



ALTA VISTA COMMERCIAL/RESIDENTIAL PROJECT

INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

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1 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

This Initial Study has been prepared in accordance with the following:

- California Environmental Quality Act (CEQA) of 1970 (Public Resources Code Sections 21000 et seq.);
- California Code of Regulations, Title 14, Division 6, Chapter 3 (State CEQA Guidelines, Sections 15000 et seq.); and

Pursuant to CEQA, this Initial Study has been prepared to analyze the potential for significant impacts on the environment resulting from implementation of the proposed residential development. As required by State CEQA Guidelines Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, the City of Placentia, in consultation with other jurisdictional agencies, to determine if a Mitigated Negative Declaration or an Environmental Impact Report is required for the project.

This Initial Study informs City decision-makers, affected agencies, and the public of potentially significant environmental impacts associated with the implementation of the project. A “significant effect” or “significant impact” on the environment means “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project” (Guidelines §15382).

Given the project's broad scope and level of detail, combined with previous analyses and current information about the site and environs, the City's intent is to adhere to the following CEQA principles:

- Provide meaningful early evaluation of site planning constraints, service and infrastructure requirements, and other local and regional environmental considerations. (Pub. Res. Code §21003.1)
- Encourage the applicant to incorporate environmental considerations into project conceptualization, design, and planning at the earliest feasible time. (State CEQA Guidelines §5004[b][3])
- Specify mitigation measures for reasonably foreseeable significant environmental effects, and commit the City and applicant to future measures containing performance standards to ensure their adequacy when detailed development plans and applications are submitted. (State CEQA Guidelines §15126.4)

Existing Plans, Programs, or Policies (PPPs)

Throughout the impact analysis in this IS/MND, reference is made to Existing Plans, Programs, or Policies (PPPs) that are currently in place which effectively reduce environmental impacts. Where applicable, PPPs are listed to show their effect in reducing potential environmental impacts. Where the application of these measures does not reduce an impact to below a level of significance, a project-specific mitigation measure is introduced. The City would include these PPPs along with

mitigation measures in the Mitigation Monitoring and Reporting Program (MMRP) for the project to ensure their implementation.

1.2 DOCUMENT ORGANIZATION

This IS/MND includes the following sections:

Section 1.0 Introduction

Provides information about CEQA and its requirements for environmental review and explains that an Initial Study/MND was prepared by the City of Placentia to evaluate the proposed project's potential to impact the physical environment.

Section 2.0 Setting

Provides information about the proposed project's location.

Section 3.0 Project Description

Includes a description of the proposed project's physical features and construction and operational characteristics.

Section 4.0 Environmental Checklist

Includes the Environmental Checklist and evaluates the proposed project's potential to result in significant adverse effects to the physical environment.

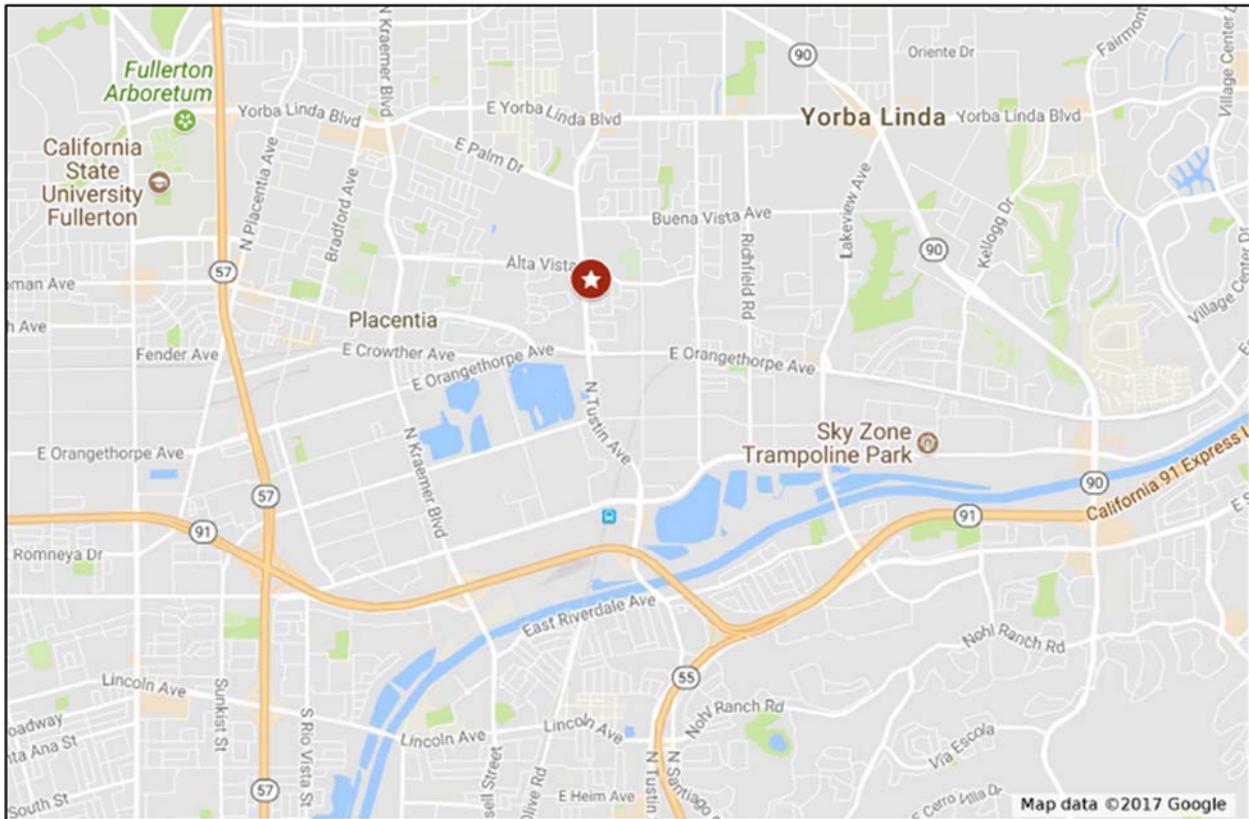
Section 5.0 Document Preparers and Contributors

Provides information regarding the organizations responsible for preparation of this document.

2 PROJECT SETTING

2.1 PROJECT LOCATION

The 8.45-acre project site consists of two parcels (assessor parcel numbers (APN) 341-324-01 and 341-324-02) that are located at the southeast corner of Rose Drive and Alta Vista Street in the City of Placentia. The project site is approximately one mile north of State Route (SR) 91 and 2.5 miles east of SR 57. Additionally, the site is located within the Yorba Linda and U.S. Geological Survey (USGS) 7.5-minute quadrangle map and within Township 3 South, Range 9 West. The location of the project is shown in Figure 1.

Figure 1: Project Location

2.2 EXISTING LAND USES

The project site is currently vacant and undeveloped. The site is surrounded by a chain link fencing and cement block walls that are associated with the adjacent residential development. The site contains soil and debris piles and a riser drain near the center of the parcel that was likely used during the previous oil extraction activities onsite.

The project site is located within the East Placentia Specific Plan (SP-7) and has a General Plan designation of Specific Plan 7 (SP-7), a zoning designation for commercial uses, and an Oil Resources zoning overlay.

Pictures of the existing site are shown in Figure 2.

Figure 2: Project Site Photos



Looking North from Rose Drive



Looking South from Alta Vista Street

2.3 SURROUNDING LAND USES

The site is surrounded by urban developed lands within SP-7 or similar Planned Community (PC) uses. Alta Vista Street is adjacent to the north of the site, and South Rose Street is adjacent to the west. The southern and eastern sides of the project site are adjacent to existing single-family residential and a 6-foot high block wall that separates the developed residential from the undeveloped project site. A golf course and residential areas are located to the west, beyond South Rose Drive, and commercial/retail, oil production, and park uses are located to the north, beyond Alta Vista Street. The existing uses and designations for the project site and adjacent areas are listed in Table 1, below. An aerial photograph of the site, showing surrounding land uses, is provided in Figure 3.

Table 1: Existing Land Uses

	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	Vacant/Undeveloped	SP-7 (Specific Plan 7)	Commercial
North	Commercial/Retail and Oil Production	SP-7 (Specific Plan 7)	Commercial and Oil Production
East	Single-Family Residential and Sports Park	SP-7 (Specific Plan 7)	Low Density Residential
South	Single-Family Residential	SP-7 (Specific Plan 7)	Medium Density Residential
West	Single-Family Residential and Golf Course	PC – Planned Community	RPC (O)

Figure 3: Aerial Photograph



2.4 PROJECT SITE BACKGROUND

The project site is located within the East Placentia Specific Plan (SP-7), which was approved by the City in January 1989 and contains 317 acres. The boundaries of SP-7 extend from Buena Vista Avenue on the north to Orangethorpe Avenue on the south; from Rose Drive on the west to Richfield Road on the east. In addition, a small area east of Richfield Road and south of Pine Street is also included within SP-7.

The East Placentia Specific Plan was adopted by the City to provide for a mix of different residential densities with neighborhood commercial, institutional, and parks/open space, while retaining the existing oil extraction uses. The project site was originally designated by SP-7 as Oil Reserve and Medium Density Residential; however, in September 1999 an amendment to SP-7 was approved, which re-designated the project site for commercial uses.

The project site is currently undeveloped and vacant but was formally an oil field containing 8 oil wells that were installed in the 1930s and removed in the 1990s. After removal of the oil production facilities, petroleum-impacted soils were successfully treated on the site and the Orange County Health Care Agency issued a full closure letter for the site in 2002 (Phase 1 2017).

3 PROJECT DESCRIPTION

3.1 PROJECT CHARACTERISTICS

The proposed project would amend SP 7 and the zoning of the project site to allow medium density residential uses on 6.46 acres of the site. In addition, a tentative tract map would divide the site into separate commercial and residential parcels, and the project would develop the site for both commercial and single-family residential uses. The project site plan is provided in Figure 4.

Commercial

Two commercial buildings would be developed on a 1.99-acre portion of the project site at the corner of Rose Drive and Alta Vista Street. The commercial buildings are planned to be approximately 10,420 square feet. However, to provide a worst-case analysis and to allow for minor changes to the site plan, the commercial portion is evaluated throughout this document, and in the technical studies, as 10,600 square feet. Approximately, 2,000 square-feet of the commercial would be a coffee shop with drive through and 8,600 square-feet would be either a fast-casual restaurant space or retail/service commercial. In addition, an outdoor dining court would be provided, along with 95 parking spaces. Access to the commercial uses would be provided from driveways from along Rose Drive and Alta Vista Street. The schematic design for the commercial portion of the project is shown in Figure 5

Single-Family Residential

remainder of the project site would be developed for single-family residential uses. A total of 54 residences would be located on 6.46-acres, which would result in a density of 8.36 dwelling units per acre. The proposed residences would be two-stories with a maximum height of 35-feet and have three different floorplans. The proposed design of the residential portion of the project is illustrated in the street scene from rose drive, shown in Figure 6. The residences would range in

Figure 4: Project Site Plan



size from 2,043 to 2,299 square feet and would provide between 3 to 4 bedrooms and 2.5 to 3 bathrooms. A summary of the proposed residences is provided in Table 2.

Table 2: Summary of Proposed Residences

Plan	Bedrooms	Bathrooms	Square footage	Quantity
Plan 1	3	2.5	2,043	15
Plan 2	3 + Loft	3	2,191	18
Plan 3	4 + Loft	3	2,299	21

In addition, each of the residences would have a 2-car garage and two driveway parking spaces. The project would also include 38 on-street parking spaces that would be spread throughout the residential tract and available to residents and guests.

Access to the proposed residential area would be provided via a gated access from Alta Vista Street and a street that would be developed to loop through the residential area. In addition, 4-foot wide sidewalks to provide for pedestrian circulation, and pedestrian access to the residential portion of the project would be provided via pedestrian paths from Alta Vista Street.

The project would provide 13,600 square feet of private onsite open space and recreation areas that would be for use by project residents and would include a tot-lot/park area, and 3 mini park areas with turf, benches, landscaping, walkways and a shade arbor. The open space would be maintained by the homeowners association (HOA).

The residential area would be bound by 6-foot high slump block walls and residential parcels would be separated by 6-foot high vinyl fences. In addition, 6-foot high slump block walls would be installed at the rear of all residential lots bordering the common area and tot lot.

Signage and Landscaping

The entire project site (both commercial and residential) would be landscaped with drought tolerant trees, shrubs, and ground cover along the exterior boundary of the project site, along the interior project streets, and in the open space and recreation areas throughout the project site.

A monument feature including a planter bed, queen palms, and an obelisk would be installed at the corner of Rose Drive/Alta Vista Street. In addition, entry monument signs would be placed at the proposed commercial center entrances on Rose Drive and Alta Vista Street and at the entrance to the residential area on Alta Vista Street. The proposed landscape plan is shown in Figure 7.

Project Operations

The project would be maintained by a Homeowners Association (HOA) that would maintain the onsite open space, recreation amenities, and common space landscaping. The HOA would be responsible for maintaining the site to City standards, which include those of the General Plan, municipal code, and the East Placentia Specific Plan.

Figure 5: Commercial Portion Schematic Design



Figure 6: Residential Portion Schematic Design



Figure 7: Project Landscaping Plan



3.1.1 CONSTRUCTION

Construction activities are anticipated to last approximately 18 months, and would include clearing and grubbing, grading, excavation and re-compaction of soils, utility and infrastructure installation, building construction, roadway pavement, and architectural coatings. Grading would involve cut of 9,700 cubic yards and fill of 11,600 cubic yards of soils. Thus, 1,900 cubic yards of soil import would be required. It is anticipated that excavation for the project would extend 12 feet below the existing grade of the site to install all the necessary utilities and foundations. Water and sewer utilities would be provided by installation of onsite infrastructure that would connect to the existing lines within Alta Vista Street.

Construction of the project would modify the existing 36-inch storm drain that currently runs through the site. This drain collects runoff from the upstream catch basin on Alta Vista Street and conveys it downstream to the 36-inch storm drain in the residential tract south of the project site. As part of the proposed project, the existing 36-inch storm drain running thru the site would be removed and a new onsite storm water system would be installed to collect runoff from the proposed development, which would filter and discharge it into the existing offsite 36-inch storm drain that is south of the project site. In addition, biotreatment devices such as catch basin planters and tree box filters would be installed to capture and filter runoff.

3.2 DISCRETIONARY APPROVALS

CITY OF PLACENTIA

- Development Plan Review to permit the development of two single-story commercial retail buildings with a total approximate square footage of 10,600 and 54 detached single-family homes.
- Zoning Code Amendment to change 6.46-acres from Commercial to Medium Density Residential and to modify the SP7 Medium Density Residential development standards.
- Tentative Tract/Parcel Map to subdivide the site into one 1.99-acre commercial site and 54 residential lots.
- Conditional Use Permit for the drive-through and outdoor dining space.

OTHER AGENCIES

This IS/MND would also provide environmental information to responsible agencies and other public agencies that may be required to grant approvals or coordinate with the City of Placentia as part of project implementation. These agencies include, but are not limited to the following:

- Santa Ana Regional Water Quality Control Board

4 ENVIRONMENTAL CHECKLIST FORM

This section includes the completed environmental checklist form. The checklist form is used to assist in evaluating the potential environmental impacts of the proposed project. The checklist form identifies potential project effects as follows: 1) Potentially Significant Impact; 2) Less Than Significant With Mitigation Incorporation; 3) Less Than Significant Impact; and, 4) No Impact. Substantiation and clarification for each checklist response is provided in Section 5 (Environmental Evaluation). Included in the discussion for each topic are standard condition/regulations and mitigation measures, if necessary, that are recommended for implementation as part of the proposed project.

4.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (X) 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.

Environmental Factors Potentially Affected

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agricultural Resources	<input type="checkbox"/>	Air Quality
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Geology/Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials	<input type="checkbox"/>	Hydrology/Water Quality
<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Noise
<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Tribal Cultural Resources	<input type="checkbox"/>	Utilities/Service Systems
		<input type="checkbox"/>	Mandatory Findings of Significance		

4.2 DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	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.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, 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 or mitigated 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

Printed Name

For

EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Potentially Significant Unless Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analysis,” as described in (5) below, may be cross-referenced).
- 5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(d). In this case, a brief discussion should identify the following:
 - (a) Earlier Analysis Used. Identify and state where they are available for review.
 - (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - (c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated

or refined from the earlier document and the extent to which they address site-specific conditions for the project.

- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The analysis of each issue should identify: (a) the significance criteria or threshold used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance.

4.3 ENVIRONMENTAL CHECKLIST QUESTIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Have a substantial adverse effect on a scenic vista?

No Impact. Scenic vistas consist of expansive, panoramic views of important, unique, or highly valued visual features that are seen from public viewing areas. This definition combines visual quality with information about view exposure to describe the level of interest or concern that viewers may have for the quality of a particular view or visual setting.

The project site is located within a developed area, on the southeast corner of Alta Vista Street and Rose Drive and is surrounded by developed areas that consist of roadways, commercial development, oil production, and residential areas that are surrounded with landscaping. The project site and surrounding area are generally level, without substantial hills or topography changes. Photos of the project site are shown in previously referenced Figure 2. Due to the limited topography and existing development with mature landscaping that exists in the project vicinity, scenic views are limited to areas along roadway corridors that shows landscaping surrounding developed land uses. However, distant views of hills can be also be seen from the roadway corridors. The Coyote Hills are located 3 miles to the northwest; the Chino Hills are located approximately 4 miles to the north; the Puente Hills are located approximately 7 miles to the northwest.

Development of the one-story commercial buildings and the two-story residences on the project site, would be similar to the existing development surrounding the project site, and would not hinder any scenic vistas or panoramic views. The existing residences to the south and east of the project site are two-story structures, and the existing commercial center at the Alta Vista Street and Rose Drive

intersection, across the street from the project site, consists of one-story structures with high rooflines that are typical of grocery stores, gas stations, pharmacies, and other neighborhood retail commercial. The project elevations are shown in previously referenced Figures 5 and 6.

Both Rose Drive and Alta Vista Street are currently lined by sidewalks, grass parkways, and landscaping adjacent to the project site. The proposed residential and commercial development would be setback behind the existing sidewalk and landscaping and would not intrude into the roadway view corridors. Road corridor views would continue to be of landscaped development and distant hills. As a result, the proposed project would not result in an adverse effect on a scenic vista.

b) Substantially damage scenic resources, including, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The proposed project would not damage any scenic resources or historic buildings within a state scenic highway. There are no designated state scenic highways in the City of Placentia. The closest State scenic highway is State Route (SR) 91 from SR 55 to east of the City of Anaheim limits (Caltrans 2017), which is located approximately 3 miles south of the project site and is not visible from the project site. Caltrans describes that views from the scenic highway portion of SR 91 include residential and commercial development (Caltrans 2017). The proposed commercial and residential development is consistent with the existing views within the scenic highway, and because the state scenic highway is not visible from the project site, no impacts to state scenic highways would occur from implementation of the proposed project.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less than Significant Impact. The project site is surrounded by developed areas that consist of roadways, residences, and commercial development. The project site that was previously used for oil production, is currently undeveloped vacant land. There are no significant visual features or scenic resources within the project site or surrounding area. The project site contains scattered non-native ruderal vegetation and the Phase I Environmental Assessment that was prepared for the site describes that the site contains construction rubble/debris, old tires, a 55-gallon drum, and a vertical corrugated metal pipe (with a diameter of about 15 inches).

The proposed project would alter the existing views of the site by developing approximately 10,600 square feet of commercial buildings at the corner of Rose Drive and Alta Vista Street. The buildings would be one-story (19 feet) high with architectural features that would reach 30-feet in height. The building would be stucco sided with a Spanish tile roof, a water feature, canopy, awnings, columns, and planters. The colors of the commercial structure would be off-white, beige, brown, and other similar earth toned colors. In addition, a monument feature including a planter bed, queen palms, and an obelisk would be installed in front of the proposed commercial building, at the corner of the Rose Drive and Alta Vista Street.

The proposed residential tract would alter views of the remainder of the project site. The residential area would consist of 54 two-story structures, driveways, roadways, landscaping and recreational open space. As described in the Project Description, there are 3 residential floor plans. The different floor plans would provide similar architectural features and earth toned colors that would provide consistency throughout the project area, including: stucco exterior walls, concrete roof tiles, decorative lighting and garage doors, brick trim, decorative shutters. The colors of the buildings would be a blend of earth toned colors that include beige, brown, tan, taupe, light gray, blue,

green, black and off-white. These design and architectural treatments are compatible with existing residential structures to the south and east of the project site.

