01**	**0.01**	**0.10**	**0.00**	**0.04**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**24.01**	**24.01**	**0.00**	**0.00**	**24.03**

3.5 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.46					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.06	0.07	0.00		0.00	0.00		0.00	0.00	0.00	9.95	9.95	0.00	0.00	9.96
Total	**2.47**	**0.06**	**0.07**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**9.95**	**9.95**	**0.00**	**0.00**	**9.96**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.10	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	24.01	24.01	0.00	0.00	24.03
Total	**0.01**	**0.01**	**0.10**	**0.00**	**0.04**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**24.01**	**24.01**	**0.00**	**0.00**	**24.03**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.02	0.16	0.15	0.00		0.01	0.01		0.01	0.01	0.00	20.70	20.70	0.00	0.00	20.74
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.02**	**0.16**	**0.15**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**20.70**	**20.70**	**0.00**	**0.00**	**20.74**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34	1.34	0.00	0.00	1.34
Total	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.34**	**1.34**	**0.00**	**0.00**	**1.34**

3.6 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.02	0.16	0.15	0.00		0.01	0.01		0.01	0.01	0.00	20.70	20.70	0.00	0.00	20.74
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.02**	**0.16**	**0.15**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**20.70**	**20.70**	**0.00**	**0.00**	**20.74**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34	1.34	0.00	0.00	1.34
Total	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.34**	**1.34**	**0.00**	**0.00**	**1.34**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.14	5.64	24.74	0.11	11.11	0.50	11.61	0.17	0.43	0.61	0.00	7,326.31	7,326.31	0.20	0.00	7,330.49
Unmitigated	3.14	5.64	24.74	0.11	11.11	0.50	11.61	0.17	0.43	0.61	0.00	7,326.31	7,326.31	0.20	0.00	7,330.49
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	9,999.22	9,999.22	988.49	20,397,687	20,397,687
Total	9,999.22	9,999.22	988.49	20,397,687	20,397,687

4.3 Trip Type Information

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Junior College (2Yr)	6.86	6.86	6.86	6.40	88.60	5.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	3,338.57	3,338.57	0.15	0.06	3,359.50
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	3,338.57	3,338.57	0.15	0.06	3,359.50
NaturalGas Mitigated	0.07	0.64	0.53	0.00		0.00	0.05		0.00	0.05	0.00	691.41	691.41	0.01	0.01	695.62
NaturalGas Unmitigated	0.07	0.64	0.53	0.00		0.00	0.05		0.00	0.05	0.00	691.41	691.41	0.01	0.01	695.62
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Junior College (2Yr)	1.29565e+007	0.07	0.64	0.53	0.00		0.00	0.05		0.00	0.05	0.00	691.41	691.41	0.01	0.01	695.62
Total		**0.07**	**0.64**	**0.53**	**0.00**		**0.00**	**0.05**		**0.00**	**0.05**	**0.00**	**691.41**	**691.41**	**0.01**	**0.01**	**695.62**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Junior College (2Yr)	1.29565e+007	0.07	0.64	0.53	0.00		0.00	0.05		0.00	0.05	0.00	691.41	691.41	0.01	0.01	695.62
Total		**0.07**	**0.64**	**0.53**	**0.00**		**0.00**	**0.05**		**0.00**	**0.05**	**0.00**	**691.41**	**691.41**	**0.01**	**0.01**	**695.62**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Junior College (2Yr)	1.14779e+007					3,338.57	0.15	0.06	3,359.50
Total						**3,338.57**	**0.15**	**0.06**	**3,359.50**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Junior College (2Yr)	1.14779e+007					3,338.57	0.15	0.06	3,359.50
Total						**3,338.57**	**0.15**	**0.06**	**3,359.50**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	3.90	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.95					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	2.95					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**3.90**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.95					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	2.95					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**3.90**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					354.74	1.24	0.04	392.05
Unmitigated					354.74	1.24	0.04	392.05
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Junior College (2Yr)	40.0696 / 62.673					354.74	1.24	0.04	392.05
Total						**354.74**	**1.24**	**0.04**	**392.05**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Junior College (2Yr)	40.0696 / 62.673					354.74	1.24	0.04	392.05
Total						**354.74**	**1.24**	**0.04**	**392.05**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					215.58	12.74	0.00	483.13
Unmitigated					215.58	12.74	0.00	483.13
Total	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Junior College (2Yr)	1062.01					215.58	12.74	0.00	483.13
Total						**215.58**	**12.74**	**0.00**	**483.13**

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Junior College (2Yr)	1062.01					215.58	12.74	0.00	483.13
Total						**215.58**	**12.74**	**0.00**	**483.13**

9.0 Vegetation

Appendix C Traffic Noise Impact Analysis (March 2013)

Appendix C

TRAFFIC NOISE IMPACT ANALYSIS

ATEP BELL AVENUE PROJECT

CITY OF TUSTIN, CALIFORNIA

Prepared by:

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Santa Ana, CA 92705

Prepared for:

RGP Planning & Development Services
Attn: Jeremy Krout
8921 Research Drive
Irvine, Calif. 92618

Date:

March 29, 2013

Project No.: P13-013 N

NOISE SETTING

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is generally considered to be unwanted sound. Sound is characterized by various parameters that describe the rate of oscillation of sound waves, the distance between successive troughs or crests, the speed of propagation, and the pressure level or energy content of a given sound. In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level.

The decibel (dB) scale is used to quantify sound pressure levels. Although decibels are most commonly associated with sound, "dB" is a generic descriptor that is equal to ten times the logarithmic ratio of any physical parameter versus some reference quantity. For sound, the reference level is the faintest sound detectable by a young person with good auditory acuity.

Since the human ear is not equally sensitive to all sound frequencies within the entire auditory spectrum, human response is factored into sound descriptions by weighting sounds within the range of maximum human sensitivity more heavily in a process called "A-weighting," written as dB(A). Any further reference in this discussion to decibels written as "dB" should be understood to be A-weighted.

Time variations in noise exposure are typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called Leq), or alternately, as a statistical description of the sound pressure level that is exceeded over some fraction of a given observation period. Finally, because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL).

CNEL-based standards are generally applied to transportation-related sources because local jurisdictions are pre-empted from exercising direct noise control over vehicles on public streets, aircraft, trains, etc. The City of Tustin therefore regulates the traffic noise exposure of the receiving property through land use controls.

Noise/land use compatibility standards for various classes of land uses are generally expressed in the Noise Element of the General Plan to insure that noise exposure is considered in any development decisions. The City of Tustin has guidelines for noise exposure standards which are shown in Table 1. For the most sensitive residential use, the City recommends an exterior noise exposure of 65 dB CNEL for usable outdoor space and an interior CNEL of 45 dB. For various land uses that are not occupied for 24 hours, the Noise Element of the General Plan contains standards based upon a 12-hour equivalent sound level expressed as $Leq_{(12)}$.

Table 1

City of Tustin Interior and Exterior Noise Standards

Land Use	Noise Standard [1]	
	Interior [2,3]	Exterior
Residential - Single family, multifamily, duplex, mobile home	45 dB CNEL	65 dB CNEL [4]
Residential - Transient lodging, hotels, motels hospitals	45 dB CNEL	65 dB CNEL [4]
Private offices, church sanctuaries, libraries	45 dB Leq (12)	-
Schools	45 dB Leq (12)	67 dB Leq (12) [5]
General offices, reception, clerical, etc.	50 dB Leq (12)	-
Bank lobby, retail store, restaurant.	55 dB Leq (12)	-
Manufacturing, warehousing	65 dB Leq (12)	-

[1] Community Noise Eqivalent Level Leq (12): the A-weighted equilvalent sound level averaged over a 12-hour period (usually the hours of operation)
[2] Noise standard with windows closed, Mechanical ventilation provided
[3] Indoor environment excluding bathrooms, toilets, closets and corridors
[4] Outdoor environment limited to rear yard of single family homes, multi-family patios, and balconies (with a depth of 6-feet or more) and common recreational areas.
[5] Outdoor environment limited to playground areas, picnic areas, and other areas of human use

Source Table N-3 City of Tustin Noise Element, June 2008

BACKGROUND NOISE LEVELS

The project traffic noise resulting from an additional 10,000 daily trips could impact levels on area roadways. In order to determine ambient noise levels in the project area short-term noise measurements were conducted on Wednesday, March 27, 2013 in the mid-afternoon (2:30-3:30 p.m.). These measurements serve as a baseline in determining the impact of the project acting upon area.

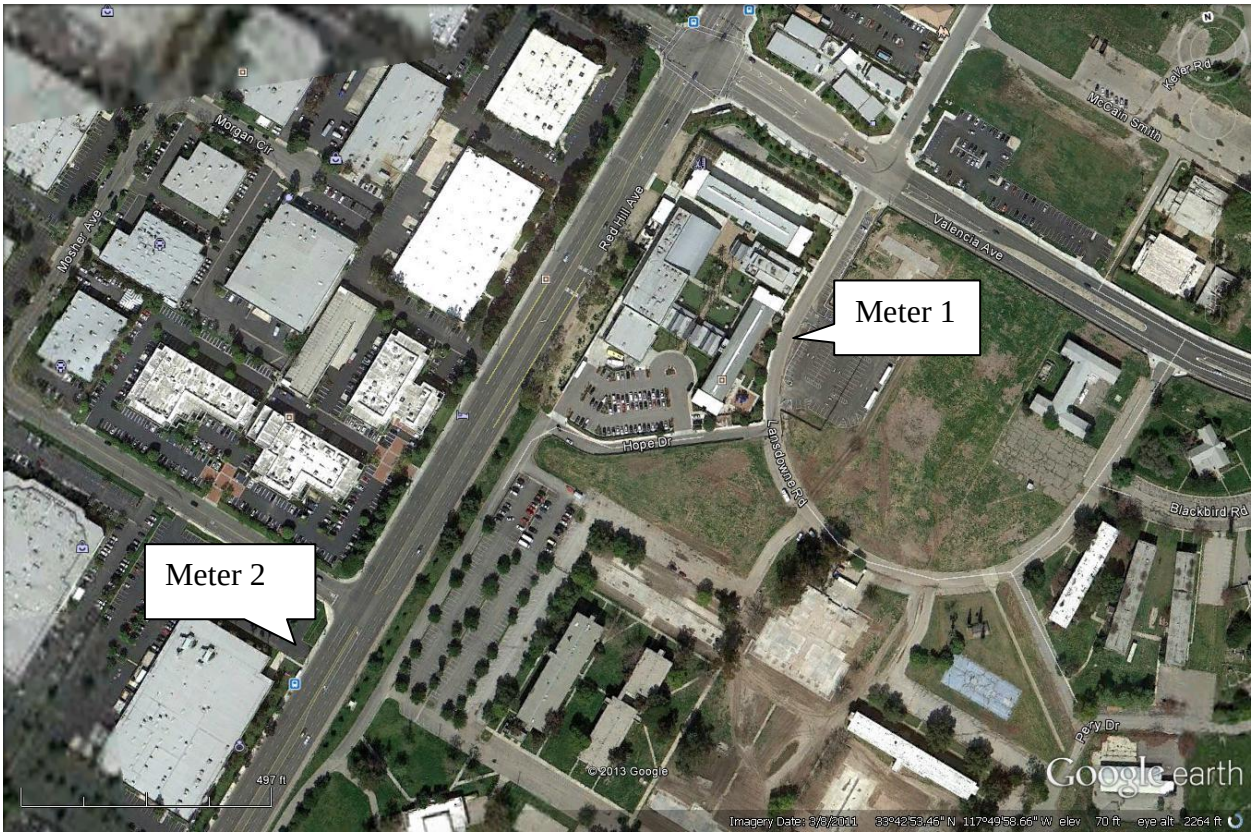
Meter 1 was located on Lansdowne Rd, south of Valencia Ave., in the satellite ATEP parking lot across from the Orange County Rescue Mission play yard. Meter 2 was along Red Hill Avenue at the Bell Road intersection. The locations are shown in Figure 1 and monitoring results are summarized below:

Measured Noise Levels (dBA)

Site No.	Leq	Lmax	Lmin	L10	L33	L50	L90
1	55.4	73.0	46.5	58.0	53.0	51.0	48.0
2	67.9	80.0	52.0	71.5	67.5	65.5	59.0

Monitoring experience shows CNELs to be 2-3 dB higher than mid afternoon Leqs which would equate to a CNEL along Valencia of 57-58 dB and 70-71 dB along Red Hill. Land uses along Red Hill are predominately commercial. The Orange County Rescue Mission, located on Hope Drive and backing up to Lansdown has a residential component. Existing CNELs of 55-56 dB adjacent to the Rescue Mission are well within the City's residential noise standard of 65 dB CNEL. Since a doubling of traffic volumes would create a +3 dB noise increase in the logarithmic decibel scale if traffic were uniformly distributed, it would take a very large traffic increase (300%) to create a noise level that would reach 65 dB CNEL along Valencia.

Figure 1 Noise Meter Locations



Meter 1: Lansdowne Rd, in ATEP satellite parking lot, across from Orange County Rescue Mission

Meter 2: SW corner of Bell Avenue and Red Hill, 75 feet to roadway centerline

NOISE IMPACTS

Noise impacts are considered significant if they expose persons to levels in excess of standards established in local general plans or noise ordinances or create a substantial noise impact. The definition of a "substantial" noise impact is not defined in any guidelines. In most environmental analyses, "substantial" is taken to mean a level that is clearly perceptible to humans. In practice, this is at least a +3 dB increase. Most people cannot distinguish a change in the noise environment that differs by less than 3 dB. Some agencies, such as Caltrans, require substantial increases to be +5 dB or more. For this analysis, the more conservative traffic noise increase of more than +3 dB would be considered significant.

PROJECT-RELATED VEHICULAR NOISE IMPACTS

Long-term noise concerns from project development center primarily on mobile source emissions on project area roadways. These concerns were addressed using the California specific vehicle noise curves (CALVENO) in the federal roadway noise model (the FHWA Highway Traffic Noise Prediction Model, FHWA-RD-77-108). The model calculates the Leq noise level for a particular reference set of input conditions, and then makes a series of adjustments for site-specific traffic volumes, distances, roadway speeds, or noise barriers. The typical Orange County day-night travel percentages and auto-truck vehicle mixes is then applied to convert one-hour Leq levels to a weighted 24-hour CNEL.

The impact of an additional 10,000 daily trips resulting from the Bell Avenue extension was evaluated using traffic volume data provided in the ATEP traffic report prepared by Stantec in March 2013. The report provides both “no project” and “with project” traffic volumes for project build-out in 2035.

Table 2 summarizes the calculated 24-hour CNEL level at 50 feet from the roadway centerline along area roadway segments surrounding the project. As shown in Table 2, many roadways are expected to experience a decrease in traffic noise when the Bell Avenue extension is complete due to a shifting in traffic patterns resulting from the diverted traffic. Both Valencia Avenue and Warner Avenue are anticipated to experience up to a 2dB reduction in traffic noise levels.

Traffic noise along Armstrong Avenue south of Valencia Ave. could experience a noise increase of +2 dB CNEL at 50 feet from the roadway centerline, but this is less than the level of human detection and less than the significance threshold. Additionally, the “with project” future traffic noise level is still less than 65dB CNEL, the noise compatibility threshold adopted by the City of Tustin for exterior residential use. The next highest project associated traffic noise increase is on Red Hill Avenue between Bell Avenue and Valencia Avenue. This +1.0 dB CNEL increase is similarly less than significance thresholds and would not create a detectable noise increase. Traffic noise associated with the addition of 10,000 trips is not expected to create a significant noise impact.

Table 2

Traffic Noise Impact Analysis
(CNEL in dB at 50 feet from Centerline)

Road Segment	*2035 No Project*	*2035 + Project*	*Project Impact*
Red Hill Avenue/			
S of Warner	70.1	70.2	0.1
S of Bell	69.5	69.9	0.4
Bell - Valencia	70.4	71.4	1.0
N of Valencia	69.5	70.2	0.7
Valencia/			
E of Red Hill	67.5	65.6	-1.9
W of Armstrong	66.9	64.7	-2.2
Armstrong/			
S of Valencia	62.2	64.2	2.0
N of Warner	62.2	62.2	0.0
Warner/			
W of Red Hill	70.5	70.2	-0.3
E of Red Hill	70.2	69.0	-1.2
W of Armstrong	69.8	68.6	-1.2
E of Armstrong	69.3	68.4	-0.9

Appendix D 2012 Annual Mitigation Monitoring and Status Report, MCAS Tustin FEIS/EIR

Appendix D

2012 Annual Mitigation Monitoring and Status Report

for

Final Joint Environmental Impact Statement/Environmental Impact Report (As modified by Final Supplement #1 and Addendum to FEIS/EIR)

For the Disposal and Reuse of MCAS Tustin

SCH No. 94071005

City of Tustin
Community Development Department
300 Centennial Way
Tustin, CA 92780

Activities that took place in 2012 and/or are currently in progress are identified in *Italic.*

Introduction:

Pursuant to the Mitigation Monitoring and Reporting Program (MMRP) for the Disposal and Reuse of MCAS Tustin, an annual review and a brief progress memorandum based on that review shall be prepared by each applicable city (City of Tustin or City or Irvine). The City of Tustin's annual review and progress memorandum provides the following:

1. A general description of the project's status, including actual or projected completion dates, if known.

2. The current status for each mitigation measure.

Background:

On January 16, 2001, the City of Tustin certified the Program Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) for the reuse and disposal of MCAS Tustin. The FEIS/EIR evaluated the environmental impacts of the reuse and disposal of MCAS-Tustin, which included the adoption of a Specific Plan and other implementing actions. On December 6, 2004, the City of Tustin adopted Resolution No. 04-76 certifying a Supplement (Final Supplement #1) and Resolution No. 04-77 adopting the revised Mitigation Monitoring Report Program to the FEIS/EIR. On April 3, 2006, the City Council adopted Resolution No. 06-43 approving an Addendum to the FEIS/EIR for the Disposal and Reuse of MCAS Tustin.

Included in Resolution Nos. 00-90, 04-77, and 06-43 was a requirement for a Mitigation Monitoring and Reporting Program (MMRP) for the Disposal and Reuse of MCAS Tustin. The purpose of the MMRP is to report accomplishment of mitigation measures required by the FEIS/EIR.

Mitigation measures and implementation measures identified in the FEIS/EIR, Final Supplement #1, and Addendum for the disposal and reuse of MCAS Tustin have been incorporated into a table. Each mitigation measure and implementation measure is listed separately on the table with appropriate space for monitoring the progress of the implementation of each measure. Implementation measures were also required where environmental impacts were less than significant, but supported the proposed development within the reuse plan area concurrent with demand. Implementation measures and mitigation measures are both discussed in this MMRP, and are equally enforceable.

The following information is identified in the table:

- The measures listed by environmental impact area in the same order as they are listed in the Final EIS/EIR, Final Supplement #1, and Addendum;
- The timing of implementation of the mitigation or implementation measure;
- The agency responsible for compliance;
- The appropriate agency to enforce the mitigation measure or implementation measure; and
- Status of the mitigation or implementation measure.

The mitigation measures and implementation measures in the table are listed by environmental impact area in the same order as they are listed in the Final EIS/EIR, Final Supplement #1, and Addendum.

Construction Activities:

Residential/Commercial/Institutional Activities:

- John Laing Homes – Tustin Field I (Harvard Avenue and Edinger Avenue): All 376 units are completed.

