



CITY OF FOUNTAIN VALLEY

PLANNING DEPARTMENT

TO: Planning and Building Director **DATE:** October 14, 2020

FROM: Steven Ayers, Principal Planner

SUBJECT: Development Plan Review 20-01 – Orange County Sanitation District (OCSD) Headquarters Building

Location:

An approximate 5.2-acre property located east of Bandilier Circle, north of Ellis Avenue, and west of Pacific Street that includes the following existing properties:

- 18484 Bandilier Circle – APN 156-163-06
- 18475 Pacific Street – APN 156-163-08
- 18410 Bandilier Circle – APN 156-163-10
- 18368 Bandilier Circle – APN 156-163-11
- 18429 Pacific Street – APN 156-163-09

Zoning

SP – Specific Plan. Fountain Valley Crossings Specific Plan (FVCSP), Mixed Industry District

Proposal:

OCSD has submitted a request for the development of a three story, 109,914 square foot headquarters building, site improvements, and pedestrian bridge spanning Ellis Avenue.

The proposal necessitates several entitlement actions involving hearings by the Planning Director, Planning Commission, and the City Council. Development Plan Review 20-01 is the first of three required hearings on the proposal and considers the physical structure and site improvements themselves. This hearing will also consider a request for three deviations to requirements of the FVCSP for the maximum building length (a 2% deviation - 203'11 ¼" proposed instead of the maximum 200'), street façade composition (a 5.5% deviation – 18.9% window openings proposed instead of the minimum 20%), and parking requirements (a 5% deviation – 261 spaces proposed instead of the 275 required). An Addendum to the FVCSP Final Environmental Impact Report stating that no new or substantially more severe significant impacts would occur as a result of the proposed headquarters building will also be considered for recommendation to the Planning Commission and City Council.

Code Requirement:

Pursuant to Section 2.0.5.C.1.c of the FVCSP, a Development Plan Review Hearing shall be required for any project within the Plan area for new development that includes primary and accessory structures. Additionally, pursuant to Section 2.0.5.F of the FVCSP, deviations from the Development Standards of the Specific Plan may be granted at the time of Development Plan Review for special circumstances and/or unique features when, in the opinion of the Planning Director, significantly greater benefits from the project can be provided than would occur if all the minimum requirements were met. Deviation requests of up to twenty percent (20%) of any single standard may be considered by the Planning Director.

Discussion:

OCSD has submitted a request for the construction of a 109,914 square foot Headquarters Building located east of Bandilier Circle, north of Ellis Avenue, and west of Pacific Street (Attachment #1). The new Headquarters Building will replace five existing buildings located within the FVCSP.

The use of the new building will be an administrative office including boardroom facilities for civic events and exhibit/touring facilities for educational functions. This use is classified as a Workplace – Professional Services use in the Mixed Industry District of the FVCSP and is permitted by-right. The new building will accommodate a civic-scaled lobby housing the Board Room/Multipurpose Room, a public exhibit displaying the history and values of OCSD as a kick-off for public tours and events, and the administrative offices for the sanitation district. Approximately 228 employees would be relocated from OCSD's Plant No. 1, which is located south of Ellis Avenue, to the new Administrative Headquarters Building. The grounds of the Administrative Headquarters Building will include parking, a public entrance plaza, an exhibit plaza, and a private landscaped employee courtyard.

A proposed private pedestrian bridge will be a painted steel, open-air structure spanning Ellis Avenue from the new building to inside the secure perimeter of OCSD's Plant 1. The bridge will provide a secure and safe pathway for employees, guided tour visitors, and select utilities to cross Ellis Avenue and directly access OCSD's Plant 1. The plant side of the bridge landing (south end) will include stairs and an elevator. The bridge is not part of the Development Plan Review and is included to provide a complete picture of the project. The City Council will consider a Code Amendment, Development Agreement, and the bridge at a future meeting.

The proposed Headquarters Building will be three stories and 65 feet tall (48 feet tall with an additional 17 feet parapet for rooftop screening). The building will provide 43,166 square feet on the first level, 33,915 square feet on the second level, and 32,833 square feet on the third level.

The project includes 261 onsite parking spaces for employees and visitors, a building footprint of 43,100 square feet (19.1% of the property), hardscape comprising of an on-site parking lot and sidewalks totaling 126,600 square feet (55.8% of the property), and landscaping totaling 57,100 square feet (25.1% of the property). The parking lot landscaping, drive-aisles, and parking dimensions were designed to meet the minimum dimensions required by the FVCSP. Both unsheltered and sheltered (under a photovoltaic canopy) parking will be available in the on-site parking lot. Parking will be accessed from one driveway on Bandilier Circle and two driveways on Pacific Street.

Architecturally, the building will provide an innovate modern design that meets the requirements of

the FVCSP and the architectural desires of OCSD. The exterior facade includes glass unitized curtain walls, a louvered aluminum blade baguette solar shading system with architectural exposed structural steel on the south side of the building, a terra cotta dark panel construction with a louvered aluminum blade baguette shading on the boardroom elevations, a metal panel at the entry portal to the building, corrugated/perforated metal screening material at the rooftop mechanical areas, a metal cable roof guardrail along the parapet of the building, and a single ply welded membrane roofing system. A stainless steel wire mesh system will be utilized on the pedestrian bridge. A complete list of all exterior materials can be found in the project description letter (Attachment #2) to this report and shown on the plans (Attachment # 1). Minimal signage will be provided in two locations: at the entrance canopy on the north plaza and with pin-mounted letters on the south façade of the boardroom.

Exterior lighting will be provided at the building predicated on dark-sky design principles to minimize glare, reduce light trespass, and minimize light intrusion in the night sky. While the bridge will be part of the City Council’s consideration, lighting will be provided on the pedestrian bridge at an average illuminance of 6.3 footcandles (fc) when the lights are on a full output. The lighting design of the pedestrian bridge will provide the necessary light levels for safe egress to and from the bridge while also minimizing glare to the oncoming traffic. The luminaries on the pedestrian bridge will provide precise optics, which reduce glare to a glare rating of “0” according to the Illuminating Engineering Society (IES) of North America. Additionally, the luminaires are dimmable so the light level can be adjusted to respond to the specific conditions in the immediate surroundings throughout the year. Lastly, the luminaires will be placed in the center of the bridge ceiling to provide light to the pedestrian bridge pathway, Because of this, and because the luminaire’s light source is recessed up in the luminaire housing, there will be very limited view of the luminaire lens by passing cars and very little light will transmit from the bridge down onto the road surface.

On-site parking will be provided for employees and visitors in the surface parking lot located on the north side of the building. Groups touring the facility will arrive by bus or van and be dropped off at the designated bus boarding area to the north of the building. The bus or vans will then leave the Headquarters site and drive to OCSD’s Plant 1 to park and await the completion of the tour. The guided tour groups will gather in the Headquarters building for the tour and walk to OCSD’s Plant 1 via the pedestrian bridge. Once the tour has commenced, the touring groups will be picked up by their bus on OCSD’s Plant 1.

Project Entitlements:

The following table, Table 1: Entitlement Summary, provides a list of entitlements required to process the project and the review authority. The review authority varies depending on the entitlement.

Table 1: Entitlement Summary

Entitlement	Review Authority
Lot Line Adjustment 19-01	Subdivision Review Committee – approved by Subdivision Committee 9/12/19
Lot Line Adjustment 19-02	Subdivision Review Committee - approved by Subdivision Committee 11/21/19
Development Plan Review 20-01	Development Plan Review Meeting – Planning Director

Deviations to FVCSP for Development Plan Review 20-01	Development Plan Review Meeting – Planning Director
Variance 332	Planning Commission
Vacation of Easement	City Council
Code Amendment 20-09	City Council
Development Agreement and Pedestrian Bridge	City Council

Development Plan Review 20-01

A Development Plan Review is required for any project within the FVCSP area for new development, which includes primary and accessory structures pursuant to FVCSP Section 2.0.5.C.1.c. The project includes the construction of a new 109,914 square foot Headquarters Building for OCSD. The building will be located at the southern portion of the project site with the on-site surface parking lot located at the northern portion of the site. As required by the FVCSP, the building will be orientated along the front setback of Ellis Avenue and will be located 15’2” from the southern property line. The project will be built 15’2” from the corner of Ellis Avenue and Pacific Street, which is within the minimum and maximum setback requirements of the FVCSP of 15 feet and 25 feet. Vehicular access will be provided via two curb cuts along both Pacific Street and one curb cut along Bandilier Circle with no vehicular access directly onto Ellis Avenue.

The project will also include a pedestrian bridge that will allow employees and touring guests to cross over Ellis Avenue from OCSD’s Plant 1 to the project site without impacting the public right-of-way of Ellis Avenue. The bridge will span from the second level of the proposed building on the north side of Ellis Avenue to a new stairway and elevator structure on OCSD’s Plant 1 property on the south side of Ellis Avenue. The bridge will be installed at a height of 19 feet above the Ellis Avenue right-of-way, which has been certified as adequate and safe by the City Engineer. The bridge will not interfere or alter existing landscaping, streetscape amenities, or existing pedestrian activity on the sidewalks. The bridge is not part of the Development Plan Review and is included to provide a complete picture of the project. The City Council will consider a Code Amendment, Development Agreement, and the bridge at a future meeting

The project is located within the Mixed Industry District of the FVCSP and will comply with the following development standards found in the FVCSP Section 2.1.5:

Table 2: Standards Compliance

Standard	Required	Provided
Use	Workplace – Professional Services	Workplace – Professional Services
Height	4 stories maximum	3 stories
Front Setback	Min 15 feet / Max 25 feet	Ellis Avenue – 15’2” Pacific Street – 23’3” Bandilier Circle – 21’3”
Side Setback	Min 10 feet	No side yard – Project complies
Rear Setback	Min 10 feet	Approximately 240 feet
Frontage Coverage on Ellis Avenue	Min 50%	58.2 %
Build to Corner at Ellis	Required between min.	Complies with 15’2”

Avenue and Pacific Street	15 foot setback and max. 25 foot setback	setback
Street Improvements	Required	8 foot wide continuous sidewalk along Bandilier Circle, Ellis Avenue, and Pacific Street with pedestrian lighting
Maximum Block Size	3,000 feet	2,203 feet existing
Minimum Public Open Space	10,991 square feet	11,634 square feet
Private Open Space	Not required for a nonresidential project	9,139 square feet
Setback Area Landscaping – Perimeter Block	1 tree / 40 feet	1 tree / 11’2” – 36’6”
Setback Area Landscaping – Interior Block	1 tree / 30 feet	1 tree / 13’10” – 27’10”
Parking Lot Type	Surface lot-side	Complies
Street Façade Top along Pacific Street	Required – Horizontal Articulation	Complies with articulation along Pacific Street
Street façade wall composition along Ellis Avenue	Required – 20% window openings	Complies with 98.2% openings
Side and Rear Façade Base and Top	Required – integral color/material change of base and top	Complies
Rooftop Screening	Required – minimum 10’ rooftop equipment setback with screening	Complies with 22’4” setback
Signage Regulations	Required – 1 sign/frontage with sq. ft. at 1.5 times frontage	Subject to separate administrative sign review

In addition to complying with the development standards listed above, the project will be designed to achieve United States Green Building Council Leadership in Energy and Environmental Design (LEED) Platinum Certification. This means that the project will meet Green building requirements for energy, construction materials, and mechanical equipment and screening. Also, the project will meet Green site treatments including water conservation and quality, storm water management, and energy conservation requirements.

Deviations to FVCSP

The project will comply with three other development standards found in the FVCSP with the approval of Deviations approved by the Planning Director. Per FVCSP 2.0.5.F, Deviations may be requested by an applicant in the amount less than 20% of a standard requirement of the FVCSP. The requests from OCSD include deviations to the maximum building length, the minimum street façade composition, and parking. Deviations from the Development Standards of the Specific Plan

may be granted at the time of Development Plan Review for special circumstances and/or unique features when, in the opinion of the Planning Director, significantly greater benefits from the project can be provided than would occur if all the minimum requirements were met. Also, additional benefits that may make a project eligible for consideration include, but are not limited to, unique or innovative designs, more or higher quality public open space, additional public improvements, and the use of energy conservation or green building technology.

1. Deviation number 1 is a requested deviation to the building length along Ellis Avenue. Per FVCSP Section 2.3.3.B.1, new buildings shall not exceed the specified maximum length as specified for each District in Section 2.1 – Development Standard. The maximum building length in the Mixed Industry District of the FVCSP is 200 feet. The proposed OCSD Headquarters Building has provided a building length along Ellis Avenue of 203' 11 ¼ ", which equals a deviation of 2%.
2. Deviation number 2 is a requested deviation to the street façade composition along Pacific Street. Per FVCSP Section 2.8.1.B.4.a, at street-facing facades, the proportion of window openings shall be a minimum of 20% of the vertical wall area between the ground (finish grade) and the top of the uppermost floor (the percentage does not include parapet height). This standard is required in the Mixed Industry District of the FVCSP. As designed, the street façade composition is proposed at 18.9%, which equals a deviation of 5.5%.
3. Deviation number 3 is a requested deviation to the parking requirement. Per FVCSP Section 2.7.1 the parking requirement for a Workplace Professional (office) use is 3.5 minimum spaces per 1,000 gross square feet. OCSD has requested to amend this requirement to 2.5 minimum spaces per 1,000 gross square feet as a part of Code Amendment 20-09 (CA), which is a part of OCSD's requested entitlements for this project. This requested deviation would be a request to deviate from the proposed CA of a minimum 2.5 spaces per 1,000 square feet and would be contingent upon approval of the requested CA. Without the CA, the parking requirement would be 385 parking spaces. With the CA, the parking requirement would be 275 parking spaces. This deviation would be a request of 14 parking spaces (275 spaces – 14 spaces = 261 spaces) which is a deviation from the CA of 5%.