The proposed residential area would be located at setbacks that have been designed to minimize the views of the proposed development from the public streets, and the proposed landscaping for the project would install 6-foot high beige slump block walls to screen views of the residential uses on the project site. In addition, the existing sidewalk and landscaping would remain along Rose Drive and Alta Vista Street adjacent to the project site, with exception of the areas that would be replaced by the driveways to the project site, which would have decorative interlocking pavers and monument signs. The project would also provide consistent landscaping throughout the site that would consist of various species of ornamental trees, shrubs, and ground cover, some of which would be in decorative planters.

Given the existing vacant and undeveloped visual character of the site, which is surrounded by residential and retail commercial uses, development of the proposed project would alter, but not substantially degrade the existing visual character or quality of the project site and its surroundings. As a result, impacts would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact. The project site is undeveloped and has no existing source of nighttime lighting. However, the project site is surrounded by sources of nighttime lighting that includes street lights along Rose Drive and Alta Vista Street, illumination from vehicle headlights, offsite exterior residential and commercial related lighting, and interior illumination passing through windows. Sensitive receptors relative to lighting and glare include residents, motorists, and pedestrians.

The proposed project would include installation of new lighting sources on the project site that would include exterior lighting for streetlights, residential security lighting, walkways lighting, interior lighting, which could be visible through windows to the outside and headlights from vehicles. In addition, the project would result in additional vehicular trips after sunset, which would add lighting in the area. However, the lighting from vehicle headlights are focused on a downward trajectory and would be intermittent and for a short period of time; therefore, impacts related to vehicle headlights would be less than significant.

The requirements of City's Municipal Code and SP 7 limit the potential for increased lighting on sensitive uses. Light emanating from the proposed project is required by Municipal Code Section 23.78.080 and SP 7 to be shielded and directed downward and away from adjoining properties and public rights-of-way to reduce light spillage. With compliance with the City's Municipal Code, that is included as PPP AE-1 and is checked through the City's plan check and project permitting process, impacts related to increased sources of light would be less than significant.

Glare can emanate from many different sources, some of which include direct sunlight, sunlight reflecting from cars or buildings, and bright outdoor or indoor lighting. Glare in the project vicinity is generated by building and vehicle windows reflecting light. However, there are no substantial buildings or structures near the project site that presently generate substantial glare since most of the buildings are one or two-story structures that are constructed of non-reflective materials and are not surfaced with a substantial number of windows adjacent to one another that would create a large reflective area.

As described above, the exterior of the proposed residences would be finished in a palette of earth-toned colors, and consist of stucco with cement roof tiles, which are not reflective surfaces. Additionally, installation of outdoor lighting would be required to meet the requirements of the City's Municipal Code and SP 7, as included as PPP AE-1, which would reduce the potential to generate glare from new lighting fixtures. As a result, the proposed project would not create a substantial source of glare, and impacts would be less than significant.

Existing Plans, Programs, or Policies

The following PPP is incorporated into the project and would reduce impacts related to aesthetics. This action will be included in the project's mitigation monitoring and reporting program:

PPP AE-1: As required by the City of Placentia Municipal Code and SP 7, all exterior lighting fixtures shall comply with the following standards to reduce light spillage.

- All onsite lighting systems shall use architectural standards and devices that provide down-lighting and lighting that is shielded from abutting public streets, residential areas, or adjoining properties.
- Exterior pole and wall-mounted lighting shall be high-pressure sodium.
- Lighting shall be indirect and subtle. Overhead pole-mounted mixtures that direct light downward shall be used.
- Parking areas, access drives and internal vehicular circulation areas shall have sufficient illumination for safety and security. The parking lot illumination level shall achieve a uniformity ratio of 2 to 1 (average to minimum) with a maintained average of 1-foot candle and a minimum of 0.3 foot-foot candle.
- Outdoor pedestrian use areas (courtyards, entryways, walkways, etc.) shall have sufficient illumination for safety and security. Primary pedestrian use area lighting should achieve a uniformity ratio of 3.5 to 1 average illumination of 0.60-foot candle and a minimum of 0.18-foot candle.
- Serviced area lighting shall be contained within the service yard boundaries and enclosure walls. No light spillover is allowed.
- All exterior building lights shall be integrated into the design of a building.

Mitigation Measures

No mitigation measures related to aesthetics are required.

REFERENCES

Caltrans California Scenic Highway Mapping System (Caltrans 2017). Accessed: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/

City of Placentia Municipal Code. Accessed: <https://qcode.us/codes/placentia/>

Phase I Environmental Site Assessment, 2017. Prepared by SCS Engineers (Phase I 2017).

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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2. AGRICULTURE AND FORESTRY RESOURCES.

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The project site is vacant and undeveloped land that was previously used for oil production. The project site is identified by the California Department of Conservation Important Farmland Finder as “Urban and Built-Up Land” (CDC 2017). The project site is not designated as Prime, Unique, or Farmland of Statewide Importance. Thus, the proposed project would not result in impacts related to conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project site has an existing zoning designation for commercial uses. The project site is not zoned for agricultural use and is not subject to a Williamson Act contract. Thus, the proposed project would not result in impacts related to conflict with an existing agricultural zoning or Williamson Act contract, and impacts would not occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The project site consists of disturbed land that has been previously used for oil production uses. No forest land exists on or adjacent to the project site. The project site has a zoning designation for commercial and is not zoned for forest land or timberland uses. Thus, the proposed project would not result in impacts related to conflict with an existing forest land or timberland zoning, and impacts would not occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The project site is vacant land that has been previously used for oil production; and no forest land exists. Thus, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use, and impacts would not occur.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. As described in the responses above, the project area does not include farmland or forest land; thus, implementation of the proposed project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use. Impacts would not occur.

Existing Plans, Programs, or Policies

There are no impact reducing Plans, Programs, or Policies related to agriculture and forestry that are applicable to the project.

Mitigation Measures

No mitigation measures related to agriculture and forestry are required.

REFERENCES

California Department of Conservation Important Farmland Finder (CDC 2017). Accessed: <https://maps.conservation.ca.gov/dlrp/ciff/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The discussion below is based on the Air Quality Impact Analysis prepared by Urban Crossroads, 2017 (AQUC 2017), which is included as Appendix A.

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact. The project site is located in the South Coast Air Basin (Basin), which is under the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD). The SCAQMD and Southern California Association of Governments (SCAG) are responsible for preparing the Air Quality Management Plan (AQMP), which addresses federal and state Clean Air Act (CAA) requirements. The AQMP details goals, policies, and programs for improving air quality in the Basin. In preparation of the AQMP, SCAQMD and SCAG use land use designations contained in General Plan documents to forecast, inventory, and allocate regional emissions from land use and development-related sources. For purposes of analyzing consistency with the AQMP, if a proposed project would have a development density and vehicle trip generation that is substantially greater than what was anticipated in the General Plan, then the proposed project would conflict with the AQMP. On the other hand, if a project’s trip generation is consistent with the General Plan, its emissions would be consistent with the assumptions in the AQMP, and the project would not conflict with SCAQMD’s attainment plans. In addition, the SCAQMD considers projects consistent with the AQMP if the project would not result in an increase in the frequency or severity of existing air quality violations or cause a new violation.

The project site has a General Plan land use designation of SP-7 and a zoning designation for commercial uses. The proposed project would amend SP-7 to change the zoning of a 6.46-acre portion of the project site from commercial to medium density residential. As detailed in Section 16, Transportation and Traffic Section, operation of the proposed 54 single family residences on the 6.46-acre portion of the project site would result in 55.6 percent fewer daily vehicle trips than development of the area for commercial uses (2,293 daily trips from the residential uses versus 5,168 daily trips from commercial uses in the area). Thus, the proposed residential zoning would result in reduced emissions from vehicular trips in comparison to those that would be generated from build out of the commercial zoning; and therefore, would be within the AQMP emissions assumptions. In addition, the proposed project would develop an infill parcel and provide additional residences near retail services and adjacent to existing residential. As a result, the vehicular trips and emissions generated from the proposed project would be consistent with the assumptions in the AQMP and would not conflict with SCAQMD's attainment plans.

In addition, emissions generated by construction and operation of the proposed project would not exceed thresholds with implementation of mitigation measures, as described in the analysis below, which are based on the AQMP and are designed to bring the Basin into attainment for the criteria pollutants for which it is in nonattainment. Therefore, because the proposed project does not exceed any of the thresholds it would not conflict with SCAQMD's goal of bringing the Basin into attainment for all criteria pollutants and, as such, is consistent with the AQMP. As a result, impacts related to conflict with the AQMP from the proposed project would be less than significant

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less than significant Impact. As described in the previous response, the project site is within the SCAQMD. Thus, the methodologies from the SCAQMD CEQA Air Quality Handbook and SCAQMD thresholds are used in evaluating project impacts. The SCAQMD has established daily mass thresholds for regional pollutant emissions, which are shown in Table AQ-1. Should construction or operation of the proposed project exceed these thresholds a significant impact could occur; however, if estimated emissions are less than the thresholds, impacts would be considered less than significant.

Table AQ-1: SCAQMD Regional Daily Emissions Thresholds (lbs/day)¹

Pollutant	Construction	Operations
VOC	75	55
NO _x	100	55
CO	550	550
PM ₁₀	150	150
PM _{2.5}	55	55
SO _x	150	150

Construction

Construction activities associated with the proposed project would generate pollutant emissions from the following: (1) site preparation, grading, and excavation. (2) construction workers traveling to and from project site; (3) delivery and hauling of construction supplies to, and debris and soil export

¹ SCAQMD CEQA Air Quality Handbook, November 1993 Rev.

from, the project site; (4) fuel combustion by onsite construction equipment; (5) building construction; application of architectural coatings; and paving. The amount of emissions generated on a daily basis would vary, depending on the intensity and types of construction activities occurring. Grading for the proposed project would involve emissions related to cut of 9,700 cubic yards and fill of 11,600 cubic yards of soils. This involves 1,900 cubic yards of soil import, and emissions of trucks importing soil. The cut, fill, and import of soils during construction results in the peak-day construction emissions of NO_x to reach 71.77, as shown on Table AQ-2. However, this would only occur during maximum grading and export activity and would not exceed the SCAQMD threshold, also shown on Table AQ-2.

In addition, the CalEEMod results shown in Table AQ-2, indicate that all of construction emissions generated by the proposed project would not exceed SCAQMD regional thresholds. Therefore, construction activities would result in a less than significant impact.

Table AQ-2: Peak-Day Regional Construction Emissions (lbs/day)

	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
2018	6.17	71.77	24.58	0.06	23.51	13.08
2019	44.14	15.30	15.27	0.02	0.99	0.80
Maximum Daily Emissions	44.14	71.77	24.58	0.06	23.51	13.08
SCAQMD Threshold	75	100	550	150	150	55
Exceed Significance?	No	No	No	No	No	No

Source: Urban Crossroads, 2017.

It is mandatory for all construction projects to comply with several SCAQMD Rules, including Rule 403 for controlling fugitive dust, PM₁₀, and PM_{2.5} emissions from construction activities, particularly during grading. Rule 403 requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the proposed project site, covering all trucks hauling soil with a fabric cover and maintaining a freeboard height of 12-inches, and maintaining effective cover over exposed areas. Compliance with Rule 403 is included as PPP AQ-1 and was accounted for in the construction emissions modeling. In addition, implementation of SCAQMD Rule 1113 that governs the VOC content in architectural coating, paint, thinners, and solvents, was accounted for in the construction emissions modeling, and is included as PPP AQ-2.

Operations

Implementation of the proposed commercial and residential uses would result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products. However, operational vehicular emissions would generate the majority of emissions from the project. The modeled operational emissions are summarized in Table AQ-3. As shown, the proposed project would not generate emissions exceeding the SCAQMD's applicable thresholds. Therefore, the project's operational emissions would be less than significant.

Table AQ-3: Peak Operational Emissions (lbs/day)

Summer Scenario	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Source	4.61	1.16	18.09	0.05	2.26	2.26
Energy Source	0.12	1.09	0.77	0.01	0.08	0.08
Mobile	7.28	28.54	51.76	0.13	8.73	2.44
Total Maximum Daily Emissions	12.01	30.79	70.62	0.19	11.07	4.78
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
Winter Scenario	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Source	4.61	1.16	18.09	0.05	2.26	2.26
Energy Source	0.12	1.09	0.77	0.01	0.08	0.08
Mobile	6.91	28.47	52.86	0.12	8.73	2.44
Total Maximum Daily Emissions	11.64	30.73	71.72	0.18	11.07	2.44
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: Urban Crossroads, 2017.

- c) **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)?**

Less Than Significant Impact. The South Coast Air Basin (SCAB) is in a non-attainment status for federal ozone standards, federal carbon monoxide standards, and state and federal particulate matter standards. Any development in the SCAB, including the proposed project, could cumulatively contribute to these pollutant violations. Evaluation of cumulative air quality impacts of the proposed project has been completed pursuant to SCAQMD's cumulative air quality impact methodology, SCAQMD states that if an individual project results in air emissions of criteria pollutants (ROG, CO, NO_x, SO_x, PM₁₀, and PM_{2.5}) that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of the criteria pollutant(s) for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.

As described above in response to Impact 3.b), neither construction or operation of the proposed project would result in an exceedance of any SCAQMD's recommended daily thresholds. Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant, and impacts would be less than significant.

- d) **Expose sensitive receptors to substantial pollutant concentrations?**

Less Than Significant Impact with Mitigation Incorporated. The SCAQMD recommends the evaluation of localized NO₂, CO, PM₁₀, and PM_{2.5} construction-related impacts to sensitive receptors in the immediate vicinity of the project site. Such an evaluation is referred to as a localized significance threshold (LST) analysis. The impacts were analyzed pursuant to the SCAQMD's *Final Localized Significance Threshold Methodology* (SCAQMD 2008). According to the LST Methodology, "off-site mobile emissions from the project should not be included in the emissions compared to the LSTs" (SCAQMD 2008).

Localized Air Quality Thresholds

SCAQMD has developed Local Significance Thresholds (LSTs) that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, and thus would not cause or contribute to localized air quality impacts. LSTs are developed based on the ambient concentrations of NO_x, CO, PM₁₀, and PM_{2.5} pollutants for each of the 38 source receptor areas (SRAs) in the SCAB. The project site is located in SRA 16, North Orange County.

Construction

The localized thresholds from the mass rate look-up tables in SCAQMD's Final Localized Significance Threshold Methodology document, were developed for use on projects that are less than or equal to 5-acres in size or have a disturbance of less than or equal to 5 acres daily.

The Air Quality Impact Analysis (Appendix A) determined that the proposed project would disturb a maximum of 3.5 acres per day during site preparation and 2.5 acres per day during grading activity, and that the closest receptor is approximately 10 feet (3.05 meters) from the project site. Although these sensitive receptors are located closer than 25 meters from the project site, SCAQMD's LST methodology states that projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.

As shown in Table AQ-4, without mitigation emissions during construction activity would exceed SCAQMD's localized significance thresholds for PM₁₀ and PM_{2.5} during site preparation and grading.

Table AQ-4: Peak Localized Daily Construction Emissions Without Mitigation (lbs/day)

Site Preparation	Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	71.70	23.76	23.31	13.03
SCAQMD Localized Threshold	184	1,037	9	5
Threshold Exceeded?	No	No	Yes	Yes
Grading	Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	48.30	17.54	10.11	5.34
SCAQMD Localized Threshold	159	854	7	4
Threshold Exceeded?	No	No	Yes	Yes

Source: Urban Crossroads, 2017.

As a result, Mitigation Measures MM AQ-1 and MM AQ-2 are included to require watering construction areas 4 times per day to ensure minimum soil moisture of 12 percent, as verified by a moisture probe; and require that all construction equipment greater than 150 horsepower (>150 HP) that complies with EPA/CARB Tier 3 emissions standards. With implementation of Mitigation Measures MM AQ-1 and MM AQ-2, PM₁₀ and PM_{2.5} emissions would be reduced to below thresholds, as shown in Table AQ-5.

Table AQ-5: Peak Localized Daily Construction Emissions With Mitigation (lbs/day)

Site Preparation	Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	27.05	30.31	6.27	3.67
SCAQMD Localized Threshold	184	1,037	9	5
Threshold Exceeded?	No	No	No	No
Grading	Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	20.83	24.51	2.94	1.74
SCAQMD Localized Threshold	159	854	7	4
Threshold Exceeded?	No	No	No	No

Source: Urban Crossroads, 2017.

Hot Spots

Regarding potential “hot spots” of CO that could result from the project, the Air Quality Impact Analysis (Appendix A) describes that the proposed project would not generate enough traffic to generate a potential hotspot. As described in the AQMP, even if the daily traffic volume at any intersection was to reach 400,000 vehicles per day, it still would not likely exceed the most stringent 1-hour CO standard (20 ppm).

As detailed in Section 16, Transportation and Traffic, the project would generate 2,857 net daily, 145 net a.m. peak hour and 166 net p.m. peak hour trips. According to the Orange County Transportation Authority 2017 Traffic Flow Map (OCTA, 2017), Rose Drive currently carries approximately 26,000 average daily trips (ADT) south of Alta Vista Street and 31,000 ADT north of Alta Vista Street. Alta Vista Street carries 14,000 ADT adjacent to the project site. When project traffic is added, the highest potential ADT would be 33,857 ADT on Rose Drive north of Alta Vista Street, which much less than the volume of traffic required to generate a CO hot spot. Thus, impacts related to a CO hot spot would not occur from implementation of the proposed project.

e) Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor issues include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations. The proposed project would implement residential and commercial development within the project area. Residential uses do not involve the types of activities that would emit objectionable odors affecting a substantial number of people. In addition, odors generated by new and existing non-residential land uses are required to be in compliance with SCAQMD Rule 402 to prevent odor nuisances on sensitive land uses. SCAQMD Rule 402, Nuisance, states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

During construction, emissions from diesel equipment, use of volatile organic compounds from architectural coatings, and paving activities may generate some nuisance odors. However, these odors would be temporary and are not expected to affect a substantial number of people. Therefore, impacts relating to both operational and construction activity odors would be less than

significant.

Existing Plans, Programs, or Policies

The following PPPs are incorporated into the project and would reduce impacts related to air quality. These actions will be included in the project's mitigation monitoring and reporting program:

PPP AQ-1: The project is required to comply with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 403, which includes the following:

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the project are watered, with complete coverage of disturbed areas, at least 3 times daily during dry weather; preferably in the mid-morning, afternoon, and after work is done for the day.
- The contractor shall ensure that traffic speeds on unpaved roads and project site areas are reduced to 15 miles per hour or less.

PPP AQ-2: The project is required to comply with the provisions of South Coast Air Quality Management District Rule (SCAQMD) Rule 1113. Only "Low-Volatile Organic Compounds" paints (no more than 50 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications shall be used

Mitigation Measures

MM AQ-1: The project plans, permits, and grading specifications shall state that during site preparation and grading activity all actively graded areas shall be watered at 2.1-hour watering intervals (e.g., 4 times per day) or a movable sprinkler system shall be in place to ensure minimum soil moisture of 12 percent is maintained for actively graded areas. Moisture content can be verified with use of a moisture probe by the grading contractor.

MM AQ-2: The project plans, permits, and grading specifications shall state that construction equipment greater than 150 horsepower (>150 HP), shall be off-road diesel construction equipment that complies with EPA/CARB Tier 3 emissions standards during all construction phases and all construction equipment shall be tuned and maintained in accordance with the manufacturer's specifications.

REFERENCES

Air Quality Impact Analysis prepared by Urban Crossroads, 2017 (AQUC 2017).

Orange County Transportation Authority Annual Traffic Volume Maps (OCTA 2017). Accessed: <http://www.octa.net/News-and-Resources/Open-Data/Annual-Traffic-Volume-Maps/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4. BIOLOGICAL RESOURCES:				
Would the project:				
a) 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 Game ² or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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 Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is based on the Habitat Suitability Evaluation prepared by Ecological Sciences, 2017 (EC 2017), which is included as Appendix B.

a) 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

² Effective January 1, 2013, the California Department of Fish and Game (DFG) became the California Department of Fish and Wildlife. See <https://cdfgnews.wordpress.com/2012/12/31/departement-name-change-effective-tomorrow/>. The CEQA Guidelines Appendix G: Environmental Checklist Form has not been updated to reflect this new name.

plans, policies, or regulations, or by the California Department of Fish and Game² or U.S. Fish and Wildlife Service?

No Impact. As described previously, the project site was previously used for oil extraction activities and is highly disturbed. The project site does not include any special status species or habitat associated with special status species.

The Habitat Suitability Evaluation (EC 2017) prepared for the project site describes that the non-native plant species are located onsite that include the following ruderal species: Mediterranean grass (*Schismus barbatus*), foxtail chess (*Bromus madritensis ssp. rubens*), Russian thistle (*Salsola tragus*), Jimsonweed (*Datura stramonium*), black mustard (*Brassica nigra*), spotted spurge (*Euphorbia maculata*), and Australian saltbush (*Atriplex semibaccata*); and the landscaping species of gum tree (*Eucalyptus sp.*) and fan palm (*Washingtonia filifera*). The project site also hosts common wildlife species that includes: northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), European starling (*Sturnus vulgaris*), and house sparrow (*Passer domesticus*). One reptile species was recorded that included side-blotched lizard (*Uta stansburiana*). Mammals recorded included California ground squirrel (*Spermophilus beecheyi*).