- John Laing Homes – Tustin Field II (Harvard Avenue and Edinger Avenue): All 189 homes are completed.

- Columbus Square/Columbus Grove: *Approximately 1,540 permits have been issued between the two communities. 1,528 homes (units) have been approved for occupancy. The remaining community (Augusta) is currently in its last phase of construction.*

- South Orange County Community College District (SOCCCD): Phase I of the SOCCCD Advanced Technology Education Park (ATEP) has been completed and is currently offering classes. The Concept Plan for Phase 3A was approved by the City on July 26, 2010 authorizing up to 305,000 square feet of educational uses. *Demolition of the majority of the former military structures is nearing completion; demolition of the balance of the site is anticipated to commence by Spring 2013. Development plans for future phases of the site have yet to be identified or submitted to the City.*

- Rancho Santiago Community College District: The Sheriff's training facility is complete; however, a portion of the property remains undeveloped. RSCCD has not identified any plans for development the remaining portion of the site.

- Orange County Rescue Mission's Village of Hope (Lansdowne/Valencia): A 192-bed transitional home for the homeless at Tustin Legacy to be operated by the Orange County Rescue Mission. Certificate of Occupancy for the transitional home has been issued. In November 2007, the Planning Commission approved an amendment to the Village of Hope Conditional Use Permit to allow for a medical/dental clinic to operate in conjunction with the transitional home. The construction for this medical/dental clinic is complete.

- The District at Tustin Legacy/Vestar (Barranca Parkway and Jamboree Road): Construction of the 1 million square-foot Class A retail center is complete with the exception of certain adjacent infrastructure improvements. *On October 21, 2010 the City and Vestar entered into a Fifth DDA amendment and Fifth Amendment to the Infrastructure and Payment Agreement deferring the construction of certain storm drain related infrastructure improvements within Barranca Parkway and Warner Avenue from June 15, 2010 until grading activities adjacent to the site occur, but in any event no later than June 15, 2012. Warner Avenue storm drain improvements were started in 2012 and are near final completion.*

- County of Orange Tustin Family Campus (15405 Lansdowne Road): The project involves a multi-treatment campus which includes four (4) stand-alone residential homes at 4,733 square feet each; three (3) two-story residential buildings, each 8,430 square feet; a 12,224 square foot, two-story campus service center; and a 1,000 square foot maintenance building for a total of 57,446 square feet of building area with a serving capacity of 90 beds for abused and neglected children and their parents and emancipated youth to be operated by the Orange County Social Services Agency. Construction was completed in 2009.

- Master Development Site:

  The City and the former Master Developer, Tustin Legacy Community Partners, LLC (TLCP), entered into a Disposition and Development Agreement (DDA) in April 2006 which was subsequently amended in March 2007 and in June 2007. The DDA identified the terms of development of an approximate 820 acre footprint at Tustin Legacy and the City's sale of the property to TLCP, which resulted in conveyance of the first of four phases of property from the City to TLCP in 2007; however, TLCP defaulted on its obligations per the DDA, and the DDA was terminated on July 6, 2010. As a consequence, title to the Phase 1 property was transferred back to the City on August 5, 2010. *Prior to termination of the DDA, TLCP completed a majority of the site preparation activities, including building and runway removals, and a large amount of the mass grading activities.*

  The City subsequently completed an updated development plan: the "Tustin Legacy Disposition Strategy for the Former Master Developer Footprint" as confirmed by the City Council on April 25, 2011. The Disposition strategy provides a framework for moving forward with completing the Tustin Legacy project pursuant to the Specific Plan with the city assuming a more limited Master Developer role by marketing smaller segment "Disposition Packages"(DPs) or parcel groupings based on market and infrastructure needs. Ten Disposition Packages (1A, 1B, 1C and 2 through 8) were originally created with the City reserving the ability to consolidate or otherwise refine over time as market needs evolve.

  In 2012 the City executed Disposition and Development Agreements for the first two Disposition Parcels 1A-North and 2A with St. Anton Partners and the Irvine Company, respectively. Grading activities for both sites are anticipated to commence by summer 2013 resulting in the construction of 225 apartments on 1A-North and 533 apartments on 2A. The Irvine Company will also be responsible for constructing certain backbone infrastructure improvements, including the balance of Barranca Parkway from Tustin Ranch Road to west of Aston Street, and portions of Warner Avenue and Park Avenue west of Tustin Ranch Road.

  The City Council has entered into an Exclusive Agreement to Negotiate with Standard Pacific on Disposition Parcels 1B and 6A for the development of approximately 375 homes. The City Council also approved an Exclusive Agreement to Negotiate with the Regency for a commercial development at site 1C located at the southeast corner of Kensington and Edinger Avenue.

  The timeframe for the disposition of the remaining Disposition Parcels is currently unknown as the City continues discussions with potential developers on various areas of the Master Development Footprint.

Infrastructure Activities

Major Backbone Infrastructure includes roads and may also include street lighting, traffic control, dry and wet utilities, and other work required in accordance with Governmental Requirements and EIR/EIS requirements.

- Armstrong Avenue (From Valencia to Warner)/Severyns Road: This project has been completed.

- Barranca Parkway – Tustin Ranch Road to Jamboree Road: Completion of Phase 1 is complete; however, construction of Phase 2 (roadway, channel, and storm drain improvements) have been deferred to no later than June 15, 2015 by execution of the 5th Amendments to the Infrastructure and Payment Agreement and the DDA between the City and Vestar to address the completion of Barranca Parkway improvements. *The City of Irvine completed the Barranca Parkway segment from Red Hill Avenue to approximately 1,000 feet west of Aston Street in 2012.*

- Edinger Avenue – Red Hill Avenue to Kensington Park Drive: This project has been completed.

- Harvard Avenue – Barranca Parkway to just south of OCTA/SCRRA railroad: This project has been completed.

- Lansdowne Road: This project has been completed.

- Marble Mountain Road (renamed as "Sweet Shade" in the City of Irvine): This project has been completed.

- Valencia Avenue – Red Hill Avenue to Kensington Park Drive: This project has been completed.

- Kensington Park Drive: This project has been completed.

- Park Avenue – Tustin Ranch Road to Jamboree Road Southbound Off-ramp: This project has been completed. *The Irvine Company will be commencing with construction of Park Avenue from Tustin Ranch Road west to Legacy Road (local road to be completed by the Irvine Company) in conjunction with completion of the Disposition Parcel 2A project.*

- Warner Avenue – Tustin Ranch Road to east of Park Avenue: This project has been completed. *The Irvine Company will be commencing with construction of Warner Avenue from Tustin Ranch Road west to Legacy Road (local road to be completed by the Irvine Company) in conjunction with completion of the Disposition Parcel 2A project.*

- Tustin Field I Bike-Trail on North side of Project: This project has been completed.

- Tustin Ranch Road extension form Warner Avenue to Walnut Avenue: *The City commenced with the two-phased project in 2011; construction is anticipated to be completed as projected by fall 2013, including the Edinger Avenue bridge, Valencia Avenue (Kensington Park Drive to Tustin Ranch Road), Legacy Road (Tustin Ranch Road to Park Avenue), and Park Avenue (Warner Avenue to Legacy Road).*

- Tustin Ranch Road – Barranca Parkway to Warner Avenue: This project has been completed.

Status of Mitigation:

Attached to this report is a table which shows the status of implementation and mitigation measures listed in the MMRP.

MITIGATION MONITORING AND REPORTING PROGRAM
MCAS TUSTIN DISPOSAL AND REUSE
Revised March 2013

The following are measures included in the Final EIS/EIR, Final Supplement #1, and Addendum for the disposal and reuse of MCAS Tustin that identifies both mitigation and implementation measures. Implementation measures are to be required where environmental impacts are less than significant, but supported the proposed development within the reuse plan area concurrent with demand. Both implementation and mitigation measures are identified in the adopted Mitigation and Monitoring Report Program, Final Supplement #1, and Addendum (Resolution Nos. 00-90, 04-77, and 06-43) and are equally enforceable.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
Mitigation Measures for Land Use					
LU-1.	The City of Tustin shall amend its General Plan and zoning ordinance to be consistent with planned land uses. Any zoning ordinance shall include site design measures such as buffering, landscaping, screening, and setbacks, to ensure high quality development and compatibility between land uses. The goal is to assure that the overall appearance of development on the site is at least similar in quality to other master planned areas in Tustin and other adjacent cities.	Prior to a final map recordation (except for financing and re-conveyance purposes) within the Reuse Plan Area within the City of Tustin.	City of Tustin	Community Development Department (Tustin)	Completed through adoption of Resolution No. 00-91 on January 16, 2001, for General Plan Amendment 00-001 and through adoption of the MCAS Tustin Specific Plan through Ordinance No. 1257 on February 3, 2003. On April 3, 2006, the City Council adopted Resolution No. 06-43 approving an addendum to the Final Environmental Impact Statement/ Environmental Impact Report for the Disposal and Reuse of MCAS Tustin and Zone Change 05-002 through Ordinance No. 1311.
LU-2.	The City of Irvine shall amend its General Plan and zoning ordinance to be	Prior to a final map recordation (except	City of Irvine	Community Development	Complete

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	consistent with planned land uses. Any zoning ordinance shall include site design measures such as buffering, landscaping, screening, and setbacks, to ensure high quality development and compatibility between land uses. The goal is to assure that the overall appearance of development on the site is at least similar in quality to other master planned areas in Tustin and other adjacent cities.	for financing and re-conveyance purposes) within the Reuse Plan Area within the City of Irvine.		Department (Irvine)	
(a)	The City of Tustin or City of Irvine, as appropriate, shall ensure that infrastructure is constructed in phases as triggered by identified thresholds in Table 4-2 of the revised Specific Plan Phasing Plan, Phasing Plan Requirements (see Table 4-2 at the end of this Mitigation Monitoring and Reporting Program). The Phasing Plan provides an organizational framework to facilitate development of the reuse plan area in tandem with infrastructure necessary to support the planned development. (As amended by Addendum) This framework reflects the fact that each component of the infrastructure has its own threshold for accommodating additional development toward	See Table 4.3-1 of the Final EIS/EIR or Table 4-2 at the end of this Mitigation Monitoring and Reporting Program for each specific triggering mechanism.	City of Tustin and/or City of Irvine, as applicable	Community Development Department/ Public Works (Tustin and/or Irvine, as applicable)	• **The District** The project complies with phasing requirement; all infrastructure improvements were included in DDA 04-02, or as conditioned by Resolution Nos. 04-73, 04-74, 3920, 3921, 3922, 3923, and 3924 • **Columbus Grove (Tract 16582)** The project complies with phasing requirements; all subdivision infrastructures will be provided or paid for by the applicant as conditioned by Resolution Nos. 3946 and 3947. Public improvements are complete. As required by the EIS/EIR, the City entered into a Cooperative Agreement with the Marble Mountain Partners to ensure the developer's responsibility for payment or construction of Tustin Legacy Backbone Infrastructure and subsequently entered into an Acquisition and Funding Agreement as part of Assessment District No. 06-01 (Tustin

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	build-out of the reuse plan area. The triggering mechanisms that identify timing of key infrastructure provisions are summarized in Table 4-2 of the revised Specific Plan Phasing Plan, Phasing Plan Requirements (see Table 4-2 at the end of this Mitigation Monitoring and Reporting Program).				Legacy/Columbus Villages) for funding and construction obligations of developer for required Tustin Legacy Backbone Infrastructure. • **Columbus Square (Tract 16581)** The project complies with the phasing requirement; all subdivision infrastructures will be provided by the applicant as conditioned by Resolution Nos. 3952 and 3953. Public improvements are complete. As required by the EIS/EIR, the City entered into a Cooperative Agreement with the Marble Mountain Partners to ensure the developer's responsibility for payment or construction of Tustin Legacy Backbone Infrastructure and subsequently entered into an Acquisition and Funding Agreement as part of Assessment District No. 06-01 (Tustin Legacy/Columbus Villages) for funding and construction obligations of developer for required Tustin Legacy Backbone Infrastructure. • **RSCCD (Sheriff)** The infrastructure to support the project was constructed concurrently with the project. • **Village of Hope** The project complies with infrastructure phasing requirements in the EIS/EIR. • **Tustin Family Campus** The project complies with phasing infrastructure requirements in the EIS/EIR.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **SOCCCD** The infrastructure to support Phase 1 of the on-site project was constructed concurrently with the project; additional infrastructure to support future phases will be required to be constructed prior to or concurrently with future phases. • ***Master Developer Footprint :*** *Pursuant to the Tustin Legacy Disposition Strategy, infrastructure and phasing obligations have been assigned to each Disposition Package based upon respective site needs and anticipated development sequencing to comply with the FEIS/EIR The applicable infrastructure and phasing obligations will be met upon completion of the first two Disposition Packages (1A-North and 2A) pursuant to the executed DDAs.*
(b)	Prior to a final map recordation (except for financing and re-conveyance purposes), the development applicant shall enter into an agreement with the City of Tustin and City of Irvine and any appropriate regional utility agencies, districts, and providers, as applicable, to dedicate all easement, right-of-ways, or other land determined necessary to construct adequate utility infrastructure and facilities to serve the project as determined by the City, Agency, District, or other providers.	Prior to final map recordation (except for financing and re-conveyance purposes).	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** All dedication required by DDA 04-02, or as conditioned by Resolution Nos. 04-73, 04-74, 3920, 3921, 3922, 3923, and 3924 was included and recorded with the final map. • **Tustin Field I (Tract 16474)** All dedication required by Condition 6.1 of Resolution No. 3863 was included and recorded with the final map. • **Tustin Field II (Tract 16507)** All required easements by Condition 11.1 of

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					Resolution No. 3885 were dedicated with recordation of Final Map 16507 • **Columbus Grove (Tract 16582)** Required dedication by Condition 3.3 of Resolution No. 3946 was included in the recorded final map • **Columbus Square (Tract 16581)** Required dedications as per Resolution No. 3952 were included in the final map and was recorded in March, 2006 • **SOCCCD (ATEP)** All easements for Phase I project have been recorded; however, dedication of easements, right-of-ways, or other land determined necessary to construct adequate utility infrastructure and facilities to serve future phases of development as determined by the City, SOCCCD or other utility providers will need to be defined with each phase and recorded. • **RSCCD (Regional Law Enforcement Training Facility)** All easements have been recorded for the Sheriff's Training Facility; however, dedication of easements, right-of-ways, or other land determined necessary to construct adequate utility infrastructure and facilities to serve future phases of development as determined by the City, RSCCCD or other utility providers will need to

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					be defined with any future phase and recorded. • **Village of Hope** All easements have been recorded. Requirement fulfilled. • ***Master Development Footprint:*** *The Final Sector B Map for Neighborhood E (Final Map 17144) and Neighborhoods B, D, and G (Final Map 17404) for Conveyance Purposes Only have been approved. Dedication of easements, right-of-ways, or other land determined necessary to construct adequate utility infrastructure and facilities to serve future phases of development as determined by the City or other utility providers, will also need to be defined with each future phase and recorded as may be deemed necessary upon completion for each Disposition Parcel pursuant to the Disposition Strategy.*
(c)	Prior to any final map recordation (except for financing and conveyance purposes), the development applicant shall enter into a secured agreement with the cities of Tustin and/or Irvine, as applicable, to participate on a pro-rated basis in construction of capital improvements necessary to provide adequate utility facilities.	Prior to final map recordation (except for financing and re-conveyance purposes).	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** DDA capital improvement obligations have been satisfied per CFD 07-01, per DDA 04-02, and the Infrastructure and Construction Payment Agreement and Amendments. • **Tustin Field I (Tract 16474)** DDA capital improvement obligations have been satisfied per CFD 04-1.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Tustin Field II (Tract 16507)** DDA capital improvement obligations have been satisfied per CFD 04-1. • **Columbus Square (16581) and Columbus Grove (Tract 16582)** Per the Cooperative Agreement and CFD 06-01, developer has met their current obligation to fund necessary capital improvements. • **SOCCCD (ATEP)** Pursuant to the Conveyance Agreement, SOCCCD is required to construct all on-site improvements; however, the City has exempted SOCCCD from City CFD funded Tustin Legacy Backbone Infrastructure costs on the presumption the primary use of the project is educational. Phase 1 of the project has been developed as an educational use and the Phase 3A Concept Plan approved in July 2010 authorized up to 305,000 square feet of uses. In the event non-educational uses are proposed, SOCCCD will be subject to required Fair Share Contributions to Tustin Legacy Backbone Infrastructure for non-educational uses, and is still subject to assessments from outside utility purveyors regardless of primary use of project and would be responsible for any costs that are necessary if SOCCCD proposes to modify or alter existing Tustin Legacy Backbone Infrastructure.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **RSCCD (Sheriff)** The initial Sheriff's Training Facility project is complete, including all on-site improvements by RSCCD. RSCCD capital improvement costs for public uses are exempt from Tustin Legacy Backbone Infrastructure obligation; however, RSCCD is still subject to assessments from outside utility purveyors. A portion of the site remains undeveloped and could involve a subsequent future phase. In such case, RSCCD will be responsible for any necessary on-site infrastructure. • **Village of Hope** Project is complete, including all on-site improvements by Village of Hope. An agreement was executed and provided the necessary dedications to ensure emergency access and construction of required utility infrastructure from an adjacent property owner (SOCCCD). • ***Master Development Footprint:*** *Pursuant to the DDAs with St. Anton Partners and the Irvine Company for Disposition Parcels 1A-North and 2A, respectively, the Developers are required to participate on a pro-rated basis in funding and construction (construction required for 2A only) of their fair-share contribution of the Tustin Legacy Backbone Infrastructure obligations. Future developers will be required to participate on a pro-rated basis in funding and/or construction of capital improvements*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					necessary to provide adequate utility facilities, as determined by the City in conjunction with any subsequent developer agreements entered into between the City and developers.
(d)	Prior to the issuance of permits for any public improvements or development project, a development applicant shall submit to the City of Tustin and City of Irvine, as applicable, information from IRWD which outlines required facilities necessary to provide adequate potable water and reclaimed water service to the development.	Prior to the issuance of permits for any public improvements or development project.	Project developer	Community Development Department (Tustin and/or Irvine, as appropriate)	• **The District** Will serve letter is on–file. All utilities are provided. • **Tustin Field I (Tract 16474)** Will serve letter is on –file. All utilities are provided • **Tustin Field II (Tract 16507)** Will serve letter is on –file. All utilities are provided • **Columbus Grove (Tract 16582)** Will serve letter is on –file. All utilities are provided. • **Columbus Square (Tract 16581)** Will serve letter is on –file. All utilities are provided. • **SOCCCD (ATEP)** IRWD has determined there will be adequate facilities to serve Phase 1 of the project; a will-serve letter will need to be submitted for all future phases of development.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Tustin Family Campus** IRWD has determined there will be adequate facilities to serve the project. All utilities are provided. • **RSCCD** IRWD has determined there will be adequate facilities to serve the Sheriff's Training Facility project; however, IRWD will need to determinate if adequate facilities will be available for any future phases. • **Village of Hope** Will serve letter is on–file. All utilities are provided. • ***Master Development Footprint:*** *An Irvine Ranch Water District (IRWD) Sub Area Master Plan (SAMP) is currently in place. Future developer(s) will be required to provide a will serve letter in conjunction with any future entitlement applications, including by St. Anton Partners and the Irvine Company for Disposition Parcels 1A-North and 2A, respectively.*
(e)	Prior to the issuance of building permits, the project developer shall ensure that fire hydrants capable of flows in amounts approved by the OCFA are in place and operational to meet fire flow requirements. (As amended by Addendum)	Prior to the issuance of the certificates of use and occupancy.	Project developer	Community Development Department (Tustin and/or Irvine, as appropriate); OCFA	• **The District** Fire Master plan approved and all fire hydrants were installed and inspected by OCFA. • **Tustin Field I (Tract 16474)** Fire Master plan approved and all fire hydrants were installed and inspected by OCFA.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Tustin Field II (Tract 16507)** Fire Master plan approved and all fire hydrants were installed and inspected by OCFA. • **Columbus Grove (Tract 16582)** *Fire Master plan approved and all fire hydrants were installed and inspected by OCFA.* • **Columbus Square (Tract 16581)** Fire Master plans reviewed and approved by OCFA – installation is in progress • **Tustin Family Campus** OCFA has determined that the project plans and data show adequate flows to serve the project. • **SOCCCD (ATEP)** OCFA has determined that the project plans and data show adequate flows to serve Phase 1 of the project; OCFA will need to determine adequate flows for all future phases. • **RSCCD** OCFA has determined that the project plans and data show adequate flows to serve the initial Sheriff's Training Facility project; however, OCFA will need to determine adequate flows will be available for any future phases. • **Village of Hope** Fire Master plans reviewed and approved by