Due to the following special circumstances and unique features, and because significantly greater benefits from the project can be provided, Staff supports these deviation requests due to the following reasons:

1. Special circumstances – The property has a special circumstance in having three street frontages of Bandilier Circle, Ellis Avenue, and Pacific Street where other properties in the FVCSP would typically have one to two street frontages. There are no provisions in the FVCSP that address such a property with three street frontages. This makes it difficult for the project to meet every development standard outlined in the FVCSP. The deviation in the maximum building length is negligible at 3' 11 ¼" and won't be discernable to the general public. Additionally, the limitation of window openings on the east side of the building facing Pacific Street is due to the design of the building and location of stairways on the east side of the building. Lastly, the design and location of the project, landscaping requirements, and setbacks, along with the Southern California Edison Easement that extends east and west along the north side of the proposed building that splits the usable area of the property, limits the amount of on-site parking that can be provided. The

- deviation will allow the project to be constructed with a shortfall of 14 parking spaces from the proposed CA.
2. The unique and innovative building design. The project will employ an innovative modern design that both meets the requirements of the FVCSP as well as the architectural desires of OCSD including:
 - a. Glass unitized curtain walls
 - b. A louvered aluminum blade baguette solar shading system with architectural exposed structural steel on the south side of the building
 - c. A terra cotta dark panel construction with a louvered aluminum blade baguette shading on the boardroom elevations
 - d. A metal panel at the entry portal to the building
 - e. Corrugated/perforated metal screening material at the rooftop mechanical areas
 - f. A metal cable roof guardrail along the parapet of the building
 - g. A single ply welded membrane roofing system
 - h. Stainless steel wire mesh along the pedestrian bridge.
 3. The entry plaza public open space will serve as a gathering place complete with seating areas, landscaping and access to the main entry, onsite parking lot, and the public right-of-way. OCSD educational exhibits are planned to be located inside the main entry lobby off Bandilier Circle. The education exhibit design will follow after the construction of the building.
 4. The additional public open space provided with the project (11,634 square feet when the minimum required is 10,991 square feet).
 5. The additional 9,139 square feet of private open space when none is required.
 6. The proposed public improvements provided with this project that include eight foot wide sidewalks and new street and pedestrian lighting.
 7. The building would be designed to achieve United States Green Building Council Leadership in Energy and Environmental Design (LEED) Platinum Certification.
 8. Similar to the Hyundai headquarters building on the north side of the 405 Freeway, the proposed project will allow a signature building in the City and one befitting one of Orange County's critical infrastructure operations and the future direction of the FVCSP. The end result will be a distinctive campus.

Traffic Analysis

To study traffic access to and from the project site, a Traffic Impact Analysis (TIA) was prepared to evaluate the three unsignalized intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue to determine the feasibility of, need for, and appropriate location for a traffic signal (Attachment #3). The analysis looked at two possible alternatives: (1) the installation of a traffic signal at Bandilier Circle/Ellis Avenue, and (2) the installation of a traffic signal at Mt. Langley/Ellis Avenue. In consultation with the Public Works department and in consideration of freeway stacking, it was determined that a traffic signal was not necessary at this time and is therefore is not a required off-site improvement for the OCSD project.

Lastly, per the California Environmental Quality Act (CEQA), a Vehicle Miles Traveled (VMT) Analysis was completed as a part of the TIA and found that the proposed project would not result in any new or additional vehicle miles than what is currently occurring in the area. Because , the project is located across Ellis Avenue and within the same VMT zone as OCSD's Plant No. 1, and OCSD will not be hiring any additional staff for the new HQ building, the amount of distance of

vehicle travel will be unchanged. Therefore, the proposed project is screened from the requirement for a VMT analysis and is presumed to have a less-than-significant transportation impact.

Additional Entitlements Subject to Subsequent Hearings

Requests for other entitlements not being reviewed at this time through the Development Plan Review process include Lot Line Adjustment 19-01 and 19-02, Variance 332, a Vacation of Easement, Code Amendment 20-09, pedestrian bridge, and a Development Agreement. The Development Plan Review and Deviations are contingent upon approval of these additional entitlements from the Planning Commission and the City Council.

The requested lot line adjustments (LLA) were processed last year and reviewed by the City's Subdivision Review Committee pursuant to FVMC 21.76. LLA No. 19-01 was initiated to complete a LLA that was initiated, but never completed, by the previous owner of the properties located at 18484 Bandilier Circle and 18475 Pacific Street. OCSD submitted a request under LLA 19-01 to complete this request so the two properties could be merged into one. OCSD then initiated LLA 19-02 to complete the merger of the rest of the parcels in the project (156-163-06, 156-163-08, 156-163-10, 156-163-11, and 156-163-09) so the proposed project would be completely under one property when complete.

LLA 19-01 was reviewed by the Subdivision Committee on September 12, 2019 and approved. LLA 19-02 was reviewed by the Subdivision Committee on November 21, 2019 and approved. Both LLA's were approved subject to the conditions that the existing buildings be demolished under an approved demolition permit and that the LLA's were contingent upon approval of the projects Development Plan Review.

Variance 332 is a request to deviate more than 20% to the development standards listed in the FVCSP including the following (see Variance Requests below). Variance 332 will be reviewed by the Planning Commission at a tentative date of October 28, 2020.

Variance Requests

- Variance #1 – Frontage Coverage (Pacific Street) seeks variance for a reduction in the minimum amount of required building frontage coverage (FVCSP Section 2.4.6.B.1) along the Pacific Street property line. This is a variance for the reduction in the minimum amount of required building frontage coverage along the Pacific Street property line. The minimum required per the FVCSP is 50% coverage and the proposed design is for 32.2% coverage.
- Variance #2 – Frontage Coverage (Bandilier Circle) seeks variance for a reduction in the minimum amount of required building frontage coverage (FVCSP Section 2.4.6.B.1) along the Bandilier Circle property line. This is a variance for the reduction in the minimum amount of required building frontage coverage along the Pacific Street property line. The minimum required per the FVCSP is 50% coverage and the proposed design is for 22.8% coverage.
- Variance #3 – Build-To-Corner (Ellis Avenue/Bandilier Circle) seeks a variance to only be sited within one (1) of the two (2) Build-to-Corner conditions (FVCSP Section 2.4.8.B) present on the project site. This is a variance request to provide a project with the build-to-corner at only one of the front corners of the property (at Ellis Avenue and Pacific Street) and not the other front corner (Ellis Avenue and Bandilier Circle).
- Variance #4 – Parking Count (NOT USED- WITHDRAWN)

- Variance #5 – Curb Cuts & Driveways (Pacific Street) seeks a variance to permit a second two-lane curb cut along the Pacific Street frontage (FVCSP Section 2.7.3.A.2.a). Per the FVCSP, the maximum number of driveways/curb cuts associated with a single building are one (1) two-lane curb cut or two (2) one-lane curb cuts per street frontage. The project will provide two two-lane curb cuts on Pacific Street.
- Variance #6 – Street Façade Base (Pacific Street) seeks a variance for a noncompliance for the Pacific Street base façade requirement (FVCSP Section 2.8.1.B.2.a.ii). The FVCSP requires a substantial horizontal articulation at the base of the street and public space facades shall be applied to form a base treatment on buildings between the finish grade the top of the first floor. The project will not comply with this development standard.
- Variance #7 – Street Façade Base (Ellis Avenue) seeks a variance for a noncompliance for the Ellis Avenue street base façade requirement (FVCSP Section 2.8.1.B.2.a.ii). The FVCSP requires a substantial horizontal articulation at the base of the street and public space facades shall be applied to form a base treatment on buildings between the finish grade the top of the first floor. The project will not comply with this development standard.
- Variance #8 – Street Façade Base (Bandilier Circle) seeks a variance for a non-compliance for the Bandilier Circle street base façade requirement (FVCSP Section 2.8.1.B.2.a.ii). The FVCSP requires a substantial horizontal articulation at the base of the street and public space facades shall be applied to form a base treatment on buildings between the finish grade the top of the first floor. The project will not comply with this development standard.
- Variance #9 – Street Façade Top (Pacific Street, Bandilier Circle and Ellis Avenue – Board Room Volume, Ellis Avenue) seeks a variance for a noncompliance for the Pacific Street, Bandilier Circle and Ellis Avenue street façade top requirement (FVCSP Section 2.8.1.B.3.a.). The FVCSP requires a substantial horizontal articulation of street and public space facades shall be applied at the top of the uppermost floor of the façade to form a façade top treatment on buildings. The project’s Board Room will not comply with this development standard.
- Variance #10 –Street Façade Wall Composition on Bandilier Circle (FVCSP Section 2.8.1.B.4) seeks a variance for a reduction in the minimum percentage of window openings within the Bandilier Circle street-facing façade (FVCSP Section 2.8.1.B.4.a). The FVCSP requires that the proportion of window openings at street-facing facades to be a minimum of twenty (20) percent of the vertical wall area between the ground (finished grade) and the top of the uppermost floor (the percentage does not include parapet height). The project will provide 11.7% window openings along Bandilier Circle.

Vacation of Easement

The proposed vacation of easement is for a remnant street easement located between Parcel 5 (APN 156-163-11), Parcel 6 (APN 156-163-10), and Parcel 9 (APN 156-163-09) located near the end of the cul-de-sac of Bandilier Circle. The review of this easement vacation will be reviewed by the Planning Commission at a tentative date of October 28, 2020 and by the City Council at a tentative date of November 17, 2020.

Code Amendment 20-09

The applicant has applied for a code amendment to the FVCSP to amend three sections of the code. The first amendment will eliminate the special public open space requirement and all related references from the FVCSP. The second amendment will reduce parking regulations for

workplace-professional uses from 3.5 spaces/1,000 gross square feet to 2.5 spaces/1,000 gross square feet. The third amendment will add a section to the FVCSP to allow for skyway pedestrian bridges in certain circumstances. Code Amendment 20-09 will be reviewed by the Planning Commission at a tentative date of October 28, 2020 and by the City Council at a tentative date of November 17, 2020.

Bridge and Development Agreement

Lastly, the applicant has applied for a Development Agreement for the project that outlines city approvals and payment for the loss of local property tax revenues that will be incurred with OCSD occupying property within the FVCSP. The Development Agreement will be reviewed by the Planning Commission at a tentative date of October 28, 2020 and by the City Council at a tentative date of November 17, 2020. The bridge has been described in this report but will be acted upon by the City Council in conjunction with the Development Agreement.

Findings for DPR 20-01

Per Section 2.0.5.A, The Planning Director has the authority to approve, conditionally approve, or deny a Development Plan, and to refer an application to the Planning Commission if determined to be necessary. In order to approve a Development Plan Review application, the Planning Director shall make the following findings.

1. The project is consistent with the City's General Plan and all applicable requirements of the Fountain Valley City Code.

The General Plan designation is Specific Plan, which accommodates a mixture of office, light industrial, and retail development in an integrated setting. Administrative offices, corporate headquarters, and research and development, as would occur in the proposed OCSD project, are permitted uses in this location. As discussed above, the proposed development meets the majority of requirements of the FVCSP except for the noted variances and code amendments, which, if approved, would bring the project into compliance with the provisions of the FVCSP. As noted, the approval of the Development Plan Review and Deviations are contingent upon approval of the proposed Variance, Code Amendment, Easement Vacation, and Development Agreement by the Planning Commission and City Council. The deviations are permitted as part of the FVCSP to provide some flexibility and are thus considered consistent with the Plan's standards. The project will maintain and enhance high quality development throughout the city by encouraging variety, quality, consistency, and innovation in land use practice and by promoting quality commercial development (General Plan Goal/Policy 2.1.2 and 2.1.3). Architecturally, the building will provide an innovative modern design that meets the requirements of the FVCSP and the architectural desires of OCSD. The project will allow a signature building in the City and one befitting one of Orange County's critical infrastructure operations and the future direction of the FVCSP. The project will improve the public access with an eight foot wide sidewalk around the street perimeter of the project complete with pedestrian lighting. The end result will be a distinctive campus that will be designed to achieve LEED Platinum Certification that meets Green building requirements for energy, construction materials, and mechanical equipment and screening. Also, the project will meet Green site treatments including water conservation and quality, storm water management, and energy conservation requirements. The project

will help the area transition from primarily older industrial and manufacturing uses to high-value developments.

2. The project will not be detrimental to the general welfare of persons working or residing in the vicinity nor detrimental to the value of the property and improvements in the neighborhood.

The proposed development will not be detrimental to the general welfare to persons working within the vicinity nor be detrimental to the value of property and improvements in the neighborhood. The proposed development replaces older, tilt-up industrial buildings with a distinctively designed building that enhances the adjacent property values and provides new improvements to the neighborhood such as street landscaping, pedestrian scale lighting, and wider sidewalks that contribute to a safer and more enjoyable pedestrian circulation.

3. The project will not adversely affect the Circulation Plan of this Specific Plan.

The project is in full compliance of the required streetscape and sidewalk improvements, which will improve the pedestrian circulation plan of the existing neighborhood. The project includes the addition of an eight foot wide sidewalk around the street perimeter of the project complete with pedestrian lighting. A Traffic analysis has been performed and the no off-site improvements are necessary. Additionally, the pedestrian bridge that will be acted on by the City Council will span across the public right-of-way to connect the project to OCSD's Plant 1 to allow efficiencies and minimize pedestrian crossings of public streets.