The Habitat Suitability Evaluation describes that no special-status plant or wildlife species were detected on site during the reconnaissance survey and none are expected due to lack of suitable habitat (EC 2017). In addition, the previous long-term use of the site for commercial purposes and other anthropogenic disturbances have altered soil chemistry and other substrate characteristics such that on-site soils are not capable of supporting any sensitive plant species known from the site vicinity (EC 2017). Thus, due to the lack of habitat and disturbed nature of the project site, impacts related to special status species would not occur from implementation of the proposed project.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?

No Impact. The project site consists of disturbed upland areas, and does not contain any drainages, vernal pools, wetland habitats, creeks, or rivers. The project site does not contain any riparian habitat, jurisdictional streambed or wetland areas, or sensitive natural community identified by USFWS or CDFW (EC 2017). In addition, no biological resources within or near the project site are identified in the Placentia General Plan. Thus, impacts to riparian habitat or other sensitive natural community would not occur from implementation of the proposed project.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means?

No Impact. As described in the response above, the project site consists of disturbed upland areas, and does not contain any drainages, creeks, rivers, or other wetland areas (EC 2017). The project site does not contain any jurisdictional areas that would be subject to Section 404 of the Clean Water Act, and the proposed project does not involve any hydrological interruption on any existing water resources. Thus, impacts to federally protected wetlands as defined by Section 404 of the Clean Water Act would not occur from implementation of the proposed project.

- d) 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?**

No Impact. The project site is located in an urban, developed area; and is surrounded by roadways or developed land uses. The project site and adjacent areas do not function as a wildlife movement corridor. Thus, development of the proposed project would not result in an impact on regional wildlife movement.

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

No Impact. There are no local biological related policies or ordinances, such as a tree preservation policy or ordinance that is applicable to the proposed project. The project site is adjacent existing non-native ornamental trees that are on City property and are not subject to any ordinances. The project site contains non-native grasses and shrubs, but there are no trees on the project site. Therefore, implementation of the proposed project would not conflict with local polices or ordinances protecting trees and no impact would occur.

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

No Impact. The project site and surrounding area is urbanized and does not support any sensitive habitat and/or species that are protected by an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan (EC 2017). Development of the project site would not conflict with local, regional, or state resource preservation and/or conservation policies. Therefore, no significant impacts would occur as a result of project implementation.

Existing Plans, Programs, or Policies

There are no impact reducing Plans, Programs, or Policies related to biological resources that are applicable to the project.

Mitigation Measures

No mitigation measures related to Biological Resources are required.

REFERENCES

Habitat Suitability Evaluation. Prepared by Ecological Sciences, 2017 (EC 2017).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The discussion below is based on the Phase 1 Cultural Resources Assessment, prepared by Material Culture Consulting, October 2017 (MCC 2017), and included as Appendix C.

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No Impact. The project site is vacant and undeveloped and does not contain any historic resources (MCC 2017). The site was formerly used as an oil field and contained 8 oil wells that were removed in the 1990s. In addition, the project site is adjacent to modern housing tracts and street system. No historic resources are located adjacent to the site. Therefore, implementation of the proposed project would not cause a substantial adverse change in the significance of a historical resource, and impacts would not occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant Impact. As described in the previous response, the project site is vacant and undeveloped. The records search identified that there are no known archaeological or historical architectural resources within the project site or within a 1-mile radius of the project site. As described in the Phase 1 Cultural Resources Assessment, although the project region was likely inhabited from at least 8,000 years ago, no archaeological resources have been recorded. In addition, the intensive modification and disturbance of the project site has eradicated any potential of near-surface resources (MCC 2017). As a result, it is unlikely that cultural resources would be encountered during the course of project development (MCC 2017); thus, impacts would be less than significant.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact With Mitigation Incorporated. The project site has been heavily disturbed by previous site activities to an unknown depth below surface. However, the paleontological sediment is mapped entirely as alluvial fan deposits dating from the Holocene to Late Pleistocene period, which is considered highly sensitive for containing significant fossil remains. The excavation activities included in construction of the proposed project would extend into the paleontologically sensitive Pleistocene units. In similar formations, significant fossil remains have been found less than 5 feet below surface. Therefore, there is a high potential for encountering paleontological resources during excavation activities. As a result, Mitigation Measure CUL-1 is included to provide a paleontological resource monitoring plan with procedures to follow for monitoring and fossil discovery, and requires a curation agreement with an appropriate, accredited institution. With implementation of Mitigation Measure CUL-1, impacts related to paleontological resources would be less than significant.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact. The project site was previously used for oil extraction activities and is not located adjacent to any known cemeteries. It is possible, though, that construction activities could unearth previously unknown human remains. However, compliance with California Health and Safety Code Section 7050.5, as included by PPP CUL-1, would ensure that human remains were treated with dignity and as specified by law, which would reduce the impact to a less than significant level.

As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the County Coroner's office shall be immediately notified and no further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. The Coroner would determine within two working days of being notified, if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would make a determination as to the Most Likely Descendent. Overall, compliance with the existing California Health and Safety Code regulations, as included by PPP CUL-1, would reduce impacts related to human remains to a less than significant level.

Existing Plans, Programs, or Policies

The following PPP is incorporated into the project and would reduce impacts related to cultural resources. This action will be included in the project's mitigation monitoring and reporting program:

PPP CUL-1: Should human remains be discovered during project construction, the project would be required to comply with State Health and Safety Code Section 7050.5, which states that no further disturbance may occur in the vicinity of the body until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine the identity of

and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD must complete the inspection within 48 hours of notification by the NAHC.

Mitigation Measure

MM CUL-1: Prior to the issuance of the first grading permit, the applicant shall provide a letter to the City of Placentia Planning Department, or designee, from a qualified paleontologist stating that the paleontologist has been retained to provide services for the project. The paleontologist shall develop a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the City. The PRIMP shall require that the paleontologist perform paleontological monitoring of any ground disturbing activities within undisturbed native sediments during mass grading, site preparation, and underground utility installation. The project paleontologist may re-evaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations have been completed.

In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered.

Criteria for discard of specific fossil specimens will be made explicit. If a qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if an important fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage and treatment shall be done at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.

REFERENCES

Phase 1 Cultural Resources Assessment, prepared by Material Culture Consulting, October 2017 (MCC 2017).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. GEOLOGY AND SOILS. Would the project:				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is based on the Geotechnical Investigation, prepared by Associated Soils Engineering, September 2017 (ASE 2017), included as Appendix D.

a) 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?**

No Impact. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act requires the State Geologist to establish regulatory zones, known as "Alquist-Priolo (AP) Earthquake Fault Zones," around the surface traces of active faults and to issue appropriate maps. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet).

The project site is not located within a designated Alquist-Priolo Earthquake Fault Zone. No active faults have been mapped near the project site. The closest active faults to the project site is the Whittier Fault that is located approximately 3.2 miles from the project site and the Puente Hills Blind Thrust Fault that is located approximately 4.9 miles from the site (ASE 2017). Thus, impacts related to rupture of a known earthquake fault would not occur.

a) **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

ii. **Strong seismic ground shaking?**

Less Than Significant Impact. The project site is located in a seismically active region, as is all of southern California. The project site could be subject to seismically related strong ground shaking. Groundshaking is a major cause of structural damage from earthquakes. The amount of motion expected at a building site can vary from none to forceful depending upon the distance to the fault, the magnitude of the earthquake, and the local geology. Greater movement can be expected at sites located closer to an earthquake epicenter, that consist of poorly consolidated material such as alluvium located near the source, and in response to an earthquake of great magnitude.

The Geotechnical Investigation that was prepared for the project states that the site is likely to be subject to strong seismic ground shaking during the life of the project due to the numerous fault in the region, and states that the seismic design of the proposed structures should be implemented in accordance with the applicable provisions stipulated in the California Building Code (CBC) (ASE 2017).

As described above, the Whittier Fault that is located approximately 3.2 miles from the project site and the Puente Hills Blind Thrust Fault that is located approximately 4.9 miles from the site. In addition, the Chino-Central Avenue (Elsinore) Fault is located approximately 9.9 miles from the site (ASE 2017).

The proposed project would add development, employees, and residents within the project site. Therefore, project implementation could subject people and structures to hazards from ground shaking. However, the California Building Code (CBC) includes provisions to reduce impacts caused by major structural failures or loss of life resulting from earthquakes or other geologic hazards. For example, Chapter 16 of the CBC contains requirements for design and construction of structures to resist loads, including earthquake loads. The CBC provides procedures for earthquake resistant structural design that include considerations for onsite soil conditions, occupancy, and the configuration of the structure including the structural system and height.

The City of Placentia has adopted the 2016 version of the CBC as Chapter 20.04 of the Municipal Code, which includes provisions to reduce impacts caused by potential major structural failures or loss of life resulting from earthquakes or other geologic hazards. For example, as done by the proposed project, the CBC requires that a California Certified Engineering Geologist or California-licensed civil engineer prepare a site-specific engineering analysis that demonstrates the satisfactory performance of proposed structures and contains requirements for design and construction of structures to resist loads and peak ground accelerations that could result from earthquakes. The Geotechnical Investigation prepared for the project includes this information, in addition to recommendations for site grading, construction, foundation design, slab design, retaining walls, infiltration design, and pavement design that are based on the CBC regulations and identified specifically for the proposed project based on site conditions. These CBC-related and geologist and/or civil engineer specifications for the proposed project are required to be incorporated into grading plans and specifications as a condition of project approval, as included as PPP GEO-1. Thus, the project would be required to adhere to the provisions of the CBC as specified for the project, which are reviewed by the City for appropriate inclusion, as part of the building plan check and development review process. Overall, compliance with the requirements of the CBC and the City municipal code for structural safety, as included as PPP GEO-1, would reduce hazards from strong seismic groundshaking to a less than significant level.

a) 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?

Less Than Significant Impact. The term "liquefaction" describes a phenomenon in which a saturated cohesionless soil loses strength and acquires a degree of mobility as a result of strong ground shaking during an earthquake. The factors known to influence liquefaction potential include soil type and depth, grain size, relative density, groundwater level, degree of saturation, and both the intensity and duration of ground shaking.

The Geotechnical Investigation describes that groundwater is greater than 31 feet 6 inches below existing grade, and that onsite soils consist of stiff to hard, fine grained silty/clayey fill and native soils, loose to medium dense granular fill soils, and medium dense to very dense granular native soils that exhibit stiff to hard consistency that are not prone to liquefaction (ASE 2017). Thus, the likelihood of occurrence of seismically-induced liquefaction at the site was determined by the Geotechnical Investigation to be negligible (ASE 2017). The project would be required to comply with the CBC requirements, as implemented by the City's Municipal Code, and by the plan check and permitting process. Thus, potential impacts related to liquefaction would be less than significant.

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

iv. Landslides?

No Impact. The project site is generally level without significant slopes and is not located near substantial slopes or hillsides. The Geotechnical Investigation states that there is no indication that recent landslides or unstable slope conditions exist on or adjacent to the site (ASE 2017). In addition, the California Seismic Hazard Map does not show that the area has a potential for earthquake-induced landslides. Therefore, the project would not expose people or structures to slope instability or seismically induced landslides.

b) Result in soil erosion or the loss of topsoil?**Less Than Significant Impact.****Construction**

Grading and excavation activities that would be required for the proposed project would expose and loosen topsoil, which could be eroded by wind or water. Thus, construction of the project has the potential to contribute to soil erosion and the loss of topsoil.

However, the City's Municipal Code Section 16.20, Stormwater Runoff and Urban Pollutant Control states that all significant development within the City, such as the proposed project, shall be undertaken in accordance with the County Drainage Area Management Plan (DAMP). The DAMP requires construction sites to implement control practices that address erosion and sedimentation (DAMP Section 8.0). Additionally, per Municipal Code Section 16.20.010, the City is a co-permittee to the Statewide National Pollutant Discharge Elimination System (NPDES) Permit for General Construction Activity, which requires implementation of a Storm Water Pollution Prevention Plan (SWPPP), by a Qualified SWPPP Developer. The SWPPP is required to be consistent with the County DAMP, address site-specific conditions related to sources of sediment, and implement erosion control and sediment control BMPs to reduce or eliminate sediment during construction. Adherence to a City approved SWPPP, which is included as PPP WQ-1 would be verified prior to the issuance of a demolition or grading permit would ensure that potential erosion associated with construction activities would be minimized, and impacts would be less than significant.

Operation

The proposed project includes installation of landscaping throughout the project site and areas of loose topsoil that could erode by wind or water would not exist upon operation of the proposed commercial and residential uses. In addition, as described in Section 9, Hydrology and Water Quality the hydrologic features of the proposed project have been designed to slow, filter, and retain stormwater within biofiltration systems and landscaping on the project site, which would also reduce the potential for stormwater to erode topsoil. Furthermore, pursuant to the City's Municipal Code Section 16.20.040, implementation of the project requires a Water Quality Management Plan (WQMP), which is included as PPP WQ-2. The WQMP describes the operational BMPs that would be implemented to minimize or eliminate the potential for soil erosion or loss of topsoil during operation of the project. As a result, potential impacts related to substantial soil erosion or loss of topsoil would be less than significant.

c) 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- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. As described above, the project site is relatively level, and does not contain nor is adjacent to any significant slope of hillside area. The project would not create slopes. Thus, on or off-site landslides would not occur from implementation of the project.

Also, as described above the project site is not conducive to effects related to liquefaction. Lateral spreading, a phenomenon associated with seismically-induced soil liquefaction, is a display of lateral displacement of soils due to inertial motion and lack of lateral support during or post liquefaction. It is typically exemplified by the formation of vertical cracks on the surface of liquefied soils, and usually takes place on gently sloping ground or level ground with nearby free surface such as drainage or stream channel (ASE 2017). As the project does not contain a drainage or stream channel, and the potential for liquefaction onsite is limited, impacts related to lateral spreading would also be less than significant (ASE 2017).

Subsidence is a general lowering of the ground surface over a large area that is generally attributed to lowering of the ground water levels within a groundwater basin. Localized or focal subsidence or settlement of the ground can occur as a result of earthquake motion in an area where groundwater in a basin is lowered. Because the groundwater has been historically deep at the project site, and the project would not pump water from the project area (as further described below), impacts related to subsidence would not occur.

Seismic related ground failure or settlements can occur within loose to moderately dense, dry or saturated granular soil. As described previously, the Geotechnical Investigation identified that onsite soils have a stiff to hard consistency that are not prone to ground failure. However, the Geotechnical Investigation recommends that onsite soils providing foundations for buildings and pavement areas be overexcavated and recompacted pursuant to the CBC compaction regulations. With implementation of the overexcavation requirements per the CBC, as included as PPP GEO-1, the potential for settlement or collapse of soils would be reduced to a less than significant level. Therefore, compliance with the requirements of the CBC as identified in the site geotechnical design recommendations that would be reviewed by the City for appropriate inclusion, as part of the permitting process, would reduce potential impacts related to ground collapse to a less than significant level.

d) Be located on expansive soil, as defined in in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant Impact. Expansive soils contain significant amounts of clay particles that swell when wet and shrink when dry. Foundations constructed on expansive soils are subjected to forces caused by the swelling and shrinkage of the soils and could result in heaving and cracking of buildings and foundations.

As described by the Geotechnical Investigation, much of the subsurface soils on the project site consist of fill containing interbedded silty sands, sands, and sand with silt, with some layers of sandy silts, clayey silts with sands, silty clays, and clays. Encountered artificial fill soils were generally medium dense to very dense (ASE 2017). Laboratory tests that were completed as part of the Geotechnical Investigation indicate that soils have a “Low” soil expansion potential.

The Geotechnical Investigation also describes that excavation bottoms would be recompacted to a minimum 90 percent relative compaction and describes removal and recompaction of all fill soils. In addition, foundations for the project would be required to comply with the CBC requirements, as implemented by the City’s Municipal Code, and by the plan check and permitting process. Thus, impacts related to expansive soils would be less than significant.

e) 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?

No Impact. The proposed project would tie into existing sewers and would not use septic tanks or alternative wastewater disposal systems. As a result, impacts related to septic tanks or alternative waste water disposal systems would not occur from implementation of the proposed project.

Existing Plans, Programs, or Policies

The following PPPs are incorporated into the project and would reduce impacts related to geology and soils. These actions will be included in the project's mitigation monitoring and reporting program:

PPP GEO-1: The project is required to comply with the California Building Standards Code as included in the City's Municipal Code and the Geotechnical Investigation, prepared by Associated Soils Engineering, September 2017, to preclude significant adverse effects associated with seismic hazards. CBC related and geologist and/or civil engineer specifications for the proposed project are required to be incorporated into grading plans and specifications as a condition of project approval.

PPP WQ-1: Stormwater Pollution Prevention Plan, provided in Section 9, Hydrology and Water Quality.

PPP WQ-2: Water Quality Management Plan, provided in Section 9, Hydrology and Water Quality.

Mitigation Measures

No mitigation measures related to geology and soils are required.

REFERENCES

Geotechnical Investigation, prepared by Associated Soils Engineering, September 2017 (ASE 2017).

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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7. GREENHOUSE GAS EMISSIONS.

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

The discussion below is based on the Greenhouse Gas Analysis prepared by Urban Crossroads, 2017 (GHGUC 2017), which is included as Appendix E.

Threshold

The City of Placentia has not established local CEQA significance thresholds for greenhouse gas (GHG) emissions, as allowed by Section 15064.7 of the CEQA guidelines. The City utilizes the SCAQMD’s numeric significance thresholds that are based on capture of approximately 90 percent of emissions from development, which is 3,000 metric tons carbon dioxide equivalent (MTCO₂e) per year for mixed use (residential/commercial) projects. This approach has been adopted by the SCAQMD for residential and mixed-use projects where it is the lead agency and is also widely used by cities in the South Coast Air Basin. As such, this threshold is utilized herein to determine if emissions of greenhouse gases from this project would be significant.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. Construction activities produce combustion emissions from various sources, such as site excavation, grading, utility engines, heavy-duty construction vehicles onsite, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from onsite construction activities would vary daily as construction activity levels change.

In addition, operation of the proposed commercial and residential uses would result in area and indirect sources of operational GHG emissions from vehicle trips, electricity and natural gas consumption, water transport (the energy used to pump water), and solid waste generation. GHG emissions from electricity consumed from the proposed development would be generated off-site by the electricity provider and is assumed to be generated by fuel combustion. GHG emissions from water transport are also indirect emissions resulting from the energy required to transport water from its source.

The estimated operational GHG emissions that would be generated from implementation of the proposed project are shown in Table GHG-1. Additionally, in accordance with SCAQMD’s recommendation, the project’s construction-related GHG emissions are amortized over 30 years

and added to the operational emissions estimate in order to determine the project's total annual GHG emissions. As shown on Table GHG-1, the project would result in approximately 2,595.99 MTCO₂e per year and would not exceed the threshold of 3,000 MTCO₂e per year. Thus, project-related GHG emissions would be less than significant.

Table GHG-1: Annual Greenhouse Gas Emissions Generated by the Project

Emission Source	Emissions (metric tons per year)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ E
Construction emissions amortized over 30 years	19.95	--	--	20.08
Area	17.49	0.02	--	18.01
Energy	482.22	0.02	0.01	484.47
Mobile Sources	1,929.28	0.14	--	1,932.81
Waste	38.27	2.26	--	94.81
Water Usage	38.66	0.22	0.01	45.82
Total CO₂E (All Sources)	2,595.99			
SCAQMD Threshold	3,000			
Threshold Exceeded?	No			

Source: Urban Crossroads, 2017.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The project would comply with regulations imposed by the State and the SCAQMD that reduce GHG emissions, as described below:

- Global Warming Solutions Act of 2006 (AB 32) is applicable to the project because many of the GHG reduction measures outlined in AB 32 (e.g., low carbon fuel standard, advanced clean car standards, and cap-and-trade) have been adopted over the last five years and implementation activities are ongoing. The proposed project would develop commercial and residential uses that would not conflict with fuel and car standards or cap-and-trade.
- Pavley Fuel Efficiency Standards (AB 1493). Establishes fuel efficiency ratings for new (model year 2009-2016) passenger cars and light trucks. AB 1493 is applicable to the project because the vehicles traveling to and from the project site would meet the manufacturer required fuel efficiency standards that would reduce GHG emissions. The California Air Resources Board (CARB) anticipates that implementation of the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 30 percent.
- Title 24 California Code of Regulations (Title 24) establishes energy efficiency requirements for new construction that address the energy efficiency of new (and altered) residences and commercial buildings. The proposed project is required to comply with Title 24, which would be verified by the City during the project permitting process.
- Title 17 California Code of Regulations (Low Carbon Fuel Standard [LCFS]). Requires carbon content of fuel sold in California to be 10 percent less by 2020. Because the LCFS applies to any transportation fuel that is sold or supplied in California, all vehicles trips generated by the project would comply with LCFS.