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					OCFA. • **Master Development Footprint** *The required location and number of hydrants will be reviewed and approved by OCFA in conjunction with any future entitlement applications submitted by future developers within the Master Development Footprint, including by St. Anton Partners and the Irvine Company for Disposition Parcels 1A-North and 2A, respectively.*
(f)	Prior to the issuance of permits for any public improvements or development project, a development applicant shall submit to the City of Tustin and City of Irvine, as applicable, information from IRWD or the City of Tustin which outlines required facilities necessary to provide adequate sanitary sewage service to the development.	Prior to the issuance of permits for any public improvements or development project.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** IRWD and OCSD approval letters were provided. All on-site utilities have been constructed. • **Tustin Field I (Tract 16474)** IRWD and OCSD approval letters were provided. All on-site utilities are constructed. • **Tustin Field II (Tract 16507)** IRWD and OCSD approval letters were provided. All on-site utilities are constructed. • **Columbus Grove (Tract 16582)** IRWD and OCSD approval letters were provided. On site utilities were provided. • **Columbus Square (Tract 16581)** IRWD and OCSD approval letters were provided. On-site utilities are under construction.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Tustin Family Campus** IRWD and OCSD have determined there will be adequate facilities to serve the project. • **SOCCCD (ATEP)** IRWD and OCSD have determined there will be adequate facilities to serve the Phase 1 project; determinations will be made for all future phases. • **RSCCD** Requirement fulfilled. IRWD and OCSD have determined there will be adequate facilities to serve the initial Sheriff's Training Facility project; however, IRWD and OCSD will need to determine adequate facilities will be available for any future phases. • **Village of Hope** IRWD and OCSD approval letters were provided. All on-site utilities are completed. • **Master Development Footprint:** *Any required information would be submitted with subsequent entitlement applications by each future project within the Master Development Footprint, including by St. Anton Partners and the Irvine Company for Disposition Parcels 1A-North and 2A, respectively.*
(g)	Prior to the issuance of grading permits or approval of any subdivision map (except for financing and re-conveyance	Prior to the issuance of grading permits or	Project developer	Tustin Building Division or the Irvine Public	• **The District** Not applicable - Site not within the 100-year flood plain (FEMA Map dated December 3, 2009)

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	purposes), whichever occurs first, for development within the 100-year flood plain, grading and drainage systems shall be designed by the project developer such that all building pads would be safe from inundation from runoff from all storms up to and including the theoretical 100-year storm, to the satisfaction of the City of Tustin Building Division or the Irvine Public Works Department, as applicable. Grading permits or subdivision maps generated for financing and reconveyance purposes are exempt.	approval of any subdivision map (except for financing and re-conveyance purposes), whichever occurs first.		Works Department, as applicable	• **Tustin Field I (Tract 16474)** Not applicable - Site not within the 100-year flood plain FEMA Map dated December 3, 2009) • **Tustin Field II (Tract 16507)** Not applicable - Site not within the 100-year flood plain FEMA Map dated December 3, 2009) • **Columbus Grove (Tract 16582)** Not applicable - Site not within the 100-year flood plain (FEMA Map dated December 3, 2009) • **Columbus Square (Tract 16581)** Not applicable - Site not within the 100-year flood plain (FEMA Map dated December 3, 2009) • **Tustin Family Campus** Not applicable - Site not within the 100-year flood plain (FEMA Map dated December 3, 2009) • **SOCCCD (ATEP)** Not applicable - Site not within the 100-year flood plain (FEMA Map dated December 3, 2009). • **RSCCD** Not applicable - Site not within the 100-year flood plain (FEMA Map dated December 3, 2009). • **Village of Hope** Not applicable - Site not within the 100-year flood plain (FEMA Map dated December 3, 2009).

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• ***Master Developer Footprint*** *Not applicable - Site not within the 100-year flood plain (FEMA Map dated December 3, 2009).*
(h)	Prior to construction of regional flood control facilities, appropriate state and federal approvals, including agreements and permits, shall be obtained. These include but are not limited to Regional Water Quality Control Board permits, including NPDES permits; Section 401 water quality certifications; Section 404 permits from the USACOE, and Section 1601 or 1603 agreements from the CDFG in a manner meeting the approval of the City of Tustin and the Irvine Public Works Department, as applicable. *(As amended by Addendum)*	Prior to construction of regional flood control facilities.	Project developer	Public Works Department (Tustin and/or Irvine, as applicable)	• ***Master Development Footprint:*** *TLCP previously obtained the 401, 404, and 1602 permits for regional flood control channel improvements; however, the proportionate portions of the permit responsibilities affecting construction of Peters Canyon Channel improvements between Tustin City limits southerly to Barranca Parkway were transferred directly from TLCP to Tustin Vista Partners, LLC, a Delaware limited liability company, on May 6, 2008. Upon termination of the DDA between the City and TLCP in July 2010, the 401, 404, and 1062 permits affecting the Master Development Footprint in the City of Tustin were assigned to the City of Tustin until such time the permit(s) and/or applicable mitigation responsibilities can be assigned to subsequent developer(s) in the future.* • **The District:** Have received 401, 404, and 1601 permits for regional flood control channel improvements. • **SOCCCD:** Regional permits not required for Phase 1 of project *and applicable clearances have been obtained in 2011 for the balance of the site.*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
(i)	Prior to issuance of any grading permit or approval of any subdivision map (except for financing and conveyance purposes), for any development that is either partially or completely located within the 100-year flood plain of the Flood Insurance Rate Map, the development applicant shall submit all required documentation to the FEMA and demonstrate that the application for a Conditional Letter of Map Revision for changes to the 100-year flood plain is satisfied in a manner meeting the approval of each respective city, as applicable.	Prior to issuance of any grading permit or approval of any subdivision map (except for financing and conveyance purposes).	Project developer	Tustin Building Division or the Irvine Public Works Department, as applicable	• **The District** Site not within the 100- year flood plain (FEMA Map dated December 3, 2009). • **Tustin Field I** Site not within the 100- year flood plain (FEMA Map dated December 3, 2009). • **Tustin Field II** Site not within the 100-year flood plain (FEMA Map dated December 3, 2009). • **Columbus Grove (Tract 16582)** Site not within the 100-year flood plain (FEMA Map dated December 3, 2009). • **Columbus Square (Tract 16581)** Site not within the 100-year flood plain (FEMA Map dated February 18, 2004). • **Tustin Family Campus** Not applicable. The project is not within the 100-year flood plain (FEMA Map dated December 3, 2009). • **SOCCCD (ATEP)** Not applicable. The project is not within the 100-year flood plain (FEMA Map dated December 3, 2009). • **RSCCD (Sheriff)** Not applicable. The project is not within the 100-

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					year flood plain (FEMA Map dated December 3, 2009). • **Village of Hope** Not applicable - Site not within the 100-year flood plain (FEMA Map dated December 3, 2009). • ***Master Developer Footprint:*** *Not applicable - Site not within the 100-year flood plain (FEMA Map dated December 3, 2009).*
(j)	Prior to the approval of any applicable subdivision map (except for financing and conveyance purposes), the developer - applicant shall design and construct local drainage systems for conveyance of the 10-year runoff. If the facility is in a local sump, it shall be designed to convey the 25-year runoff.	Prior to the approval of any applicable subdivision map (except for financing and conveyance purposes).	Project Developer	Public Works Department (Tustin and/or Irvine, as applicable)	• ***The District*** *All improvements necessary for public health and safety have been installed; however, pursuant to the Fifth DDA Amendment and Fifth Amendment to the Infrastructure Construction and Payment Agreement between the City and Vestar, the schedule for installation of certain storm drain related improvements affected by grading activities adjacent to the District within Warner Avenue and Barranca will occur in conjunction with future grading on adjacent sites but in no event later than June 15, 2015. Warner Avenue storm drain improvements were started in 2012 and are near final completion.* • **Tustin Field I (Tract 16474)** Hydrology Plan approved and improvements installed

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Tustin Field II (Tract 16507)** Hydrology Plan approved and improvements installed. • **Columbus Square (Tract 16581)** Hydrology Plan approved and improvements installed • **Tustin Family Campus** Hydrology Plan approved and improvements installed • **SOCCCD (ATEP)** Hydrology Plan approved and improvements installed for Phase 1 of the project: however, a hydrology plan must be submitted and approved by the City and improvements installed in conjunction with future plans. • **RSCCD (Sheriff)** Hydrology Plan approved and improvements installed for the initial Sheriff's Training Facility; however, a Hydrology Plan will need to be approved and improvements installed for any future phases of development. • **Village of Hope** Hydrology Plan approved and improvements installed.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• ***Master Developer Footprint*** *Not applicable - Site not within the 100-year flood plain (FEMA Map dated December 3, 2009).*
(k)	Prior to any grading for any new development, the following drainage studies shall be submitted to and approved by the City of Tustin, City of Irvine, and/or OCFCD, as applicable:	Prior to any grading for any new development.	Project Developer	Building Division or Public Works Department (Tustin and/or Irvine, as applicable)	
	(1) A drainage study including diversions (i.e., off-site areas that drain onto and/or through the project site), with justification and appropriate mitigation for any proposed diversion.	Prior to any grading for any new development.	Project Developer	Tustin Building Division or Public Works Department (Tustin and/or Irvine, as applicable)	• **The District** *The Hydrology Plan for the project was approved and construction on a majority of the systems have been included with exception of certain Barranca storm drain channel improvements, which will be constructed by no later than June 15, 2015 per the 5th DDA Amendment and Fifth Amendments to the Infrastructure Construction and Payment Agreement. Warner Avenue storm drain improvements were started in 2012 and scheduled to be completed by April 2013.* • **Tustin Field I** The Hydrology Plan for the project was approved and improvements were installed • **Tustin Field II** The Hydrology Plan for the project was approved and improvements were installed

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Columbus Grove (Tract 16582)** The Hydrology Plan for the project was approved and improvements were installed • **Columbus Square (Tract 16581)** The Hydrology plans for the project have been reviewed and approved. The project is currently under construction. • **Tustin Family Campus** Grading and drainage plans approved by the City. Construction of the project is complete. • **SOCCCD (ATEP)** Grading and drainage plans approved by the City and improvements installed for Phase 1 of project; however, grading and drainage plans will need to be submitted and approved by the City and improvements installed in conjunction with future phases. • **RSCCD (Sheriff)** Grading and drainage plans approved by the City and improvements installed for the initial Sheriff's Training Facility; however, grading and drainage plans will need to be approved by the City and improvements installed for any future phases. • **Village of Hope** The Hydrology Plan for the project was approved and construction is complete.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• ***Master Development Footprint*** *City and/or future developer(s) will assume responsibility to submit detailed information for all phases during the entitlement application phases for Neighborhoods B, D, E and G as determined necessary, including by St. Anton Partners and the Irvine Company for Disposition Parcels 1A-North and 2A, respectively.*
	(2) A drainage study evidencing that proposed drainage patterns would not result in increased 100-year peak discharges within and downstream of the project limits, and would not worsen existing drainage conditions at storm drains, culverts, and other street crossings including regional flood control facilities. The study shall also propose appropriate mitigation for any increased runoff causing a worsening condition of any existing facilities within or downstream of project limits. Implementation of appropriate interim or ultimate flood control infrastructure construction must be included.	Prior to any grading for any new development.	Project Developer	Tustin Building Division or Public Works Department (Tustin and/or Irvine, as applicable)	• **The District** The Hydrology Plan for the project was approved and improvements installed. • **Tustin Field I** The Hydrology Plan for the project was approved and improvements were installed**.** • **Tustin Field II** The Hydrology Plan for the project was approved and improvements were installed**.** • **Columbus Grove (Tract 16582)** The Hydrology Plan for the project was approved and improvements were installed**.** • **Columbus Square (Tract 16581)** The Hydrology plans for the project have been reviewed and approved. The project is currently under construction. • **Tustin Family Campus** The Hydrology plans for the project have been

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					reviewed and approved. Construction of the project is complete. • **SOCCCD (ATEP)** Grading and drainage plans approved by the City and improvements installed for Phase 1 of the project; however, grading and drainage plans will need to be submitted and approved by the City and improvements installed in conjunction with future phases. • **RSCCD (Sheriff)** Grading and drainage plans approved by the City and improvements installed for the initial Sheriff's Training Facility; however, grading and drainage plans will need to be approved by the City and improvements installed for any future phases. • **Village of Hope** The Hydrology Plan for the project was approved and construction is complete. • ***Master Development Footprint:*** *Drainage study complete. Developers will be required to submit a Hydrology Plan for compliance with the approved drainage study.*
	(3) Detailed drainage studies indicating how, in conjunction with the drainage conveyance systems including applicable swales, channels, street flows, catch basins,	Prior to any grading for any new development.	Project Developer	Tustin Building Division or Public Works Department (Tustin and/or	• **The District** The Hydrology Plan for the project was approved and improvements were installed.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	storm drains, and flood water retarding, building pads are made safe from runoff inundation which may be expected from all storms up to and including the theoretical 100-year flood.			Irvine, as applicable)	• **Tustin Field I** The Hydrology Plan for the project was approved and improvements were installed**.** • **Tustin Field II** The Hydrology Plan for the project was approved and improvements were installed**.** • **Columbus Grove (Tract 16582)** The Hydrology Plan for the project was approved and improvements were installed**.** • **Columbus Square (Tract 16581)** The Hydrology plans for the project have been reviewed and approved. The project is currently under construction. • **Tustin Family Campus** Grading and drainage plans approved by the City and improvements are complete. • **SOCCCD (ATEP)** Grading and drainage plans approved by the City and improvements completed for Phase 1 of the project; however, grading and drainage plans will need to be submitted and approved by the City and improvements installed in conjunction with future phases. • **RSCCD (Sheriff)** Grading and drainage plans approved by the City and improvements completed for the initial

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					Sheriff's Training Facility; however, grading and drainage plans will need to be approved by the City and improvements installed for any future phases. • **Village of Hope** The Hydrology Plan for the project was approved and construction is complete. • **Master Development Footprint:** *TLCP previously prepared a Hydrology study for initial phases of the project. Drainage plans were submitted for City review in Neighborhood E and will be submitted with future entitlement applications for Neighborhoods B, D, and G as determined necessary, including by St. Anton Partners and the Irvine Company for Disposition Parcels 1A-North and 2A, respectively.*
(l)	Prior to approval of any subdivision map (except for financing or conveyance purposes), an agreement will be executed with the OCFCD that provides for the identification and contribution of a project-specific fair share contribution toward the construction of ultimate flood control facilities needed to accommodate build-out of the affected project. Interim flood control facilities may be considered for approval provided such facilities meet OCFCD requirements. Nothing shall preclude the City of Tustin from	Prior to approval of any subdivision map (except for financing or conveyance purposes).	City of Tustin	Tustin Public Works Department, Tustin Community Redevelopment Agency	• **The District** Agreement with OCFCD was executed on June 8, 2004, and is on file with Public Works Department. • **Tustin Field I** Agreement with OCFCD executed on June 8, 2004. • **Tustin Field II** Agreement with OCFCD executed on June 8, 2004.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	transferring the obligation onto other project developers within the project area.				• **Columbus Grove (Tract 16582)** Agreement with OCFCD was executed on June 8, 2004, and is on file with Public Works Department. • **Columbus Square (Tract 16581)** Not applicable to this site. • **SOCCCD (ATEP)** Agreements have been executed for Phase I project; however, SOCCCD may need to contribute a project-specific fair share toward the construction of ultimate flood control facilities needed to accommodate build-out of the affected project if the primary use of future phases is not educational, which would not be exempted from this requirement. • **RSCCD (Sheriff)** Agreements have been executed. • ***Master Development Footprint*** *Any requirements are determined at each entitlement application stage as determined necessary. DDAs have been executed for the St. Anton and Irvine company projects, which include fair share contribution provisions.*
Implementation Measures for Public Services and Facilities					
(m)	General	Prior to final map	Project	Tustin	

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	The City of Tustin and the City of Irvine, each within its respective jurisdiction, shall ensure that adequate fire protection, police protection, libraries, and parks and recreation facilities (including bikeways/trails) needed to adequately serve the reuse plan area shall be provided as necessary. To eliminate any negative impact the project could have on each community's general fund, financing mechanisms including but not limited to developer fees, assessment district financing, and/or tax increment financing (in the event that a redevelopment project area is created for the site), shall be developed and used as determined appropriate by each City. Specifically;	recordation or building permit issuance.	developer	Community Development Department, Police Department, or Parks Department or the City of Irvine, and/or OCFA, as appropriate	
	(1) Applicants for private development projects shall be required to enter into an agreement with City of Tustin or the City of Irvine, as applicable, to establish a fair-share mechanism to provide needed fire and police protection services, libraries, and parks and recreation facilities (including bikeways) through the use of fee schedules, assessment district financing,				• **The District** A DDA was entered into identifying developer responsibilities. City and Vestar have completed formation of Community Facility District (CFD) No. 07-01 for public services (Special Tax B) and for facilities (Tax A). • **Tustin Field I** A DDA was entered into identifying developer responsibilities. City and developer completed

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	Community Facility District financing, or other mechanisms as determined appropriate by each respective city.				formation of CFD No. 04-01 which provided Fair share financing of public services (Special Tax B) and facilities (Tax A). • **Tustin Field II** A DDA was entered into identifying developer responsibilities. City and developer completed formation of CFD No. 04-01 which provided Fair share financing of public services (Special Tax B) and facilities (Tax A). • **Columbus Grove (Tract 16582)** A Cooperative Agreement was entered into with developer indentifying developer responsibilities. City and developer completed formation of CFD 06-1 which provided Fair Share financing of public services (Special Tax B) and facilities (Tax A). An Amendment to Fire Master Plan was approved and installation is complete. • **Columbus Square (Tract 16581)** A Cooperative Agreement was entered into with developer indentifying developer responsibilities. City and developer completed formation of CFD 06-1 which provided Fair Share financing of public services (Special Tax B) and facilities (Tax A). An Amendment to Fire Master Plan was approved and installation is in progress. • **SOCCCD (ATEP)** Pursuant to the Conveyance Agreement, SOCCCD is required to construct all on-site improvements;