4. The project complies with the applicable provisions of the Fountain Valley Crossings Specific Plan and other applicable regulations.

The proposed development complies with the majority of applicable provisions of the FVCSP except for the noted variances and code amendments, which, if approved, would bring the project into compliance with the provisions of the FVCSP. Also, the project is designed to meet the requirements of state and local building, energy and development codes. Due to unique site conditions and constraints noted above, the project is requesting deviations, a variance, and a code amendment to bring the project into compliance with the provisions of the FVCSP. Therefore, the approval of the projects Development Plan Review and Deviations is contingent upon approval of the proposed Variance, Code Amendment, Easement Vacation, and Development Agreement by the Planning Commission and City Council.

With Conditions of Approval outlined in Attachment #5 to this Staff Report, staff supports the applicant's request.

Environmental Clearance:

The Environmental Impact Report (EIR) prepared for the Fountain Valley Crossings Specific Plan and was certified by the City Council on January 23, 2018. For reference, the Final EIR can be accessed at <https://www.fountainvalley.org/1278/Fountain-Valley-Crossings>.

An Addendum to the EIR has been prepared (Attachment #4) to identify whether the proposed revisions would result in any new significant impacts (CEQA Guidelines Section 15162).

Through the Addendum, it was determined that no new or substantially more severe significant impacts would occur as a result of the proposed changes. None of the conditions described in CEQA Guidelines Section 15162 requiring the preparation of a subsequent EIR or CEQA Guidelines Section 15163 requiring preparation of a supplemental EIR have occurred. This Addendum to the adopted EIR is an appropriate level of environmental review for the project revisions, as identified in CEQA Guidelines Section 15164.

Notice Furnished:

Due notice of the public hearing on October 14, 2020, conducted in the City Council Chambers at City Hall, 10200 Slater Avenue, Fountain Valley, was given as required by the Fountain Valley Municipal Code. Public hearing notices were mailed to all property owners and commercial tenants within 500 feet of the subject property. The item was published in the Fountain Valley View and notices were posted at City Hall and the Recreation Center.

Alternatives:

1. Recommend approval of the Addendum to the FVCSP EIR in accordance with the CEQA and approve Development Review 20-09 with Deviations to standards of the FVCSP for maximum building length (a 2% deviation - 203'11 ¼" proposed instead of the maximum 200'), street façade composition (a 5.5% deviation – 18.9% window openings proposed instead of the minimum 20%), and parking requirements (a 5% deviation – 261 spaces proposed instead of the 275 required) per the Conditions of Approval outlined in Attachment #5 of this Staff Report contingent upon Planning Commission and City Council actions on Variance 332, Code Amendment No. 20-09, the Vacation of Easement, Development Agreement, pedestrian bridge and Addendum.
2. Deny the request.
3. Continue this request for additional information.

Recommended Action:

Staff recommends that the Planning and Building Department Director select Alternative #1: Recommend approval of the Addendum to the FVCSP EIR in accordance with CEQA and approve Development Review 20-09 with Deviations to standards of the FVCSP for maximum building length (a 2% deviation - 203'11 ¼" proposed instead of the maximum 200'), street façade composition (a 5.5% deviation – 18.9% window openings proposed instead of the minimum 20%), and parking requirements (a 5% deviation – 261 spaces proposed instead of the 275 required) per the Conditions of Approval outlined in Attachment #5 of this Staff Report contingent upon Planning Commission and City Council actions on Variance 332, Code Amendment No. 20-09, the Vacation of Easement, Development Agreement, pedestrian bridge and Addendum.

Prepared By: Steven Ayers, Principal Planner

Attachment 1: Site Plan, Landscape Plan, Floor Plan, Elevations

Attachment 2: Project Description Letter

Attachment 3: Traffic Impact Analysis

Attachment 4: Addendum to the FVCSP EIR

Attachment 5: Conditions of Approval for DPR 20-01 and Deviations to FVCSP

ORANGE COUNTY SANITATION DISTRICT

CONTRACT NO. P1-128A

HEADQUARTERS COMPLEX AT PLANT NO.1

PART OF:

PROJECT NO. P1-128 - HEADQUARTERS COMPLEX

DEVELOPMENT PLAN REVIEW RESUBMITTAL 4: DRAWINGS

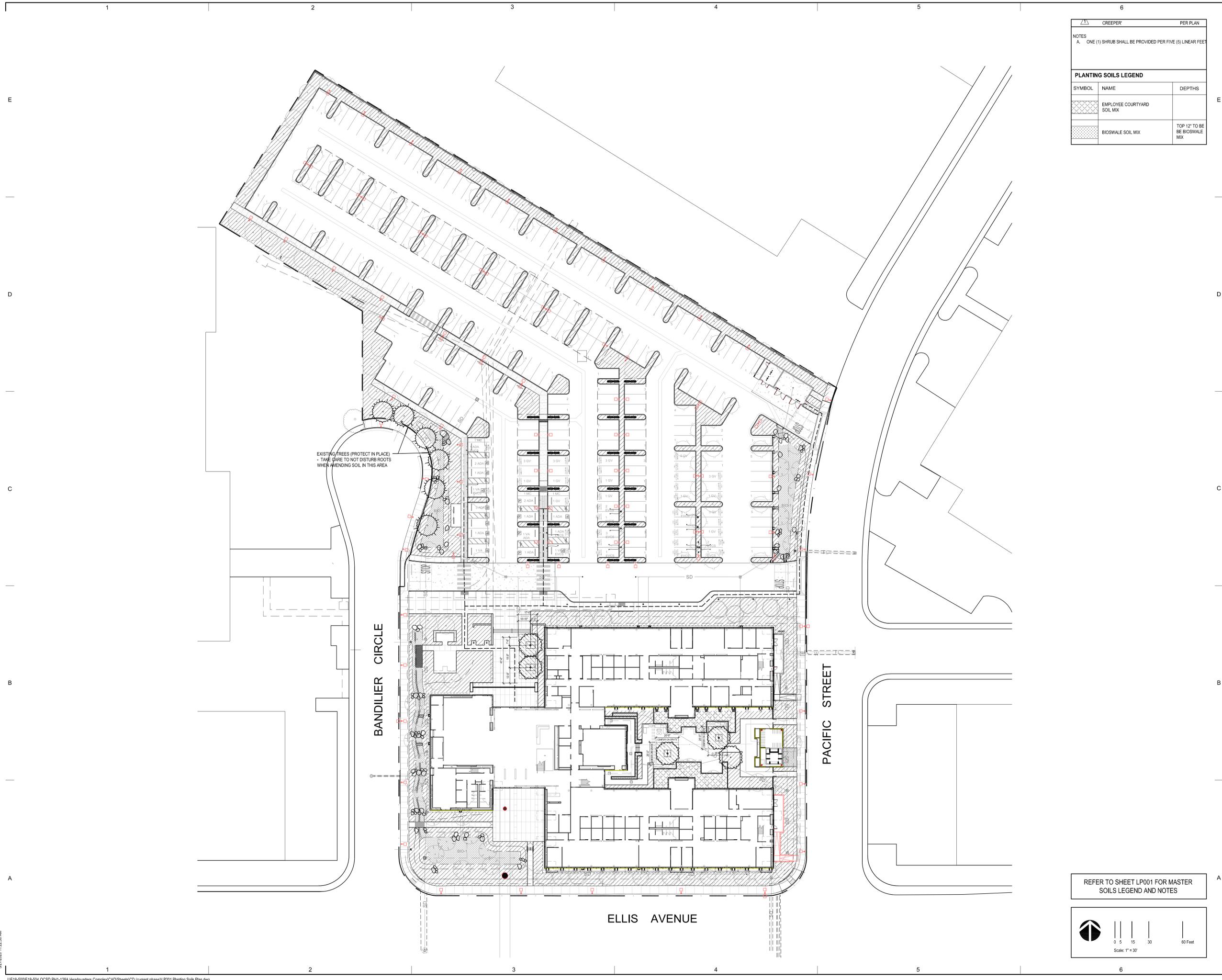
HDR PROJECT NO. 10041646
 PROJECT ADDRESS: BANDILIER/ELLIS/PACIFIC
 DATE: 09/04/2020



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Submitted 9/4/2020



Z		CREEPER	PER PLAN
NOTES			
A. ONE (1) SHRUB SHALL BE PROVIDED PER FIVE (5) LINEAR FEET			
PLANTING SOILS LEGEND			
SYMBOL	NAME	DEPTHS	
[Symbol]	EMPLOYEE COURTYARD SOIL MIX		
[Symbol]	BIOSWALE SOIL MIX	TOP 12" TO BE BE BIOSWALE MIX	



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ORANGE COUNTY
SANITATION DISTRICT
P1-128A HEADQUARTERS
COMPLEX AT PLANT NO. 1

ELLIS AVE / BANDILIER / PACIFIC
FOUNTAIN VALLEY, CA 92708



MARK	DATE	DESCRIPTION

Project Number | 10041646
Original Issue | 09/04/2020

PRELIMINARY
NOT FOR CONSTRUCTION

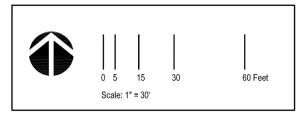
Sheet Name
Planting Soils Plan

Scale
As indicated
Sheet Number

LP201

Project Status
CFV DPR RESUBMITTAL 4

REFER TO SHEET LP001 FOR MASTER SOILS LEGEND AND NOTES



3/27/2020 11:22:30 AM



Project Introduction

The Orange County Sanitation District (OCSD) will construct a new Headquarters Building to be located on the north side of Ellis Avenue between Pacific Street and Bandilier Circle. The new Headquarters Building will replace a combination of outdated non-compliant buildings and trailers located across the campus on Plant 1. By consolidating these functions there are opportunities for enhanced collaboration and productivity through the design and implementation of innovative workplace strategies for the new facility.

Project Scope

The new Headquarters Building will be approximately 109,900 gross square feet of workplace including a civic scaled lobby housing the Board Room/Multipurpose Room, a public exhibit displaying the history and values of OCSD as a kick-off for public tours and events, and the administrative offices for the sanitation district. The site is to be developed with 261 spaces of surface parking for employees and visitors. The site will include a public entrance plaza, an exhibit plaza, and a private landscaped employee courtyard. The pedestrian bridge is a painted steel open air non conditioned structure spanning from the new building to inside the secure perimeter of Plant 1 as a secure safe pathway for employees, guided tour visitors, and select utilities to cross the high traffic Ellis Avenue to directly access Plant 1. The plant side bridge landing will include stairs and an elevator.

Use

Administrative offices including boardroom facilities for civic events and exhibit/touring facilities for educational functions.

Hours

Standard operational office hours of Monday through Friday from 8 am to 6 pm with limited monthly events in the evening.

Building Size

Level 1	43,166 glsf
Level 2	33,915 glsf
Level 3	32,833 glsf
Total	109,914 glsf

Parking

The site is to be developed with 261 spaces of onsite surface parking for employees and visitors. The occasional visitor who is coming to conduct business with OCSD will park in the surface parking lot or street parking. Groups touring the facility will arrive by bus or van and be dropped off at the designated bus boarding area to the north of the building. The bus or vans will then leave the Headquarters site and drive to Plant 1 to park in the location indicated in the attached Bus Parking Exhibit. The guided tour groups will gather in the Headquarters building for the tour and walk to Plant 1 via the pedestrian bridge. Once the tour has commenced, the touring groups will be picked up by their vehicle on Plant 1. The parking lot has been design to meet the requirements set forth in the Fountain Valley Crossing Specific Plan.



Parking Count

Parking will be classified into two facility types, unsheltered and sheltered (via a photovoltaic canopy). The specific stall types and counts are as follows:

Facility Type - Unsheltered	
Standard	185 stalls
Accessible (ADA)	5 stalls
Van Accessible (VA)	1 stall
Electric Charging	7 stalls
ADA Charging	1 stall
VA Charging	1 stall
Clean Air/Vanpool/EV (GV)	11 stalls
Motorcycle	2 stall
Bicycle	13 spaces

Facility Type – Sheltered	
Standard	27 stalls
Accessible (ADA)	4 stalls
Van Accessible (VA)	1 stall
Electric Charging	5 stalls
ADA Charging	1 stall
VA Charging	1 stall
Clean Air/Vanpool/EV (GV)	11 stalls
Motorcycle	2 stalls
Bicycles	0 spaces

Landscape Values

Building footprint	19.1%	(43.1 ksf)
Hardscape	55.8%	(126.6 ksf)
Landscape	25.1%	(57.1 ksf)

Exterior Materials

Silicon glazed unitized curtain wall systems
 CW-1 at Lobby and Boardroom
 CW-2 at north and south facing facades on Office Wings (incl. fritting in select areas)
 CW-3 at end walls in Office Wings (incl. fritting)

Window all system
 WW-1

Glass panel for guardrail
 GL-1 at South Plaza

Aluminum solar shading system
 SS-1 baguettes at Office Wings

Terracotta rainscreen
 TC-2 flat panels at Office Wings
 TC-3 strong extrusion panels at Boardroom and Courtyard



Architectural exposed structural steel
AESS-1 at select locations

Metal panel
MP-1 at fascia conditions
MP-2 at select applications
MP-3 at Entry Portal

Corrugated/perforated metal
RS-1 at rooftop mechanical areas as screening material

Architectural grade cast-in-place concrete
CN-1 at grade conditions

Stainless steel wire mesh
SSM-1 at Pedestrian Bridge and select guardrails

Metal cable roof guardrail
MG-1 at parapet extension conditions (to meet min. 42" height)

Single ply welded membrane
R-1 roofing system

Roof deck pavers
R-2 at Terraces

Galvanized structural steel
WSS-1 at select areas

Photovoltaic panels
PV at rooftop and parking canopies

Signage

Minimal identification signage showing agency's full name "ORANGE COUNTY SANITATION DISTRICT" shall be embossed within the face of the entrance canopy at the north plaza and pin-mounted letters on the south façade of the two story tall boardroom block (adjacent to the south plaza).