- California Water Conservation in Landscaping Act of 2006 (AB 1881) provides requirements to ensure water efficient landscapes in new development and reduced water waste in existing landscapes. The proposed project is required to comply with AB 1881 landscaping requirements, which would be verified by the City during the project permitting process.

In addition, as described in the previous response, the proposed project would not result in GHG emissions that would exceed the threshold of 3,000 MTCO₂e per year, which is the SCAQMD's numeric significance threshold. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Existing Plans, Programs, or Policies

There are no impact reducing Plans, Programs, or Policies related to greenhouse gas emissions that are applicable to the project.

Mitigation Measures

No mitigation measures related to greenhouse gas emissions are required.

REFERENCES

Greenhouse Gas Analysis prepared by Urban Crossroads, 2017 (GHGUC 2017).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
8. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is based on the Phase I Environmental Site Assessment, 2017. Prepared by SCS Engineers (Phase I 2017), and the Methane Assessment 2017. Prepared by SCS Engineers (SCS 2017), which are included as Appendix F and Appendix G.

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. A hazardous material is defined as any material that, due to its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, and any material that a business or the local implementing agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released.

As described in Section 2.4, *Project Site Background*, the 8 oil wells that formally existed onsite have been removed and petroleum-impacted soils were successfully treated on the site and the Orange County Health Care Agency issued a full closure letter for the site in 2002 (Phase I 2017). However, the proposed construction activities would involve transport, use, and disposal of hazardous materials such as paints, solvents, oils, grease, and caulking. In addition, hazardous materials may be needed for fueling or operating construction equipment on the site. These types of materials are not acutely hazardous, and all storage, handling, use, and disposal of these materials are regulated by federal and state requirements, which the project construction activities are required to strictly adhere to. These regulations include: the federal Occupational Safety and Health Act and Hazardous Materials Transportation Act; Title 8 of the California Code of Regulations (CalOSHA), and the state Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. As a result, hazardous material impacts related to construction activities would be less than significant.

Operation of the proposed project includes activities related to residential and retail/restaurant development, which would use hazardous materials including: solvents, cleaning agents, paints, pesticides, batteries, and aerosol cans. Although residents and employees of the project would utilize common types of hazardous materials, normal routine use of these products as indicated by product safety labeling in compliance with federal and state regulations would not result in a significant hazard to residents or workers in the vicinity of the project. Therefore, operation of the proposed project would not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous waste during operation of the proposed project. Impacts would be less than significant.

b) 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?

Less than Significant Impact with Mitigation Incorporated. As described by the Phase I Environmental Site Assessment (Phase I 2017), the project site was used for oil extraction activities and 8 wells were located on the property from the 1930s through the 1990s. By the late 1990s, all oil field related structures/buildings had been removed from the site (Phase I 2017). Potential environmental issues associated with oil field site include residual petroleum hydrocarbons in soil and presence of methane gas.

The Phase I determined that there is no evidence of releases of hazardous substances and there appears to be little potential for on-site contamination on the site (Phase I 2017). The Phase I also

identified that after removal of the oil production facilities, petroleum-impacted soils were successfully treated on the site and the Orange County Health Care Agency issued a full closure letter for the site in 2002 (Phase I 2017).

Due to the potential for methane gas to be present in the project area, a methane gas testing was conducted pursuant to the requirements of the Orange County Fire Authority (OCFA) as outlined in the Combustible Soil Gas Hazard Mitigation Guideline C-03. The testing identified methane gas at concentrations ranging from 0 to 500 parts per million (ppm) (SCS 2017). The OCFA Combustible Soils Gas Hazard Mitigation Guideline provides a threshold of 5,000 ppm. Because the methane gas concentrations on the project site were identified at a maximum of 500, which are much lower than the threshold, impacts related to methane gas would be less than significant.

Although based on the findings of the Phase I no contaminants are anticipated to exist on the project site, because the site was previously used for oil production, petroleum hydrocarbons could exist within onsite soils. Thus, the Phase I recommends inclusion of a soils management contingency plan in the event petroleum hydrocarbons are encountered during site development activities. As a result, Mitigation Measure HAZ-1 has been included to ensure that any contaminated soils identified onsite would be removed and disposed of in compliance with existing federal, state, and local regulations that are overseen by the County of Orange Health Care Agency.

c) Emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact. A preschool is currently located within the commercial center across Alta Vista Street from the project site. As described in response a), construction and operation of the proposed project would involve the use, storage and disposal of small amounts of hazardous materials on the project site. These hazardous materials would be limited and used and disposed of in compliance with federal, state, and local regulations, which would reduce the potential of accidental release into the environment near the school. In addition, the proposed residential and commercial uses would not involve the use or handling of acutely hazardous materials.

Furthermore, the emissions that would be generated from construction and operation of the proposed project were evaluated in the air quality analysis presented in Section 3, and the emissions generated from the proposed project would not cause or contribute to an exceedance of the federal or state air quality standards. Thus, the proposed project would not emit hazardous or handle acutely hazardous materials, substances, or waste near the school, and impacts would be less than significant.

d) 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?

No Impact. The Phase I Environmental Site Assessment (Phase I 2017) prepared for the project conducted a database search to determine if the project site or any nearby properties are identified as having hazardous materials. The Phase I record search determined that the project site is not located on or near by a site which is included on a list of hazardous materials sites. As a result, impacts related to hazards from being located on or adjacent to a hazardous materials site would not occur from implementation of the proposed project.

- e) **For a project 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?**

No Impact. The proposed project is not located within an airport land use plan or within two miles of an airport. The closest airports to the project site is the Fullerton Municipal Airport, which is approximately 7.75 miles west of the project site, and John Wayne Airport, which is approximately 13.25 miles south of the project site. Therefore, the proposed project would not result in an airport related safety hazard for people residing or working in the project area.

- 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?**

No Impact. There are no private airstrips located within the vicinity of the project site. Therefore, the development of the project would not result in a safety hazard related to airstrips for people residing or working in the project area.

- g) **Impair implementation of an adopted emergency response plan or emergency evacuation plan?**

Less Than Significant Impact. The City of Placentia Police Department oversees emergency response in the City. The proposed project would provide commercial and single-family residential uses that would be permitted and approved in compliance with existing safety regulations, such as the California Building Code and Fire Code as included in the City's Municipal Code (Chapter 20.04 Building Code and Section 18.04.030, Fire Code) to ensure that it would not conflict with implementation of an emergency evacuation.

The proposed construction activities, including equipment and supply staging and storage, would occur within the project site and would not restrict access of emergency vehicles to the project site or adjacent areas, and impacts related to interference with an adopted emergency response or evacuation plan during construction activities would be less than significant.

Operation of the proposed project would also not result in a physical interference with an emergency response evacuation. Direct access to the project site would be provided from Alta Vista Street and Rose Drive, which are adjacent to the project site. The residential portion of the project would be gated. Thus, to provide emergency vehicle access, an OCFA/Police Department approved Knox Box would be installed. The project is also required to design and construct internal access and provide fire suppression facilities (e.g., hydrants and sprinklers) in conformance with the City Municipal Code. In addition, the OCFA would review the development plans during the permitting process to ensure adequate emergency access pursuant to the requirements of the building and fire codes. As such, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

- h) **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?**

No Impact. The project site is located within a developed suburban area and not adjacent to wildlands and is not located within an identified wildland fire hazard area, as identified by the Orange County Very High Fire Hazard Severity Zone Map. In addition, implementation of the proposed project would be required to adhere to the Uniform Fire Code, as included in the City's Municipal Code Section 18.04.030, and would be reviewed by OCFA during the project permitting process to ensure that the project plans meet the fire protection requirements. Because the project site is not mixed with wildlands and is surrounded by developed lands, it would not expose people or structures to a significant risk of loss, injury, or death from wildfires. Therefore, impacts related to exposure of people or structures to a significant risk of loss, injury or death involving wildland fires would not occur.

Project Design Features & Standard Conditions/Existing Plans, Programs, or Policies

There are no impact reducing Plans, Programs, or Policies related to hazards and hazardous materials that are applicable to the project.

Mitigation Measures

Mitigation Measure HAZ-1: Should potentially contaminated soils be identified during excavation, grading, or construction activities, the applicant's hazardous materials specialist will collect soils samples and have them analyzed for contaminants of concern for concentrations above worker safety thresholds established by the California Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board (RWQCB), and/or County of Orange Health Care Agency. Any soils with chemicals exceeding the RWQCB Environmental Screening Levels (ESLs) for residential uses or hazardous waste limits will be characterized, removed, and disposed of off-site at a licensed hazardous materials disposal facility in compliance with state regulations.

REFERENCES

Methane Assessment 2017. Prepared by SCS Engineers (SCS 2017).

Orange County Very High Fire Hazard Severity Zone Map (Oct 2011). Accessed:
<http://www.ocpublicworks.com/gov/pw/cd/building/firehazard.asp>

Phase I Environmental Site Assessment, 2017. Prepared by SCS Engineers (Phase I 2017).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
9. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) 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 which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| i) 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j) Inundation by seiche, tsunami, or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

The discussion below is based on the Drainage Study, prepared by Blue Peak Engineering, 2017 (Drainage 2017), which is included as Appendix H, and the Preliminary Water Quality Management Plan, prepared by Blue Peak Engineering, 2017 (WQMP 2017).

a) Violate any water quality standards or waste discharge requirements?

Less than Significant Impact.

Construction

Construction of the proposed project would require grading and excavation of soils, which would loosen sediment, and then have the potential to mix with surface water runoff and degrade water quality. Additionally, construction would require the use of heavy equipment and construction-related chemicals, such as concrete, cement, asphalt, fuels, oils, antifreeze, transmission fluid, grease, solvents and paints. These potentially harmful materials could be accidentally spilled or improperly disposed of during construction and, if mixed with surface water runoff, could wash into and pollute waters.

These types of water quality impacts during construction of the project would be prevented through implementation of a stormwater pollution prevention plan (SWPPP). Construction of the project would disturb more than one acre of soil; therefore, the proposed project would be required to obtain coverage under the NPDES General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ, as amended). Construction activity subject to this permit includes clearing, grading, and ground disturbances such as trenching, stockpiling, or excavation. The Construction General Permit requires implementation of a SWPPP that is required to identify all potential sources of pollution that are reasonably expected to affect the quality of storm water discharges from the construction site. The SWPPP would generally contain a site map showing the construction perimeter, proposed buildings, stormwater collection and discharge points, general pre- and post-construction topography, drainage patterns across the site, and adjacent roadways. The SWPPP would also include construction BMPs such as:

- Silt fencing, fiber rolls, or gravel bags
- Street sweeping and vacuuming
- Storm drain inlet protection
- Stabilized construction entrance/exit
- Vehicle and equipment maintenance, cleaning, and fueling
- Hydroseeding
- Material delivery and storage
- Stockpile management
- Spill prevention and control
- Solid waste management
- Concrete waste management

Adherence to the existing requirements and implementation of the appropriate BMPs as ensured through the City's construction permitting process and included as PPP WQ-1, would ensure that the project would not violate any water quality standards or waste discharge requirements, potential water quality degradation associated with construction activities would be minimized, and impacts would be less than significant.

Operations

The proposed project would introduce new commercial and residential uses to the project site, which would introduce the potential for pollutants such as, chemicals from household cleaners, pathogens from pet wastes, nutrients from fertilizer, pesticides and sediment from landscaping, trash and debris, and oil and grease from vehicles. These pollutants could potentially discharge into surface waters and result in degradation of water quality. Thus, the project would be required to comply with existing regulations that limit the potential for pollutants to discharge from the site.

The Orange County Drainage Area Management Plan (DAMP), which is included in the City's Municipal Code as Section 16.20.040, is the primary water pollutant control regulation for development projects. The DAMP requires implementation of Water Quality Management Plans (WQMPs) based on the anticipated pollutants that could result from the project. The potential pollutants guide which BMPs are incorporated into the project, including the Low Impact Development (LID) features, pollutant source control features, and pollutant treatment control features. In addition, the DAMP requires the project to infiltrate, evapotranspire, or biotreat/biofilter the 85th percentile 24-hour storm event. As provided in the Project Description, a new onsite storm water system would be installed to collect runoff from the proposed development, which would filter and discharge it into the existing offsite 36-inch storm drain that is south of the project site. In addition, biotreatment devices such as catch basin planters and tree box filters would be installed to capture and filter runoff from the project area. The biotreatment devices would remove pollutants (i.e., sediments, nutrients, heavy metals, oxygen demanding substances, oil and grease, bacteria, and pesticides).

With implementation of the operational BMPs that would be included in the required WQMP, that is required pursuant to the DAMP and City Municipal Code that is implemented by PPP WQ-2, which would be verified during the permitting process for the proposed project, potential pollutants would be reduced to the maximum extent feasible, and development of the proposed project would not violate any water quality standards or waste discharge requirements, and impacts would be less than significant.

b) 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)?

Less than Significant Impact. The proposed project is within the service boundaries of, and would be served by, the Golden State Water Company (GSWC). Approximately, 44 percent of the total water supply to the Placentia-Yorba Linda area is obtained from groundwater. GSWC operates several groundwater wells within the Orange County Groundwater Basin. The Basin is managed by the Orange County Water District (OCWD), which regulates the amount of groundwater pumped from the Basin and sets the Basin Production Percentage for all pumpers, including GSWC. The proposed project would result in a limited increased need for water supply, as detailed in Section

18, *Utilities and Service Systems*, based on the Golden State Water Company (GSWC) water use factors, the proposed project would result in the need for approximately 8.957 acre-feet/year (AFY), which would be provided by GSWC through both imported and groundwater supplies. Because the Basin is managed by OCWD and the project is limited in size and within the existing Urban Water Management Plan (UWMP) water demand estimates (as detailed in Section 18, *Utilities and Service Systems*), the water need from the proposed project would not require additional groundwater supplies that could result in lowering of the groundwater table. In addition, the project does not propose to extract groundwater. Thus, the proposed project would not result in the lowering of the local groundwater table, and impacts would be less than significant.

c) 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?

Less than Significant Impact. The project site does not contain, nor is adjacent to, a stream, river, creek, or other flowing water body. Thus, impacts related to alteration of the course of a stream or river would not occur.

Construction

Construction of the proposed project would require grading and excavation of soils, which would loosen sediment and could result in erosion or siltation. However, as described in Response 3.9 a), construction of the proposed project requires City approval of a SWPPP prepared by a Qualified SWPPP Developer, as included by PPP WQ-1. The SWPPP is required for plan check and approval by the City's Public Works Department, prior to provision of permits for the project, and would include construction BMPs to reduce erosion or siltation. Typical BMPs for erosion or siltation, include: use of silt fencing, fiber rolls, gravel bags, stabilized construction driveway, and stockpile management (as described in the previous above). Adherence to the existing requirements and implementation of the required BMPs per the permitting process would ensure that erosion and siltation associated with construction activities would be minimized, and impacts would be less than significant.

Operations

The project area is currently undeveloped and largely pervious. After development of the project, the site would be 33 percent pervious, and 67 percent impervious (WQMP 2017). The pervious areas onsite would be landscaped. Thus, implementation of the project would not generate soils that could erode. In addition, the proposed drainage infrastructure would slow and retain stormwater, which would also limit the potential for erosion or siltation. The project proposes to filter stormwater through the infrastructure of the onsite storm drain system and through biotreatment devices such as catch basin planters and tree box filters that would be installed to capture and filter runoff from the project area. As described in previous Response 3.9 a), the DAMP requires the project to implement a WQMP (as included by PPP WQ-2) to infiltrate, evapotranspire, or biotreat/biofilter the 85th percentile 24-hour storm event, and the project would achieve this by the use of the biotreatment devices, such as catch basin planters and tree box filters that have been incorporated into the site plan to meet the drainage needs of the proposed project. As a result, stormwater runoff and the potential for erosion and siltation would not increase with implementation of the proposed project. Therefore, the proposed project would not alter the existing drainage pattern in the project area and would not result in substantial erosion or siltation on- or off-site. Impacts would be less than significant.

d) 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 which would result in flooding on- or off-site?

Less than Significant Impact. As described in the previous response, the project site does not contain, nor is adjacent to, a stream, river, creek, or other flowing water body. Thus, impacts related to alteration of the course of a stream or river would not occur. In addition, the proposed project would be required to implement a SWPPP (included as PPP WQ-1) during construction that would implement BMPs, such as the use of silt fencing, fiber rolls, and gravel bags, that would ensure that runoff would not substantially increase during construction, and flooding on or off-site would not occur.

Also, as described above, the project would implement an operational WQMP (as included by PPP WQ-2) that would install an onsite storm drain system and biotreatment devices such as catch basin planters and tree box filters that would infiltrate, evapotranspire, or biotreat/biofilter the 85th percentile 24-hour storm event, as required by the DAMP. Thus, operation of the proposed project would not substantially increase stormwater runoff, and flooding on or off-site would not occur.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact. As described in the previous responses, the proposed project would be required to implement a SWPPP (included as PPP WQ-1) during construction that would implement BMPs, such as the use of silt fencing, fiber rolls, and gravel bags, that would ensure that runoff would not substantially increase during construction, and that pollutants would not discharge from the project site, which would reduce potential impacts to drainage systems and water quality to a less than significant level.

Also, the project would implement an operational WQMP (included as PPP WQ-2) that would install an onsite storm drain system and biotreatment devices such as catch basin planters and tree box filters as part of the project, that would infiltrate, evapotranspire, or biotreat/biofilter the 85th percentile 24-hour storm event, as required by the DAMP. Thus, operation of the proposed project would not substantially increase stormwater runoff, and pollutants would be filtered onsite. Impacts related to drainage systems and polluted runoff would be less than significant with implementation of the existing requirements, which would be verified during the permitting process.

f) Otherwise substantially degrade water quality?

Less than Significant Impact. As described in the previous responses, the proposed project would be required to implement a SWPPP during construction (as included by PPP WQ-1) that would implement BMPs to limit the potential of pollutants to discharge from the project site. Similarly, a WQMP would be required to be implemented pursuant to the requirements of the DAMP (as included by PPP WQ-2), which would reduce the potential for pollutants to discharge from the project site. Overall, potential impacts related to the substantial degradation of water quality would be less than significant with implementation of the existing regulations that are verified during the City's permitting process.

g) 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?

No Impact. The Federal Emergency Management Agency Flood Insurance Rate Map (FIRM) for the project area (06059C0152J) identifies that the project site is not located within a 100-year flood zone. Thus, the proposed project would not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, and impacts would not occur.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. As described in the response above, the project site is not located within a 100-year flood hazard area. Thus, the proposed project would not place structures within a flood hazard area that would impede or redirect flood flows, and impacts would not occur.

i) 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?

No Impact. Project implementation would not expose either people or structures to flood hazards as a result of the failure of a dam or levee. The site is not subject to inundation as a result of the failure of a dam or levee because no such structure is located near the subject property that would adversely affect the site in the event of a failure. Therefore, no flooding or inundation impacts would result from implementation of the project.

j) Inundation by seiche, tsunami, or mudflow

No Impact. A seiche is a surface wave created when an inland body of water is shaken, usually by earthquake activity. The site also is not subject to flooding hazards associated with a seiche because the nearest large body of surface water are Anaheim Lake, which is an engineered infiltration basin that is located 0.5 miles southwest of the site and is too far away from the project site to result in effects related to a seiche.

The Pacific Ocean is located more than 17.5 miles west of the project site; consequently, there is no potential for the project site to be inundated by a tsunami. In addition, the project site is flat and not located near any steep hillsides; therefore, there is no potential for the site to be adversely affected by mudflow. Thus, implementation of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow. No impact would occur.

Existing Plans, Programs, or Policies

The following PPPs are incorporated into the project and would reduce impacts related to water quality. These actions will be included in the project's mitigation monitoring and reporting program:

PPP WQ-1: Prior to grading permit issuance, the project developer shall have a Stormwater Pollution Prevention Plan (SWPPP) prepared by a QSD (Qualified SWPPP Developer) pursuant to the Orange County Drainage Area Management Plan (DAMP). The SWPPP shall incorporate all necessary Best Management Practices (BMPs) and other DAMP requirements to comply with the National Pollutant Discharge Elimination System (NPDES) regulations to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with

the SWPPP and permit periodic inspection of the construction site by City of Placentia staff or its designee to confirm compliance.