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					however, the City has exempted SOCCCD from City CFD funded Tustin Legacy Backbone Infrastructure costs provided that the primary use of the project is educational. Phase 1 of the project has been developed as an educational use; however, SOCCCD adopted a Long Range Plan on November 3, 2008 and submitted a Concept Plan for Phase 3A that may not clearly identify the primary use as educational as the City has informed SOCCCD. As a result SOCCCD may be subject to a required future contribution to Tustin Legacy Backbone Infrastructure for non-educational uses, and is still subject to assessments from outside utility purveyors regardless of primary use of project as well as landscape maintenance easements. • **RSCCD (Sheriff)** The initial Sheriff's Training Facility project is complete. RSCCD capital improvement costs for this project are paid out of fair share backbone infrastructure fees. City has exempted RSCCD from City CFD funded infrastructure costs pursuant to Conveyance Agreement; however, RSCCD is still subject to assessments from outside utility purveyors if determined needed by those agencies. • **Master Development Footprint:** *This development is currently in the planning stage. Any requirements are determined at each entitlement application stage as determined*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					necessary. The City Council initiated establishing Community Facilities District 13-01, a special tax to cover services such as emergency response, police, recreation program, streets and sidewalks.
	(2) Recipients of property through public conveyance process, or other conveyance procedures, shall be required to mitigate any impacts of their public uses of property on public services and facilities. *(As amended by Addendum)*		Property recipients		• **SOCCCD (ATEP)** Pursuant to the Conveyance Agreement, SOCCCD is required to construct all on-site improvements; however, SOCCCD is exempted from Tustin Legacy Backbone Infrastructure costs provided that proposed uses on the project site are educational. Phase 1 of the project has been developed as an educational use and the Phase 3A Concept Plan approved in July 2010 authorized up to 305,000 square feet of uses. In the event non-educational uses are proposed in the future, SOCCCD will be subject to required Fair Share Contributions to Tustin Legacy Backbone Infrastructure for the non-educational uses, and in any event would still be subject to assessments from outside utility purveyors regardless of primary use of the site. • **RSCCD (Sheriff)** The Sheriff's Training Facility project is complete. RSCCD capital improvement costs for this project are paid out of fair share backbone infrastructure fees. City has exempted RSCCD from Tustin Legacy Backbone Infrastructure costs pursuant to a Settlement Agreement; however, RSCCD is still subject to assessments from outside utility purveyors.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Village of Hope** Village of Hope capital improvement costs for this project are paid out of fair share backbone infrastructure fees. City has exempted Village of Hope from Tustin Legacy Backbone Infrastructure costs pursuant to a Conveyance Agreement; however, Village of Hope is still subject to assessments from outside utility purveyors as determined necessary.
(n)	The cities of Tustin and Irvine shall jointly consult and coordinate with the Orange County Parks, Program Management and Coordination Division, in preparation of trail designs for the Peters Canyon and Barranca trails within the reuse plan area. Improvements for each of these trails would be installed upon completion of flood control channel improvements and approval of their joint use by the OC Parks.	Ongoing prior to implementation of Peters Canyon and Barranca trails.	City of Tustin and City of Irvine	Community Development Department (Tustin and/or Irvine, as applicable)	• **Tustin Field I** On-site connection to the future trails has been provided. Cash bonds for future construction upon completion of Orange County trail construction have been submitted. • **Tustin Field II** An Agreement was executed on June 8, 2004, between City and OCFCD. • **Columbus Grove (Tract 16582)** An Agreement was executed between City and OCFCD on June 8, 2004 and included trail improvement along Peters Canyon Channel to the north of the site. • **Columbus Square (Tract 16581)** An Agreement was executed between City and OCFCD on June 8, 2004

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Tustin Family Campus** The Tustin Family Campus is not immediately adjacent to a trail system and did not implement a trail through the site. • **SOCCCD (ATEP)** The SOCCCD is not immediately adjacent to a trail system and did not implement a trail through the ATEP campus site. • **RSCCD (Sheriff)** The RSCCD is not immediately adjacent to the Peters Canyon and Barranca trail system. A Class II bikeway will be installed by the City on Warner Avenue adjacent to the project. • **Orange County Regional Park (OC Parks)** In cooperation with OC Parks, evaluated proposals and recommended a firm to complete the General Development Plan for the 84 acre regional park. • ***Master Development Footprint*** *The Irvine Company (DP 2A) will be commencing, in summer 2013, with the Barranca Parkway and channel improvements between Tustin Ranch Road to west of Aston Street. Future developers will be assigned responsibility for construction of any required remaining trails identified in the Specific Plan and/or in the Tustin Legacy Backbone Infrastructure Program.*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
(o)	Fire Protection/Emergency Medical Services Prior to the first final map recordation or building permit issuance for development (except for financing and re-conveyances purposes), the project developer could be required to enter into an agreement with the City of Tustin or City of Irvine/OCFA, as applicable, to address impacts of the project on fire services. Such agreement could include participation for fire protection, personnel and equipment necessary to serve the project and eliminate any negative impacts on fire protection services.	Prior to the first final map recordation or building permit issuance for development (except for financing and re-conveyances purposes).	Project developer	Tustin Community Redevelopment Agency and the City of Irvine	• **Tustin Field I** DDA 03-01 executed and CFD funded and no additional obligation required. • **Tustin Field II** DDA 03-03 executed and CFD funded and no additional obligation required. • **Columbus Grove (Tract 16582)** Cooperative Agreement entered into and CFD funded and no additional obligation required. • **Columbus Square (Tract 16581)** Cooperative Agreement entered into and CFD funded and no additional obligation required. • **The District** DDA entered into and CFD has been funded and no additional obligation required. • **SOCCCD (ATEP)** The SOCCCD received building permits via the Division of the State Architect for Phase I. No additional Fair Share Contribution toward Tustin Legacy Backbone Infrastructure, including fire facilities required for educational uses. SOCCCD will be responsible for any Fair Share Contributions required for Tustin Legacy Backbone Infrastructure, including the Fire Station in Tustin Legacy for any non-educational uses that occur on the site.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **RSCCD (Sheriff)** The RSCCD received building permits via the Division of the State Architect for the Sheriff's Training Facility project. No additional Fair Share Contribution toward Tustin Legacy Backbone Infrastructure, including fire facilities required for educational uses. • ***Master Development Footprint*** *Future developers will be required to provide their Fair Share Contribution towards Tustin Legacy Backbone Infrastructure, including fire facilities, to address necessary fire protection and emergency medical service needs at Tustin Legacy. St. Anton Partners and the Irvine Company have entered into the DDAs for Disposition Parcels 1A-North and 2A, respectively and have agreed to their fair share contribution.*
(p)	Prior to issuance of building permits, the project developer shall work closely with the OCFA to ensure that adequate fire protection measures are implemented in the project.	Prior to issuance of building permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** Fire Master Plan approved by OCFA and all requirements installed. • **Tustin Field I** Fire Master Plan approved by OCFA and all requirements installed. • **Tustin Field II** Fire Master Plan reviewed and approved by OCFA -installation completed.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Columbus Grove (Tract 16582)** *Fire Master Plan approved and all requirements installed.* • **Columbus Square (Tract 16581)** Fire Master Plan reviewed and approved by OCFA - installation in progress • **Tustin Family Campus** Fire Master Plan reviewed and approved by OCFA - construction is complete. • **SOCCCD (ATEP)** Fire Master Plan for Phase 1 of project reviewed and approved by OCFA - installation complete; however, a complete Fire Master Plan for future phases will need to be reviewed and approved by OCFA. • **RSCCD (Sheriff)** Fire Master Plan reviewed and approved by OCFA for the Sheriff's Training Facility project and installation complete; however, OCFA will need to review and approve any future phases of development. • **Village of Hope** Fire Master Plan approved and installation complete. • ***Master Development Footprint*** *Developers will be required to ensure fire*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					protection measures are implemented with each development, as applicable, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively.
(q)	Prior to issuance of building permits for phased projects, the project developer shall submit a construction phasing plan to the OCFA demonstrating that emergency vehicle access is adequate.	Prior to issuance of building permits for phased projects.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** Fire Master Plan approved by OCFA and all requirements installed. • **Tustin Field I** Fire Master Plan approved by OCFA and all requirements installed. • **Tustin Field II** Fire Master Plan reviewed and approved by OCFA -installation completed. • **Columbus Grove (Tract 16582)** *Fire Master Plan approved and all requirements installed.* • **Columbus Square (Tract 16581)** Fire Master Plan reviewed and approved by OCFA - installation in progress • **Tustin Family Campus** Fire Master Plan reviewed and approved by OCFA - construction is complete. • **SOCCCD (ATEP)** Fire Master Plan for Phase 1 of project reviewed

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					and approved by OCFA - installation complete; however, a complete Fire Master Plan for future phases will need to be reviewed and approved by OCFA. • **RSCCD (Sheriff)** Fire Master Plan reviewed and approved by OCFA for the initial Sheriff's Training Facility project and installation complete; however, OCFA will need to review and approve any future development plans. • **Village of Hope** Fire Master Plan approved and installation complete. • ***Master Development Footprint*** *Future developer(s) will be required to address adequate emergency vehicle access is addressed with each development, as applicable, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively.*
(r)	Prior to the issuance of building permits, the project developer shall submit a fire hydrant location plan for the review and approval of the Fire Chief and ensure that fire hydrants capable of flows in amounts approved by the OCFA are in place and operational to meet fire flow requirements.	Prior to issuance of building permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** Fire Master Plan approved by OCFA and all requirements installed. • **Tustin Field I** Fire Master Plan approved by OCFA and all requirements installed.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Tustin Field II** Fire Master Plan reviewed and approved by OCFA -installation completed. • **Columbus Grove (Tract 16582)** *Fire Master Plan approved by OCFA and all requirements installed.* • **Columbus Square (Tract 16581)** Fire Master Plan reviewed and approved by OCFA - installation in progress *and the project is near completion.* • **Tustin Family Campus** Fire Master Plan reviewed and approved by OCFA - construction is complete. • **SOCCCD (ATEP)** Fire Master Plan for Phase 1 of project reviewed and approved by OCFA - installation complete; however, a complete Fire Master Plan for future phases will need to be reviewed and approved by OCFA. • **RSCCD (Sheriff)** Fire Master Plan reviewed and approved by OCFA for the Sheriff's Training Facility and installation complete; however, OCFA will need to review and approve any future development plans.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Village of Hope** Fire Master Plan approved and installation complete. • ***Master Development Footprint*** *Future developer(s) will be required to address any specific requirements with each development at the building permit application stage, as applicable, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively.*
(s)	Police Protection Prior to issuance of building permits, the project developer shall work closely with the respective Police Department to ensure that adequate security precautions are implemented in the project.	Prior to issuance of building permits.	Project developer	Community Development Department (Tustin and / or Irvine, as applicable)	• **The District** Development plans were reviewed and approved by Tustin Police Department • **Tustin Field I** All development plans were approved by Tustin Police Department • **Tustin Field II** All plans were reviewed and approved by Tustin Police Department. • **Columbus Grove (Tract 16582)** All plans reviewed and approved by the Tustin Police Department. • **Columbus Square (Tract 16581)** All plans were reviewed and approved by the Tustin Police Department.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **SOCCCD (ATEP)** The Tustin Police Department reviewed the Phase 1 project; however, the Tustin Police Department will need to review all future phases. • **RSCCD (Sheriff)** The Tustin Police Department reviewed the project. • **Village of Hope** Development plans received to date were reviewed by Tustin Police Department. • ***Master Development Footprint*** *Developer(s) will be required to address any specific requirements with each development at the entitlement application stage, as applicable. The Tustin Police Department reviewed and approved the plans for St. Anton Partners and the Irvine Company for Disposition Parcels 1A-North and 2A, respectively.*
(t)	<u>Schools</u> Prior to the issuance of building permits, the project developer shall submit to the respective City proof of payment of appropriate school fees adopted by the applicable school district pursuant to Government Code Section 65995. Alternatively, a project developer may	Prior to the issuance of building permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** School fees were collected prior to issuance of building permits. • **Tustin Field I** School fees were collected prior to issuance of building permits.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	enter into a mutual agreement with an applicable school district to provide alternative mitigation that addresses student generation increases. (As amended by Addendum)				• **Tustin Field II** All fees were collected prior to issuance of building permits. • **Columbus Grove (Tract 16582)** School permit fees are collected with issuance of each permit. • **Columbus Square (Tract 16581)** School permit fees are collected with issuance of each building permit. • **SOCCCD (ATEP)** The project is a school district and no fees were required. Future phases involving non-educational users are subject to school fees. • **RSCCD (Sheriff)** The project is part of a school district and no fees were required. • ***Master Development Footprint*** *Developer(s) will be required to pay school fees for each development, as applicable, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively prior to permit issuance.*
(u)	<u>Parks and Recreation</u> Prior to the first final map recordation	Prior to the first final map recorda-tion (except for	Project developer	Tustin Community Development	• **Tustin Field I** A recreation building and park facilities were constructed within a one acre site within the

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	(except for financing and re-conveyance purposes) or building permit issuance for development within the City of Tustin portion of the site, the project developer shall be required to provide evidence of compliance with all requirements and standards of the City of Tustin Park Code.	financing and re-conveyance purposes) or building permit issuance.		Department and Parks and Recreation Department	project (developer was given credit for these improvements) and additional Park in-lieu fees were also paid. Developer also made a Fair Share Contribution towards Tustin Legacy Backbone Infrastructure which included public parks at Tustin Legacy. • **Tustin Field II** A recreation pool area and park facilities were constructed within a one acre site within the project (developer was given credit for these improvements and additional Park in-lieu of fees were paid. Developer also made a Fair Share Contribution towards Tustin Legacy Backbone Infrastructure which included public parks at Tustin Legacy. • **Columbus Grove (Tract 16582)** Parks plan approved and under construction (developer was given a credit for these improvements and additional Park – in lieu fees paid and bonds submitted (on file with City Clerk). Developer also made a Fair Share Contribution towards Tustin Legacy Backbone Infrastructure which included public parks at Tustin Legacy. • **Columbus Square (Tract 16581)** Park plans approved and construction in progress (developer was given credit for these improvements and additional Park– in-lieu fees paid and bonds submitted. Developer also made a Fair Share Contribution towards Tustin Legacy

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					Backbone Infrastructure which included public parks at Tustin Legacy. • **SOCCCD (ATEP)** The project did not require a contribution to park facilities for educational uses. However, any non-educational uses will be required to make a Fair Share Contribution towards Tustin Legacy Backbone Infrastructure which includes public parks at Tustin Legacy. • **RSCCD (Sheriff)** The project did not require a contribution to park facilities. • **Master Development Footprint** Future developer(s) will be required to comply with all requirements and standards of the City of Tustin Quimby Act ordinance with each development, as applicable. Developers will also be required to make e a Fair Share Contribution towards Tustin Legacy Backbone Infrastructure which includes public parks (with a credit for any Quimby Act dedications or fees paid). *St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively will construct a focal park in addition to their respective recreation building and pool area*. • ***Focal Park 4.7 Acres (St. Anton Partners)*** *As part of the development of MCAS Tustin*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					Disposition Package 1A, reviewed the Preliminary Landscape Plan submitted by St. Anton Partners for a proposed 4.7 neighborhood park for public use as part of a 225 multi-unit development.
(v)	Prior to the first final map recordation or building permit issuance within the City of Irvine portion of the site, the project developer shall be required to provide evidence of compliance with all requirements and standards of the City of Irvine Park Code.	Prior to the first final map recordation (except for financing and re-conveyance purposes) or building permit issuance.	Project developer	Irvine Community Development Department	Not applicable to any development projects at Tustin Legacy in Tustin.
(w)	Prior to the first concept plan for tentative tract map in the City of Tustin, the project developer shall file a petition for the creation of a landscape maintenance district for the project area with the City of Tustin. The district shall include public neighborhood parks, landscape improvements, and specific trails (Barranca only), the medians in arterials, or other eligible items mutually agreed to by the petitioner and the City of Tustin. In the event that a district is not established prior to issuance of the first building permit, maintenance of items mentioned above shall be the responsibility of a community association.	Prior to the first concept plan for tentative tract map.	Project developer	Tustin Public Works Department; Tustin Community Redevelopment Agency	• **The District** Landscaped Maintenance obligations of the developer immediately adjacent to the project are secured by a landscape maintenance agreement (parkways adjacent to the site) and maintenance conditions have been included and recorded with CC&Rs. City and developer have completed formation of CFD No. 07-01 which imposes a public service assessment for maintenance of medians, parks, landscaping and other public services (Special Tax B). • **Tustin Field I** Landscaped Maintenance obligations of the developer immediately adjacent to the project are secured by a landscape maintenance agreement (parkways adjacent to the site) and maintenance

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					conditions have been included and recorded with CC&Rs. City and developer have completed formation of CFD No. 04-01 which imposes a public service assessment for maintenance of medians, parks, landscaping and other public services (Special Tax B). • **Tustin Field II** Landscaped Maintenance obligations of the developer immediately adjacent to the project are secured by a landscape maintenance agreement (parkways adjacent to the site) and maintenance conditions have been included and recorded with CC&Rs. City and developer have completed formation of CFD No. 04-01 which imposes a public service assessment for maintenance of medians, parks, landscaping and other public services (Special Tax B). • **Columbus Grove (Tract 16582)** Landscaped Maintenance obligations of the developer immediately adjacent to the project are secured by a landscape maintenance agreement (parkways adjacent to the site) and maintenance conditions have been included and recorded with CC&Rs. City and developer have completed formation of CFD No. 06-01 which imposes a public service assessment for maintenance of medians, parks, landscaping and other public services (Special Tax B).