Exterior Lighting

Lighting strategies will include dark-sky design principles.

MEMORANDUM

DATE: September 30, 2020

To: Tom Grant, Orange County Sanitation District

FROM: Ambarish Mukherjee, PE and Dean Arizabal, LSA

SUBJECT: Orange County Sanitation District Headquarters Project—Unsignalized Intersection Level of Service and Signal Warrant Analysis



LSA is pleased to present this traffic analysis for the proposed Orange County Sanitation District (OCSD) Headquarters (HQ) Project (project) north of the existing OCSD Plant No. 1 in Fountain Valley. The new 109,914-square-foot (sf) HQ building and parking lot would be built on the parcel generally bounded by an industrial building (10850–10870 Spencer Avenue) to the north, Ellis Avenue to the south, Pacific Street to the east, and Bandilier Circle to the west. In addition, a pedestrian bridge would be constructed over Ellis Avenue that would connect the proposed HQ building and the existing Plant No. 1. Access to the project site will be provided at driveways along Bandilier Circle and Pacific Street via the unsignalized intersections of Bandilier Circle/Ellis Avenue and Pacific Street/Ellis Avenue.

OCSD is considering project access at Mt. Langley Street (and the unsignalized intersection of Mt. Langley Street/Ellis Avenue) through a connection from the proposed parking lot to an existing parking lot serving the adjacent parcels to the west (18350 Mt. Langley Street and 10700 Spencer Avenue). As such, the proposed project consists of two potential alternatives. Each project alternative includes a new 109,914 sf HQ building, a pedestrian bridge over Ellis Avenue, and access via Bandilier Circle and Pacific Street with the following considerations:

- Project Alternative 1: No access via Mt. Langley Street
- Project Alternative 2: Access via Mt. Langley Street

The proposed 109,914 sf OCSD HQ building would not result in additional vehicle miles traveled (VMT) to the regional roadway network. OCSD will not be hiring new or additional staff to occupy the proposed HQ building. The proposed project would relocate 228 existing employees and the associated vehicle trips from Plant No. 1 on the south side of Ellis Avenue to the new HQ building on the north side of Ellis Avenue. As a result, the proposed project would reduce vehicle trips from Plant No. 1 and the signalized intersection of the Interstate 405 (I-405) southbound ramps—OCSD driveway/Ellis Avenue and add (redistribute) these vehicle trips to the new HQ building and the unsignalized intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue.

The purpose of this traffic analysis is to evaluate the three unsignalized intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue for each project alternative per comments from the City of Fountain Valley (City) and its attorney (Harper & Burns LLP). This technical memorandum includes the following information for Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue for existing and existing plus project (two alternatives) conditions: (1) a level of service (LOS) analysis and (2) an evaluation of the Peak-Hour Signal Warrant (Warrant 3) of the *California Manual on Uniform Traffic Control Devices* (California MUTCD), 2014 Edition, Revision 5 (March 27, 2020). The traffic analysis also provides an analysis of VMT.

LEVEL OF SERVICE ANALYSIS

Methodology

In accordance with the City's methodologies, the unsignalized intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue were analyzed using the *Highway Capacity Manual* (HCM) methodology. Synchro (Version 10.1) software was used to determine the LOS based on traffic volume and intersection geometry. The HCM methodology calculates the average delay experienced by vehicles at an intersection. The resulting calculation of average delay experienced by vehicles is then expressed in terms of LOS at that intersection.

In addition, the Intersection Capacity Utilization (ICU) methodology for signalized intersections compares the volume-to-capacity (v/c) ratios of conflicting turn movements at an intersection, sums up these critical conflicting v/c ratios for each intersection approach, and determines the overall ICU. The ICU calculations assume a lane capacity of 1,700 vehicles per hour (vph) and a 0.05 clearance interval (or loss time). Similar to the HCM calculation of delay, the resulting ICU is expressed in terms of LOS. Traffix (Version 8.0) software was used to determine the LOS based on traffic volume and intersection geometry.

LOS A represents free-flow activity, and LOS F represents overcapacity operation. LOS is a qualitative assessment of the quantitative effects of such factors as traffic volume, roadway geometrics, speed, delay, and maneuverability on roadway and intersection operations. LOS criteria for intersections are presented below.

Level of Service Descriptions

- A. In this service level, no approach phase is fully utilized by traffic, and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
- B. This service level represents stable operation, where an occasional approach phase is fully utilized, and a substantial number are nearing full use. Many drivers begin to feel restricted within platoons of vehicles.
- C. This level still represents stable operating conditions. Occasionally, drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.

- D. This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
- E. Capacity occurs at the upper end of this service level. This level represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is attained no matter how great the demand.
- F. This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, speed can drop to zero.

The relationship between LOS and delay (in seconds) for unsignalized intersections and the ICU value (v/c ratio) for signalized intersections is as follows:

Level of Service	Unsignalized Intersections Delay (seconds)	Signalized Intersections ICU
A	≤10	≤0.60
B	>10 and ≤15	>0.60 and ≤0.70
C	>15 and ≤25	>0.70 and ≤0.80
D	>25 and ≤35	>0.80 and ≤0.90
E	>35 and ≤50	>0.90 and ≤1.00
F	>50	>1.00

Source: Highway Capacity Manual
 ICU = intersection capacity utilization
 sec = seconds

The City has established LOS D as the upper limit of satisfactory operation. If a project causes an intersection to deteriorate from satisfactory to unsatisfactory LOS, improvements are required to return the LOS to the acceptable level. Improvements are not required for intersections operating at LOS D or better with implementation of a project.

A project would require improvements for any of the following conditions:

- An intersection degrades from satisfactory LOS D to unsatisfactory LOS E or F.
- The ICU increases by 0.01 or more at a signalized intersection operating at unsatisfactory LOS E or F.
- The delay is increased at an unsignalized intersection operating at unsatisfactory LOS E or F.

Volume Development

Existing Traffic Volumes

In order to establish the existing condition, traffic volumes were collected for the unsignalized intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue by an independent data collection firm, Counts Unlimited, on October 3, 2019.

The City noted that the October 2019 side street (Mt. Langley, Bandelier, and Pacific) volumes are acceptable for purposes of this analysis. However, the City stated that the October 2019 volumes for Ellis Avenue may not be representative of normal traffic conditions. LSA reviewed the existing (2015) counts from the *Fountain Valley Crossings Specific Plan Traffic Impact Analysis (TIA)* (Fehr & Peers, December 2017), as well as 2016 counts provided by the City, and compared that data with the October 2019 counts. More specifically, LSA identified the eastbound, westbound, and total (eastbound and westbound) volumes for Ellis Avenue based on 2015 volumes for the adjacent signalized intersections of Ward Street/Ellis Avenue and the I-405 southbound ramps/Ellis Avenue–Euclid Street. In addition, LSA determined the eastbound, westbound, and total (eastbound and westbound) volumes for Ellis Avenue between Ward Street and Euclid Avenue based on the 2016 counts from the City. A comparison was then made with the eastbound, westbound, and total (eastbound and westbound) Ellis Avenue volumes from the 2019 unsignalized intersection volumes. The 2015, 2016, 2019, and Δ Ellis Avenue volumes (rounded to the nearest hundred) are shown below:

- **2015 Ellis Avenue Volumes**
 - AM Peak Hour: 1,800 Eastbound, 800 Westbound, and 2,600 Total
 - PM Peak Hour: 1,000 Eastbound, 1,400 Westbound, and 2,400 Total
- **2016 Ellis Avenue Volumes**
 - AM Peak Hour: 1,300 Eastbound, 600 Westbound, and 1,900 Total
 - PM Peak Hour: 900 Eastbound, 1,400 Westbound, and 2,300 Total
- **2019 Ellis Avenue Volumes**
 - AM Peak Hour: 1,800 Eastbound, 700 Westbound, and 2,500 Total
 - PM Peak Hour: 1,100 Eastbound, 1,400 Westbound, and 2,500 Total
- **Δ Ellis Volumes (2019 – 2015)**
 - AM Peak Hour: 0 Eastbound, -100 Westbound, and -100 Total
 - PM Peak Hour: +100 Eastbound, 0 Westbound, and +100 Total
- **Δ Ellis Volumes (2019 – 2016)**
 - AM Peak Hour: +500 Eastbound, +100 Westbound, and +600 Total
 - PM Peak Hour: +200 Eastbound, 0 Westbound, and +200 Total

It should be noted that OCSD project site was generating more traffic in 2015 and 2016 than in 2019, as several buildings/uses on the OCSD project site that were occupied in 2015 and 2016 are now vacant (as of the October 3, 2019, count date). Based on comparison of the 2015 Ellis Avenue volumes from the Fountain Valley Crossings Specific Plan TIA and the October 2019 Ellis Avenue volumes, the 100-trip differential (for eastbound, westbound, and total volumes) in the a.m. peak hour (-100) and p.m. peak hour (+100) is nominal. In addition, the 100-trip differential in 2015 and

2019 directional data could be the variation in the days counted. Lastly, the October 2019 Ellis Avenue volumes are higher (+600 in the a.m. peak hour and +200 in the p.m. peak hour) than the 2016 Ellis Avenue volumes from the City. As such, the October 2019 traffic counts are representative of typical conditions and are appropriate for this project.

The existing (October 2019) counts are provided as an attachment. This data forms the basis for both the LOS analysis and the signal warrant analysis. Figure 1 (all figures are attached) illustrates the existing traffic volumes at the two intersections.

Project Trip Generation

As previously described, the proposed project would relocate 228 existing employees from Plant No. 1 south of Ellis Avenue to the new HQ building north of Ellis Avenue. The proposed project would not result in additional VMT to the regional roadway network. However, the proposed HQ building would add vehicle trips to the local intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue.

Project vehicle trips were calculated using office trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation* Manual, 10th Edition (2017).

The existing site of the proposed HQ building comprises several parcels and occupied uses. Approximately 53,590 sf of office, manufacturing, warehousing, and research and development uses were occupied and generating trips as of October 3, 2019, when the traffic counts were conducted. The trip generation for the occupied uses were calculating using ITE trip rates for manufacturing, warehousing, and research and development uses.

Table A (all tables are attached) provides a project trip generation summary of the proposed 109,914 sf HQ building and the existing 53,590 sf of occupied uses. The project trip generation is the same for both alternatives.

As shown on Table A, the proposed project would generate approximately 1,071 daily trips, including 128 trips (110 inbound and 18 outbound) in the a.m. peak hour and 127 trips (20 inbound and 107 outbound) in the p.m. peak hour.

The existing occupied uses generate approximately 314 daily trips, including 31 trips (26 inbound and 5 outbound) in the a.m. peak hour and 31 trips (7 inbound and 24 outbound) in the p.m. peak hour.

Because the existing uses would be demolished with the project, the net trip generation of the project (both alternatives) is 757 daily trips, including 97 trips (84 inbound and 13 outbound) in the a.m. peak hour and 96 trips (13 inbound and 83 outbound) in the p.m. peak hour.

Existing and Existing Plus Project Alternatives Conditions

Existing plus project (two alternatives) traffic volumes were calculated by adding the net project trips discussed above to the existing traffic volumes. Peak-hour intersection turning movement volumes for existing and existing plus project conditions (including the reduction of trips of the

currently occupied uses on the project site and the addition of OCSD HQ trips) for each alternative are shown on Figures 1 and 2.

An LOS analysis of the unsignalized intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue was conducted for existing and existing plus project conditions (two alternatives) based on the HCM methodology. Tables B and C summarize the results of the intersection LOS analysis for the project alternatives.

Existing

As shown on Tables B and C, Mt. Langley Street/Ellis Avenue operates at satisfactory LOS D during the a.m. peak hour and unsatisfactory LOS F during the p.m. peak hour. Bandilier Circle/Ellis Avenue operates at unsatisfactory LOS E during the a.m. peak hour and unsatisfactory LOS F during the p.m. peak hour. Pacific Street/Ellis Avenue operates at satisfactory LOS C in the a.m. peak hour and unsatisfactory LOS F in the p.m. peak hour.

Existing Plus Project Alternative 1 (No Access via Mt. Langley Street)

As shown on Table C, with the addition of the net project trips (the removal of existing site trips and the addition of OCSD HQ trips), the deficient delays would increase at the intersections of Bandilier Circle/Ellis Avenue and Pacific Street/Ellis Avenue under Project Alternative 1. However, Project Alternative 1 would not increase the deficient delay at the intersection of Mt. Langley Street/Ellis Avenue.

Recommendations to improve the project's delay contributions are described later in this technical memorandum.

Existing Plus Project Alternative 2 (Access via Mt. Langley Street)

As shown on Table C, with the addition of the net project trips (the removal of existing site trips and the addition of OCSD HQ trips), the deficient delays would increase at the intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue under Project Alternative 2.

Recommendations to improve the project's delay contributions are described later in this technical memorandum.