PPP WQ-2: Prior to grading permit issuance, the project developer shall have a Water Quality Management Plan (WQMP) approved by the City for implementation. The project shall comply with the City's Municipal Code Section 16.20.040, the Orange County Drainage Area Management Plan (DAMP), and Regional Water Quality Control Board (RWQCB) requirements in effect at the time permitting to control discharges of sediments and pollutants during operation of the project.

Mitigation Measures

No mitigation measures related to hydrology and water quality are required.

REFERENCES

Federal Emergency Management Agency Flood Map Service Center. Accessed:
<https://msc.fema.gov>.

Golden State Water Company 2015 Urban Water Management Plan - Placentia-Yorba Linda (GSWC 2015). Prepared by Kennedy/Jenks Consultants. July 2016. Accessed:
http://www.gswater.com/download/Placentia-YorbaLinda_2015_UWMP-Final-Draft.pdf

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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10. LAND USE AND PLANNING. Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

a) Physically divide an established community?

No Impact. The physical division of an established community could occur if a major road (expressway or freeway, for example) were built through an existing community or neighborhood, or if a major development was built which was inconsistent with the land uses in the community such that it divided the community. The environmental effects caused by such a facility or land use could include lack of, or disruption of, access to services, schools, or shopping areas. It might also include the creation of blighted buildings or areas due to the division of the community.

The proposed project site is vacant and surrounded by developed land uses that include single-family residential, retail commercial, and roadways. The proposed retail and single-family residential project is consistent with the existing land uses surrounding the project site. The proposed commercial area on the corner of the site would be directly across Alta Vista Street from existing commercial uses, and the proposed residential area would be adjacent on the south and east sides to existing single-family residential uses. The proposed project would develop onsite roadways to serve the residential area and connect to Alta Vista Street. These new roads would not change any existing street systems or divide any developed areas. Overall, implementation of the proposed project would not physically divide an established community, and impacts would not occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact. The project site has an existing General Plan land use designation of SP-7 and a zoning designation for commercial uses. The proposed project would amend SP-7 to change the zoning of a 6.46-acre portion of the project site from commercial to medium density residential. As detailed in Section 16, Transportation and Traffic Section, development of the proposed 54 single-family residences on the 6.46-acre portion of the project site would result in

55.6 percent fewer daily vehicle trips than development of the area for commercial uses (2,293 daily trips from the residential uses versus 5,168 daily trips from commercial uses in the area). Because build out of the proposed residential zoned area would result in a reduced number of vehicular trips compared to operation of commercial uses in the area, the associated impacts related to air quality emissions, greenhouse gas emissions, noise, and traffic congestion would also be less. Additionally, the amended zoning designation and proposed commercial and single-family residential uses would be compatible with development patterns in the area, as described in the previous response. Thus, impacts related to conflict with a policy adopted for the purpose of avoiding or mitigating an environmental effect would be less than significant.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The project site and surrounding area is urbanized and does not support any sensitive habitat and/or species that are protected by an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan (EC 2017). Development of the project site would not conflict with local, regional, or state resource preservation and/or conservation policies. Therefore, impacts would not occur.

Existing Plans, Programs, or Policies

There are no impact reducing Plans, Programs, or Policies related to land use and planning that are applicable to the project.

Mitigation Measures

No mitigation measures related to land use and planning are required.

REFERENCES

City of Placentia East Placentia Specific Plan (SP-7). Accessed:
<http://www.placentia.org/DocumentCenter/View/6231>

Habitat Suitability Evaluation. Prepared by Ecological Sciences, 2017 (EC 2017).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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11. MINERAL RESOURCES. Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

a) 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?

No Impact. The project site is vacant and undeveloped land and is not located in a Significant Mineral Aggregate Resource Area (SMARA) nor is it located in an area with active mineral extraction activities. The Generalized Mineral Land Classification of Orange County (DOC 1994), shows that the project site is in Mineral Resource Zone 1 (MRZ-1). Areas located in MRZ-1 are classified as areas where adequate information indicates that no significant mineral resources are present, or where it is judged that little likelihood exists for their presence.

The project site was previously used for oil extraction activities, that included 8 onsite wells. Like all areas within SP-7, the project site has an Oil Resources zoning overlay that ensures oil extraction/production activities could continue until the reserves diminish. However, oil production activities on the project site were discontinued in the late 1990s (ASE 2017). Therefore, development of the site with commercial and single-family residences would neither result in a loss of oil production nor result in the loss of availability of a known mineral resource that would be of value to the region, and impacts would not occur.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on the general plan, specific plan or other land use plan?

No Impact. As described in the previous response, the area in which the project is located has been the source of oil production activities in the past; however, the subject property has not been used for oil production since the late 1990s (ASE 2017). In addition, the site has been designated as an MRZ-1 area, which are areas where no significant mineral resources exist. Therefore, implementation of the proposed commercial and residential uses on the project site would not result in the loss of locally important mineral resources, and impacts would not occur.

Existing Plans, Programs, or Policies

There are no impact reducing Plans, Programs, or Policies related to mineral resources that are applicable to the project.

Mitigation Measures

No mitigation measures related to mineral resources are required.

REFERENCES

Geotechnical Investigation, prepared by Associated Soils Engineering, September 2017 (ASE 2017).

California, State of. Department of Conservation (DOC 1994). Generalized Mineral Land Classification of Orange County, California. Accessed:
ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_94-15/OFR_94-15_Plate_1.pdf

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
12. NOISE. Would the project result in:				
a) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is based on the Noise Impact Analysis, 2017. Prepared by Urban Crossroads, which is included as Appendix I.

State Law

An interior CNEL of 45 dB is mandated by the State of California Noise Insulation Standards (CCR, Title 24, Part 6, Section T25-28) for residential dwellings and hotel and motel rooms. Conventional construction practices, with closed windows and fresh air supply systems or air conditioning normally suffice.

City of Placentia Municipal Code

Section 23.76.050 of the City’s Municipal Code establishes the permissible noise level that may be received at nearby sensitive uses (e.g., residential). For noise-sensitive residential properties, the exterior noise level shall not exceed 55 dBA L₅₀ during daytime hours (7:00 a.m. to 10:00 p.m.) and shall not exceed 50 dBA L₅₀ during the nighttime hours (10:00 p.m. to 7:00 a.m.). These standards apply for a cumulative period of 30 minutes in any hour (L₅₀), as well as plus 5 dBA cannot be exceeded for a cumulative period of more than 15 minutes in any hour (L₂₅), or the standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour (L₈), or the

standard plus 15 dBA for a cumulative period of more than 1 minute in any hour (L₂), or the standard plus 20 dBA for any period of time (L_{max}), as shown on Table N-1.

Table N-1: City of Placentia Operational Noise Standards

Land Use	Time Period	Exterior Noise Levels (dBA) ¹				
		L ₅₀ (30 Mins)	L ₂₅ (15 mins)	L ₈ (5 mins)	L ₂ (1 Min)	L _{max} (Anytime)
Residential (Noise Zone I)	Daytime	55	60	65	70	75
	Nighttime	50	55	60	65	70

Source: Section 23.76.050 of the City of Placentia Municipal Code

¹ The noise level is the level exceeded "n" percent of the time during the measurement period. L₂₅ is the noise level exceeded 25% of the time

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Section 23.81.170 of the City’s Municipal Code states that construction activity is limited to the hours of 7:00 a.m. and 7:00 p.m. Monday to Friday; 9:00 a.m. to 6:00 p.m. on Saturdays; with no activity allowed on Sundays or holidays.

Noise Thresholds

The Noise Impact Analysis utilized the City’s Municipal Code criteria, the Federal Interagency Committee on Noise (FICON), and Caltrans construction noise analysis protocols as noise thresholds for the proposed project. Noise impacts are considered significant if any of the conditions listed in Table N-2 result from the project.

Table N-2: Noise Significance Criteria

Analysis Scenario	Noise Condition(s)	Significance Criteria	
		Daytime	Nighttime
Off-Site ¹ Traffic Noise	if ambient is < 60 dBA CNEL	≥ 5 dBA CNEL project increase	
	if ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL project increase	
	if ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL project increase	
On-Site ² Traffic Noise	Residential Exterior Noise Level Criteria	65 dBA CNEL	
	Residential Interior Noise Level Standard	45 dBA CNEL	
	Commercial Interior Noise Level Standard	50 dBA CNEL	
Operational Noise	Exterior Noise Level Standards ³	See Table N-1	
	if ambient is < 60 dBA ¹	≥ 5 dBA project increase	
	if ambient is 60 - 65 dBA ¹	≥ 3 dBA project increase	
	if ambient is > 65 dBA ¹	≥ 1.5 dBA project increase	
Construction Noise & Vibration	Permitted hours of 7:00 a.m. and 7:00 p.m. Monday to Friday; 9:00 a.m. to 6:00 p.m. Saturday; with no activity on Sundays or holidays. ⁴		
	Noise Level Threshold ⁵	85 dBA L _{eq}	n/a
	Noise Level Increase ⁶	12 dBA L _{eq}	n/a
	Vibration Level Threshold ⁷	80 VdB	n/a

Source: Urban Crossroads, 2017.

¹ Source: FICON, 1992.

² Sources: City of Placentia General Plan Noise Element, County of Orange General Plan Noise Element (Tables VIII-2 & VIII-3), and the California Green Building Standards Code (Section 5.507.4.2).

³ Source: Section 23.76.050 of the City of Placentia Municipal Code (Appendix 3.1).

⁴ Source: Section 23.81.170 of the City of Placentia Municipal Code.

⁵ Source: NIOSH, Criteria for Recommended Standard: Occupational Noise Exposure.

⁶ Source: Caltrans Traffic Noise Analysis Protocol, May 2011.

⁷ Source: FTA Transit Noise and Vibration Impact Assessment, May 2006.

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.; "n/a" = No nighttime construction activity is permitted, so no nighttime construction noise level limits are identified.

Sensitive Receptors

Sensitive receptors near the project site include existing residences and the Placentia Champions Sports Complex and park. The closest sensitive receiver locations are approximately 10 feet east and south of the site boundary. The closest sensitive receptors to the project site are listed below:

- R1: Located approximately 345 feet northwest of the project site, R1 represents the existing Emerald Isle Apartments on the northwest corner of Rose Drive and Alta Vista Street.
- R2: Location R2 represents the Placentia Champions Sports Complex and park located approximately 646 feet northeast of the project site on Blankenship Circle, behind an existing 10-foot high wall.
- R3: Location R3 represents the existing outdoor living areas (backyards) of residences located approximately 10 feet east of the project site on Runyon Place.
- R4: Location R4 represents the existing outdoor living areas (backyards) of residences located approximately 10 feet east of the project site on Rodarte Place.
- R5: Location R5 represents the existing outdoor living areas (backyards) of residences located approximately 10 feet south of the project site on Babcock Circle.
- R6: Location R6 represents the existing residential homes located approximately 187 feet west of the project site across Rose Drive.

Existing Ambient Noise Levels

To identify the existing ambient noise levels in the project area, noise level measurements were taken on and adjacent to the project site on November 15, 2017 for a 24-hour period. As shown on Table N-3, noise levels in the project area range from 57.5 to 76.2 Community Noise Equivalent Level (CNEL).

Table N-3: Existing Ambient Noise Levels

Location	Distance to Project Boundary (Feet)	Description	Energy Average Hourly Noise Level (dBA L _{eq}) ¹		Average Median Noise Level (dBA L ₅₀) ¹		CNEL
			Daytime	Nighttime	Daytime	Nighttime	
L1	270	Northwest of the site on the northwest corner of Rose Drive and Alta Vista Street.	67.9	63.5	63.7	54.6	71.2
L2	800	East of the site in the Champions Sports park.	56.5	53.1	53.5	51.1	60.8
L3	0	Northeast corner of the site on Alta Vista Street.	61.0	56.5	56.1	51.3	64.2
L4	0	At the eastern site boundary on Rodarte Place.	51.5	50.7	49.6	48.3	57.5
L5	0	Southwest corner of the site on Rose Drive.	66.7	61.0	63.5	53.1	69.3
L6	180	West of the site across Rose Drive adjacent to residences on Underhill Drive.	71.2	69.2	64.9	57.3	76.2

Source: Urban Crossroads, 2017.

¹ Energy (logarithmic) average hourly levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

a) 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?

Less than Significant Impact with Mitigation Incorporated.

Onsite Exterior Noise Conditions

The Noise Impact Analysis (Appendix I) calculated the exterior noise levels for the proposed buildings. As shown in Table N-4, the proposed outdoor living areas and building façades adjacent to Rose Drive and Alta Vista Street would experience exterior noise levels ranging from 65.3 to 70.1 dBA CNEL, which exceeds the 65 dBA CNEL exterior noise level standards for residential land use. As a result, Mitigation Measure N-1 is included, which requires the project to include 6-foot high noise barriers for the outdoor living areas (backyards) of the proposed single-family residential lots adjacent to Rose Drive and Alta Vista Street, which is shown in Figure N-1.

With inclusion of the noise barriers, exterior noise at the impacted areas would be reduced to range from 60.8 to 64.1 dBA CNEL (shown on Table N-4), which would satisfy the 65 dBA CNEL exterior noise level standard for single-family residential use.

Table N-4: Exterior Onsite Traffic Noise Levels

Lot/ Building	Roadway	Unmitigated Noise Level (dBA CNEL)	Mitigated Noise Level (dBA CNEL)	Barrier Height (Feet)
14	Rose Dr.	69.8	63.8	6.0
20	Rose Dr.	70.1	64.1	6.0
Shop 1	Rose Dr.	68.0	– ¹	– ¹
Shop 2	Alta Vista St.	65.3	– ¹	– ¹
3	Alta Vista St.	67.0	60.8	6.0

Source: Urban Crossroads, 2017.

¹ The unmitigated exterior traffic noise levels at Shops 1 and 2 satisfy the Office of Planning and Research, Appendix C: Noise Element Guidelines, Figure 2, normally acceptable land use compatibility criteria for commercial uses. Therefore, no exterior noise mitigation is required.

Onsite Interior Noise Conditions

To determine if the interior noise levels within the proposed buildings would comply with the City of Placentia 45 dBA CNEL interior noise standards for residential land use, and the interior noise level threshold of 50 dBA CNEL based on the California Green Building Standards Code for non-residential buildings (Section 5.507.4.2), future noise levels were calculated at the first and second-floors of the proposed building façades.

Table N-5 identifies that noise levels at the first-floor of the proposed building façade would range from 59.7 to 68.0 dBA CNEL. Using standard windows with a minimum STC rating of 27, would reduce the first-floor interior noise to meet the residential and commercial standards. Therefore, Mitigation Measure N-2 is included to require the use of construction components on the buildings adjacent to Rose Drive and Alta Vista Street (that are identified in Figure N-1) that would reduce interior noise to within standards. Thus, impacts related to interior noise would be less than significant with implementation of Mitigation Measure N-2.

Figure N-1: On-Site Noise Reduction Measures



Table N-5: Interior First Floor Noise Levels with Mitigation

Lot/ Building	Noise Level at Façade without Mitigation ¹	Required Interior NR ²	Estimated Minimum Interior NR with Mitigation	Mitigated Interior Noise Level	Noise Standard
14	63.4	18.4	25.0	38.4	45
20	63.4	18.4	25.0	38.4	45
Shop 1	68.0	18.0	25.0	43.0	50
Shop 2	65.3	15.3	25.0	40.3	50
3	59.7	14.7	25.0	34.7	45

Source: Urban Crossroads, 2017.

¹ Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).

² Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.

"NR" = Noise reduction

In addition, Table N-6 shows that noise levels at the second-floor of the proposed building façades would range from 65.7 to 69.2 dBA CNEL. However, with implementation of Mitigation Measure N-2, interior noise to second floor areas of the proposed project would be within standards, and impacts related to interior noise would be less than significant.

Table N-6: Interior Second Floor Noise Levels with Mitigation

Lot/ Building	Noise Level at Façade without Mitigation ¹	Required Interior NR ²	Estimated Minimum Interior NR with Mitigation	Mitigated Interior Noise Level	Noise Standard
14	69.2	24.2	25.0	44.2	45
20	69.2	24.2	25.0	44.2	45
3	65.7	20.7	25.0	40.7	45

Source: Urban Crossroads, 2017.

¹ Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).

² Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.

"NR" = Noise reduction

Project Operational Noise

The proposed commercial and residential uses would generate noise from roof-top air conditioning units, a drive-thru speakerphone, entry gate activity, recreational activity, and parking lot activity. Table N-7 shows that the combined operational noise from the project related activities would not exceed the City's Municipal Code exterior noise level standards at the sensitive receptors. Therefore, the project generated operational noise would be less than significant.

Table N-7: Operational Noise Levels at Sensitive Receptors

Receiver Location	Noise Level at Receiver Locations (dBA)					Threshold Exceeded?	
	L ₅₀ (30 mins)	L ₂₅ (15 mins)	L ₈ (5 mins)	L ₂ (1 min)	L _{max} (Anytime)	Daytime	Nighttime
	Residential Standards	55	60	65	70		
	50	55	60	65	70	-	-
R1	36.2	37.8	39.8	41.2	44.0	No	No
R2	31.4	33.5	37.2	39.7	42.3	No	No
R3	46.1	48.8	54.1	57.1	59.0	No	No
R4	32.9	35.3	39.7	42.4	44.9	No	No
R5	28.7	30.7	34.0	36.3	39.6	No	No
R5	36.0	37.8	39.4	40.5	44.0	No	No

Source: Urban Crossroads, 2017.

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact with Mitigation Incorporated. Construction activity included in the project can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from project construction activities would cause only intermittent, localized intrusion from the following:

- **Heavy Construction Equipment:** The vibration generated by excavation, grading, and construction equipment is short-term and intermittent during construction activity that would be limited to the hours of 7:00 a.m. and 7:00 p.m. Monday to Friday; 9:00 a.m. to 6:00 p.m. Saturday. The project would require 1,900 cubic yards of soil import. Grading operations would occur over a number of weeks and therefore the daily off-site trips generated by soil hauling would be minimal.
- **Haul Trucks:** Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul routes pass through residential neighborhoods on streets with bumps or potholes.

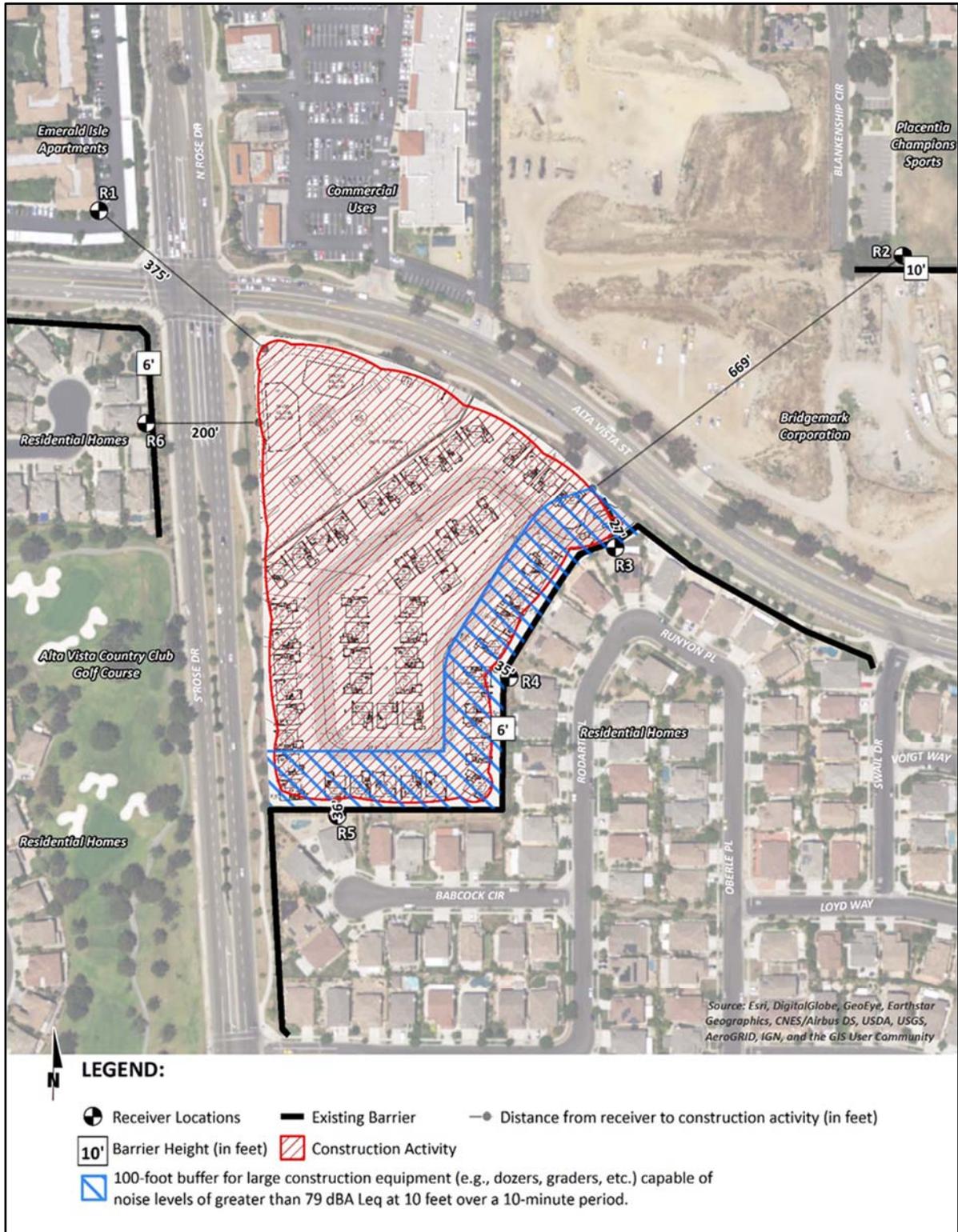
Construction Equipment Vibration: The ground-borne vibration levels from the project's construction activities were estimated by data published by the Federal Transit Administration (FTA). The Noise Impact Analysis identified that construction vibration levels would exceed the 80 VdB human annoyance threshold for infrequent vibration at receiver locations R3 to R5, as shown on Table N-8 and Figure N-2. Table N-8 reflects all phases of project development.