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Columbus Square (Tract 16581)** Landscaped Maintenance obligations of the developer immediately adjacent to the project are secured by a landscape maintenance agreement (parkways adjacent to the site) and maintenance conditions have been included and recorded with CC&Rs. City and developer have completed formation of CFD No. 06-01 which imposes a public service assessment for maintenance of medians, parks. landscaping and other public services (Special Tax B). • **Tustin Family Campus** Orange County Social Services is responsible for maintenance of parkway landscaping adjacent to their property as a condition of the City's design review approval of their project and subject to the Agreement between the City and County for the Tustin Family Center. Public agencies have been determined by City Council policy to be exempt from any CFD special taxes for public services provided the uses on said sites are public uses. • **SOCCCD (ATEP)** SOCCCD will be responsible for maintenance of parkway landscaping adjacent to their property as a condition of the City's concept plan and design review approvals of their project (by individual phases) and subject to the Conveyance Agreement between the City and SOCCCD. A phase 1 Landscape Maintenance Agreement has been entered into. Public agencies have been

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					determined by City Council policy to be exempt from any CFD special taxes for public services provided the uses on said sites are public uses. To the extent non-educational uses are proposed and approved on the site in the future on the project site, an obligation for such uses to contribute to any public service costs for maintenance of medians, parks. landscaping and other public services will be required. • **RSCCD (Sheriff)** RSCCCD will be responsible for maintenance of parkway landscaping adjacent to their property as condition of the City's reviews and approvals. Public agencies have been determined by City Council policy to be exempt from any CFD special taxes for public services provided the uses on said sites are public uses. • ***Master Development Footprint*** *Developer(s) will be required to be responsible for maintenance of parkway landscaping adjacent to development sites as a condition imposed at the entitlement stage. Further, each project will be required to participate in any future CFD, including CFD 13-01, imposed on the property to cover infrastructure and for maintenance of medians, parks, landscaping and other public services as a condition imposed at the entitlement stage, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively.*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
(x)	Prior to approval of any subdivision map (except for financing or conveyance purposes), an agreement will be executed with the following agencies for the associated trail improvements: a. County Parks — identification of a project-specific fair share contribution toward the installation of necessary regional bikeway trail improvements within Peters Canyon Channel, to be installed in conjunction with the County of Orange's other channel improvements;	Prior to approval of any subdivision map (except for financing or conveyance purposes).	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **Tustin Field I** City entered into an Agreement with the OCFCD and Orange County Parks executed on June 8, 2004 (on file with PW) which addresses these obligations. Developer has also made their Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program and entered into an Acquisition and Funding Agreement associated with CFD 04-01. • **Tustin Field II** City entered into an Agreement with the OCFCD and Orange County Parks executed on June 8, 2004 (on file with PW) which addresses these obligations. Developer has also made their Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program and entered into an Acquisition and Funding Agreement associated with CFD 04-01. • **Columbus Grove (Tract 16582)** City entered into an Agreement with the OCFCD and Orange County Parks executed on June 8, 2004 (on file with PW) which addresses these obligations. Developer has also made their Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program and entered into an Acquisition and Funding Agreement associated with CFD 06-01. • **Columbus Square (Tract 16581)** City entered into an Agreement with the OCFCD

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					and Orange County Parks executed on June 8, 2004 (on file with PW) which addresses these obligations. Developer has also made their Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program and entered into an Acquisition and Funding Agreement associated with CFD 06-01. • **SOCCCD (ATEP)** Requirement fulfilled for Phase I project. Any future non-educational users will be subject to a project specific Fair Share Contribution toward the installation of necessary regional bikeway trail improvements included in the Tustin Legacy Backbone Infrastructure Program. • **RSCCD (Sheriff)** Requirement fulfilled. Public uses exempt by City Council policy from a fair share contribution towards these improvements, so no agreement necessary. • **Village of Hope** Requirement fulfilled. Public and non-profit uses exempt by City Council policy from a fair share contribution towards these improvements, so no agreement is necessary. • ***Master Development Footprint*** *Future developer(s) will be required to make a Fair Share Contribution towards these*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					improvements, as applicable, and at future entitlement application stages of the project, the requirement will also be imposed, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively.
	b. City of Tustin — the identification of a project-specific fair share contribution toward the installation of Class II bicycle trails through the project site. For the area of the site northeast of Irvine Center Drive, a separate agreement would be required to ensure the provision of a bikeway right-of-way easement, and design and construction of a bike trail along the SCRRA/OCTA rail tracks from Harvard Avenue westerly to the Peters Canyon Channel. In addition, project developers of the areas of the site southeast of the Peters Canyon Channel would need to accommodate access to both the Peters Canyon Trail and the trail adjacent to the SCRRA/OCTA tracks in any project site design including dedication of any necessary recreational trail easements;	Prior to the first final map recordation (except for financing and re-conveyance purposes) or building permit issuance.	Project developer	Tustin Community Development Department and/or SCRRA/OCTA, as appropriate	• **The District** City entered into DDA with developer which addresses these obligations. Developer has also made their Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program and entered into an Acquisition and Funding Agreement associated with CFD 07-01. Developer has completed an off-site bikeway trail on the north side of Barranca Parkway between Jamboree Road and Tustin Ranch Road. • **Tustin Field I** City entered into a DDA with developer which addresses these obligations. Developer has also made their Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program and entered into an Acquisition and Funding Agreement associated with CFD 04-01. The specific Bike trail on the north side of the project was designed and approved. The public bid was awarded December, 2005 and the project was completed in September 2006. • **Tustin Field II** City entered into a DDA with developer which

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					addresses these obligations. Developer has also made their Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program and entered into an Acquisition and Funding Agreement associated with CFD 04-01. The specific on-site pedestrian access from the site to future trail along Peters Canyon is complete. *Construction of the future Peters Canyon Trail within Tustin will be the responsibility of one or more future developers as determined through future entitlements with other developers of the former Master Developer footprint. The portion within Irvine is a Moffett Meadows and Marble Mountain (Lennar) responsibility that was imposed on this developer by the City of Irvine with their entitlements.* • **Columbus Grove (Tract 16582)** City entered into a Cooperative Agreement with developer which addresses the obligations. Developer has also made their current Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program and entered into an Acquisition and Funding Agreement associated with CFD 06-01. Responsibility for actual construction of the trail on the North side of Tustin Field 1 and on the west sided of Tustin Field 1 and II has been placed on others. • **Columbus Square (Tract 16581)** City entered into a Cooperative Agreement with developer which addresses these obligations.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					Developer has also made their Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program and entered into an Acquisition and Funding Agreement associated with CFD 06-01. Responsibility for actual construction of the trail on the North side of Tustin Field 1 and on the west sided of Tustin Field 1 and II has been placed on others. • **SOCCCD (ATEP)** Public uses are exempt by City Council policy from Fair Share Contributions towards the Tustin Legacy Backbone Infrastructure Program and any infrastructure assessments imposed by Tustin Legacy CFD's. Since Phase 1 is a public use, no obligations required. .Any future non-educational users will be subject to a project-specific Fair Share Contribution toward the installation of Class II bicycle trails through the larger Tustin Legacy project and any applicable CFD assessments for said improvements. • **RSCCD (Sheriff)** Public uses are exempt by City Council policy from Fair Share Contributions towards the Tustin Legacy Backbone Infrastructure Program and any infrastructure assessments imposed by Tustin Legacy CFD's. The RSCCCD project is a public use, no obligations required. • ***Master Development Footprint:*** *Future developer(s) will be responsible for any required*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program as a condition also imposed at the entitlement stage. Further, projects will be required to participate in any future CFD imposed on the property(ies) to cover infrastructure, maintenance and public services as a condition imposed at the entitlement stage, as applicable, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively.
	c. City of Tustin — the identification of a project specific fair share contribution toward installation of Class I bikeway trail improvements northerly of Barranca Parkway after completion of the Barranca Channel improvements. For proposed developments adjacent to Barranca Channel, separate agreements would be required to ensure the establishment of a bikeway right-of-way easement between Jamboree Road and Red Hill Avenue.	Prior to the first final map recordation (except for financing and re-conveyance purposes) or building permit issuance.	Project developer	Tustin Community Development Department	• **The District** A Fair Share Contribution was made by developer as condition of the DDA and funding provided partially from CFD 07-01 proceeds. Class I bikeway along Barranca Parkway was constructed by the project developer. • **Tustin Field I** A Fair Share Contribution was made by developer as condition of the DDA and with CFD 04-01. Actual improvements constructed by others. • **Tustin Field II** A Fair Share Contribution was made by developer as condition of the DDA and with CFD 04-01. Actual improvements constructed by others. • **Columbus Grove (Tract 16582)** A Fair Share Contribution was made by developer

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					as condition of the DDA and with CFD 04-01. Actual improvements constructed by others. • **Columbus Square (Tract 16581)** A Fair Share Contribution was made by developer as condition of the DDA and with CFD 04-01. Actual improvements constructed by others. • **Tustin Family Campus** Public uses are exempt by City Council policy from Fair Share Contributions towards the Tustin Legacy Backbone Infrastructure Program and any infrastructure assessments imposed by Tustin Legacy CFD's. Since Tustin Family Campus is a public use, no obligations required. • **SOCCCD (ATEP)** Public uses are exempt by City Council policy from Fair Share Contributions towards the Tustin Legacy Backbone Infrastructure Program and any infrastructure assessments imposed by Tustin Legacy CFD's. Since Phase 1 is a public use, no obligations required. Any future non-educational users will be subject to a project-specific Fair Share Contribution toward the improvements through the larger Tustin Legacy project and any applicable CFD assessments for said improvements. • **RSCCD (Sheriff)** Public uses are exempt by City Council policy from Fair Share Contributions towards the

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					Tustin Legacy Backbone Infrastructure Program and any infrastructure assessments imposed by Tustin Legacy CFD's. The RSCCCD project is a public use, no obligations required. • **Village of Hope** Public uses are exempt by City Council policy from Fair Share Contributions towards the Tustin Legacy Backbone Infrastructure Program and any infrastructure assessments imposed by Tustin Legacy CFD's. The RSCCCD project is a public use, no obligations required. • ***Master Development Footprint*** *Future developer(s) will be required to be responsible for a Fair Share contribution towards construction of Tustin Legacy Backbone Infrastructure which will include trails and any required CFD assessments at the entitlement application stage, as applicable, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively. In addition to funding their fair-share, the Irvine Company will also commence construction of the Barranca Parkway and channel improvements by summer 2013 from Tustin Ranch Road to west of Aston Street.*
Mitigation Measures for Aesthetics					

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
Vis-1	In conjunction with any zoning ordinance amendments to implement the reuse plan in Tustin or Irvine, an urban design plan shall be adopted to provide for distinct and cohesive architectural and landscape design, features and treatments, as well as harmony with adjacent landscaping. The urban design plan shall have the following elements: • landscaping concept and master signage plan; • design review and approval process; • limits on development intensity for each specific land use; • limits on height of structures and lot coverage; • minimum site building setbacks; • minimum on-site landscaping requirements; • buffering requirements, including berms, masonry walls, and landscaping; • lighting regulations, including regulations ensuring that exterior lighting does not • negatively impact surrounding property; • screening regulations for mechanical equipment and outside storage; and, • site signage requirements, including	Prior to the first final map recordation (except for financing and re-conveyance purposes) or building permit issuance.	City of Tustin and City of Irvine	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** Included in construction plans – installation complete. • **Tustin Field II** Included in construction plans – installation completed. • **Columbus Grove (Tract 16582)** Included in construction plans – installation in progress. • **Columbus Square (Tract 16581)** Included in construction plans – installation in progress. • **SOCCCD (ATEP)** Phase 1 of the project was reviewed for compliance with the requirements of the MCAS Tustin Specific Plan; however, all future phases will need to be reviewed for compliance with the MCAS Tustin Specific Plan. • **Village of Hope** Included in construction plans – installation complete. • **Tustin Family Campus** Included in construction plans – installation complete.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	sign permit approval.				• **RSCCD (Sheriff)** The Sheriff's Training Facility project was reviewed for compliance with the requirements of the MCAS Tustin Specific Plan, and any future development phases will also be subject to compliance with the MCAS Tustin Specific Plan. • ***Master Development Footprint*** *Future developer(s) will be responsible for any required urban design plan including cohesive architectural and landscape design. St. Anton and the Irvine Company have included these design elements in their construction drawings that are currently in plan check.*
Mitigation Measures for Cultural and Paleontological Resources					
Hist-1	Historic American Building Survey (HABS) - DON will complete the appropriate recordation for hangars 28 and 29 and the discontiguous historic district prior to conveyance of any property within the discontiguous historic district and shall ensure that copies of the recordation are made available to SHPO, the City of Tustin, and any local or other archive facilities designated by SHPO.	Prior to conveyance to City of Tustin	Department of the Navy	Department of the Navy	Complete
Hist-2	Curation - within 30 days of the	Within 30 days of	Department of	Department of the	Complete

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	execution of the MOA, Department of the Navy will distribute copies of plans and architectural drawings and other archival materials and records, as available, concerning the layout and the buildings and structures that made up the original Navy lighter-than-air blimp facility to a local curation facility. The City of Tustin or its designee will also be provided with copies of these materials.	the execution of the MOA	the Navy	Navy	
Arch-1	Prior to issuance of grading permits, the four-acre parcel currently outside the boundaries of the Air Station along Harvard Avenue shall be surveyed to determine the presence/absence of archaeological resources prior to grading.	Prior to issuance of grading permits.	Project developer	Tustin Community Development Department	• **Tustin Field I (location of 4 acre site)** A paleontologist contract was executed prior to grading. During grading, a cultural resource was exposed and handled per plan. The monitoring of the site and evaluation of the object was done by SWCA in contract with JLH and all correspondence on file with CDD.
Arch-2	Prior to issuance of grading permits, the cities of Tustin and Irvine shall each require applicants of individual development projects to retain, as appropriate, a county-certified archaeologist. If buried resources are found during grading within the reuse plan area, a qualified archaeologist would need to assess the site significance and perform the appropriate mitigation. The Native American view point shall be considered during this process. This	Prior to issuance of grading permits.	Project Developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **Tustin Field I** During grading, archeological resources were exposed and handled per plan paleontologist plan on file with CDD • **Tustin Field II** Copy of contract and paleontologist plan on file with CDD • **The District** Copy of contract and paleontologist plan on file with CDD

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	could include testing or data recovery. Native American consultation shall also be initiated during this process.				• **Columbus Grove (Tract 16582)** Copy of contract and paleontologist plan on file with CDD • **Columbus Square (Tract 16581)** Copy of contract and paleontologist plan on file with CDD • **RSCCD (Sheriff)** The RSCCD retained an archaeologist for the Sheriff's Training Facility project construction; however, an archaeologist will also need to be obtained for construction of any future phases. • **SOCCCD (ATEP)** The SOCCCD retained an archaeologist for project construction of Phase 1; however, an archaeologist will also need to be obtained for construction of any future phases. • **Village of Hope** The Village of Hope retained an archaeologist for project construction. • ***Master Development Footprint*** *Future developer(s) will be required to retain an archeologist for each project, as applicable, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively. The City has retained an archaeologist for the duration of*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					the Tustin Ranch Road project from Warner Avenue to Walnut Avenue.
AR-1-	Prior to issuance of a grading permit, the City of Tustin shall retain, as appropriate, a county-certified archaeologist. If buried resources are found during grading within the portion of the site located north of Edinger Avenue, a qualified archaeologist would need to assess the site significance and perform the appropriate mitigation. The Native American viewpoint shall be considered during this process. This could include testing or data recovery. Native American consultation shall also be initiated during this process. (As amended by Final Supplement #1)	Prior to issuance of a grading permit (for the Tustin Ranch Road Extension project)	City of Tustin	Community Development Department	• ***Master Development Footprint*** *The City has retained an archaeologist for the duration of the Tustin Ranch Road project from Warner Avenue to Walnut Avenue. The grading work at Tustin Ranch Road is completed and the roadway improvements currently under construction with expected completion by Fall 2013.*
Hist-3	As specified in the MOA, a substantive effort will be made to determine whether there is an economically viable adaptive use of Hangar 28 and Hangar 29.	Ongoing, prior to making substantial changes to Hangar 28 or Hangar 29.	City of Tustin and County of Orange	Tustin Community Redevelopment Agency	*The Orange County Board of Supervisors approved a concept plan to reuse Hangar 28 and the surrounding area as an 84.5-acre regional park that includes a variety of active and passive recreational uses such as picnic areas, trails, plazas, and courts for basketball, volleyball, tennis and handball. The City is currently in the process of assessing adaptive reuse of Hangar 29.*
Hist-4	If the marketing effort identifies an economically viable adaptive use of either of the complexes, that complex will be encumbered by a historic	Prior to making substantial changes to Hangar 28 or	Department of the Navy	Tustin Community Development Department	*The Orange County Board of Supervisors approved a concept plan to reuse Hangar 28 and the surrounding area as an 84.5-acre regional park that includes a variety of active and passive recreational uses such*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	preservation covenant. In the case of the Hangar 28 complex, these measures shall balance the needs of the adaptive use and the needs for effective operation of the Federal Lands to Parks or Historic Monument programs.	Hangar 29.			*as picnic areas, trails, plazas, and courts for basketball, volleyball, tennis and handball. The City is currently in the process of assessing adaptive reuse of Hangar 29.*
Hist-5	If NPS and/or SHPO determine that, despite a marketing effort that complies with the terms of the MOA or as agreed to by the City of Tustin/County of Orange, NPS, and/or SHPO, an economically viable adaptive use of the Hangar 28 complex was not identified, NPS and/or SHPO shall promptly advise Department of the Navy and notify the City of Tustin/County of Orange that the following measures are required.				
	a. Written History - The City of Tustin/County of Orange shall prepare an illustrated history report on MCAS TUSTIN, with emphasis on the initial construction of the Air Station and its World War II Navy lighter-than-air operations.	Prior to making substantial changes to Hangar 28.	Department of the Navy	NPS, SHPO, and Department of the Navy	Cooperative efforts between the City and the County are completed. The completed written history is on file with the City of Tustin and County of Orange.
	b. Exhibit - The City of Tustin/County of Orange shall prepare a professional-quality illustrated interpretive exhibit with emphasis				Cooperative efforts between the City and the County are completed. The finished interpretive exhibits are available for use and rotation for public displays from the City of Tustin and County of Orange.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	on the initial construction of the air station and its World War II Navy lighter-than-air operations.				
	c. Interpretive Video - The City of Tustin/County of Orange shall prepare a professional-quality documentary video and shall undertake a one-time distribution and outreach program for the documentary video.				Cooperative efforts between the City and the County are completed. Copies of the finished interpretive video are on file with the City of Tustin and County of Orange and on the City's web site at tustinca.org.
Paleo-1	The cities of Tustin and Irvine shall each require applicants of individual development projects to comply with the requirements established in a PRMP prepared for the site, which details the methods to be used for surveillance of construction grading, assessing finds, and actions to be taken in the event that unique paleontological resources are discovered during construction.	Prior to issuance of grading permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** A copy of contract and paleontologist plan are on file with CDD • **Tustin Field I** SWCA Environmental consultant were retained by JLH during grading (contract is on file with CDD) • **Tustin Field II** SWCA Environmental consultant were retained by JLH during grading (contract is on file with CDD) • **Columbus Grove (Tract 16582)** A copy of contract and paleontologist plan are on file with CDD • **Columbus Square (Tract 16581)** A copy of contract and paleontologist plan are on file with CDD