PEAK-HOUR SIGNAL WARRANT ANALYSIS

The California MUTCD provides warrants to determine whether a traffic signal is warranted at a specific intersection. The Peak-Hour Warrant (Warrant 3) is dependent on traffic volume. The traffic count data collected on October 3, 2019, forms the basis for the existing traffic volume setting on the major (higher-volume) street (Ellis Avenue) and the minor (lower-volume) streets (Mt. Langley Street, Bandilier Circle, and Pacific Street). According to the traffic counts, the a.m. peak hour for Mt. Langley Street/Ellis Avenue and Bandilier Circle/Ellis Avenue was 7:45 a.m. to 8:45 a.m., and the p.m. peak hour was 4:45 p.m. to 5:45 p.m. For Pacific Street/Ellis Avenue, the a.m. peak hour was 7:30 a.m. to 8:30 a.m., and the p.m. peak hour was 4:45 p.m. to 5:45 p.m.

Warrant 3 is also based on the number of lanes of each intersection approach. Ellis Avenue currently has a two-lane approach in each direction. Given that on-street parking is permitted on both sides of Mt. Langley Street, Bandilier Circle, and Pacific Street, these streets each have one approach lane. As such, Warrant 3 is based on two approach lanes for Ellis Avenue (major street) and a single approach lane for Mt. Langley Street, Pacific Street, and Bandilier Circle (minor streets).

Additionally, Warrant 3 provides different traffic volume thresholds for rural and urban settings. A traffic volume that would not meet the signal warrant in an urban setting could meet the signal warrant in a rural setting. The urban setting is the default condition, but the rural setting may be used in the built-up area of an isolated community with a population of less than 10,000 or where the speed limit on a major street is greater than 40 miles per hour (mph). Although the City is an urban setting, the speed limit on Ellis Avenue (major street) is 45 mph in the project vicinity. Therefore, the rural setting was examined for Warrant 3.

The California MUTCD signal warrant worksheets for Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue for existing and existing plus project conditions are provided as an attachment.

Warrant 3: Peak Hour

The Peak-Hour Warrant is intended for use at a location where traffic conditions are such that, for a minimum of 1 hour of an average day, the minor street traffic suffers undue delay when entering or crossing the major street. The threshold curves shown on Figure 4C-4 of the California MUTCD have been compared to the traffic volumes.

There are three components of Warrant 3, Part A (i.e., total vehicle hours of delay for the minor street approach, approach volume of the minor street, and total entering volume of the intersection). Of these three components, both intersections exceeded the total vehicle hours of delay for the minor street approach and the total entering volume of the intersection, but not the approach volume of the minor street, during existing and existing plus project conditions. Therefore, Part A is not met.

Part B compares the plotted point representing the traffic volumes of both the major street and minor street approaches to the threshold curves of Figure 4C-4 of the California MUTCD. In a rural setting, if the major approach volume exceeds 1,200 vph, the warrant is met if the minor approach volume exceeds 75 vph. As previously described, the rural setting was assumed because the speed limit of the major street is greater than 40 mph. More specifically, the Ellis Avenue speed limit is 45 mph along the project frontage.

Figures 3–8 illustrate how the plotted points for existing and existing plus project (two alternatives) conditions and both peak hours fall below or above the threshold curves of Figure 4C-4 of the California MUTCD for Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue.

Existing

Under existing conditions, the major approach volume at the intersection of Mt. Langley Street/Ellis Avenue exceeds 2,300 vehicles during both peak hours, and the minor approach volume is 21 vehicles in the a.m. peak hour and 77 vehicles in the p.m. peak hour. The major approach volume at the intersection of Bandilier Circle/Ellis Avenue exceeds 2,400 vehicles during both peak hours, but the minor approach volume is 7 vehicles in the a.m. peak hour and 40 vehicles in the p.m. peak hour. The major approach volume at the intersection of Pacific Street/Ellis Avenue exceeds 2,400 vehicles during both peak hours, but the minor approach volume is 22 vehicles in the a.m. peak hour and 62 vehicles in the p.m. peak hour. As such, Part B is satisfied for Mt. Langley Street/Ellis Avenue during the p.m. peak hour for existing conditions (2 vph over the traffic volume threshold). However, Part B is not satisfied for Bandilier Circle/Ellis Avenue or Pacific Street/Ellis Avenue during any peak hour for existing conditions.

Existing Plus Project Alternative 1 (No Access via Mt. Langley Street)

With implementation of Project Alternative 1, the major approach volume at the intersection of Mt. Langley Street/Ellis Avenue would continue to exceed 2,300 vehicles during both peak hours, and the minor approach volume would continue to be 21 vehicles in the a.m. peak hour and 77 vehicles in the p.m. peak hour. The major approach volume at the intersection of Bandilier Circle/Ellis Avenue would continue to exceed 2,400 vehicles during both peak hours, and the minor approach volume would be 18 vehicles in the a.m. peak hour and 95 vehicles in the p.m. peak hour. The major approach volume at the intersection of Pacific Street /Ellis Avenue would also continue to exceed 2,400 vehicles during both peak hours, and the minor approach volume would be 24 vehicles in the a.m. peak hour and 90 vehicles in the p.m. peak hour. As such, Part B is satisfied for Mt. Langley Street/Ellis Avenue (2 vph over the traffic volume threshold), Bandilier Circle/Ellis Avenue (20 vph over the traffic volume threshold), and Pacific Street/Ellis Avenue (15 vph over the traffic volume threshold) during the p.m. peak hour, for existing plus project conditions.

Although Project Alternative 1 would add inbound and outbound trips to Bandilier Circle/Ellis Avenue and Pacific Street/Ellis Avenue, it would not add any inbound or outbound trips at Mt. Langley Street/Ellis Avenue. Recommendations for a traffic signal are described in the subsequent section of this technical memorandum.

Existing Plus Project Alternative 2 (Access via Mt. Langley Street)

With implementation of Project Alternative 2, the major approach volume at the intersection of Mt. Langley Street/Ellis Avenue would continue to exceed 2,300 vehicles during both peak hours, and the minor approach volume would be 24 vehicles in the a.m. peak hour and 98 vehicles in the p.m. peak hour. The major approach volume at the intersection of Bandilier Circle/Ellis Avenue would continue to exceed 2,400 vehicles during both peak hours, and the minor approach volume would be 15 vehicles in the a.m. peak hour and 78 vehicles in the p.m. peak hour. The major approach volume at the intersection of Pacific Street/Ellis Avenue would also continue to exceed 2,400 vehicles during both peak hours, and the minor approach volume would be 24 vehicles in the a.m. peak hour and 86 vehicles in the p.m. peak hour. As such, Part B is satisfied for Mt. Langley Street/Ellis Avenue (23 vph over the traffic volume threshold), Bandilier Circle/Ellis Avenue (3 vph

over the traffic volume threshold), and Pacific Street/Ellis Avenue (15 vph over the traffic volume threshold) during the p.m. peak hour, for existing plus project conditions.

Recommendations for a traffic signal are described in the subsequent section of this technical memorandum.

VEHICLE MILES TRAVELED ANALYSIS

For purposes of Senate Bill 743 compliance, a VMT analysis should be conducted for land use projects. The approach to a VMT analysis includes project screening as a first step to see if a full VMT assessment would be required. Some projects can be assumed to result in a less-than-significant transportation impact based on project type and trip generation. According to the City's *Transportation Impact Assessment Guidelines for Land Use Projects in CEQA and for General Plan Consistency* (June 2020), a project that would generate less than 110 net new daily vehicle trips may be screened from a full VMT assessment and may be presumed to have a less-than-significant transportation impact.

The proposed project would not generate any additional VMT, as OCSD will not be hiring new or additional staff for the new HQ building. The proposed project would relocate 228 existing employees from Plant No. 1 to the new HQ building. In addition, the proposed project is in the same VMT zone as Plant No. 1. Therefore, vehicle trips would be redistributed from south of Ellis Avenue to north of Ellis Avenue (i.e., reduced from the Plant No. 1 driveway and added to Mt. Langley Street, Bandilier Circle, and Pacific Street along Ellis Avenue). As such, the proposed project (two alternatives) would not increase VMT, is screened from a VMT analysis, and is presumed to have a less-than-significant transportation impact.

RECOMMENDATIONS

Project Alternative 1 (No Access via Mt. Langley Street)

In order to address the existing delay deficiencies at Bandilier Circle/Ellis Avenue, the proposed project's volume and delay contributions to this intersection, and the consideration of a traffic signal per Warrant 3 of the California MUTCD, the following improvement has been recommended:

- The project should install a traffic signal at Bandilier Circle/Ellis Avenue.
 - Although Warrant 3 is met for Mt. Langley Street/Ellis Avenue, a traffic signal is not recommended at this intersection because the project would not add any inbound (eastbound left-turn or westbound right-turn) or outbound (southbound left-turn or southbound right-turn) vehicles at this intersection.
 - Although Warrant 3 is met for Pacific Street/Ellis Avenue, a traffic signal is not recommended at this intersection due to its proximity to the signalized intersection of the I-405 southbound ramps—OCSD driveway/Ellis Avenue (approximately 560 feet away) and the dual eastbound left-turn lanes for the I-405 southbound ramps that currently extend westerly beyond Pacific Street/Ellis Avenue. In addition, the I-405 Improvement Project will be reconfiguring the I-405 southbound ramps/Ellis Avenue intersection to provide three

eastbound left-turn lanes that may alter the westbound approach of Pacific Street/Ellis Avenue.

Table D summarizes the intersection LOS with a traffic signal at Bandilier Circle/Ellis Avenue. As shown on this table, this intersection would operate at satisfactory LOS A during both peak hours with the addition of project traffic and a traffic signal.

Although the recommended improvement would improve upon existing conditions at Bandilier Circle/Ellis Avenue, the installation of a traffic signal at Bandilier Circle/Ellis Avenue will ultimately be determined by the City. At this point, City staff does not support a traffic signal at this intersection.

Project Alternative 2 (Access via Mt. Langley Street)

In order to address the existing delay deficiencies at Mt. Langley Street/Ellis Avenue, the proposed project's volume and delay contributions to this intersection, and the consideration of a traffic signal per Warrant 3 of the California MUTCD, the following improvement has been recommended:

- The project should install a traffic signal at Mt. Langley Street/Ellis Avenue.
 - Although Warrant 3 is met for Pacific Street/Ellis Avenue, a traffic signal is not recommended at this intersection due to its proximity to the signalized intersection of the I-405 southbound ramps–OCSD driveway/Ellis Avenue (approximately 560 feet away) and the dual eastbound left-turn lanes for the I-405 southbound ramps that currently extend westerly beyond Pacific Street/Ellis Avenue. In addition, the I-405 Improvement Project will be reconfiguring the I-405 southbound ramps/Ellis Avenue intersection to provide three eastbound left-turn lanes that may alter the westbound approach of Pacific Street/Ellis Avenue.
 - Although Warrant 3 is met for Bandilier Circle/Ellis Avenue, a traffic signal at Mt. Langley Street/Ellis Avenue would provide a greater benefit to the surrounding parcels in the project vicinity, as Bandilier Circle is a short street that terminates adjacent to the project's parking lot.
 - With the implementation of a traffic signal at Mt. Langley Street/Ellis Avenue, some vehicles currently making a southbound left turn at Bandilier Circle/Ellis Avenue and Pacific Street/Ellis Avenue would be redistributed to the recommended signal. A new signal at Mt. Langley Street/Ellis Avenue would reduce the conflicting southbound left-turn volumes and improve the LOS at Bandilier Circle/Ellis Avenue and Pacific Street/Ellis Avenue.

Table E summarizes the intersection LOS with a traffic signal at Mt. Langley Street/Ellis Avenue. As shown on this table, this intersection would operate at satisfactory LOS A during both peak hours with the addition of project traffic and a traffic signal.

Therefore, the recommended improvement would improve upon existing conditions at Mt. Langley Street/Ellis Avenue while providing better access for the surrounding land uses. However, the installation of a traffic signal at this intersection will ultimately be determined by the City.

CONCLUSIONS

The proposed OCSD HQ project includes a new 109,914 sf HQ building and a pedestrian bridge over Ellis Avenue that would connect the proposed HQ building and the existing Plant No. 1. Access to the site is provided via Bandilier Circle and Pacific Street along Ellis Avenue. The proposed project also includes the potential for project access at Mt. Langley Street through a connection from the proposed parking lot to an existing parking lot serving the adjacent parcels to the west. As such, the following two project alternatives (each including the proposed 109,914 sf HQ building, pedestrian bridge over Ellis Avenue, and access at Bandilier Circle and Pacific Street) are under consideration:

- Project Alternative 1: No access via Mt. Langley Street
- Project Alternative 2: Access via Mt. Langley Street

An existing and existing plus project (two alternatives) LOS analysis was conducted for Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue. Based on the results of this analysis, these unsignalized intersections currently operate at unsatisfactory LOS E or F during one or both peak hours. Although both alternatives of the proposed project would increase the deficient delays at Bandilier Circle/Ellis Avenue and Pacific Street/Ellis Avenue, the deficient delay at the intersection of Mt. Langley Street/Ellis Avenue would only increase with Alternatives 2 (access via Mt. Langley Street).

LSA considered and evaluated the Peak-Hour Warrant (Warrant 3) from the California MUTCD for the unsignalized intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue for existing and existing plus project (two alternatives) conditions. Given the traffic volume thresholds established for a rural setting, Warrant 3 is satisfied for Mt. Langley Street/Ellis Avenue (2 vph over the traffic volume threshold) during the existing condition, but not for Bandilier Circle Ellis Avenue or Pacific Street/Ellis Avenue.