Table N-8: Construction Equipment Vibration Levels at Sensitive Receptors

Receiver Location ¹	Construction Equipment Vibration Levels (VdB) ²					Highest Vibration Level (VdB)	Threshold Exceeded? ³
	Distance to Construction Activity (Feet)	Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer		
R1	375'	22.7	43.7	50.7	51.7	51.7	No
R2	669'	15.2	36.2	43.2	44.2	44.2	No
R3	27'	57.0	78.0	85.0	86.0	86.0	Yes
R4	35'	53.6	74.6	81.6	82.6	82.6	Yes
R5	36'	53.2	74.2	81.2	82.2	82.2	Yes
R6	200'	30.9	51.9	58.9	59.9	59.9	No

Source: Urban Crossroads, 2017.

Figure N-2: Construction Buffer Zone and Receiver Locations



As a result, Mitigation Measure N-3 is included, which would require a 100-foot buffer zone for large construction equipment (e.g. dozers, graders, scrapers, etc.) from the impacted receiver locations (as shown on Figure N-2) where vibration could exceed thresholds. Within the 100-foot buffer zone, only smaller mobile equipment would be allowed. With implementation of Mitigation Measure N-3, vibration levels would be reduced to 68.9 VdB, as shown on Table N-9, which is below the FTA 80 VdB threshold, and impacts would be reduced to a less than significant level.

Further, vibration levels at sensitive receptors would not be sustained during the entire construction period but would occur only during the times that heavy construction equipment is operating adjacent to the project site perimeter near the sensitive receptor, and within the City's allowable construction hours.

Table N-9: Mitigated Construction Equipment Vibration Levels at Sensitive Receptors

Receiver Location	Construction Equipment Vibration Levels (VdB)					Highest Vibration Level (VdB)	Threshold Exceeded?
	Distance to Construction Activity (Feet)	Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer		
R3	100'	39.9	60.9	67.9	68.9	68.9	No
R4	100'	39.9	60.9	67.9	68.9	68.9	No
R5	100'	39.9	60.9	67.9	68.9	68.9	No

Source: Urban Crossroads, 2017.

Construction Haul Truck Vibration: Construction of the project site would require up to 1,900 cubic yards of soils import, which would be brought to the site by haul trucks. The Noise Impact Analysis determined that typical vibration levels for the heavy truck activity at normal traffic speeds would approach 65 VdB, which is below the vibration threshold of 80 VdB. Thus, impacts related to construction haul truck vibration would be less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact.

Traffic Noise

As described in Section 16, Transportation and Traffic, the project would generate 2,875 daily trips (145 a.m. peak hour trips and 166 p.m. peak hour trips). Table N-10 provides the increase in ambient noise that would occur from the project generated traffic. As shown, the project would result in a noise level increase of up to 0.6 dBA CNEL, which is less than the 1.5 dBA CNEL threshold listed in Table N-2. Therefore, traffic noise level increases would be less than significant.

Table N-10: Project Traffic Related Noise Increases

ID	Road	Segment	Adjacent Land Use ¹	CNEL at Adjacent Land Use (dBA) ²			Threshold Exceeded?
				No Project	With Project	Project Addition	
1	Rose Dr.	n/o Buena Vista	Residential	71.7	71.7	0.0	No
2	Rose Dr.	s/o Buena Vista	Residential	71.8	71.8	0.0	No
3	Rose Dr.	s/o Alta Vista St.	Residential	70.9	71.1	0.2	No
4	Rose Dr.	s/o Del Cerro Dr.	Residential	70.9	71.1	0.2	No
5	Jefferson St.	n/o Alta Vista St.	Residential/Park	61.5	61.5	0.0	No
6	Jefferson St.	s/o Alta Vista St.	Residential	64.4	64.4	0.0	No
7	Buena Vista	e/o Rose Dr.	Residential	68.7	68.7	0.0	No
8	Alta Vista St.	w/o Rose Dr.	Residential	70.6	70.7	0.1	No
9	Alta Vista St.	e/o Rose Dr.	Residential	69.1	69.7	0.6	No
10	Alta Vista St.	e/o Jefferson St.	Residential	67.6	67.7	0.1	No
11	Del Cerro Dr.	e/o Rose Dr.	Residential	66.6	66.9	0.3	No
12	Orangethorpe	w/o Del Cerro Dr.	Residential	70.7	70.7	0.0	No
13	Orangethorpe	e/o Del Cerro Dr.	Residential	70.5	70.5	0.0	No

Source: Urban Crossroads, 2017.

¹ City of Placentia General Plan Land Use Element, Exhibit 5.² The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.**Project Operational Noise**

As described previously, implementation of the proposed commercial and residential uses would generate noise related to roof-top air conditioning units, a drive-thru speakerphone, entry gate activity, recreational activity, and parking lot vehicle movements. To identify the increase in ambient noise that would be generated by operation of the project, the estimated operational noise levels were combined with the existing ambient noise levels measurements, listed in Table N-3.

As indicated on Tables N-11 and N-12, the project is estimated to generate an increase in ambient noise during the daytime hours of up to 0.4 dBA L₅₀ and during the nighttime hours of up to 1.1 dBA L₅₀. This would be less than the 1.5 dBA threshold; therefore, impacts would be less than significant.

Table N-11: Daytime Operational Related Noise Increases

Receiver Location	Total Project Operational Noise Level (dBA L ₅₀)	Measurement Location	Reference Ambient Noise Levels (dBA L ₅₀)	Combined Project and Ambient (dBA L ₅₀)	Project Contribution (dBA L ₅₀)	Threshold Exceeded?
R1	36.2	L1	63.7	63.7	0.0	No
R2	31.4	L2	53.5	53.6	0.0	No
R3	46.1	L3	56.1	56.5	0.4	No
R4	32.9	L4	49.6	49.7	0.1	No
R5	28.7	L5	63.5	63.5	0.0	No
R6	36.0	L6	64.9	64.9	0.0	No

Source: Urban Crossroads, 2017.

Table N-12: Nighttime Operational Related Noise Increases

Receiver Location	Total Project Operational Noise Level (dBA L ₅₀)	Measurement Location	Reference Ambient Noise Levels (dBA L ₅₀)	Combined Project and Ambient (dBA L ₅₀)	Project Contribution (dBA L ₅₀)	Threshold Exceeded?
R1	36.2	L1	54.6	54.6	0.1	No
R2	31.4	L2	51.1	51.2	0.0	No
R3	46.1	L3	51.3	52.5	1.1	No
R4	32.9	L4	48.3	48.5	0.1	No
R5	28.7	L5	53.1	53.1	0.0	No
R6	36.0	L6	57.3	57.4	0.0	No

Source: Urban Crossroads, 2017.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less than Significant Impact with Mitigation Incorporated. Construction of the proposed project is anticipated to last 18-months and would involve grubbing, grading, excavation and re-compaction of soils, utility and infrastructure installation, building construction, roadway pavement, and architectural coatings. Construction of the proposed project would require use of heavy equipment that would increase noise levels in the immediate project area. The noise from construction activity would fluctuate depending on the particular type, number, and duration of use of construction equipment.

The Noise Impact Analysis prepared for the project determined that project-related construction noise levels would range from 50.9 to 73.3 dBA Leq at sensitive receptors. As shown in Table N-13, the project related construction noise would result in temporary and periodic noise level increases between 0.3 to 19.6 dBA Leq at sensitive receiver locations. The 12 dBA Leq significance threshold would be exceeded at receiver locations R3 and R4.

Table N-13: Construction Related Increases in Noise Levels at Sensitive Receptors

Receiver Location	Highest Project Construction Noise Level	Measurement Location	Reference Ambient Noise Levels	Combined Project and Ambient	Temporary Worst-Case Project Contribution	Threshold Exceeded?
R1	56.0	L1	67.9	68.2	0.3	No
R2	50.9	L2	56.5	57.6	1.1	No
R3	73.3	L3	61.0	73.6	12.6	Yes
R4	71.1	L4	51.5	71.1	19.6	Yes
R5	70.8	L5	66.7	72.2	5.5	No
R6	55.9	L6	71.2	71.3	0.1	No

Source: Urban Crossroads, 2017.

As a result, Mitigation Measure N-3 is included, which would require a 100-foot buffer zone for large construction equipment (e.g. dozers, graders, scrapers, etc.) from the impacted receiver locations where project construction noise levels could potentially exceed the noise level thresholds. Within the 100-foot buffer zone, only smaller mobile equipment would be allowed. Table N-14 shows that with implantation of Mitigation Measure N-3 the noise levels at the impacted receiver

locations would be reduced to below the 12 dBA construction noise threshold, which would reduce construction noise impacts to a less than significant level.

Table N-14: Mitigated Construction Noise Levels at Sensitive Receptors

Receiver Location	Mitigated Construction Noise Level	Measurement Location	Reference Ambient Noise Levels	Combined Project and Ambient	Temporary Worst-Case Project Contribution	Threshold Exceeded?
R1	56.0	L1	67.9	68.2	0.3	No
R2	50.9	L2	56.5	57.6	1.1	No
R3	61.9	L3	61.0	64.5	3.5	No
R4	61.9	L4	51.5	62.3	10.8	No
R5	61.9	L5	66.7	68.0	1.3	No
R6	55.9	L6	71.2	71.3	0.1	No

Source: Urban Crossroads, 2017.

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?

No Impact. The proposed project is not located within an airport land use plan or within two miles of an airport. The closest airports to the project site is the Fullerton Municipal Airport, which is approximately 7.75 miles west of the project site, and John Wayne Airport, which is approximately 13.25 miles south of the project site. Therefore, the proposed project would not result in airport related noise impacts to people residing or working within the project site.

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?

No Impact. There are no private airstrips located within the vicinity of the project site. Therefore, the development of the project would not expose people residing or working in the project site to excessive noise related to airstrips, and impacts would not occur.

Existing Plans, Programs, or Policies

The following PPP is incorporated into the project and would reduce impacts related to noise. This requirement will be included in the project's mitigation monitoring and reporting program:

PPP N-1: Per Municipal Code Section 23.81.170 construction activity is limited to the hours of 7:00 a.m. and 7:00 p.m. Monday to Friday; 9:00 a.m. to 6:00 p.m. on Saturdays; with no activity allowed on Sundays or holidays.

Mitigation Measures

Mitigation Measure N-1: The project plans, specifications, and permitting shall require construction of 6-foot high noise barriers adjacent to the backyards of the proposed single-family residences adjacent to Rose Drive and Alta Vista Street. The noise control barriers shall be constructed so that the top of each wall and/or berm combination extends to the planned height above the pad elevation of the lot it is shielding. If the road is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residence and the road. The barrier shall provide a weight of at least 4 pounds per square foot of face area with no decorative cutouts or line-of-sight openings between shielded areas and the roadways, or a

minimum transmission loss of 20 dBA. The barrier shall consist of a solid face from top to bottom. Unnecessary openings or decorative cutouts shall not be made. All gaps (except for weep holes) should be filled with grout or caulking. The noise barrier shall be constructed using the following materials:

- Masonry block;
- Stucco veneer over wood framing (or foam core), or 1-inch-thick tongue and groove wood of sufficient weight per square foot;
- Glass (1/4-inch-thick), or other transparent material with sufficient weight per square foot capable of providing a minimum transmission loss of 20 dBA;
- Earthen berm;
- Any combination of these construction materials.

Mitigation Measure N-2: The project plans, specifications, and permitting shall require the following noise reduction features be included in the construction of the buildings adjacent to Rose Drive and Alta Vista Street:

Residential:

- **Windows:** All residential lots adjacent to Rose Drive and Alta Vista Street require first and second-floor windows and sliding glass doors that have well-fitted, well-weather-stripped assemblies, with minimum sound transmission class (STC) ratings of 27.
- **Doors (Non-Glass):** All exterior doors shall be well weather-stripped and have minimum STC ratings of 25. Well-sealed perimeter gaps around the doors are essential to achieve the optimal STC rating.
- **Walls:** At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal.
- **Roof:** Roof sheathing of wood construction shall be per manufacturer's specification or caulked plywood of at least one-half inch thick. Ceilings shall be per manufacturer's specification or well-sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.
- **Ventilation:** Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g. air conditioning) or active ventilation system (e.g. fresh air supply) shall be provided which satisfies the requirements of the Uniform Building Code.

Commercial:

- **Windows:** Retail buildings (Shops 1 and 2) require upgraded windows with a minimum STC rating of 32 and a means of mechanical ventilation (e.g., air conditioning);
- **Doors (Non-Glass):** All exterior doors shall be well weather-stripped and have minimum STC ratings of 25. Well-sealed perimeter gaps around the doors are essential to achieve the optimal STC rating.
- **Walls:** At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal.

- Roof: Roof sheathing shall be per manufacturer's specification. Ceilings shall be per manufacturer's specification. Ceiling/roof Insulation, if required under manufacturer's specification, shall have a minimum rating of R-19.
- Ventilation: Arrangements for any habitable room (e.g., office) shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g. air conditioning) or active ventilation system (e.g. fresh air supply) shall be provided which satisfies the requirements of the Uniform Building Code.

Mitigation Measure N-3: The project plans, specifications, and permitting shall require construction activities to adhere to the following:

- The use of large construction equipment (e.g., dozers, graders, scrapers) capable of generating noise levels in excess of 79 dBA L_{eq} (10-minute) at 10 feet and vibration levels of 80 VdB at sensitive receiver locations shall be prohibited within 100 feet of nearby occupied sensitive receivers (represented by receiver locations R3 to R5) to reduce the noise and vibration levels for the entire duration of project construction. Only smaller mobile equipment shall be allowed within 100 feet of these sensitive receivers. If the contractor can demonstrate that specific pieces of large construction equipment satisfies the 79 dBA L_{eq} (10-minute) at 10 feet noise level criteria, and vibration levels of 80 VdB at sensitive receiver locations, then they shall be allowed to operate within the 100-foot buffer zone.
- Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during construction (i.e., to the northwest and center).
- The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. and 7:00 p.m. Monday to Friday; 9:00 a.m. to 6:00 p.m. Saturday; with no activity on Sundays or holidays). The contractor shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise.

REFERENCES

Noise Impact Analysis, 2017. Prepared by Urban Crossroads

Potentially Significant Impact **Less Than Significant with Mitigation Incorporated** **Less Than Significant Impact** **No Impact**

13. POPULATION AND HOUSING.

Would the project:

- a) 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)?
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

a) Induce substantial population growth in an area, either directly or indirectly?

Less than Significant Impact. The U.S. Census Bureau data provides that in 2015 there were 16,553 housing units within the City of Placentia, and that 97 percent of them were occupied. The average household size within the City was 3.44 persons per household and 70 percent households within the City have between 1 and 3 occupants. As shown in Table P-1, the City of Placentia is anticipated to grow by 6,121 residents (an increase of 11.7 percent) and 2,347 housing units (an increase of 14.2 percent) between 2015 and 2040.

Table P-1: City of Placentia SCAG Projected Population and Housing

	Population	Housing
Actual 2015¹	52,279	16,553
2040 SCAG Projections²	58,400	18,900
Increase	6,121 (11.7%)	2,347 (14.2%)

Source: ¹Census American Factfinder, ²SCAG 2016 Growth Forecast by Jurisdiction.

Based on the existing average household size of 3.44 persons per household, the 54 single-family residences that would be developed on the project site would result in approximately 186 residents a full capacity. This would consist of 2.3 percent of the anticipated housing growth and 3 percent of the anticipated population growth between 2015 and 2040. This increase in population is not considered a substantial direct increase because it is within the anticipated growth rate and consists of an infill development within an urban area that would be served by existing infrastructure.

In addition, indirect growth is related to the expansion of infrastructure, such as water, sewer or street systems that would serve areas beyond the proposed development. As described previously, the proposed project would be served by existing infrastructure that the project would connect to. The proposed street system would only serve the proposed residences, would connect to Alta Vista Street, and would not serve any areas beyond the project site. Therefore, the proposed project

would not result in inducement of substantial population growth, either directly or indirectly, and impacts would be less than significant.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The project site is vacant and undeveloped land and does not contain any housing on the project site. The proposed project would provide 54 new housing units onsite, and would not displace any existing housing or necessitate the construction of housing elsewhere. Thus, impacts would not occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. As described above, the project site is vacant, and no people currently reside onsite. The proposed project would provide onsite housing; it would not displace any people and would not necessitate the construction of housing elsewhere. Thus, impacts would not occur.

Existing Plans, Programs, or Policies

There are no impact reducing Plans, Programs, or Policies related to population and housing that are applicable to the project.

Mitigation Measures

No mitigation measures related to population and housing are required.

REFERENCES

SCAG 2016 Growth Forecast by Jurisdiction. Accessed:
www.scag.ca.gov/Documents/2016DraftGrowthForecastByJurisdiction.pdf

U.S. Census American Factfinder (Census 2017). Accessed: <https://factfinder.census.gov/>

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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14. PUBLIC SERVICES.

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:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) **Result in substantial adverse physical impacts associated with the provision of 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:**

- Fire protection?**
- Police protection?**
- Schools?**
- Parks?**
- Other public facilities?**

Fire Protection

Less Than Significant Impact. The Orange County Fire Authority (OCFA) provides fire protection to the City of Placentia. The OCFA provides services including fire prevention and suppression, emergency medical services, technical rescue, and hazardous materials response. There are 3 existing OCFA Stations within approximately 2 miles from the project site. Station 34 is 1.2 miles from the project site at 1530 North Valencia Avenue; Fire Station 35 is 1.6 miles from the project site at 120 South Bradford Avenue; and Fire Station 10 is 2.1 miles from the project site at 18422 E. Lemon Drive (ocfa.org 2017).

The proposed project is an infill development that would provide 54 single-family unit residences within an area already served by OCFA and within close proximity to 3 stations. Due to the small

increase in residents that would occur from implementation of the project, a limited incremental increase in demand for fire protection and emergency medical services would occur. However, implementation of the project would be required to adhere to the California Fire Code, which is included in the City's Municipal Code per Chapter 18.04.030 and would be reviewed by OCFA during the project permitting process to ensure that the project plans meet the fire protection requirements. This would include fire hydrant location, fire water pressure, and knox boxes to provide emergency access through the gated residential area.

Additionally, the site is within 2 miles of 3 fire stations that currently serve the project area. Due to the limited increase in residents and the existing location of OCFA facilities, the proposed project would not result in the need for, new or physically altered fire department facilities, and substantial adverse physical impacts associated with the provision of new or expanded facilities would not occur. Therefore, impacts related to fire protection services would be less than significant.

Police Protection

Less Than Significant Impact. The Placentia Police Department provides policing services throughout the City from its headquarters at 401 E. Chapman Avenue, which is approximately 1.5 miles from the project site. The proposed project would develop infill residential uses within an area that is already served by the Police Department. The proposed project would result in an onsite population that would create the need for police services. Calls for police service during project construction may include: theft of building materials and construction equipment, malicious mischief, graffiti, and vandalism. Operation of the proposed 54 residences and the commercial retail establishments could generate a typical range of police service calls, such as shoplifting, vehicle burglaries, residential thefts, and disturbances. To reduce the potential for these types of crimes, security concerns are addressed in the project design by providing low-intensity security lighting for the purposes of wayfinding, safety, and building structure security. The commercial area would have a security system that includes cameras. In addition, the gates for the residential area would have knox boxes to provide emergency access.

Although an incremental increase could result from implementation of the project, the need for law enforcement services from the proposed project would not be significant when compared to the current service levels of the Placentia Police Department and the small residential nature of the proposed project. The additional 186 residents that are anticipated to be generated from full occupancy of the proposed project would not require the construction or expansion of the Police Department facilities. Overall the proposed project would not result in the need for, new or physically altered police protection facilities, and substantial adverse physical impacts associated with the provision of new or expanded facilities would not occur.