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **SOCCCD (ATEP)** The SOCCCD shall be required to retain a paleontologist for all phased ATEP construction. • **RSCCD (Sheriff)** The RSCCD retained a paleontologist for the Sheriff's Training Facility project construction; however, a paleontologist will also need to be obtained for construction of any future phases. • **Village of Hope** The Village of Hope retained a paleontologist for the project construction. • **Tustin Family Campus** The County of Orange retained a paleontologist for the project construction. • ***Master Development Footprint*** *Future developer(s) will be required to retain a paleontologist for each project, as applicable. A copy of each contract and paleontologist plan will be required to be kept on file at the City, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively. The City has retained an paleontologist for the duration of the Tustin Ranch Road project from Warner Avenue to Walnut Avenue.*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
Paleo-2	Prior to the issuance of a grading permit, project applicants shall provide written evidence to each city, that a county-certified paleontologist has been retained to conduct salvage excavation of unique paleontological resources if they are found.	Prior to issuance of grading permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** Copy of contract and paleontologist plan on file with CDD • **Tustin Field I** The contract with SWCA included the requirements (contract on file with CDD) • **Tustin Field II** The contract with SWCA included the requirements (contract on file with CDD) • **Columbus Grove (Tract 16582)** Copy of contract and paleontologist plan on file with CDD • **Columbus Square (Tract 16581)** Copy of contract and paleontologist plan on file with CDD • **SOCCCD (ATEP)** The SOCCCD shall be required to retain a paleontologist for all phased ATEP construction. • **RSCCD (Sheriff)** The RSCCD retained a paleontologist for the initial Sheriff's Training Facility project construction; however, a paleontologist will also need to be obtained for construction of any future phases.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Village of Hope** The Village of Hope retained a paleontologist for the project construction. • **Tustin Family Campus** The County of Orange retained a paleontologist for the project construction. • ***Master Development Footprint*** *Future developer(s) will be required to retain a paleontologist for each project, as applicable, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively. The City has retained a paleontologist for the Tustin Ranch Road project from Warner Avenue to Walnut Avenue. A copy of each contract and paleontologist plan will be required to be kept on file at the City.*
PR-1	The City of Tustin shall comply with the requirements established in the Paleontological Resources Management Plan (PRMP) prepared for the Base, which details the methods to be used for surveillance of construction grading, assessing finds, and actions to be taken in the event that unique paleontological resources are discovered during construction. *(As amended by Final Supplement #1 - for the Tustin Ranch*	During grading and construction activities.	City of Tustin	Community Development Department	• ***Master Development Footprint*** *Future developer(s) will be required to retain a paleontologist for each project and implement methods to be used in the PRMP if unique resources as discovered, as applicable, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively. The City has retained a paleontologist for the Tustin Ranch Road project from Warner Avenue to Walnut Avenue. A copy of each contract and paleontologist plan*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	Road Extension project)				*will be required to be kept on file at the City.*
PR-2	Prior to the issuance of a grading permit, the City shall retain a county-certified paleontologist to conduct salvage excavation of unique paleontological resources if they are found. *(As amended by Final Supplement #1- for the Tustin Ranch Road Extension project)*	Prior to the issuance of a grading permit.	City of Tustin	Community Development Department	• ***Master Development Footprint*** *Future developer(s) will be required to retain a paleontologist for each project, as applicable, including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively. The City has retained a paleontologist for the Tustin Ranch Road project from Warner Avenue to Walnut Avenue. A copy of each contract and paleontologist plan will be required to be kept on file at the City.*
Mitigation Measures for Biological Resources					
Bio-1	The project proponents of any development affecting jurisdictional waters of the U.S. or vegetated wetlands shall obtain Section 401, Section 404, Section 1602, and other certifications, approvals and permits as necessary. Copies of the necessary state and federal permits shall be provided to the City prior to the issuance of mass or grading permits for grading activities impacting jurisdictional areas. A replacement ratio for affected wetland resources shall be determined in consultation with regulatory agencies as part of the permitting process and shall be no less	Prior to issuance of grading permits or any public improvements within pond turtle habitat.	Project developer	Tustin Community Development Department and/or OCFCD, as appropriate	• **The District** Required permits have been obtained. • **SOCCCD (ATEP)** Regional permits not required for Phase 1of project; however, applicable regional permits for mitigation of any jurisdictional waters will be obtained prior to development of future phases, as applicable. • **RSCCD (Sheriff)** Required permits have been obtained. • ***Master Development Footprint*** *TLCP previously obtained the applicable 401,*

	Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	than 1:1 replacement of function and value. Additional criteria and requirements will be as follows: • Create (establish), restore, or enhance wetland/riparian habitats on-site to the maximum extent practicable to minimize and replace the on-site loss of USACE and CDFG jurisdictional acreage and function, or off-site as may be permitted by the USACE and CDFG. • To return jurisdictional habitats that are temporarily disturbed during construction to pre-construction conditions. To provide for maintenance, management and monitoring of the mitigation site or sites for a minimum of three years as determined through the permitting process. *(As amended by Addendum)*				*404, and 1602 permits; however, the proportionate portions of the permit responsibilities affecting construction of Peters Canyon Channel improvements between Tustin City limits southerly to Barranca Parkway were transferred directly from TLCP to Tustin Vista Partners, LLC, a Delaware limited liability company, on May 6, 2008. Upon termination of the DDA between the City and TLCP in July 2010, the 401, 404, and 1062 permits affecting the Master Development Footprint in the City of Tustin were assigned to the City of Tustin until such time the permit(s) and/or applicable mitigation responsibilities are assigned to subsequent developer(s) in the future.*
Bio-2	Based on consultations with CDFG, City of Tustin, or a project proponent as applicable, an off-site relocation site for southwestern pond turtles captured on site shall be identified that is as close to the Reuse Plan area as possible and that is sustainable in perpetuity.	Prior to issuance of grading permits or any public improvements within pond turtle habitat.	City of Tustin and/or project developer, as appropriate	Tustin Community Development Department	• **The District** CDFG approved a pond turtle relocation and mitigation plan for the project; all turtles have been relocated. • **SOCCCD (ATEP)** The SOCCCD would be responsible for

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	(No appropriate habitat in the City of Tustin is available for relocation.) Potential relocation sites include but are not limited to a turtle pond and relocation site located in upper Shady Canyon within the Orange County Nature Preserve; or the San Joaquin Marsh, which is managed by UC Irvine, Irvine Ranch, and the Orange County Water District. Some property owners and public agencies may be adverse to the relocation of species of special concern onto their property or jurisdiction, and it would be speculative to identify actual sites prior to completion of consultation with CDFG and with potential property owners and/or appropriate public agencies. A relocation and mitigation plan shall be prepared by a qualified biologist for approval by the CDFG. The relocation and mitigation plan shall include the following: • Requirement for focused surveys for southwestern pond turtles prior to construction activities and submittal of survey report to the CDFG. • Identification of specific relocation site within the Newport Bay watershed. • Methodology for trapping, capture, recordation and release of				arrangements with CDFG for relocation of any found turtles. • **RSCCD (Sheriff)** The RSCCD would be responsible for arrangements with CDFG for relocation of any found turtles. • **Master Development Footprint** TLCP previously completed a pond turtle survey and CDFG approved a pond turtle relocation and mitigation plan for the project; all turtles have been relocated.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	southwestern pond turtles. • Requirement of biological monitoring during construction and requirement for capture and relocation by a qualified biologist of any additional southwestern pond turtles observed during construction. *(As amended by Addendum)*				
Bio-3	Permits from the CDFG shall be obtained for live-capture of the turtles and for transporting them to the relocation site.	Prior to issuance of grading permits or any public improvements within pond turtle habitat.	Project developer	Tustin Community Development Department	• **The District** CDFG approved a pond turtle relocation and mitigation plan for the project; all turtles have been relocated. • **SOCCCD (ATEP)** The SOCCCD would be responsible for arrangements with CDFG for relocation of any turtles found. • **RSCCD (Sheriff)** The RSCCD would be responsible for arrangements with CDFG for relocation of any found. • **Master Development Footprint** TLCP previously completed a pond turtle survey and CDFG approved a pond turtle relocation and mitigation plan for the project; all turtles have been relocated.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
Bio-4	A project proponent shall negotiate with the CDFG or other agency or organization as appropriate, for relocation of turtles and/or contribution of funds to improve, restore, or create a relocation site as turtle habitat, in conjunction with any regulatory permits necessary. *(As amended by Addendum)*	Ongoing	City of Tustin and/or project developer, as appropriate	Tustin Community Development Department	• **The District** CDFG approved a pond turtle relocation and mitigation plan for the project; all turtles have been relocated. • **SOCCCD (ATEP)** The SOCCCD would be responsible for arrangements with CDFG for relocation of any turtles found. • **RSCCD (Sheriff)** The RSCCD would be responsible for arrangements with CDFG for relocation of any found. • **Master Development Footprint** TLCP previously completed a pond turtle survey and CDFG approved a pond turtle relocation and mitigation plan for the project; all turtles have been relocated.
Mitigation Measures for Traffic/Circulation					
T/C-1	Construction In conjunction with the approval of a site development permit, the City of Tustin and the City of Irvine, as applicable (for that portion of the reuse plan within Irvine), shall require each developer to provide traffic operations and control	Prior to site development permit.	Project developer	Public Works Department (Tustin or Irvine, as applicable)	• **The District** Traffic Management Plan reviewed and approved and construction has been completed. • **Tustin Field I** Traffic Management Plan reviewed and approved and construction has been completed.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	plans that would minimize the traffic impacts of proposed construction activity. The plans shall address roadway and lane closures, truck hours and routes, and notification procedures for planned short-term or interim changes in traffic patterns. The City of Tustin and the City of Irvine, as applicable, shall ensure that the plan would minimize anticipated delays at major intersections. Prior to approval, the City of Tustin or the City of Irvine, as applicable shall review the proposed traffic control and operations plans with any affected jurisdiction.				• **Tustin Field II** Traffic Management Plan reviewed and approved and construction has been completed • **Columbus Grove (Tract 16582)** Traffic management plan reviewed and approved and construction has been completed. • **Columbus Square (Tract 16581)** Traffic improvement plan reviewed and approved and construction has been completed. • **Tustin Family Campus** Routes provided to and approved by Public Works. • **SOCCCD (ATEP)** Routes provided to and approved by Public Works for Phase 1 of the project; however, all routes for future phases will need to be provided to and approved by Public Works. • **RSCCD** Routes provided to and approved by Public Works for the initial Sheriff's Training Facility project; however, all routes for future phases will need to be provided to and approved by Public Works. • ***Master Development Footprint*** *Future developer(s) will be required to provide traffic management plan to be reviewed and approved by the City prior to construction activity.*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
T/C-2	Development The City of Tustin and the City of Irvine, as applicable (for that portion of the reuse plan area within Irvine), shall ensure that the arterial intersection improvements required in 2005 and 2020 and as indicated in Tables 4.12-7 and 4.12-9 of the Final EIS/EIR are implemented for their respective jurisdictions according to the cumulative ADT thresholds identified in each table and according to the fair share basis noted. The ADT threshold represents the traffic volume which would result in an impact and the fair share percentage reflects the percent of the traffic impact resulting from the reuse generated traffic. In some cases, reuse traffic would generate 100 percent of the impact, thereby assuming full financial responsibility for the identified improvements. In other cases, reuse traffic would generate only a fraction of the traffic impacting the intersection and financial responsibility would correspond.	Prior to issuance of certificates of occupancy.	Project developer	Public Works Department (Tustin or Irvine, as applicable)	MCAS Tustin Specific Plan "Trips" are monitored for compliance with ADT Thresholds by Public Works Department on an ongoing basis as projects are entitled. • **The District** Final traffic study identified cumulative ADTs; the project ADT does not exceed thresholds identified in the FEIS/EIR as amended by the Supplemental Agreement between the Cities of Irvine and Tustin dated February 22, 2001, for off-site mitigation at arterial intersections. The traffic study determined the need for a traffic signal at Park Avenue and District Drive. Construction of this traffic signal is complete. • **Tustin Field I** Traffic Management Plan reviewed and approved and construction is complete • **Tustin Field II** Staff received final traffic study addressing cumulative ADT thresholds and fair share responsibility for mitigation improvements; traffic study determined need for traffic signal at Edinger Avenue/Aviation Drive and at Moffett Avenue/Meridian Street. Construction is complete. • **Columbus Grove (Tract 16582)** Staff received final traffic study addressing cumulative ADT thresholds and fair share responsibility for mitigation improvements; traffic

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					study determined need for modification of the traffic signal at Harvard Avenue and Moffet Avenue. Plans for off-site improvement reviewed and approved. Construction is complete. • **Columbus Square (Tract 16581)** Staff received final traffic study addressing cumulative ADT thresholds and fair share responsibility for mitigation improvements; traffic study determined need for two (2) traffic signals at Kensington Park Drive and Georgia Street and Valencia/Columbus Square Street; Improvement Plans reviewed and approved. Construction is complete. • **SOCCCD (ATEP)** The trip count for the ATEP is based on square feet. The project is within the "Learning Village" trip budget identified in the MCAS Tustin Specific Plan allocated to Phase 1 of the project; however, trip counts for future phases will need to be evaluated and approved by the City. • **RSCCD (Sheriff)** The trip counts for the initial Learning Village are based on square feet. The Sheriff's Training Facility project, in addition to other approved projects within the Education Village (ATEP), is within the EIS/EIR trip budget. Any future phases will need to comply with the maximum development permitted on the site by the ADT budget.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• ***Master Developer Footprint*** *Developers will be required to provide traffic studies for each neighborhood, as applicable, as planned are developed.*
T/C-3	The City of Tustin and the City of Irvine, as applicable (for that portion of the reuse plan area within Irvine), shall contribute, on a fair share basis, to improvements to freeway ramp intersections as listed in Table 4.12-8 of the Final EIS/EIR. The method of implementing improvements, e.g., restriping, ramp widening, shall be based on special design studies, in association with Caltrans.	See Table 4.12-8 of the Final EIS/EIR for each specific triggering mechanism.	Project developer	Public Works Department (Tustin or Irvine, as applicable)	• **The District (Vestar/Kimco)** The DDA addresses developers required Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program, as well as an implementing Infrastructure Construction and Payment Agreement (as amended), entitlement conditions of approval and CFD No. 07-01. Required improvements have been completed. • **Tustin Field I** The DDA addresses developers required Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program, entitlement conditions of approval and CFD No. 04-01. • **Tustin Field II** The DDA addresses developers required Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program, entitlement conditions of approval, and CFD No. 04-01. • **Columbus Grove (Tract 16582)** The Cooperative Agreement with developer addresses the required Fair Share Contribution towards Tustin Legacy Backbone Infrastructure, the conditions of entitlement conditions for the project, and CFD No. 06-01.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Columbus Square (Tract 16581)** The Cooperative Agreement with developer addresses the required Fair Share Contribution towards Tustin Legacy Backbone Infrastructure, the conditions of entitlement conditions for the project, and CFD No. 06-01. • ***SOCCCD (ATEP)*** Pursuant to the Conveyance Agreement, SOCCCD is required to construct all on-site improvements; however, the City has exempted SOCCCD from Tustin Legacy Backbone Infrastructure costs on the presumption the primary use of the project is educational. Phase 1 of the project has been developed as an educational use and the Phase 3A Concept Plan approved in July 2010 authorized up to 305,000 square feet of uses. In the event non-educational uses are proposed, SOCCCD will be subject to required Fair Share Contributions to Tustin Legacy Backbone Infrastructure for non-educational uses, and is still subject to assessments from outside utility purveyors regardless of primary use of project and would be responsible for any costs that are necessary if SOCCCD proposes to modify or alter existing Tustin Legacy Backbone Infrastructure., subject to approval by the City. • **RSCCD (Sheriff)** Based on City Council Policy and provisions of the Conveyance Agreement, SOCCCD is exempt

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					from required Fair Share Contributions towards Tustin Legacy Backbone Infrastructure since the use is public educational. • ***Master Development Footprint*** *Future developer(s) will be required to make the applicable Fair Share contribution towards construction of Tustin Legacy Backbone Infrastructure and any required CFD assessments at the entitlement application stage including St. Anton Partners and the Irvine Company pursuant to the DDAs for Disposition Parcels 1A-North and 2A, respectively.*
T/C-4	The City of Tustin and the City of Irvine, as applicable (for that portion of the reuse plan area within Irvine), shall ensure that all on-site circulation system improvements for the reuse plan area assumed in the 2005 and 2020 traffic analysis and as shown in Table 4-4 of the revised Specific Plan Phasing Plan (see Table 4-4 at the end of the Mitigation Monitoring and Reporting Program) are implemented according to the cumulative ADT thresholds identified in the table. Under this Phasing Plan, the City of Tustin shall monitor all new development within the site, accounting for the cumulative ADT generated by development projects. As each ADT threshold is reached, the roadway	Ongoing (see Table 4.12-10 of the Final EIS/EIR or Table 4-4 at the end of the Mitigation Monitoring and Reporting Program for each specific triggering mechanism.	Project developer	Public Works Department (Tustin or Irvine, as applicable)	MCAS Tustin Specific Plan "Trips" are monitored by Public Works Department on an ongoing basis as projects are entitled. • **The District** Final traffic study identified cumulative ADT: the project ADT does not exceed thresholds identified in the FEIS/EIR as modified by the a supplemental Mitigation Agreement between the Cities of Irvine and Tustin dated February 22, 2001 for off-site mitigation at arterial intersections. • **Tustin Field I** Project ADT determined consistent with ADT threshold Table for compliance with Roadway Improvement Table.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	improvements listed in Table 4-4 of the revised Specific Plan Phasing Plan (see Table 4-4 at the end of the Mitigation Monitoring and Reporting Program) shall be constructed before any additional projects within the reuse plan area would be approved. *(As amended by Addendum)*				• **Tustin Field II** Project ADT determined consistent with ADT threshold Table for compliance with Roadway Improvement Table. Required improvements addressed with DDA, entitlement conditions and funding of CFD No. 04-01. • **Columbus Grove (Tract 16582)** Project ADT determined for project and ADT threshold reviewed for compliance with Roadway Improvement Table. Project ADT determined consistent with ADT threshold Table for compliance with Roadway Improvement Table. Required improvements addressed with DDA, entitlement conditions, and funding of CFD No. 06-01. • **Columbus Square (Tract 16581)** Project ADT determined for project and ADT threshold reviewed for compliance with Roadway Improvement Table. Project ADT determined consistent with ADT threshold Table for compliance with Roadway Improvement Table. Required improvements addressed with DDA, entitlement conditions, and funding of CFD No. 06-01. • **SOCCCD (ATEP)** The trip counts for the ATEP are based on square feet. The project is within the Learning Village trip budget as allocated for Phase 1 of the project; however, all future phases will need to be

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					evaluated and agreed to by the City at the entitlement application stage. • **RSCCD (Sheriff)** The trip counts for the Learning Village are based on square feet. The initial Sheriff's Training Facility project, in addition to other approved projects within the Learning Village (ATEP), is within the EIS/EIR trip budget Any future phases will be evaluated at the application stage. • **Master Development Footprint** *The Irvine Company and St. Anton Project ADT and ADT threshold were reviewed for compliance with Roadway Improvement Table. Project ADT determined consistent with ADT threshold Table for compliance with Roadway Improvement*
T/C-5	Prior to approval of a site development permit or vesting tract, except for financing or conveyance purposes, for all land use designation areas in Alternative 1 with the exception of the Learning Village, Community Park, and Regional Park, a project developer shall enter into an agreement with the City of Tustin and City of Irvine, as applicable (for that portion of the reuse plan area within Irvine) which assigns improvements required in the EIS/EIR to the development site and which requires participation in a fair share mechanism to	Ongoing, prior to approval of a site development permit or vesting tract, except for financing or conveyance purposes, based on the ADT generation thresholds shown in Tables 4.12-7, 4.12-8, 4.12-9, and 4.12-10 of the	Project developer	Public Works/ Community Development Departments (Tustin and/or Irvine, as applicable)	• **The District** Included in the DDA, Infrastructure and Construction Agreement (as amended), entitlement conditions and CFD No. 07-01 Acquisition and Construction Agreement. • **Tustin Field I** Included in the DDA, entitlement conditions and CFD No. 04-01 Acquisition and Construction Agreement.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	design and construct required on-site and arterial improvements consistent with the ADT generation thresholds shown in Table 4-4 of the revised Specific Plan Phasing Plan (see Tables 4-4 at the end of the Mitigation Monitoring and Reporting Program). *(As amended by Addendum)*	Final EIS/EIR (see Table4-4 at the end of the Mitigation Monitoring and Reporting Program for each specific triggering mechanism).			• **Tustin Field II** Included in the DDA, entitlement conditions, and CFD No. 04-01 Acquisition and Construction Agreement. • **Columbus Grove (Tract 16582)** Included in the Cooperative Agreement, entitlement conditions, and CFD No. 06-01 Acquisition and Construction Agreement • **Columbus Square (Tract 16581)** Included in the Cooperative Agreement, entitlement conditions, and CFD No. 06-01 Acquisition and Construction Agreement • **SOCCCD (ATEP)** Pursuant to the Conveyance Agreement, SOCCCD is required to construct all on-site improvements; however, the City has exempted SOCCCD from Tustin Legacy Backbone Infrastructure costs on the presumption the primary use of the project is educational. Phase 1 of the project has been developed as an educational use and the Phase 3A Concept Plan approved in July 2010 authorized up to 305,000 square feet of uses. In the event non-educational uses are proposed, SOCCCD will be subject to required Fair Share Contributions to Tustin Legacy Backbone Infrastructure for non-educational uses, and is still subject to assessments from outside utility purveyors regardless of primary use of project and would be responsible