With implementation of Project Alternative 1, Warrant 3 would be satisfied for Mt. Langley Street/Ellis Avenue (2 vph over the traffic volume threshold, but Project Alternative 1 would not add any inbound or outbound trips to Mt. Langley Street), Bandilier Circle/Ellis Avenue (20 vph over the traffic volume threshold), and Pacific Street/Ellis Avenue (15 vph over the traffic volume threshold).

Project Alternative 1 would offset its volume and delay contributions and improve the existing conditions of the unsignalized intersection of Bandilier Circle/Ellis Avenue with the following improvement:

- Installation of a traffic signal at Bandilier Circle/Ellis Avenue

With implementation of Project Alternative 2, Warrant 3 would be satisfied for Mt. Langley Street/Ellis Avenue (23 vph over the traffic volume threshold), Bandilier Circle/Ellis Avenue (3 vph over the traffic volume threshold), and Pacific Street/Ellis Avenue (11 vph over the traffic volume threshold).

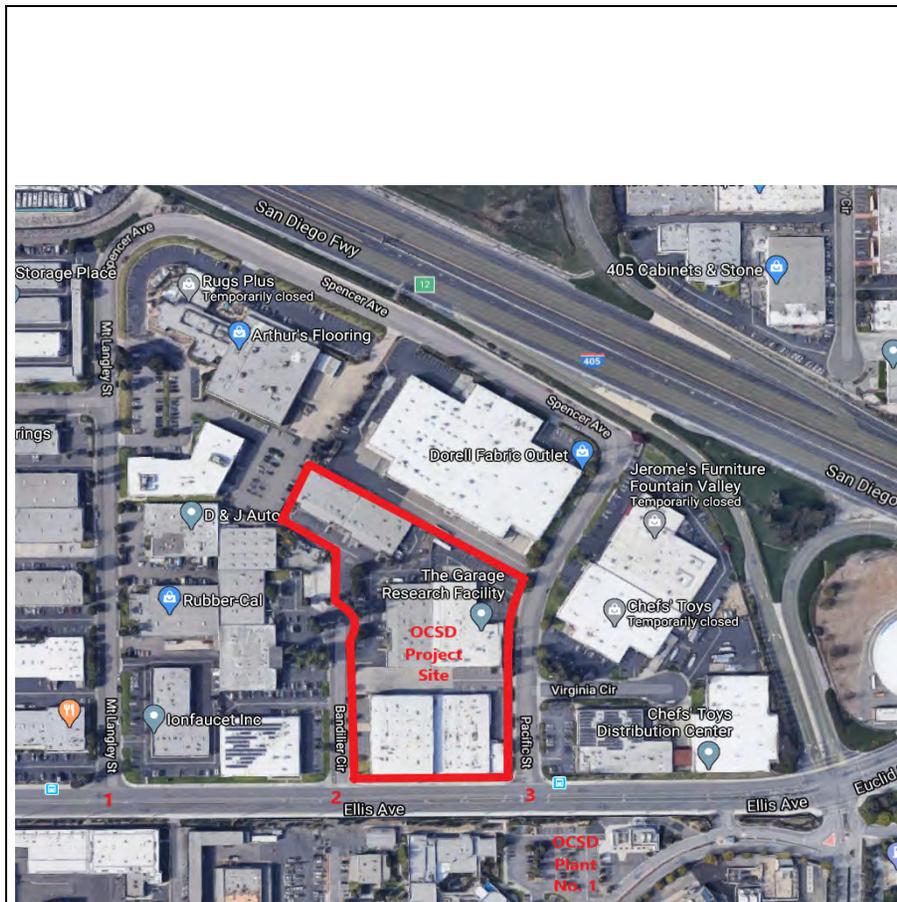
Project Alternative 2 would offset its volume and delay contributions and improve the existing conditions of the unsignalized intersection of Mt. Langley Street/Ellis Avenue, while providing regional access for the surrounding land uses, with the following improvements:

- Installation of a traffic signal at Mt. Langley Street/Ellis Avenue

The proposed project would not result in any additional VMT, as the project is within the same VMT zone as Plant No. 1 and OCSD will not be hiring any new or additional staff for the new HQ building. Therefore, the proposed project (both alternatives) is screened from a VMT analysis and is presumed to have a less-than-significant transportation impact.

We trust this information will be useful in your planning efforts. Please let us know if you have any questions or comments.

Attachments: Figures 1 and 2: Volume Development (Project Alternatives 1 and 2)
Table A: Project Trip Generation (Project Alternatives 1 and 2)
Tables B and C: Intersection LOS (Project Alternatives 1 and 2)
Figures 3–5: Warrant 3 Analysis (Project Alternative 1)
Figures 6–8: Warrant 3 Analysis (Project Alternative 2)
Tables D and E: Intersection LOS with Improvements (Project Alternatives 1 and 2)
Existing Counts
HCM and ICU Worksheets
California MUTCD Worksheets



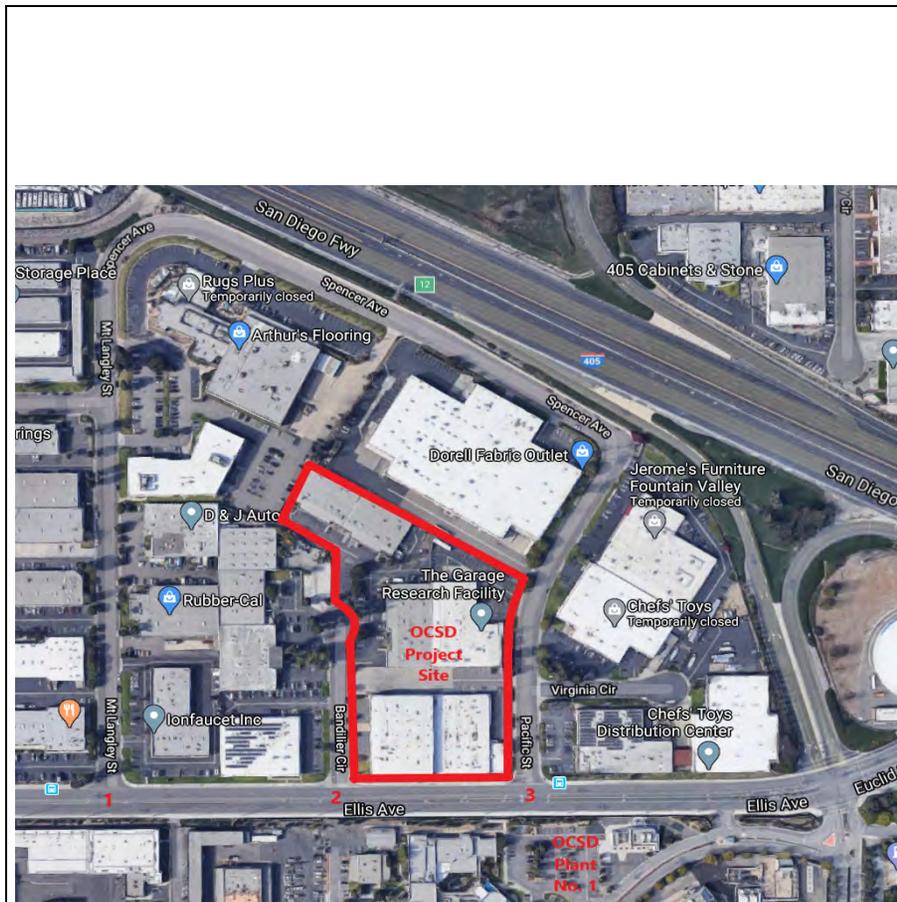
Existing Volumes		
$\begin{array}{r} \leftarrow 12/42 \\ \leftarrow 9/35 \\ \hline 17/15 \rightarrow \\ 1729/992 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 36/29 \\ \leftarrow 698/1335 \\ \hline \end{array}$	$\begin{array}{r} \leftarrow 14/27 \\ \leftarrow 8/35 \\ \hline 2/2 \rightarrow \\ 1768/1073 \rightarrow \end{array}$
1. Mt. Langley/Ellis	2. Bandilier/Ellis	3. Pacific/Ellis
Existing Site (Occupied Uses) Volumes		
$\begin{array}{r} \leftarrow 3/11 \\ \hline 3/2 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 0/5 \\ \leftarrow 1/5 \\ \hline 2/1 \rightarrow \\ 1/1 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 3/6 \\ \leftarrow 1/8 \\ \hline 1/1 \rightarrow \\ 1/5 \rightarrow \end{array}$
1. Mt. Langley/Ellis	2. Bandilier/Ellis	3. Pacific/Ellis
Proposed Project (Alternative 1) Volumes		
$\begin{array}{r} \leftarrow 4/13 \\ \hline 48/5 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 4/9 \\ \leftarrow 8/56 \\ \hline 34/4 \rightarrow \\ 14/1 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 0/4 \\ \leftarrow 6/38 \\ \hline 14/1 \rightarrow \\ 8/56 \rightarrow \end{array}$
1. Mt. Langley/Ellis	2. Bandilier/Ellis	3. Pacific/Ellis
Existing Plus Project (Existing - Occupied Uses + Alternative 1) Volumes		
$\begin{array}{r} \leftarrow 12/42 \\ \leftarrow 9/35 \\ \hline 17/15 \rightarrow \\ 1774/995 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 6/23 \\ \leftarrow 12/72 \\ \hline 39/6 \rightarrow \\ 1755/1041 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 11/25 \\ \leftarrow 13/65 \\ \hline 15/2 \rightarrow \\ 1775/1124 \rightarrow \end{array}$
1. Mt. Langley/Ellis	2. Bandilier/Ellis	3. Pacific/Ellis



LEGEND
xxxx/yyyy AM / PM Volume

FIGURE 1

OCSD Headquarters Project
Volume Development (Project Alternative 1)



Existing Volumes		
$\begin{array}{r} \leftarrow 12/42 \\ \leftarrow 36/29 \\ \hline 17/15 \rightarrow \\ 1729/992 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 2/19 \\ \leftarrow 5/21 \\ \hline 7/3 \rightarrow \\ 1742/1041 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 14/27 \\ \leftarrow 8/35 \\ \hline 2/2 \rightarrow \\ 1768/1073 \rightarrow \end{array}$
1. Mt. Langley/Ellis	2. Bandilier/Ellis	3. Pacific/Ellis
Existing Site (Occupied Uses) Volumes		
$\begin{array}{r} \leftarrow 3/11 \\ \hline 3/2 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 0/5 \\ \leftarrow 1/5 \\ \hline 2/1 \rightarrow \\ 1/1 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 3/6 \\ \leftarrow 1/8 \\ \hline 1/1 \rightarrow \\ 1/5 \rightarrow \end{array}$
1. Mt. Langley/Ellis	2. Bandilier/Ellis	3. Pacific/Ellis
Proposed Project (Alternative 2) Volumes		
$\begin{array}{r} \leftarrow 1/4 \\ \leftarrow 2/17 \\ \hline 14/1 \rightarrow \\ 34/4 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 3/9 \\ \leftarrow 6/39 \\ \hline 34/4 \rightarrow \\ 2/17 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 6/38 \\ \hline 8/56 \rightarrow \\ \leftarrow 43/11 \\ \leftarrow 19/4 \end{array}$
1. Mt. Langley/Ellis	2. Bandilier/Ellis	3. Pacific/Ellis
Existing Plus Project (Existing - Occupied Uses + Alternative 2) Volumes		
$\begin{array}{r} \leftarrow 13/46 \\ \leftarrow 11/52 \\ \hline 31/16 \rightarrow \\ 1760/994 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 5/23 \\ \leftarrow 10/55 \\ \hline 39/6 \rightarrow \\ 1743/1057 \rightarrow \end{array}$	$\begin{array}{r} \leftarrow 11/21 \\ \leftarrow 13/65 \\ \hline 1/1 \rightarrow \\ 1775/1124 \rightarrow \end{array}$
1. Mt. Langley/Ellis	2. Bandilier/Ellis	3. Pacific/Ellis



LEGEND
xxxx/yyyy AM / PM Volume

FIGURE 2

OCSD Headquarters Project
Volume Development (Project Alternative 2)

Table A: Project Trip Generation (Alternatives 1 and 2)

Land Use	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates (Land Use Code)¹									
General Office Building (710)		TSF	9.74	1.00	0.16	1.16	0.18	0.97	1.15
Manufacturing (140)		TSF	3.93	0.48	0.14	0.62	0.21	0.46	0.67
Research and Development Center (760)		TSF	11.26	0.32	0.10	0.42	0.06	0.34	0.40
Warehouse (150)		TSF	1.74	0.13	0.04	0.17	0.05	0.14	0.19
Project Trip Generation									
New OCSD Office Building	109.914	TSF	1,071	110	18	128	20	107	127
Existing Site (Occupied Uses) Trip Generation									
18368 Bandilier Cir (General Office)	5.942	TSF	58	6	1	7	1	6	7
18375 Bandilier Cir (Manufacturing)	5.942	TSF	23	3	1	4	1	3	4
18381 Bandilier Cir (Manufacturing)	5.942	TSF	23	3	1	4	1	3	4
18384 Bandilier Cir (General Office)	5.942	TSF	58	6	1	7	1	6	7
18436 Bandilier Cir (Warehousing)	5.975	TSF	10	1	0	1	0	1	1
18429 Pacific St, Suite A (Research and Development)	9.760	TSF	110	3	1	4	1	3	4
18429 Pacific St, Suite B (Warehousing)	10.790	TSF	19	2	0	2	1	1	2
18429 Pacific St, Suite C (Manufacturing)	3.297	TSF	13	2	0	2	1	1	2
Total	53.590	TSF	314	26	5	31	7	24	31
Net Trip Generation (Project - Existing)			757	84	13	97	13	83	96

¹ Trip rates referenced from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition (2017).