Schools

Less Than Significant Impact. The project site is located within the Placentia-Yorba Linda Unified School District, which operates and maintains 34 schools, including 23 elementary schools (K-6), 6 middle schools (7-8), and 7 high schools (9-12). The site is currently located within the attendance area boundaries of Morse Elementary School, Kraemer Middle School, and Valencia High School.

The School District's Residential Development School Fee Justification Study from 2016 provides estimates of the number of students generated by residential development. As shown in Table PS-1, the proposed 54 single-family residential units would result in approximately 25 students.

Table PS-1: Student Generation

School Level	Students Per Single Family House	Students Generated by Project
Elementary	0.1887	10
Middle	0.1151	6
High	0.1714	9
Total	0.4752	25

Pursuant to Government Code Section 65995 et seq. (which was passed as Senate Bill 50 in 1998), school districts may collect development fees. According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be “full and complete school facilities mitigation.” As of April 12, 2016, the Placentia-Yorba Linda Unified School District school fee is \$3.48 per square foot of new residential construction. Pursuant to Government Code Section 65995 et seq. payment of these fees would offset any potentially significant impacts to school facilities, and impacts would be less than significant. Consistent with the requirement, the payment of school fees is included as PPP PS-1.

Parks

Less Than Significant Impact. The City currently operates and maintains several parks and other recreational facilities that serve the residents of Placentia. Section 22.54.030 of the Placentia Municipal Code requires that 2.5 acres of City parks per 1,000 persons existing within the City be dedicated to local parks. As described previously in Section 13, Population and Housing, the proposed project would house 186 new residents at full occupancy. This would create a City requirement for dedication of 0.47 acre of parkland and/or payment of park fees pursuant Chapter 22.54 Park and Recreation Dedication and Fees of the City’s Municipal Code, which provides an in-lieu fee and parkland dedication requirements for development projects.

The project includes approximately 13,600 square feet (0.31 acre) of onsite open space and recreation areas with a tot-lot/park area and 3 mini park areas, which is 0.16 acre less than the Municipal Code requirement. Thus, the project would be subject to the payment of the park in-lieu fee requirements. Because the proposed project would provide both onsite park and recreation facilities and payment of the in-lieu fee for park and recreation, impacts related to the expanded need for parks due to the increase of 186 residents at full occupancy would be less than significant, and no mitigation measures are required. Consistent with the requirement, the payment of park fees is included as PPP PS-2.

Other Services

Less Than Significant Impact. The proposed project may result in an incremental increase in the use of libraries, senior centers, and other public facilities. However, the projected increase of 186 new residents onsite would not result in a substantial increase in the demand for these services, such that construction of new or expanded facilities would be required. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, and impacts would be less than significant.

Existing Plans, Programs, or Policies

The following PPPs are incorporated into the project and would reduce impacts related to public services. These actions will be included in the project’s mitigation monitoring and reporting program:

PPP PS-1: Schools Development Impact Fee

The project will be required to pay applicable development fees levied by the Placentia-Yorba Linda Unified School District pursuant to the School Facilities Act (Senate Bill [SB] 50, Stats. 1998, c.407) to offset these impacts on school facilities resulting from new development.

PPP PS-2: Park and Recreation Impact Fee

The project will be required to pay applicable City of Placentia development impact fees for park and recreational facilities pursuant to Chapter 22.54 Park and Recreation Dedication and Fees of the City's Municipal Code, which are imposed on each development project to offset the cost of providing increased park and recreation facilities.

Mitigation Measures

No mitigation measures related to public services are required.

REFERENCES

Orange County Fire Authority Website. Accessed:
<http://www.ocfa.org/AboutUs/FireStations.aspx>

Placentia-Yorba Linda Unified School District Website. Accessed: <https://www.pylusd.org/>

Placentia-Yorba Linda Unified School District Residential Fee Justification Study, 2016. Prepared By: Dolinka Group, LLC. Accessed:
https://www.pylusd.org/apps/pages/index.jsp?uREC_ID=185006&type=d&pREC_ID=462436

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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15. RECREATION.

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would be accelerated?

Less Than Significant Impact. As described in response to Impact 14, Public Services, the proposed project would result in a generation of approximately 186 residents, which would create a slight increase in demand on the existing recreation facilities. However, impacts from the proposed project are anticipated to be minimal due to the limited number of residents that would be generated by the project; and inclusion of 13,600-square feet of open space park and recreation areas that would provide recreation facilities for residents. Based on Municipal Code requirements, the project would also provide fees to use toward the provision of City park and recreation facilities. With provision of the onsite recreation, and payment of the required fees, as included by PPP PS-2, the project would not 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. In addition, as described above, the project would be required to pay parkland in-lieu fees pursuant to Municipal Code Chapter 18.01. Thus, impacts would be less than significant.

b) Require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less Than Significant Impact. As described in the previous response and Project Description, the proposed project includes 13,600-square feet of open space park and recreation areas that would provide recreation facilities for residents. The impacts of development of the proposed recreational amenities are considered part of the impacts of the proposed project as a whole and are analyzed throughout the various sections of this IS/MND. For example, activities such as excavation, grading, and construction as required for the recreational components of this project would result in impacts that are analyzed in the Air Quality, Greenhouse Gas Emissions, Noise, and Transportation and Traffic. In addition, operation of the project would only result in the demand for parks and recreational facilities as articulated in the previous response, which would not require the construction or expansion of recreational facilities. Therefore, the proposed project would not

require the construction or expansion of other recreational facilities that might have an adverse physical effect on the environment. As a result, impacts related to recreation are less than significant.

Existing Plans, Programs, or Policies

PPP PS-2: Park and Recreation Impact Fee, provided in Section 14, Public Services.

Mitigation Measures

No mitigation measures related to recreation are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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16. TRANSPORTATION/TRAFFIC. Would the project:

a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature or incompatible uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is based on the Traffic Impact Analysis, prepared by EPD Solutions, 2017 (EPD 2017), included as Appendix J.

- a) **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?**
- b) **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?**

Traffic Thresholds and Standards

The traffic study area includes intersections within the Cities of Placentia and Anaheim. The significance criteria for both Placentia and Anaheim are as follows:

City of Placentia: The General Plan Circulation Element Policy CIR 1.1 states “Developments that are under the City’s jurisdiction are to provide improvements needed to maintain LOS D or better with existing plus new development traffic”. Based on this policy, a significant impact would occur if the project causes an intersection to deteriorate from acceptable LOS (LOS D or better) to unacceptable LOS E or F. If an intersection is already operating at LOS E or F, a project impact would occur if the project causes an increase of 0.01 or more in the v/c ratio.

City of Anaheim: One of the study intersections, Del Cerro Drive/Orangethorpe Avenue, is partially in the City of Anaheim. The City of Anaheim’s *Criteria for Preparation of Traffic Impact Studies*, provides the following scale to determine whether an impact would occur.

LOS	Final V/C Ratio	Project-Related Increase In V/C
C	>0.700 – 0.800	equal to or greater than 0.050
D	>0.800 – 0.900	equal to or greater than 0.030
E, F	>0.900	equal to or greater than 0.010

Orange County Congestion Management Program: The Orange County Congestion Management Program (CMP) identifies LOS E as the worst acceptable level of service during peak hours. Since the City of Placentia and City of Anaheim standards provide a stricter minimum level of service, all locations meeting this standard will concurrently meet the Orange County CMP minimum criteria.

Traffic Study Area and Existing Conditions

The traffic study area includes 8 intersections, which as shown in Table T-1, all currently operate at a satisfactory LOS C or better during the weekday a.m. and p.m. peak hours.

Table T-1: Existing Intersection Peak Hour Level of Service

Intersection	LOS Method	AM Peak		PM Peak	
		V/C or Delay ²	LOS ¹	V/C or Delay ²	LOS ¹
1. Rose Dr/Buena Vista Ave	ICU	0.752	C	0.796	C
2. Rose Dr/Alta Vista St	ICU	0.669	B	0.634	B
3. Rose Dr/Del Cerro Dr	ICU	0.613	B	0.551	A
4. Del Cerro Dr/Orangethorpe	ICU	0.301	A	0.293	A
5. Jefferson St/Alta Vista St	ICU	0.279	A	0.271	A
6. Residential Driveway/Alta Vista St	HCM	Does not Exist			
7. Commercial Driveway/Alta Vista St	HCM	13.3	B	14.9	B
8. Rose Dr/Commercial Driveway	HCM	Does not Exist			

ICU = Intersection Capacity Utilization, HCM = Highway Capacity Manual

¹ Level of Service

² Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections

Source: EPD Solutions, Inc. 2017.

Project Impacts

Less than Significant Impact. The proposed project would develop 10,600 square feet of commercial and 54 single-family residences. As detailed in the Project Description, the project proposes to amend the Zoning Code and SP-7 to change the 6.46-acre residential site from Commercial to Medium Density Residential. As shown in Table T-2, operation of the project would generate approximately 2,875 daily trips, that include 145 a.m. peak hour trips and 166 p.m. peak hour trips (EPD Solutions, Inc. 2017). As noted in the project description, the project would require 1,900 cubic yards of soil import, which could generate approximately 100 truck trips. Grading operations would occur over a number of weeks and therefore the daily and peak hour trip associated with construction would be significantly less than the trips generated by the project once it is operational.

Table T-2: Project Trip Generation

Land Use	Units	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Trip Rates								
Fast Casual Restaurant ¹	TSF	315	1.39	0.68	2.07	7.77	6.36	14.13
Coffee Shop with Drive Through ²	TSF	820	45.38	43.61	88.99	21.69	21.69	43.38
Single Family Residential ³	DU	9	0.19	0.56	0.74	0.62	0.37	0.99
Shopping Center ⁴	DU	<i>Fitted Curve Equation Used for Trip Generation</i>						
Project Trip Generation								
Fast Casual Restaurant	8.6 TSF	2711	12	5	17	67	55	122
<i>Pass-By Trips (43 %)⁵</i>		-1166	-	-	-	-29	-24	-53
Coffee Shop with Drive Through	2 TSF	1641	91	87	178	44	43	87
<i>Pass-By Trips (50 %)⁶</i>		-821	-46	-44	-90	-22	-22	-44
Single Family Residential	54 DU	510	10	30	40	34	20	54
Total Project Trip Generation		2,875	67	78	145	94	72	166
Trip Generation with Existing Zoning Designation								
Fast Casual Restaurant	8.6 TSF	2,711	12	5	17	67	55	122
<i>Pass-By Trips (43 %)⁵</i>		-1,166	-	-	-	-29	-24	-53
Coffee Shop with Drive Through	2 TSF	1,641	91	87	178	44	43	87
<i>Pass-By Trips (50 %)⁶</i>		-821	-46	-44	-90	-22	-22	-44
Shopping Center	32.546 TSF	2,802	104	64	168	114	123	237
Total Trip Generation with Existing Zoning		5,168	161	112	273	174	175	349
More Trips from Existing Zoning than the Proposed Project		2,293	94	34	128	80	103	183

TSF = Thousand Square Feet

¹ Trip rates from the Institute of Transportation Engineers, *Trip Generation, 10th Edition, 2017*. Land Use Code 930 - Fast Casual Restaurant² Trip rates from the Institute of Transportation Engineers, *Trip Generation, 10th Edition, 2017*. Land Use Code 937 - Coffee/Donut Shop with Drive-Through Window³ Trip rates from the Institute of Transportation Engineers, *Trip Generation, 10th Edition, 2017*. Land Use Code 210 - Single-Family Detached Housing.⁴ Trip rates from the Institute of Transportation Engineers, *Trip Generation, 10th Edition, 2017*. Land Use Code 820 - Shopping Center.⁵ Pass-By Trip Percentage from the Institute of Transportation Engineers, *Trip Generation Handbook, 3rd Edition*. Land Use Code 932 - High-Turnover (Sit-Down) Restaurant.⁶ Pass-By Trip Percentage from the Institute of Transportation Engineers, *Trip Generation Handbook, 3rd Edition*. Land Use Code 934 - Fast-Food Restaurant with Drive-Through Window was used. There is no pass-by rate for Coffee Shop with Drive Through and indoor seating.

Source: EPD Solutions, Inc, 2017.

In addition Table T-2 provides the trip generation from development of the site under the existing commercial zoning for the entire site to provide a comparison of the trips that would be generated under the existing and proposed zoning designations of the site. As shown on Table T-2, development of the site with all commercial uses would generate approximately 5,168 daily, 273 a.m. peak hour and 349 p.m. peak hour. As proposed, the project would generate 2,293 (44

percent) fewer daily, 128 (47 percent) fewer a.m. peak hour and 183 (52 percent) fewer p.m. peak hour trips than build out of the site for commercial land use.

Existing Plus Project: Existing with the proposed project traffic volumes were determined by adding the project trips shown in Table T-2 to the existing without-project traffic volumes. As shown in Table T-3, with the addition of project traffic, all study intersections would continue to operate at satisfactory LOS D or better during the weekday a.m. and p.m. peak hours. Thus, impacts would be less than significant in the existing plus project condition.

Table T-3: Existing Plus Project

Intersection	LOS Method	Existing				Existing plus Project			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay ²	LOS ¹						
1. Rose Dr/Buena Vista Ave	ICU	0.752	C	0.796	C	0.817	D	0.833	D
2. Rose Dr/Alta Vista St	ICU	0.669	B	0.634	B	0.744	C	0.697	B
3. Rose Dr/Del Cerro Dr	ICU	0.613	B	0.551	A	0.666	B	0.600	A
4. Del Cerro Dr/Orangethorpe	ICU	0.301	A	0.293	A	0.356	A	0.309	A
5. Jefferson St/Alta Vista St	ICU	0.279	A	0.271	A	0.299	A	0.295	A
6. Residential Driveway/Alta Vista St	HCM	Does not Exist				12.5	B	13.3	B
7. Commercial Driveway/Alta Vista St	HCM	13.3	B	14.9	B	22.3	C	31.3	D
8. Rose Dr/Commercial Driveway	HCM	Does not Exist				11.9	B	20.8	C

ICU = Intersection Capacity Utilization

HCM = Highway Capacity Manual

TWSC = Two Way Stop Controlled (evaluated using the HCM Methodology)

¹ Level of Service

² Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections

Source: EPD Solutions, Inc., 2017

Opening Year 2019 Plus Project: Opening year 2019 without-project traffic volumes were determined by adding a growth rate of 1 percent per year to the existing traffic volumes as directed by the City staff. Opening Year 2019 volumes include the addition of cumulative traffic volumes from (approved and/or pending) cumulative projects are expected to generate approximately 4,988 daily trips, including 501 a.m. peak hour trips and 554 p.m. peak hour trips.

As shown in Table T-4, with the addition of the proposed project traffic to the 2019 traffic conditions, all study intersections would continue to operate at satisfactory LOS D or better during the weekday a.m. and p.m. peak hours. Therefore, impacts would also be less than significant in the opening year 2019 plus project condition.

Table T-4: Opening Year (2019) Plus Project

Intersection	LOS Method	Opening Year				Opening Year plus Project			
		AM Peak		PM Peak		AM Peak		PM Peak	
		V/C or Delay ²	LOS ¹						
1. Rose Dr/Buena Vista Ave	ICU	0.773	C	0.821	D	0.839	D	0.858	D
2. Rose Dr/Alta Vista St	ICU	0.683	B	0.648	B	0.760	C	0.711	C
3. Rose Dr/Del Cerro Dr	ICU	0.632	B	0.571	A	0.686	B	0.621	B
4. Del Cerro Dr/Orangethorpe	ICU	0.313	A	0.301	A	0.370	A	0.319	A
5. Jefferson St/Alta Vista St	ICU	0.283	A	0.275	A	0.304	A	0.3	A
6. Residential Driveway/Alta Vista St	HCM	Does not Exist				12.6	B	13.4	B
7. Commercial Driveway/Alta Vista St	HCM	13.4	B	15.1	C	22.8	C	32.7	D
8. Rose Dr/Commercial Driveway	HCM	Does not Exist				12.1	B	21.8	C

ICU = Intersection Capacity Utilization

HCM = Highway Capacity Manual

TWSC = Two Way Stop Controlled (evaluated using the HCM Methodology)

¹ Level of Service² Volume-to-capacity ratio for signalized intersection, delay for unsignalized intersections

Source: EPD Solutions, Inc., 2017

c) 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?

No Impact. The proposed project is not located near an airport. The closest airports to the project site is the Fullerton Municipal Airport, which is approximately 7.75 miles west of the project site, and John Wayne Airport, which is approximately 13.25 miles south of the project site. In addition, the project would develop the site with structures that would be a maximum of two-stories high, which would not extend into navigable airspace. Therefore, the proposed project would not result in a change in air traffic patterns, and impacts would not occur.

d) Substantially increase hazards due to a design feature or incompatible uses?

Less than Significant Impact. The proposed project includes commercial and single-family residential uses, and does not include any incompatible uses, such as farm equipment. The project would also not increase any hazards related to a design feature. Access to the commercial portion of the project would be provided via two driveways; one on Rose Drive approximately 425 feet south of Alta Vista Street and one on Alta Vista Street approximately 350 feet east of Rose Drive. The driveway on Rose Drive would be right-in/right-out only. The driveway on Alta Vista Street would be aligned with the existing shopping center driveway on the north side of Alta Vista Street and would provide full-access into and out of the project. The commercial driveways are approximately 26 feet wide, which would be adequate for passenger car and delivery truck ingress/egress. The residential roadways to be constructed by the project would be approximately 36 feet wide and have been designed to meet the City's design standards that provides adequate turning space for passenger cars, fire trucks, and delivery trucks. In addition, as shown on Figure 4, Project Site Plan, the residential roadway and gate access location has been designed with sufficient stacking/queuing space to accommodate at least two vehicles in the inbound lane and two vehicles for visitors waiting to enter the site. There is also a turn-around for vehicles to exit the site without entering through the gate. Based on the capacity of the entry gate (340 vehicles, and

the maximum inbound volume of 34 vehicles during the p.m. peak hour, there would be adequate queuing behind the residential entry gate.

In addition, the LOS analysis in the Traffic Impact Analysis (Appendix J) determined that the proposed driveways would operate with acceptable LOS and have minimal delays during the peak hours. In addition, an analysis of queuing at the Rose Drive/Alta Vista Street intersection was prepared to determine whether the project would result in queues at the intersection could affect access to the project during the peak hours. As shown in Table T-5, the queue at the intersection of Rose Drive/Alta Vista Street would not extend to or block the project driveways during the a.m. or p.m. peak hours.

Table T-5: Queuing at Rose Drive/Alta Vista Street

Movement	Distance to Driveway	50th Percentile Queue	95th Percentile Queue
AM Peak Hour			
Westbound Left	425 feet	115 feet	175 feet
Westbound Through	425 feet	116 feet	191 feet
Northbound Left	350 feet	24 feet	56 feet
Northbound Through	350 feet.	115 feet	152 feet
PM Peak Hour			
Westbound Left	425 feet	90 feet	146 feet
Westbound Through	425 feet	120 feet	206 feet
Northbound Left	350 feet	53 feet	87 feet
Northbound Through	350 feet	287 feet	348 feet

Source: EPD Solutions, Inc., 2017

Additionally, the project does not include any visual obstructions that would obstruct sight distance or that would prohibit full access in, and out of, the project area. Thus, motorists entering and exiting the project site would be able to do so comfortably, safely, and without undue congestion. As such, project access and circulation would be adequate, and project impacts related to hazardous design features would be less than significant.

e) Result in inadequate emergency access?

No Impact. The proposed project would provide commercial and single-family residential uses that would be permitted and approved in compliance with existing safety regulations, such as the California Building Code and Fire Code (as integrated into the City's Municipal Code) to ensure that it would not result in inadequate emergency access.

The proposed construction activities, including equipment and supply staging and storage, would occur within the project site and would not restrict access of emergency vehicles to the project site or adjacent areas. During construction, Rose Drive and Alta Vista would remain open to ensure adequate emergency access to the project area and vicinity. Thus, impacts related to inadequate emergency access during construction activities would not occur.

As described above, operation of the proposed project would also not result in inadequate emergency access. Direct access to the project site would be provided from Rose Drive and Alta Vista Street. The new roadways constructed by the project would be required through the City's permitting procedures to meet the City's design standards that provides adequate turning space for passenger cars, fire trucks, and delivery trucks. The project is also required to provide fire

suppression facilities (e.g., hydrants and sprinklers). The OCFA would review the development plans as part of the permitting procedures to ensure adequate emergency access pursuant to the requirements in Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9). As a result, impacts related to inadequate emergency access would not occur.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. Existing transit service in the City is provided by the Orange County Transportation Authority (OCTA). OCTA bus route 71 directly serves the project site with bus stops located on Rose Drive north and south of Alta Vista Street. Existing sidewalks are located on Rose Drive and on Alta Vista Street adjacent to the project. In addition, Class II Bicycle Lanes are provided on Alta Vista Street from Kraemer Boulevard to Van Buren Street.