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					for any costs that are necessary if SOCCCD proposes to modify or alter existing Tustin Legacy Backbone Infrastructure, subject to approval by the City. • **RSCCD (Sheriff)** Tustin City Council policy exempts a public educational use from the Fair Share Contribution towards the Tustin Legacy Backbone Infrastructure Program. The RSCCCD Regional Law Enforcement facility is a public use and is exempt. But would be responsible for any alteration of existing improvements in the public right-of-way necessary for their projects, subject to approval of the City. • ***Master Development Footprint*** *Future developer(s) will be required to make the applicable Fair Share contribution towards construction of Tustin Legacy Backbone Infrastructure and any improvements required to be constructed by developer, entitlement conditions at each application stage will reinforce these requirements pursuant to the Disposition Strategy.*
T/C-6	The City of Tustin and the City of Irvine, as applicable (for that portion of the reuse plan area in Irvine), will monitor new development within the reuse plan area, accounting for the cumulative ADTs generated by development projects	Ongoing, based on the ADT generation thresholds shown in Table 4.12-10 of the Final EIS/EIR	Project developer	Public Works and Community Development Departments (Tustin and/or Irvine, as	MCAS Tustin Specific Plan "Trips" are monitored by Public Works Department on an ongoing basis as projects are entitled. • **The District** Final traffic study identified cumulative ADTs;

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	within the reuse plan area. As each cumulative ADT threshold shown in Table 4-4 of the revised Specific Plan Phasing Plan ~~4.12-10~~ (see Table 4-4 at the end of the Mitigation Monitoring and Reporting Program) is reached, the roadway improvements listed shall be constructed before any additional projects within the reuse plan area are approved. *(As amended by Addendum)*	(see Table 4-4 at the end of the Mitigation Monitoring and Reporting Program for each specific triggering mechanism).		applicable)	City monitoring will determine timing of roadway improvements identified in MMP Table 4-4; per project final traffic study, project does not exceed ADT threshold level requiring roadway improvements shown in Table 4-4. • **Tustin Field I** Final traffic study identified cumulative ADTs; City monitoring will determine timing of roadway improvements identified in MMP Table 4-4; per project final traffic study, project does not exceed ADT threshold level requiring roadway improvements shown in Table 4-4. • **Tustin Field II** Final traffic study identified cumulative ADTs; City monitoring will determine timing of roadway improvements identified in MMP Table 4-4; per project final traffic study, project does not exceed ADT threshold level requiring roadway improvements shown in Table 4-4. • **Columbus Grove (Tract 16582)** Final traffic study identified cumulative ADTs; City monitoring will determine timing of roadway improvements identified in MMP Table 4-4; per project final traffic study, project does not exceed ADT threshold level requiring roadway improvements shown in Table 4-4.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Columbus Square (Tract 16581)** Final traffic study identified cumulative ADTs; City monitoring will determine timing of roadway improvements identified in MMP Table 4-4; per project final traffic study, project does not exceed ADT threshold level requiring roadway improvements shown in Table 4-4. • **SOCCCD (ATEP)** The trip counts for the ATEP are based on square feet. The project is within the Learning Village trip budget based on the presumption the primary use of the project is educational. Phase 1 of the project has been developed as an educational use; however, SOCCCD adopted a Long Range Plan on November 3, 2008 and submitted a Concept Plan for Phase 3A that do not clearly identify the primary use as educational as the City has informed SOCCCD. As a result SOCCCD may be subject to CFD funded infrastructure costs, and is still subject to assessments from outside utility purveyors regardless of primary use of project. The District would also be responsible for any alteration of existing improvements in the public right of way to accommodate the development, subject to approval by the City. • **RSCCD (Sheriff)** The trip counts for the Learning Village are based on permitted total square footages and F.A.R for each use. The initial Sheriff's Training Facility project, in addition to other approved projects

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					within the Learning Village (ATEP), is within the EIS/EIR trip budget any future phases will be also evaluated against the Trip budget. • ***Master Development Footprint*** *Traffic Studies, as necessary, will be required at the entitlement application stage for each neighborhood development. Cumulative ADTs will be identified and any required improvements necessary as a condition of occupancy will be identified with entitlements. Conditions of entitlements and City monitoring will determine timing of roadway improvements*. The Irvine Company and St. Anton project have been determined to be within the thresholds and appropriate backbone infrastructure improvements have been made as condition of approval of the projects.
T/C-7	The City of Tustin shall adopt a trip budget for individual portions of the reuse plan area to assist in the monitoring of cumulative ADTs and the amount and intensity of permitted non-residential uses as evaluated in the EIS/EIR.	Within one (1) year of project approval, and ongoing thereafter.	City of Tustin	Tustin Public Works and Community Development Departments	A trip budget has been adopted for individual portions of the reuse plan. "Trips" are monitored on individual portions of the reuse plan are monitored by Public Works Department on an ongoing basis as projects are entitled.
T/C-8	Alternative improvements that provide an equivalent level of mitigation in 2005 or 2020 to what is identified in Tables 4.12-7, 4.12-8, and 4.12-9 of the Final EIS/EIR (see Tables 2 through 4) at the	Ongoing	City of Tustin and/or City of Irvine	Public Works and Community Development Departments (Tustin and/or	The City of Tustin and Irvine in 2001 entered into a Mitigation Agreement that does identify alternative mitigation measures to those identified in the FEIS/EIR. . Subsequently, the City of Irvine and the City of Tustin entered into a Settlement Agreement

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	end of the Mitigation Monitoring and Reporting Program) may be identified in consultation between the City of Tustin and the City of Irvine, as applicable, and the impacted jurisdiction.			Irvine, as applicable)	and Mutual Release of Claims on July 13, 2010, for the IBC Vision Plan that further refined the mitigation measures identified in the 2001 Settlement Mitigation Agreement.
T/C-9	The City of Tustin shall enter into agreements with Caltrans and the cities of Santa Ana and Irvine to ensure that the off-site roadway improvements needed to mitigate the effects of the proposed alternative are constructed pursuant to improvement programs established by the respective jurisdiction. In order to properly coordinate the timing and improvements in the adjacent jurisdictions, the City of Tustin shall hold a scoping-like meeting with the respective jurisdictions. The purpose of said scoping-like meeting shall be to identify the concerns of the respective jurisdictions prior to the initiation of the fair share study. The purpose of the study would be to fully identify, with each jurisdiction, the scope and costs of feasible improvements (as determined by the respective jurisdiction). The improvements would be acceptable to each jurisdiction toward fulfilling the timing and cost of the transportation improvement obligations as required to	Within one (1) year of project approval.	City of Tustin, City of Irvine	Public Works and Community Development Departments (Tustin and/or Irvine, as applicable)	Mitigation Agreements with City of Santa Ana and City of Irvine executed in February 2001.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	mitigate transportation impacts in each jurisdiction. The funding for the improvements to be incorporated into the agreement would be utilized by the respective agency to improve the capacity of the impacted intersections/links or be used for substituted improvements, as determined by mutual agreement. Prior to execution of the agreement, each jurisdiction would be allowed ten (10) working days to review the technical report prior to being provided with a copy of the proposed agreement. Each jurisdiction would then have ten (10) working days to review and comment as to its concurrence with the improvement programs contained in the agreement. The comments of each jurisdiction would be considered to ensure that the City of Tustin's responsibility for fair share funding of the improvements in each jurisdiction as stated above is fully addressed.				
TC-1	A westbound shared through/right-turn lane shall be added to the Redhill Avenue/Warner Avenue intersection *(As amended by Final Supplement #1)*	Opening Tustin Ranch Road Extension.	City of Tustin	Public Works Department	• ***Master Development Footprint*** *In the DDA, this was an improvement required to be designed and constructed in conjunction with development of Neighborhood E by any subsequent developers.*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
IA-1	Table 4.12-10 of the Final EIS/EIR, as revised and presented in Table 4-4 of the revised Specific Plan Phasing Plan (see Table 4-4 at the end of the Mitigation Monitoring and Reporting Program) presents the Phasing Plan for the on-site circulation system. The Phasing Plan is based upon traffic circulation impact and mitigation analyses contained in the *Tustin Legacy Traffic Analysis* (Austin-Foust Associates, Inc., February 2006). Under this Specific Plan Phasing Plan, the City of Tustin shall monitor all new development within the Specific Plan, accounting for the cumulative ADT generated by development projects. As each ADT threshold is reached, the roadway improvements listed in Tables 4-3 and 4-4 of the revised Specific Plan Phasing Plan (see Tables 4-3 and 4-4 at the end of the Mitigation Monitoring and Reporting Program) shall be constructed before any additional projects within the Specific Plan would be approved. *(As amended by Addendum)*	See Table 4.12-10 of the Final EIS/EIR or Table 4-4 at the end of the Mitigation Monitoring and Reporting Program for each specific triggering mechanism.	City of Tustin	Community Development and Public Works Departments (Tustin and/or Irvine, as applicable)	MCAS Tustin Specific Plan "Trips" are monitored by Public Works Department on an ongoing basis as projects are entitled.
IA-2	Table 7-3 of the Final EIS/EIR (see Table 3-3 at the end of the Mitigation Monitoring and Reporting Program) presents the Trip Budget which summarizes the square footage of	See Table 7-3 of the Final EIS/EIR or Table 6 at the end of the Mitigati-on Monitoring and	City of Tustin	Tustin Community Development and Public Works Departments	MCAS Tustin Specific Plan "Trips" are monitored by Public Works Department and Community Development Department on an ongoing basis as projects are entitled by neighborhood.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	non-residential uses allocated to each neighborhood by Planning Area and the associated ADT. (Residential uses are shown for information only, they are not part of the budget.) Pursuant to Section 3.2.4 of the Specific Plan, the City of Tustin shall implement the trip budget by neighborhood to control the amount and intensity of non-residential uses. Trip Budget transfers between neighborhoods shall also be implemented as directed in subsection 3.2.4 of the Specific Plan.	Reporting Program for each specific triggering mechanism.			
IA-3	Prior to the approval of (1) a Planning Area Concept Plan pursuant to Section 4.2 of the Specific Plan, (2) a site development permit, or (3) a vesting tentative map for new square footage (not for financing or conveyance purposes), a project developer shall provide traffic information consistent with the provisions of the Specific Plan, the FEIS/EIR, and this Addendum, and the requirements of the City of Tustin Traffic Engineer. The traffic information shall (a) identify and assign traffic circulation mitigation measures required in the EIS/EIR pursuant to the Phasing Plan described in Table 4-4 of the revised Specific Plan Phasing Plan (see Table 4-4 at the end of the Mitigation Monitoring and Reporting Program); (b) evaluate the	Prior to the approval of (1) a Planning Area Concept Plan pursuant to Section 4.2 of the Specific Plan, (2) a site development permit, or (3) a vesting tentative map for new square footage (not for financing or conveyance purposes).	Project developer	Tustin Community Development and Public Works Departments	• **The District** Traffic Analysis has been completed. The majority of requirements have been constructed. Timing for the remaining Barranca Parkway improvements are addressed in Amendment No. 5 of the DDA. • **Tustin Field I** Traffic Analysis was prepared and all requirements installed. • **Tustin Field II** Traffic Analysis was prepared and all requirements installed. • **Columbus Grove (Tract 16582)** Traffic Analysis was prepared and all requirements installed.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	effects of either the delay of any previously committed circulation improvements or the construction of currently unanticipated circulation improvements; and (c) utilize the circulation system and capacity assumptions within the EIS/EIR and any additional circulation improvements completed by affected jurisdictions for the applicable timeframe of analysis. *(As amended by Addendum)*				• **Columbus Square (Tract 16581)** Traffic Analysis was prepared and all requirements installed. • **SOCCCD (ATEP)** Phase I is complete. The City determines trip count data in the future as assigned to each phase of the project as new development progresses. For now, Phase I of the SOCCCD site is within its trip budget and density as determined by the capacity assumptions of the EIR/EIS. • **RSCCD (Sheriff)** The initial Sheriff's Training Facility project is complete. The project, combined with other ongoing projects, is within the trip budget as determined by the capacity assumptions of the EIR/EIS and any future phase will be evaluated when they are processed. • ***Master Development Footprint*** *An updated Traffic Analysis may be required in conjunction with requests for entitlements for individual neighborhood phases by subsequent developers.*
IA-4	Prior to the issuance of building permits for new development within planning areas requiring a concept plan, a project developer shall enter into an agreement with the City of Tustin to (a) design and	Prior to the issuance of building permits.	Project developer	Tustin Community Development and Public Works Departments	• **The District** DDA and Infrastructure Construction and Payment Agreement, as amended, entered into which identifies required design and construction obligations as well as entitlement conditions, and

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	construct roadway improvements consistent with the ADT generation Phasing Plan described in Table 4-4 of the revised Specific Plan Phasing Plan (see Table 4-4 at the end of the Mitigation Monitoring and Reporting Program) and (b) address the impact of and specify the responsibility for any previously committed circulation improvements assumed in the EIS/EIR which have not been constructed. *(As amended by Addendum)*				documentation for CFD No. 07-01 Traffic analysis completed and required improvements are currently under construction. • **Tustin Field I** DDA entered into and Improvements included in entitlement conditions and CFD 04-01 documentation. • **Tustin Field II** DDA entered into and Improvements included in entitlement conditions and CFD 04-01 documentation. • **Columbus Grove** Cooperative Agreement entered into, with Improvements included in entitlement conditions and CFD 06-01 documentation • **Columbus Square** Cooperative Agreement entered into with Improvements included in entitlement conditions and in CFD 06-01documentation. • **SOCCCD (ATEP)** A Conveyance Agreement has been entered into. District is currently in compliance as long as uses on the site are primarily an educational use which would exempt it from Tustin Legacy Backbone Infrastructure Program obligations. The District would be responsible for any alteration of existing

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					improvements in the public right of way to accommodate future phased development subject to approval by the City and if future development is not primarily educational in nature would be responsible for additional backbone obligations. • **RSCCD (Sheriff)** An Agreement has been entered into. The initial facility is currently in compliance since it is an educational public use which is exempt under City Council policy from Tustin Legacy Backbone Infrastructure Program obligations. • **Tustin Family Campus** An Agreement has been entered into. Under City Council policy, public use is exempt from Tustin Legacy Backbone Infrastructure Program obligations. • **Village of Hope** An Agreement has been entered into. Under City Council policy, non-profit use is exempt from Tustin Legacy Backbone Infrastructure Program obligations. • ***Master Development Footprint*** *Traffic analysis completed and required contributions towards Tustin LegacyBackbone Infrastructure Program have been identified including developer required improvements to be completed. These will be imposed as necessary in any subsequent developer entitlements.*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					The Irvine Company and St. Anton project have been conditioned appropriately for their fairs share contribution to the Backbone Infrastructure Program.
IA-5	If a subsequent traffic Phasing Plan demonstrates that certain circulation improvements should be included in a different phase of Specific Plan development (accelerated or delayed) or that a circulation improvement can be substituted, the mitigation Phasing Plan in Table 4-4 of the revised Specific Plan Phasing Plan (see Table 4-4 at the end of the Mitigation Monitoring and Reporting Program) may be amended, subject to approval of the City of Tustin and any other affected jurisdictions, provided that the same level of traffic mitigation and traffic capacity would be provided. *(As amended by Addendum)*	Ongoing	City of Tustin	Tustin Public Works and Community Development Departments	Not applicable at this time to any site at Tustin Legacy.
IA-6	The City of Tustin will enter into agreements with Caltrans and the cities of Santa Ana and Irvine to ensure that the off-site roadway improvements needed to mitigate the effects of the Specific Plan are constructed pursuant to improvement programs established by the respective jurisdiction.	Within one (1) year of approval of reuse and disposal of MCAS Tustin	City of Tustin	Tustin Public Works and Community Development Departments	Studies have been completed and Mitigation Agreements with City of Santa Ana and City of Irvine have been executed.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	In order to properly coordinate the timing and funding of fair share obligation of Specific Plan improvements in the adjacent jurisdictions, the City of Tustin shall hold a scoping-like meeting with the respective jurisdictions. The purpose of said scoping-like meeting shall be to identify the concerns of the respective jurisdictions prior to the initiation of the fair share study. The purpose of the study would be to fully identify, with each jurisdiction, the scope and costs of obligations of the Specific Plan as required to mitigate transportation impacts in feasible improvements (as determined by the respective jurisdiction). The improvements would be acceptable to each jurisdiction toward fulfilling the timing and cost of the transportation improvement each jurisdiction, as listed above. The funding for the improvements to be incorporated into the agreement would be utilized by the respective agency to improve the capacity of the impacted intersections/links or be used for substituted improvements, as determined by mutual agreement. Prior to execution of the agreement, each jurisdiction would be allowed ten working days to review the technical				

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	report prior to being provided with a copy of the proposed agreement. Each jurisdiction would then have ten working days to review and comment as to its concurrence with the improvement programs contained in the agreement. The comments of each jurisdiction would be considered to ensure that the City of Tustin's responsibility for fair share funding of the improvements in each jurisdiction as stated above is fully addressed.				
IA-7	Each Specific Plan project would contain, to the satisfaction of the City of Tustin and/or City of Irvine, as applicable, a pedestrian circulation component showing pedestrian access to regional hiking trails, parks, schools, shopping areas, bus stops, and/or other public facilities.	Prior to issuance of grading permits	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	At the entitlement stage, all development proposals at the concept plan and at design review and construction stages have been required to include a pedestrian circulation component.
Mitigation Measures for Air Quality					
AQ-1	During construction of the proposed project, the City, and/or developer and its contractors shall be required to comply with regional rules, which would assist in reducing short-term air pollutant emissions. SCAQMD Rule 402 requires that air pollutant emissions should not	Prior to issuance of grading or building permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** Requirements are included in the construction documents and enforced during construction • **Tustin Field I** Requirements were enforced and construction is completed