ADT = average daily traffic

OCSD = Orange County Sanitation District

TSF = thousand square feet

Table B: Intersection LOS Summary (Project Alternative 1)

Intersection	Control	Peak Hour	Existing		Existing Plus Project Alternative 1		Peak-Hour Δ Delay	Improvements Required?
			Delay	LOS	Delay	LOS		
Mount Langley Street/Ellis Avenue	TWSC	AM	33.7	D	34.9	D	1.2	No
		PM	163.6	F	163.6	F	0.0	No
Bandilier Circle/Ellis Avenue	TWSC	AM	44.4	E	55.8	F	11.4	Yes
		PM	90.3	F	497.0	F	406.7	Yes
Pacific Street/Ellis Avenue	TWSC	AM	20.9	C	28.7	D	7.8	No
		PM	71.0	F	182.3	F	111.3	Yes

Δ = change in

= exceeds City's level of service (LOS) criteria

HCM = Highway Capacity Manual. Delay is reported in seconds.

LOS = level of service

N/A = not applicable

TWSC = two-way stop control

Table C: Intersection LOS Summary (Project Alternative 2)

Intersection	Control	Peak Hour	Existing		Existing Plus Project Alternative 2		Peak-Hour Δ Delay	Improvements Required?
			Delay	LOS	Delay	LOS		
Mount Langley Street/Ellis Avenue	TWSC	AM	33.7	D	39.2	E	5.5	Yes
		PM	163.6	F	312.8	F	149.2	Yes
Bandilier Circle/Ellis Avenue	TWSC	AM	44.4	E	53.0	F	8.6	Yes
		PM	90.3	F	352.1	F	261.8	Yes
Pacific Street/Ellis Avenue	TWSC	AM	20.9	C	27.2	D	6.3	No
		PM	71.0	F	181.6	F	110.6	Yes

Δ = change in

= exceeds City's level of service (LOS) criteria

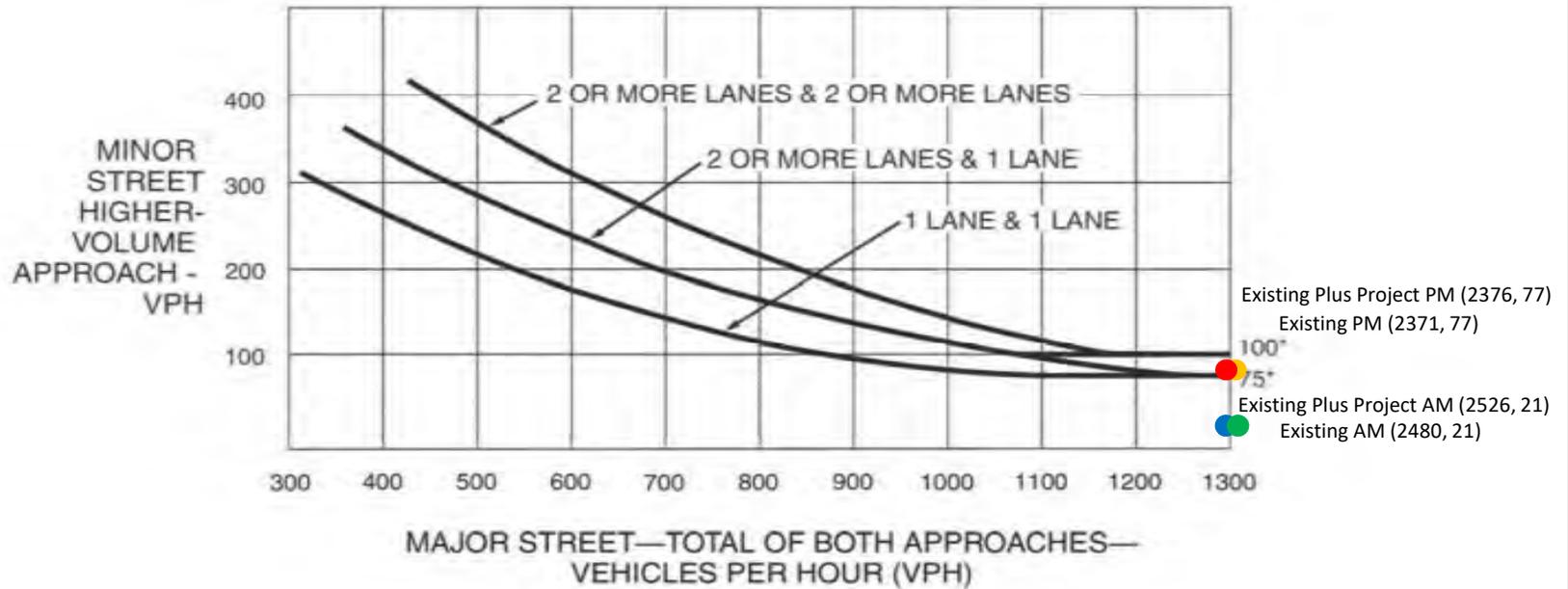
HCM = Highway Capacity Manual. Delay is reported in seconds.

LOS = level of service

N/A = not applicable

TWSC = two-way stop control

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



FIGURE 3

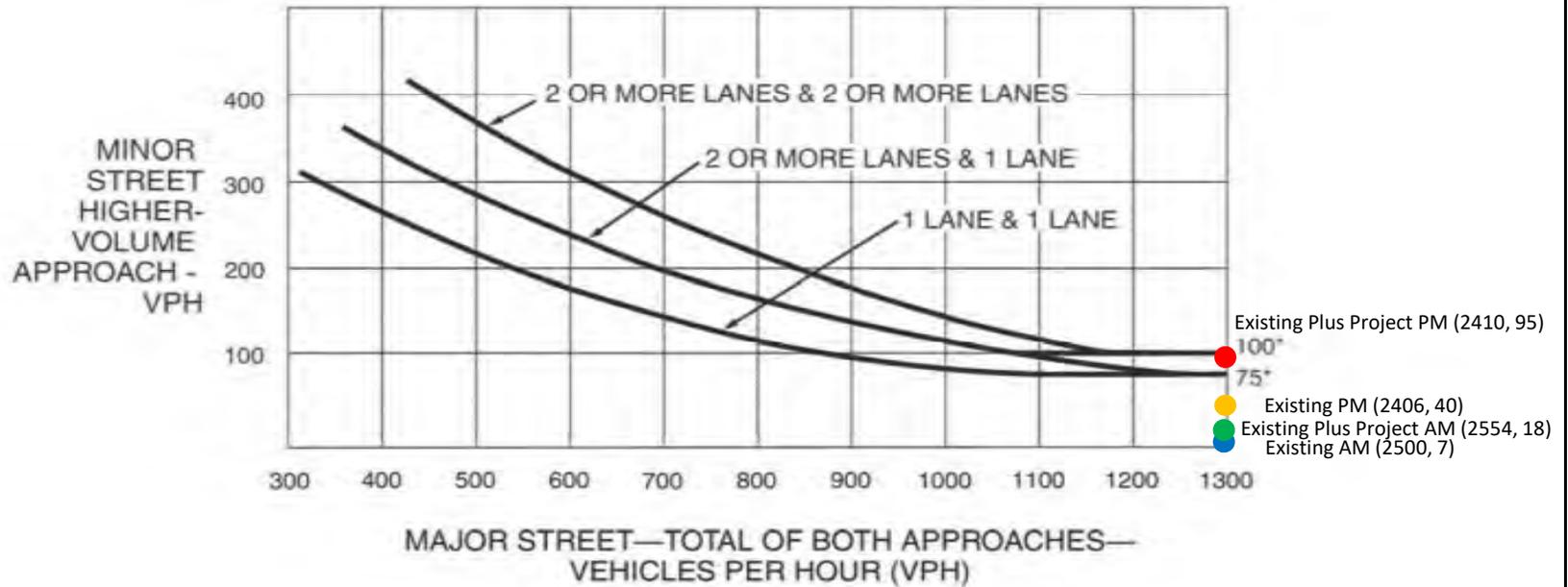
LEGEND

- Existing AM and PM (Major St Vol, Minor St Vol)
- Existing Plus Project AM and PM (Major St Vol, Minor St Vol)

Mt. Langley/Ellis Avenue (Project Alternative 1)
 Signal Warrant 3 - Peak Hour Vehicular Volume

SOURCE: California MUTCD 2014 Edition, Chapter 4C.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



FIGURE 4

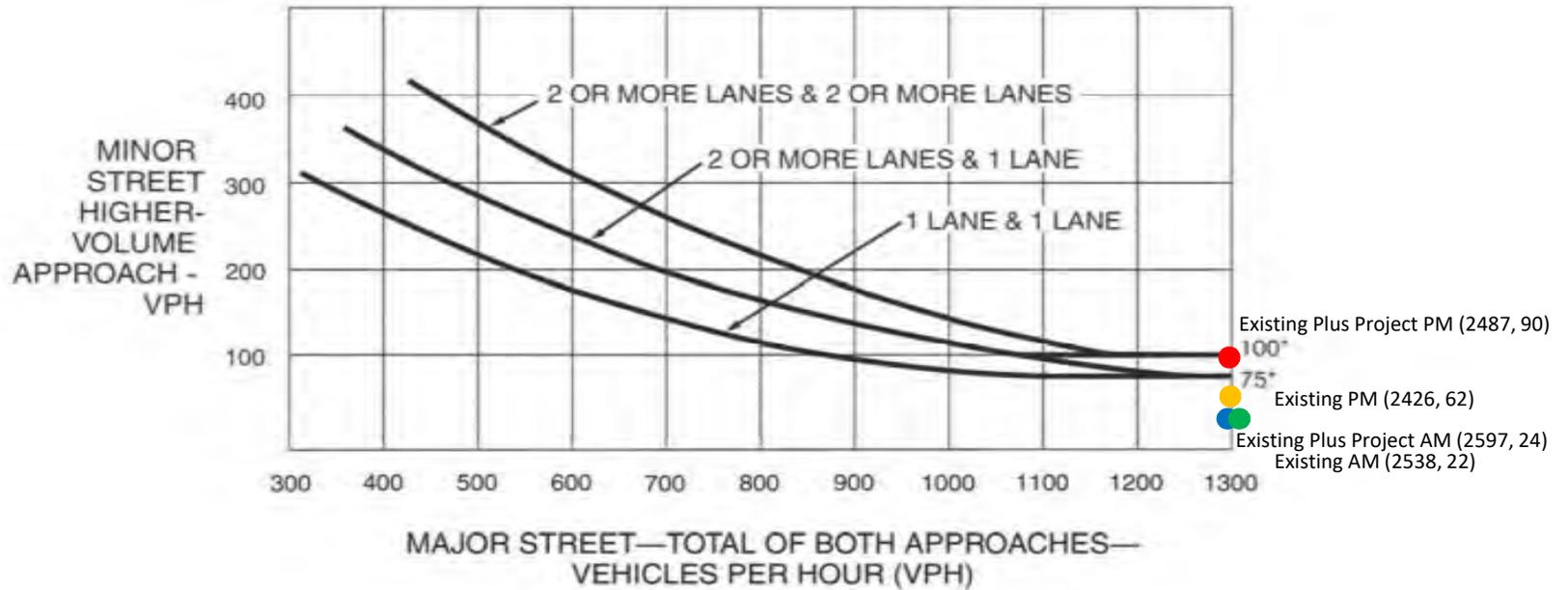
LEGEND

- Existing AM and PM (Major St Vol, Minor St Vol)
- Existing Plus Project AM and PM (Major St Vol, Minor St Vol)

Bandilier Circle/Ellis Avenue (Project Alternative 1)
 Signal Warrant 3 - Peak Hour Vehicular Volume

SOURCE: California MUTCD 2014 Edition, Chapter 4C.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

LSA

FIGURE 5

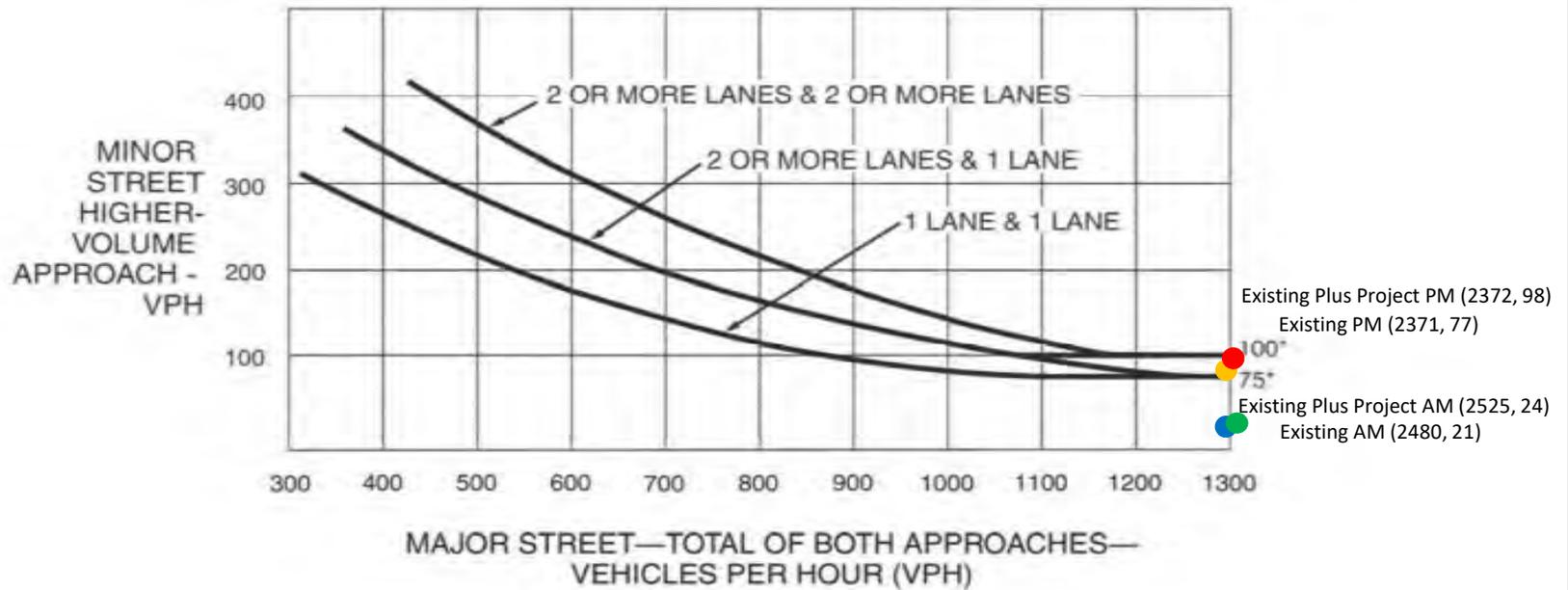
LEGEND

- Existing AM and PM (Major St Vol, Minor St Vol)
- Existing Plus Project AM and PM (Major St Vol, Minor St Vol)