Construction of the proposed project would not remove or alter the existing sidewalks, bicycle lanes, or transit service access. The project would include sidewalks along the onsite roadways and a pedestrian pathway would connect the residential portion of the project to the existing sidewalk on Alta Vista Street. Development of 54 single-family residences is not expected to significantly increase pedestrian, bicycle and/or transit trips. Therefore, the proposed project would not result in conflicts related to public transit, bicycle, or pedestrian facilities, and impacts would not occur.

Existing Plans, Programs, or Policies

There are no impact reducing Plans, Programs, or Policies related to transportation and traffic that are applicable to the project.

Mitigation Measures

No mitigation measures related to transportation and traffic are required.

REFERENCES

Traffic Impact Analysis, prepared by EPD Solutions, 2017 (EPD 2017)

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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17. TRIBAL CULTURAL RESOURCES.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

The discussion below is based on the Phase 1 Cultural Resources Assessment, prepared by Material Culture Consulting, October 2017 (MCC 2017), and the outreach conducted by the City that is described below.

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

No Impact. The project site is vacant and undeveloped and does not contain any historic resources (MCC 2017). The site was formerly used as an oil field and contained 8 oil wells that were removed in the 1990s. In addition, the project site is adjacent to modern housing tracts and street system. No tribal cultural historic resources are located adjacent to the site. Therefore, implementation of the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource, and impacts would not occur.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less Than Significant.**Senate Bill 18**

Senate Bill 18 (SB 18) (California Government Code Section 65352.3) sets forth requirements for local governments to consult with Native American tribes to aid in the protection of traditional tribal cultural places through local land use planning. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early stage of planning for the purpose of protecting, or mitigating impacts on, cultural places. The Tribal Consultation Guidelines: Supplement to General Plan Guidelines (OPR, 2005), identifies the following contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the Native American Heritage Commission [NAHC]) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

Because the proposed project includes a Specific Plan Amendment to SP-7 to change the designation of 6.46-acres of the site from Commercial to Medium Density Residential, it is subject to the statutory requirements of SB 18 Tribal Consultation Guidelines. The City contacted the NAHC with the Notice of Preparation for this EIR and informational letters about the proposed project and requests for consultation were sent to each tribe identified on the NAHC's list on March 12, 2018.

The City received one response from the Gabrieleño Band of Mission Indians Kizh Nation., which resulted in preparation of Mitigation Measure TCR-1, listed below, which when implemented would reduce potential impacts related to Tribal Cultural Resources to a less than significant level.

As described previously, the project site has been disturbed from past oil drilling activities. Due to the previous operations on-site, there is some infill soils of unknown origins on the project site. During consultation with the Kizh Nation, it was identified that the site is located in the vicinity of trading routes that were used for commerce by the Tribe, and therefore there is some potential for tribal cultural resources to exist on the project site. Mitigation Measure TCR-1 is included to require retention of a Native American Monitor from Gabrieleño Band of Mission Indians Kizh-Nation to provide Native American Indian Sensitivity Training to construction personnel and provide on-call services to address unanticipated prehistoric or tribal resources. With implementation of Mitigation Measures TCR-1, potential impacts related to tribal cultural resources would be less than significant.

Assembly Bill 52

Chapter 532, Statutes of 2014 (i.e., Assembly Bill [AB] 52), requires that Lead Agencies evaluate a project's potential to impact "tribal cultural resources." Such resources include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources." AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a "tribal cultural resource." Also per AB 52 (specifically PRC 21080.3.1), Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects. Pursuant to the requirements of AB 52, the City sent informational letters about the proposed project and requests for consultation to each tribe on the City's list of tribes requesting consultation March 12, 2018.

As noted previously, one request to consult was received from the Gabrieleño Band of Mission Indians Kizh Nation, which resulted in Mitigation Measure TCR-1.

Existing Plans, Programs, or Policies

The following PPP is incorporated into the project and would reduce impacts related to tribal cultural resources. This action will be included in the project's mitigation monitoring and reporting program:

PPP CUL-1: Human Remains, provided previously in Section 5, Cultural Resources.

Mitigation Measure

Mitigation Measure TCR-1: Prior to the issuance of a grading permit, the project developer/applicant shall communicate with representatives of the Gabrieleño Band of Mission Indians Kizh-Nation and present evidence of such communication to the City of Placentia Community Development Department Director, or designee, demonstrating the following shall occur:

- **On-call monitoring services** by a qualified Native American Monitor to address unanticipated prehistoric or tribal resources. The Native American Monitor shall be present at the pre-grading conference to establish procedures for tribal cultural resource surveillance.
- **Native American Indian Sensitivity Training** by a qualified Native American Monitor for construction personnel. The training session shall include a handout and focus on how to identify Native American resources encountered during earthmoving activities and the procedures followed if resources are discovered, the duties of the Native American Monitor of Gabrieleño Ancestry, and the general steps the Monitor would follow in conducting a salvage investigation.
- **Construction Monitoring** by a qualified Native American Monitor for ground-disturbing construction activities, as follows:
 - Initial clearing and rough grading activities (e.g., pavement removal, auguring, boring, grading, excavation, potholing, trenching, and grubbing);
 - Spot checking of previously disturbed soils that haven't been previously monitored; and
 - Monitoring previously undisturbed native soils.

The Native American Monitor(s) shall complete monitoring logs on a daily basis when onsite. The logs shall provide descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and

excavation activities of previously undisturbed native soils are completed, or when the Tribal Representatives and Monitor have indicated that the site has a low potential for tribal cultural resources.

- **Consult on unanticipated discovery of human remains and associated funerary objects:**

- Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. If funerary objects are discovered during grading or archeological excavations, they shall be treated in the same manner as bone fragments that remain intact and the construction contractor and/or qualified archeologist shall consult with the Gabrieleno Band of Mission Indians – Kizh Nation (Tribe).
- As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the County Coroner's office shall be immediately notified and no further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98 The Coroner would determine within two working days of being notified, if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would make a determination as to the Most Likely Descendent. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains shall be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard shall be posted outside of working hours. If the remains are Native American, the Tribe shall make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials shall be removed and the project applicant/developer shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects, if possible. The Tribe shall work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations shall either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes 4 or more burials, the location is considered a cemetery and a separate treatment plan shall be created. The project applicant/developer shall consult with the Tribe regarding avoidance of all cemetery sites. Once complete, a final report of all activities shall be submitted to the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains.
- Each occurrence of human remains and associated funerary objects shall be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony shall be removed to a secure container on site if possible. These items shall be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location mitigated between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

REFERENCES

Phase 1 Cultural Resources Assessment, prepared by Material Culture Consulting, October 2017 (MCC 2017).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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18. UTILITIES AND SERVICE SYSTEMS.

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less than Significant Impact. The proposed project would install onsite sewer lines that would connect to the existing sewer line in Alta Vista Street. The wastewater generated by the project would be conveyed by the City of Placentia sewer system to the Orange County Sanitation District (OCSD) Reclamation Plant No. 2, located in the City of Huntington Beach that is operated in compliance with a National Pollutant Discharge Elimination System (NPDES) permit (Permit CA0110604) that was issued by the Santa Ana Regional Water Quality Control Board (RWQCB). Waste discharge requirements for the facility in this permit are based on all applicable state and

federal regulations, policies and guidance, and include limitations on effluent discharge and receiving water. In general, effluent discharge requirements include specifications for adequate disinfection treatment and limitations on radioactivity, pollutant concentrations, sediments, pH, temperature, and toxicity.

The commercial and residential land uses proposed by the project are not anticipated to discharge wastewater that contains harmful levels of toxins that are regulated by the RWQCB (such as large quantities of pesticides, herbicides, oil, grease, and other chemicals that are more typical in industrial uses) and all effluent would comply with the wastewater treatment standards of the RWQCB. Therefore, the proposed project would result in less than significant impacts related to the wastewater treatment requirements of the RWQCB, and no mitigation measures are required.

b) 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?

Less than Significant Impact.

Water

The proposed project is an infill project and water lines currently exist in the Alta Vista Street right-of-way. The proposed project would install new onsite water lines that would convey water supplies from the existing line in Alta Vista Street to each of the proposed structures. The project site would continue to receive water supplies (described below in Response 18.d) through the existing water lines and would not require expansion to serve the proposed project. Therefore, although construction of the onsite water lines would be required to support the new development, no extensions or expansions to the water pipelines supplying the project site would be required. The necessary installation of the onsite water supply lines is included as part of the proposed project and would not result in any physical environmental effects beyond those identified in other sections of this IS/MND. Therefore, the proposed project would not result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and impacts would be less than significant. No mitigation measures are required.

Wastewater

As described above, the proposed project would install onsite sewer lines that would connect to the existing sewer in Alta Vista Street. Wastewater would be conveyed by existing trunk sewer lines to the OCSD wastewater treatment plant. The proposed project is an infill project and although construction of the onsite wastewater conveyance lines would be included to provide future connections to nearby sewers, no extensions or expansions to the sewer system serving the project area would be required. The quantities of wastewater generated by the project are described below in Response 18.e. The necessary installation of onsite sewer lines is included as part of the proposed project and would not result in any physical environmental effects beyond those identified in other sections of this IS/MND. Therefore, the proposed project would not result in the construction of new wastewater facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and impacts would be less than significant. No mitigation measures are required.

c) 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?

Less than Significant Impact. The proposed project includes development of onsite storm water drainage features that include a new onsite storm water system would be installed to collect runoff from the proposed development, which would filter and discharge it into the existing offsite 36-inch storm drain that is south of the project site. The Orange County DAMP requires the project to infiltrate, evapotranspire, or biotreat/biofilter the 85th percentile 24-hour storm event. As provided in the Project Description, the proposed drainage system would slow and filter runoff and biotreatment devices such as catch basin planters and tree box filters would also be installed to capture and filter runoff. Due to the appropriate sizing of the onsite drainage features, operation of the proposed project would not substantially increase stormwater runoff, and the project would not require or result in the construction of new off-site storm water drainage facilities or expansion of existing offsite facilities, the construction of which could cause significant environmental effects. The required installation of onsite drainage features is included as part of the proposed project and would not result in any physical environmental effects beyond those identified in other sections of this IS/MND. Overall, impacts related to stormwater drainage facilities would be less than significant, and no mitigation measures are required.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less than Significant Impact. The project site is located within the service boundary of Golden State Water Company (GSWC), which currently serves the areas adjacent to the project site. GSWC obtains its water supply for the Placentia service area from local groundwater and imported water obtained from the Municipal Water District of Orange County (MWDOC). MWDOC gets its imported supply from Metropolitan Water District of Southern California (Metropolitan). Between 2011 and 2015, groundwater represented an average of 44 percent of the total water supply to the Placentia-Yorba Linda area and the remainder was provided by imported water. The GSWC 2015 Urban Water Management Plan (UWMP) states that groundwater through 2040 is expected to comprise 52 percent of the Placentia-Yorba Linda area's total supply (GSWC 2015).

The GSWC 2015 UWMP provides water demand projections through 2040 that are based on SCAG population and growth estimates and average water use rates. The GSWC 2015 UWMP details that the 2015 demand for water was 6,317 AFY, and that it anticipates a demand increase of 8,957 AFY by 2040 (an increase of 41.8 percent). Additionally, as shown in Table U-1 below, the GSWC 2015 UWMP anticipates a demand increase of 1,753 AFY from single-family and commercial uses through 2040, which is an increase of 48 percent.

Table U-1: 2015 UWMP Anticipated Increase in Water Demand for Single Family and Commercial Uses

Land Use	2015 Actual Demand (AFY)	2040 Projected Demand (AFY)	Increase (AFY)
Single-Family	3,359	5,050	1,691 (50%)
Commercial	385	447	62 (16%)
Subtotal	3,744	5,497	1,753 (46.8%)

Source: GSWC 2015 UWMP

Based on the GSWC 2015 UWMP's water use factor for single-family housing of 0.37 acre-feet yearly (AFY) the addition of 54 single-family residences would require approximately 19.98 acre-feet of water annually, which equates to 1.2 percent of the anticipated water demand increase from single-family residential uses through 2040. Also, because the SCAG growth projections are

based on the existing designations, and the project site is designated for commercial uses, the UWMP water demand estimates include development of the site for commercial uses. Overall, the WQMP identifies an anticipated water demand of 8,957 AFY and a supply of 8,965 AFY. This indicates that the planned supplies exceed demand by 8 AFY. Therefore, the GSWC would have sufficient water supplies available to serve the project from existing entitlements, and new or expanded entitlements would not be needed. Impacts related to water supplies would be less than significant, and no mitigation measures are required.

e) 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?

Less than Significant Impact. Based on a wastewater flow of 3,451 gallons per acre per day for medium density residential development (7-15 du/ac) (Spruce 2015), the proposed project would generate approximately 21,086 gallons of wastewater per day. In addition, a nominal amount of wastewater would be generated by the 10,600 square feet of commercial uses on the project site.

As described previously, the project would install onsite sewer lines that would connect to the existing sewer in Alta Vista Street, and wastewater flows would be conveyed through the OCSD trunk pipelines that range in size from 12 to 96 inches in diameter, to the OCSD Reclamation Plant No. 2 in Huntington Beach that has a treatment capacity of 258 mgd, and an average daily flow of 67 mgd (OCSD 2017). Due to the OCSD plants' excess capacity, the existing facilities would be available to accommodate the increase in wastewater flow from the project. Therefore, development of the proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments, and impacts would be less than significant. No mitigation measures are required.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less than Significant Impact. The Orange County Integrated Waste Management Department owns and operates three active landfills serving the Orange County region, that include: the Frank R. Bowerman Landfill, the Olinda Alpha Landfill, and the Prima Deshecha Landfill. All three landfills are Class III landfills that accept only non-hazardous municipal solid waste for disposal; no hazardous or liquid waste is accepted.

The Bowerman Sanitary landfill is permitted to accept 11,500 tons per day of solid waste and is permitted to operate through 2053. In September 2016, the maximum daily amount of solid waste disposed at the landfill was 7,680 tons (Calrecycle September Inspection Report); thus, having an average daily additional capacity of 3,820 tons per day.

The Olinda Alpha Landfill is permitted to accept 8,000 tons per day of solid waste and is permitted to operate through 2021. In December 2016, the maximum daily amount of solid waste disposed at the landfill was 7,728 tons (Calrecycle December 2016 Inspection Report); thus, having an average daily additional capacity of 272 tons per day.

The Prima Deshecha Sanitary Landfill is permitted to accept 4,000 tons per day of solid waste and is permitted to operate through 2067 (Calrecycle 2017). In September 2016, the maximum daily amount of solid waste disposed at the landfill was 2,075 tons (Calrecycle September 2016

Inspection Report); thus, having an average daily additional capacity of 1,925 tons per day.

Development of the proposed project would result in additional solid waste generation from the 54 additional single-family residences and the 10,600 square feet of commercial. Based on an average of the single-family solid waste generation rates obtained from CalRecycle, one single-family home is expected to generate 9.8 pounds per day of solid waste and commercial retail is estimated to generate 0.006 pounds of solid waste per square foot per day (CalRecycle 2017). Thus, the 54 additional single-family residences are estimated to generate 529.2 pounds of solid waste per day, and the 10,600 square feet of commercial is estimated to generate 63.6 pounds per day. As solid waste services are provided weekly by Republic Services, the commercial waste hauler that serves the City of Placentia, this totals a weekly disposal of 4149.6 pounds (or 2.07 tons) of solid waste.

Based on the current state recycling requirements, which require diversion of 50 percent of solid waste away from landfills, the proposed project would result in 2,074.8 pounds (1.04 tons) of solid waste per week being disposed of in landfills. In 2020, state regulations per AB 341 will become effective, which will require diversion of 75 percent of solid waste from landfills. Thus, it is anticipated that solid waste landfill disposal from operation of the proposed project in 2020 would be reduced to approximately 1,037.4 pounds (0.52 tons) per week. As described above, all three landfills that could serve the project site have sufficient permitted capacity to accommodate the project's solid waste disposal needs, and impacts related to landfill capacity would be less than significant. No mitigation measures are required.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The proposed project would be required to comply with applicable federal, state, and local regulations regarding the proper disposal of solid waste generated onsite, including AB 939, AB 341, and the California Green Building Code (24 CCR Part 11) as each relates to solid waste and recycling. Impacts related to compliance with federal, state, and local statutes and regulations related to solid waste would not occur from implementation of the proposed project, and no mitigation measures are required.

Existing Plans, Programs, or Policies

There are no impact reducing Plans, Programs, or Policies related to utilities and service systems that are applicable to the project.

Mitigation Measures

No mitigation measures related to utilities and service systems are required.

REFERENCES

CalRecycle Residential Sector Generation Rates. Accessed:
<https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>.

Calrecycle Solid Waste Information System Database: Accessed:
<http://www.calrecycle.ca.gov/swfacilities/directory/search.aspx>

City of Placentia Spruce Street Condominiums Initial Study/Mitigated Negative Declaration (Spruce 2015). Accessed: <https://www.placentia.org/DocumentCenter/View/4543>

Golden State Water Company 2015 Urban Water Management Plan - Placentia-Yorba Linda (GSWC 2015). Prepared by Kennedy/Jenks Consultants. July 2016. Accessed: http://www.gswater.com/download/Placentia-YorbaLinda_2015_UWMP-Final-Draft.pdf

Orange County Sanitation District Facts and Key Statistics (OCSD 2017). Accessed: <https://www.ocsd.com/Home/ShowDocument?id=19430>

19. MANDATORY FINDINGS OF SIGNIFICANCE.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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, substantially 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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?

Less than Significant Impact with Mitigation Incorporated.

As described in Section 5, Cultural Resources, the project site does not contain any historic or archaeological resources; however, the potential exists for subsurface paleontological resources to be located within the project site. Therefore, Mitigation Measure MM CUL-1 is included to ensure that any inadvertent discovery of resources during ground-disturbing activities would be less than significant. Additionally, due to the fact that there were trade routes in the vicinity utilized by ancient tribal cultures, there is potential for Tribal Cultural Resources on the project site. With implementation of Mitigation Measure TCR-1, impacts to Tribal Cultural Resources would be less than significant.

As described previously in Section 12, Noise, ambient noise in the vicinity of the project area could impact onsite residences. Thus, mitigation has been included to provide noise barriers and building construction requirements that would reduce noise at onsite sensitive receptors. In addition, the project's 18-month construction activities would generate temporary and periodic increases in ambient noise levels and groundborne vibration at nearby sensitive receptors. Therefore, mitigation has been included to provide a construction setback and instructions that would temporary and intermittent construction noise and vibration at sensitive receptors to a less than significant level.

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)?

Less than Significant Impact. Cumulative impacts are defined as two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period. The CEQA Guidelines, Section 15130 (a) and (b), states:

- (a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.
- (b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

Less than Significant Impact. The project consists of providing infill commercial and residential uses on an existing undeveloped parcel within a suburban area. The proposed development is consistent with the adjacent commercial and residential development. The project site is within SP-7, and has been planned for development since adoption of SP-7 in 1989.

As described above, all of the potential impacts related to implementation of the project would be less than significant or reduced to a less than significant level with implementation of mitigation measures related to cultural resources, hazardous materials, and noise. In addition, the cumulative effect of the proposed project taken into consideration within SP-7 is limited, due to the small scale and infill nature of the proposed project. Furthermore, the project would develop an area that has been previously disturbed. Thus, impacts to environmental resources or issue areas would not be cumulatively considerable; and cumulative impacts would be less than significant.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact with Mitigation Incorporated. The proposed project would result in infill development on a previously developed site. The project would not consist of any use or any activities that would result in a substantial negative affect any persons in the vicinity. All resource topics associated with the proposed project have been analyzed in accordance with CEQA and the State CEQA Guidelines and were found to pose no impacts, less than significant impacts, or less than significant impacts with mitigation, as previously detailed. Consequently, the project would not result in any environmental effects that would cause substantial adverse effects on human beings directly or indirectly, with implementation of the mitigation measures that have been previously detailed.

Existing Plans, Programs, or Policies

Refer to the previously listed PPPs related to aesthetics, air quality, cultural resources, geology and soils, hydrology and water quality, noise, public services, and tribal cultural resources. These PPPs are existing plans, programs, or policies which effectively reduce potential environmental impacts.

Mitigation Measures

Refer to the previously listed mitigation measures related to cultural resources, tribal cultural resources, hazardous materials, and noise. These Mitigation Measures effectively reduce environmental impacts to less than significant.

5 DOCUMENT PREPARERS AND CONTRIBUTORS

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