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	create a nuisance off-site. SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures so the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. The City and its contractors shall use the measures presented in SCAQMD Rule 403 Tables 1, 2 and 3 (presented in Tables 5-1, 5-2 and 5-3 of the FEIS/EIR Addendum). This compliance measure shall be included in the contractor's specifications and verified on City projects by the Department of Public Works. *(As amended by Addendum)*				• **Tustin Field II** Requirements were enforced and construction is completed • **Columbus Grove (Tract 16582)** Included with construction drawings and will be enforced during construction. • **Columbus Square (Tract 16581)** Included with construction drawings and will be enforced during construction • **SOCCCD (ATEP)** Requirements were fulfilled by the SOCCCD during construction for Phase 1; however, future phases will be subject to the AQMD rules which require air pollutant emissions to not create nuisance off-site. • **RSCCD (Sheriff)** Requirements were fulfilled by the RSCCD during construction. • **Village of Hope** Requirements were included in the construction documents and enforced during construction. • ***Master Development Footprint*** *Future developer(s) will be required to provide requirements in the construction documents and to be enforced during construction, as applicable.*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					The St. Anton and Irvine Company projects are currently in plan check, and any requirements identified will be enforced during construction.
AQ-2	Unless determined by the City of Tustin and the City of Irvine, as applicable, to be infeasible on a project-by-project basis due to unique project characteristics, each city shall require individual development projects to use low VOC architectural coatings for all interior and exterior painting operations.	Prior to issuance of grading or building permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** Included with the construction drawings and will be enforced during construction • **Tustin Field I** Requirements were enforced and construction is completed • **Tustin Field II** Requirements were enforced and construction is completed • **Columbus Grove (Tract 16582)** Included with the construction drawings and will be enforced during construction. • **Columbus Square (Tract 16581)** Included with construction drawings and will be enforced during construction. • **Tustin Family Campus** Responsibility of County. • **SOCCCD (ATEP)** Responsibility of the SOCCCD but will be imposed in City conditions of approval on entitlements pursuant to the Conveyance Agreement.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **RSCCD (Sheriff)** Responsibility of the RSCCD • **Village of Hope** Required as part of a condition of approval of the Design Review approved for the project. • ***Master Development Footprint*** *Future developer(s) will be required to be conditioned at the entitlement application stage to comply with this requirement for each project, as applicable.*
AQ-3	Prior to the issuance of development permits for new non-residential projects with 100 or more employees, and expanded projects where additional square footage would result in a total of 100 or more employees, the City of Tustin and the City of Irvine, as applicable, shall impose a mix of TDM measures which, upon estimation, would result in an average vehicle ridership of at least 1.5, for each development with characteristics that would be reasonably conducive to successful implementation of such TDM measures. These TDM measures may include one or more of the following, as determined appropriate and feasible by each city on a case-by-case basis:	Prior to issuance of development permits for new non-residential projects with 100 or more employees and expanded projects where additional square footage would result in a total of 100 or more employees	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	- Establish preferential parking for carpool vehicles. - Provide bicycle parking facilities. - Provide shower and locker facilities. - Provide carpool and vanpool loading areas. - Incorporate bus stop improvements into facility design. - Implement shuttles to shopping, eating, recreation, and/or parking and transit facilities. - Construct remote parking facilities. - Provide pedestrian circulation linkages. - Construct pedestrian grade separations. - Establish carpool and vanpool programs. - Provide cash allowances, passes, and other public transit and purchase incentives. - Establish parking fees for single occupancy vehicles. - Provide parking subsidies for rideshare vehicles. - Institute a computerized commuter rideshare matching system. - Provide a guaranteed ride-home program for ridesharing. - Establish alternative work week, flex-time, and compressed work week schedules.	Prior to issuance of development permits for new non-residential projects with 100 or more employees and expanded projects where additional square footage would result in a total of 100 or more employees	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **The District** The project's approval includes the provisions of bicycle parking facilities and bus turn outs. • **Tustin Family Campus** The number of employees generated by the project for on-site occupancy is anticipated to be less than 100 employees. • **SOCCCD (ATEP)** The number of employees generated by the Phase I project for on-site occupancy was anticipated to be less than 100 employees. Future phases of development may result in 100 or more employees which would require compliance with the TDM measures. • **RSCCD (Sheriff)** The number of employees generated by the project for on-site occupancy is anticipated to be less than 100. • ***Master Development Footprint*** *Non-residential developer(s) will be required to be conditioned at the entitlement stage to comply with applicable TDM measures for each project, as applicable.*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	- Establish telecommuting or work-at-home programs. Provide additional vacation and compensatory leave incentives. - Provide on-site lunch rooms/cafeterias and commercial service such as banks, restaurants, and small retail. - Provide on-site day care facilities. - Establish an employee transportation coordinator(s).				
AQ-4	If not required under each individual development's TDM plan, the City of Tustin and the City of Irvine, as applicable, shall implement the following measures, as determined appropriate or feasible by each city on a case-by-case basis: - Reschedule truck deliveries and pickups for off-peak hours. - Implement lunch shuttle service from a worksite(s) to food establishments. - Implement compressed work week schedules where weekly work hours are compressed into fewer than five days, such as 9/80, 4/40, or 3/36. - Provide on-site child care and after-school facilities or contribute to off-site developments within walking distance. - Provide on-site employee services	Ongoing	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	Each non-residential project is required to submit a TDM plan, as applicable, and the projects will be analyzed on a case by case basis and applicable measures would be implemented. • **The District** The project's approval includes the provisions of bicycle parking facilities and bus turn outs. • **SOCCCD** The project's approval includes the provisions of bicycle parking facilities and bus turn outs. • **Tustin Family Campus** Programs offered at the campus include on-site daycare, on-site residential programs for abused and neglected children and their families, and other transportation related services for the clients. • **RSCCD (Sheriff)** The project design includes the provisions of

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	such as cafeterias, banks, etc. - Implement a pricing structure for single-occupancy employee parking, and/or provide discounts to ridesharers. - Construct off-site pedestrian facility improvements such as overpasses and wider sidewalks. - Include retail services within or adjacent to residential subdivisions. - Provide shuttles to major rail transit centers or multi-modal stations. - Contribute to regional transit systems (e.g., right-of-way, capital improvements, etc.). - Synchronize traffic lights on streets impacted by development. - Construct, contribute, or dedicate land for the provision of off-site bicycle trails linking the facility to designated bicycle commuting routes. - Include residential units within a commercial development. - Provide off-site bicycle facility improvements, such as bicycle trails linking the facility to designated bicycle commuting routes, or on-site improvements, such as bicycle paths. - Include bicycle parking facilities such as bicycle lockers.				bicycle parking facilities, on-site gymnasium, shower facilities, and on-site employee services. • ***Master Development Footprint*** *Developer(s) of non-residential projects will be required to be conditioned to comply with applicable TDM measures for each project, as applicable.*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	- Include showers for bicycling and pedestrian employees' use. - Construct on-site pedestrian facility improvements, such as building access which is physically separated from street and parking lot traffic, and walk paths.				
AQ-1	During construction of the proposed roadway extension, the following measures will be implemented to comply with existing SCAQMD Rules and Regulations: - Rule 1113 that regulates the VOC content of any paints and surface coatings that may be used in construction, - Rule 1108 that regulates the VOC content of any asphalt used in construction, SCAQMD Rules 402 and 403 that regulate the control of fugitive dust and visible emissions. - All stationary equipment (e.g., generators and compressors) .rated in excess of 50 horsepower is subject to SCAQMD permitting. (*As amended by Final Supplement #1)*	During construction of the Tustin Ranch Road Extension.	City of Tustin	Community Development Department.	• ***Master Development Footprint*** *Tustin Ranch Road from Warner Avenue to Walnut Avenue is currently under construction. The contractor is required to follow SCAQMD rules and regulations.*
Mitigation Measures for Noise					

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
N-1	Prior to reuse of any existing residential units within the reuse area for civilian use, the City of Tustin or the City of Irvine, as applicable, and where necessary and feasible, shall require the installation of noise attenuation barriers, insulation, or similar devices to ensure that interior and exterior noise levels at these residential units do not exceed applicable noise standards.	Prior to reuse of any existing residential units.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	No reuse of any existing residential is proposed.
N-2	During design of the grade-separated intersection of Tustin Ranch Road at Edinger Avenue, the City of Tustin shall evaluate potential noise impacts on surrounding properties to the northeast of Edinger Avenue and shall incorporate into the design of this intersection noise attenuation measures determined appropriate and feasible by the City of Tustin, in order to ensure that these surrounding properties do not experience noise levels that exceed City of Tustin noise standards.	Prior to approval of final design plans.	Project developer	Tustin Public Works Department	Noise studies were completed. Mitigation has been identified and implemented.
N-3	For new development within the reuse area, the City of Tustin and City of Irvine, as applicable, shall ensure that interior and exterior noise levels do not exceed those prescribed by state requirements and local city ordinances	Prior to issuance of building permits.	Project developer	Community Development Department (Tustin and/or Irvine, as applicable)	• **Tustin Field I** Noise analysis was prepared for all sensitive noise receptors and recommended mitigation such as sound walls and window/door upgrades were included in the construction drawings.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	and general plans. Plans demonstrating noise regulation conformity shall be submitted for review and approval prior to building permits being issued to accommodate reuse.				• **Tustin Field II** Noise analysis was prepared for all sensitive noise receptors and recommended mitigation such as sound walls and window/door upgrades were included in the construction drawings. • **Columbus Grove (Tract 16582)** Noise analysis was prepared for all sensitive noise receptors and recommended mitigation such as sound walls and window/door upgrades were included in the construction drawings. • **Columbus Square (Tract 16581)** Noise analyses were prepared for all sensitive noise receptors and recommended mitigation such as sound walls, window/door upgrades were included in construction drawings • **SOCCCD (ATEP)** Phase 1 of the project is complete. The project was required to comply with the City's noise standards, and will be required for all future phases. • **RSCCD (Sheriff)** The Sheriff's Training Facility project is complete. The project was required to comply with the City's noise standards. The State Division of Architect is responsible for ensuring compliance with City's noise standards, and will be required for all future phases.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
					• **Village of Hope** Noise analyses were prepared for all sensitive noise receptors and recommended mitigation such as sound walls, windows, door upgrades were included in construction drawings. • ***Master Development Footprint*** *Prior to issuance of any building permits, developers of future construction projects may be required submit an acoustical study for review and approval and conditions will be placed on development based on the studies.* *The Irvine Company and St. Anton projects submitted their noise reports and recommended mitigation will be implemented accordingly.*
N-4	Prior to the connection of Warner Avenue to the North Loop Road or the South Loop Road, the City of Tustin shall conduct an acoustical study to assess reuse traffic noise impacts to existing sensitive receptors adjacent to Warner Avenue, between Harvard Avenue and Culver Drive. If mitigation of reuse traffic noise impacts is required, the City of Tustin and the City of Irvine shall enter into an agreement that defines required mitigation and which allocates the cost of mitigation between the City of Tustin and the City of Irvine on a fair share basis.	Prior to approval of final design plans.	City of Tustin and City of Irvine	Tustin Community Development and Public Works Departments	To be implemented at the time closer to the time frame for completion of the future segment of Warner Avenue that will extend from Harvard Avenue to Red Hill Avenue.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
NR-1	Prior to opening the proposed segment of Tustin Ranch Road to traffic, the City will install a soundwall that achieves the exterior (i.e., 65 dBA) residential noise standards identified in the City of Tustin Noise Element. The following are the required heights of the soundwall in relation to the elevation of the proposed roadway adjacent to the residential receptors (see Exhibit 5.3-2 in Final Supplement to FEIR for receptor locations). • Receptor 1 Existing 6-foot wall • Receptors 2- 4 Proposed 12-foot wall • Receptors 5-6 Proposed 10-foot wall • Receptors 7-8 Proposed 8-foot wall • Receptors 9 through 15feet south of Receptor 21 Proposed 6-foot wall *(As amended by Final Supplement #1)*	Prior to opening the proposed segment of Tustin Ranch Road to traffic	City of Tustin	Community Development and Public Works Departments	• ***Master Development Footprint*** *Tustin Ranch Road construction and any required noise mitigation measures are under construction.*
NR-2	Receptors 1 through 13 requires forced air ventilation (see Exhibit 5.3-2 in Final Supplement to FEIR for receptor locations). If Receptors 1 through 13 do not currently have forced air ventilation, the City shall provide forced air ventilation prior to the opening of the proposed segment of Tustin Ranch Road to traffic. (As amended by Final	Prior to the opening of the proposed segment of Tustin Ranch Road to traffic	City of Tustin	Community Development Department	• ***Master Development Footprint*** *Tustin Ranch Road is under construction and all requirements have been addressed including any agreements with impacted property owners.*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	Supplement #1)				
NR-3	Receptors 14 through 21 that have a second story will require forced air ventilation in the second story. If these residential receptors do not currently have forced air ventilation, the City shall provide forced air ventilation in the second story prior to the opening of the proposed segment of Tustin Ranch Road to traffic. *(As amended by Final Supplement #1)*	Prior to the opening of the proposed segment of Tustin Ranch Road to traffic	City of Tustin	Community Development Department	• ***Master Development Footprint*** *Tustin Ranch Road is under construction and all requirements have been addressed including any agreements with impacted property owners.*
NR-4	Prior to the opening of the proposed segment of Tustin Ranch Road to traffic, all second-story windows and/or sliding glass doors in habitable rooms of the residences along the proposed alignment that view the proposed alignment shall be fitted with acoustic-rated window/door assemblies. These assemblies shall have a sound transmission class (STC) rating of no less than 35 and the STC shall be high enough to achieve an interior noise level of no more than 45 dBA CNEL. Non-sensitive uses (e.g., bathrooms) do not require such assemblies. *(As amended by Final Supplement #1)*	Prior to the opening of the proposed segment of Tustin Ranch Road to traffic	City of Tustin	Community Development Department	• ***Master Development Footprint*** *Tustin Ranch Road is under construction and all requirements have been addressed including any agreements with impacted property owners.*

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
NR-5	All second-story exterior doors in habitable rooms of the residences along the proposed alignment that view the proposed alignment shall be fitted with solid-core assemblies that are well sealed with weather-stripping. *(As amended by Final Supplement #1)*	Prior to the opening of the proposed segment of Tustin Ranch Road to traffic	City of Tustin	Community Development Department	• ***Master Development Footprint*** *Tustin Ranch Road is under construction and all requirements have been addressed including any agreements with impacted property owners.*
NR-6	Prior to opening of the proposed segment of Tustin Ranch Road to traffic, the City will install a 10-foot high wall along the eastern easement of Tustin Ranch Road from Walnut Avenue to the southern property line of the First Baptist Church**.** *(As amended by Final Supplement #1)*	Prior to the opening of the proposed segment of Tustin Ranch Road to traffic	City of Tustin	Community Development and Public Works Departments	• ***Master Development Footprint*** *Tustin Ranch Road is under construction and all requirements have been addressed including any agreements with impacted property owners.*
NR-7	The second-story windows that view the proposed alignment shall be fitted with acoustic-rated window assemblies. The assemblies shall have a sound transmission class (STC) rating of no less than 35 and the STC shall be high enough to achieve an interior noise of no more than 45 dBA CNEL. *(As amended by Final Supplement #1)*	Prior to the opening of the proposed segment of Tustin Ranch Road to traffic	City of Tustin	Community Development Department	• ***Master Development Footprint*** *Tustin Ranch Road is under construction and all requirements have been addressed including any agreements with impacted property owners.*
NR-8	The construction contractor shall notify	Prior to approval	City of Tustin	Public Works	• ***Master Development Footprint***

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	all property owners and tenants adjacent to the proposed construction activities of the days and hours of operation. Prior to construction activities, the construction contractor shall inspect all structures on adjacent properties to document existing characteristics of the structures. If damages to structures (i.e., residences, pools, decking) occur during construction activities, the property owner shall be financially compensated by the construction contractor to remediate damages. These provisions shall be placed on all construction contract documents. *(As amended by Final Supplement #1)*	of Plans and Specifications		Department	*Tustin Ranch Road is currently under construction. All requirements including notifications have been completed.*
Implementation Measures for Water Quality					
WQ-1	Prior to the approval of grading plans, the project developers shall provide written evidence to the Department of Public Works that it has filed a Notice of Intent with the State Water Resources Control Board in order to obtain coverage under the latest approved General Construction Permit. Pursuant to the permit requirements, developers shall develop a Stormwater Pollution Prevention Plan (SWPPP) that incorporates Best Management Practices	Prior to approval of grading plans.	Project Developer	Community Development Department (Tustin and/or Irvine, as applicable)	Notice of Intent is on file with Community Development Department and/or Public Works Department.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	for reducing or eliminating sediment and other construction-related pollutants in the site runoff. *(As amended by Addendum)*				
WQ-2	Prior to approval of a grading plans, the Department of Public Works shall confirm that the contractors specifications require compliance with the latest approved General Waste Discharge Requirements issued by the Santa Ana Regional Water Quality Control Board to govern discharges from construction dewatering and water line/sprinkler line testing should they occur during construction. Developers shall comply with these regulations including provisions requiring notification, testing and reporting of dewatering and testing-related discharges, which shall mitigate any impacts of such discharges. *(As amended by Addendum)*	Prior to approval of grading plans.	Project Developer	Community Development Department (Tustin and/or Irvine, as applicable)	Projects were reviewed for compliance with the General Waste Discharge Requirements.
WQ-3	The City of Tustin and major master plan developers of the former MCAS Tustin shall participate in the Regional Board's NSMP Working Group and contribute to funding and implementation of the Work Plan. To mitigate construction-related	Ongoing	Project Developer	Community Development Department (Tustin and/or Irvine, as applicable)	The City participates in the Regional Board's NSMP Working Group.

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	selenium and nutrient water quality impacts that may result from construction-related groundwater discharges, developers shall implement: (a) feasible and available volume reduction BMPs in accordance with the General NSMP Permit (R8-2004-0021); (b) selenium and nutrient control BMPs that are developed under the Work Plan as of the date of project approval; and (c) selenium and nutrient measures that may be developed under the Work Plan after project approval which are available and feasible to deploy. *(As amended by Addendum)*				
WQ-4	To mitigate post-construction surface water and long-term groundwater discharge water quality impacts, prior to issuance of grading permits, developers shall prepare a project WQMP, which shall be submitted to the City of Tustin or City of Irvine, as applicable, for approval. The WQMP shall be prepared in compliance with all MS4 Permit requirements (including DAMP and LIP requirements), and at a minimum shall contain the following elements: a) An Integrated Water Conservation/Storm Water Runoff	Prior to issuance of grading permits.	Project Developer	Community Development Department (Tustin and/or Irvine, as applicable)	Prior to issuance of grading permits, each development is required to submit a Water Quality Management Plan which identifies applicable best practices, as applicable.

Measure	Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
and Subdrain Discharge Water Quality Management Program. This program shall integrate into the storm drainage and water quality control system facilities and systems to capture, recycle and conserve low flows, which may include irrigation returns and subdrain discharges, to reduce, to the extent feasible, post-development low flow surface runoff and groundwater discharge volumes. The program shall also implement one or more treatment control technologies developed under the NSMP and available at the time of project approval for nutrient and selenium removal. b) Site Planning and Design BMPs. The WQMP shall incorporate site design BMPs described in the Model WQMP attached as Exhibit 7.11 to the DAMP to the extent feasible and appropriate in light of proposed land uses. c) Source Control BMPs. The WQMP shall incorporate source control BMPs described in the Model WQMP attached as Exhibit 7.11 to the DAMP to the extent feasible and appropriate in light of proposed land use.				

Measure		Timing and Implementation	Mitigation Compliance Responsibility	Mitigation Monitoring and Enforcement Responsibility	Status
	d) Treatment Control BMPs. The WQMP shall incorporate treatment control BMPs described in the Model WQMP attached as Exhibit 7.11 to the DAMP. *(As amended by Addendum)*				
WQ-5	As required by DAMP and the MS4 Permit, as well as the Cooperative Agreement DO2-119 between the City of Tustin, OCFCD, and the County of Orange, a Water Quality Technical Report (WQTR) shall be prepared prior to the issuance of grading permits. The WQTR shall quantitatively and qualitatively (as appropriate) assess planned BMPs to be included in the WQMP to confirm that the treatment and hydrologic controls included in the SWPPP and WQMP will be sufficient to assure that project discharges will not cause a violation of applicable water quality standards. *(As amended by Addendum)*	Prior to issuance of grading permits.	Project Developer	Community Development Department (Tustin and/or Irvine, as applicable)	Prior to issuance of grading permits, each development is required to submit a Water Quality Management Plan which identifies applicable best practices, as applicable.