Pacific Street/Ellis Avenue (Project Alternative 1)
 Signal Warrant 3 - Peak Hour Vehicular Volume

SOURCE: California MUTCD 2014 Edition, Chapter 4C.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



FIGURE 6

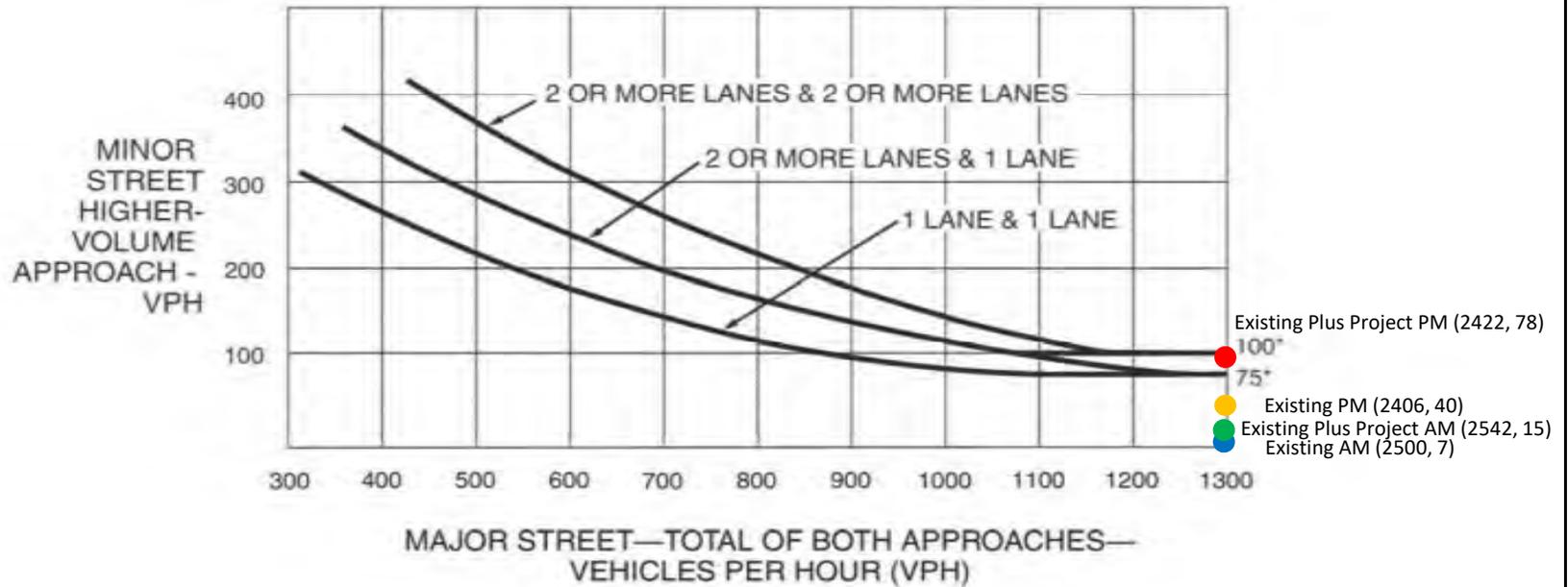
LEGEND

- ● Existing AM and PM (Major St Vol, Minor St Vol)
- ● Existing Plus Project AM and PM (Major St Vol, Minor St Vol)

Mt. Langley/Ellis Avenue (Project Alternative 2)
 Signal Warrant 3 - Peak Hour Vehicular Volume

SOURCE: California MUTCD 2014 Edition, Chapter 4C.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



FIGURE 7

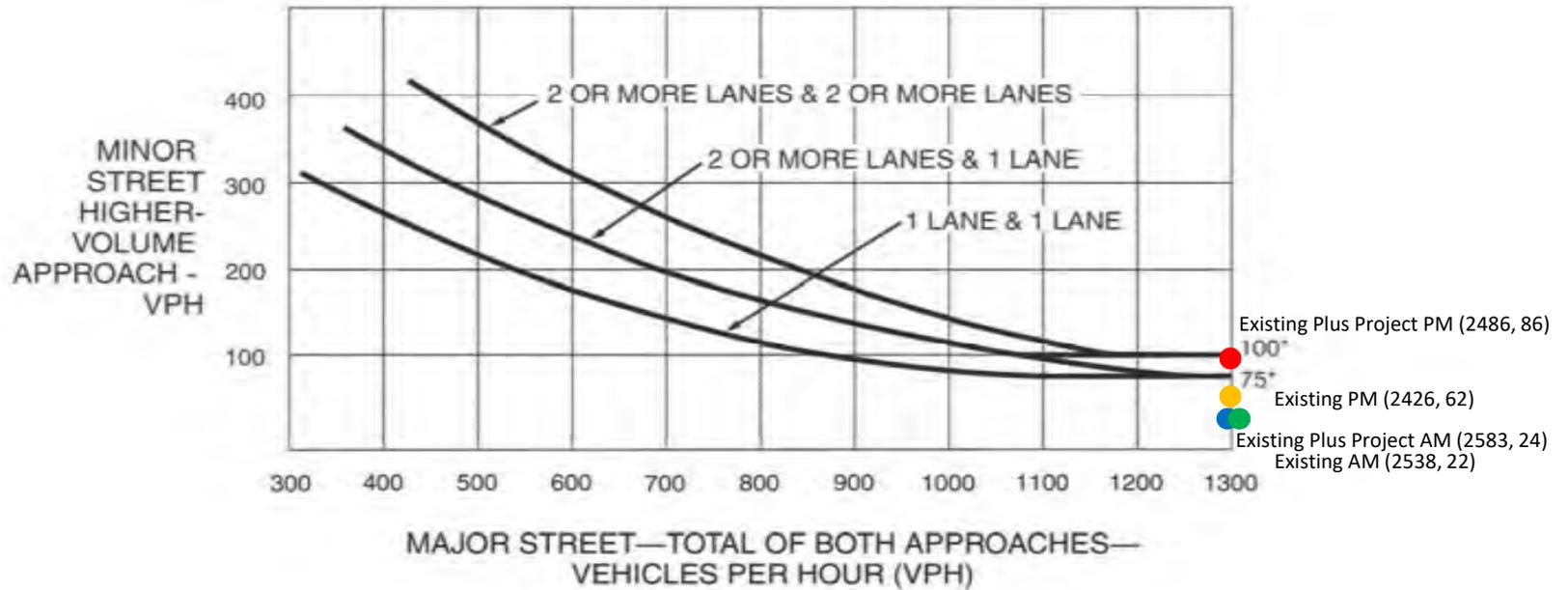
LEGEND

- Existing AM and PM (Major St Vol, Minor St Vol)
- Existing Plus Project AM and PM (Major St Vol, Minor St Vol)

Bandilier Circle/Ellis Avenue (Project Alternative 2)
 Signal Warrant 3 - Peak Hour Vehicular Volume

SOURCE: California MUTCD 2014 Edition, Chapter 4C.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.



FIGURE 8

LEGEND

- Existing AM and PM (Major St Vol, Minor St Vol)
- Existing Plus Project AM and PM (Major St Vol, Minor St Vol)

Pacific Street/Ellis Avenue (Project Alternative 2)
 Signal Warrant 3 - Peak Hour Vehicular Volume

SOURCE: California MUTCD 2014 Edition, Chapter 4C.

Table D: Intersection LOS Summary with Improvements (Project Alternative 1)

Intersection	Control	Peak Hour	Existing		Existing Plus Project Alternative 1		Peak-Hour Δ Delay/ICU	Improvements Required?
			Delay/ICU	LOS	Delay/ICU	LOS		
Mount Langley Street/Ellis Avenue	TWSC	AM	33.7	D	34.9	D	1.2	No
		PM	163.6	F	163.6	F	0.0	No
<i>With Improvements¹</i>	TWSC	<i>AM</i>	-	-	34.9	D	1.2	-
		<i>PM</i>	-	-	163.6	F	0.0	-
Bandilier Circle/Ellis Avenue	TWSC	AM	44.4	E	55.8	F	11.4	Yes
		PM	90.3	F	497.0	F	406.7	Yes
<i>With Improvements¹</i>	Signal	<i>AM</i>	-	-	0.577	A	-	-
		<i>PM</i>	-	-	0.510	A	-	-
Pacific Street/Ellis Avenue	TWSC	AM	20.9	C	28.7	D	7.8	No
		PM	71.0	F	182.3	F	111.3	Yes
<i>With Improvements¹</i>	TWSC	<i>AM</i>	-	-	28.7	D	7.8	-
		<i>PM</i>	-	-	182.3	F	111.3	-

Δ = change in

= exceeds City's level of service (LOS) criteria

¹ Proposed improvement is the installation of a traffic signal at Bandilier/Ellis.

HCM = Highway Capacity Manual. Delay is reported in seconds.

ICU = Intersection Capacity Utilization. ICU method is used to analyze proposed signalized intersection.

LOS = level of service

N/A = not applicable

TWSC = two-way stop control

Table E: Intersection LOS Summary with Improvements (Project Alternative 2)

Intersection	Control	Peak Hour	Existing		Existing Plus Project Alternative 2		Peak-Hour Δ Delay/ICU	Improvements Required?
			Delay/ICU	LOS	Delay/ICU	LOS		
Mount Langley Street/Ellis Avenue	TWSC	AM	33.7	D	39.2	E	5.5	Yes
		PM	163.6	F	312.8	F	149.2	No
<i>With Improvements</i> ¹	<i>Signal</i>	<i>AM</i>	-	-	0.582	A	-33.1	-
		<i>PM</i>	-	-	0.518	A	-163.1	-
Bandilier Circle/Ellis Avenue	TWSC	AM	44.4	E	53.0	F	8.6	Yes
		PM	90.3	F	352.1	F	261.8	Yes
<i>With Improvements</i> ¹	<i>TWSC</i>	<i>AM</i>	-	-	53.0	F	8.6	-
		<i>PM</i>	-	-	352.1	F	261.8	-
Pacific Street/Ellis Avenue	TWSC	AM	20.9	C	27.2	D	6.3	No
		PM	71.0	F	181.6	F	110.6	Yes
<i>With Improvements</i> ¹	<i>TWSC</i>	<i>AM</i>	-	-	27.2	D	6.3	-
		<i>PM</i>	-	-	181.6	F	110.6	-

Δ = change in

= exceeds City's level of service (LOS) criteria

¹ Proposed improvement is the installation of a traffic signal at Mt. Langley/Ellis.

HCM = Highway Capacity Manual. Delay is reported in seconds.

ICU = Intersection Capacity Utilization. ICU method is used to analyze proposed signalized intersection.

LOS = level of service

N/A = not applicable

TWSC = two-way stop control

EXISTING COUNTS

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Fountain Valley
N/S: Mount Langley Street
E/W: Ellis Avenue
Weather: Clear

File Name : 06_FTV_Mt Langley_Ellis AM
Site Code : 00319639
Start Date : 10/3/2019
Page No : 1

Groups Printed- Total Volume

Start Time	Mount Langley Street Southbound			Ellis Avenue Westbound			Ellis Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	5	1	6	103	13	116	0	361	361	483
07:15 AM	0	2	2	114	9	123	1	361	362	487
07:30 AM	3	1	4	140	4	144	1	398	399	547
07:45 AM	2	1	3	180	8	188	1	420	421	612
Total	10	5	15	537	34	571	3	1540	1543	2129
08:00 AM	0	1	1	169	7	176	4	456	460	637
08:15 AM	5	4	9	180	8	188	7	458	465	662
08:30 AM	2	6	8	169	13	182	5	395	400	590
08:45 AM	1	3	4	156	7	163	5	390	395	562
Total	8	14	22	674	35	709	21	1699	1720	2451
Grand Total	18	19	37	1211	69	1280	24	3239	3263	4580
Apprch %	48.6	51.4		94.6	5.4		0.7	99.3		
Total %	0.4	0.4	0.8	26.4	1.5	27.9	0.5	70.7	71.2	

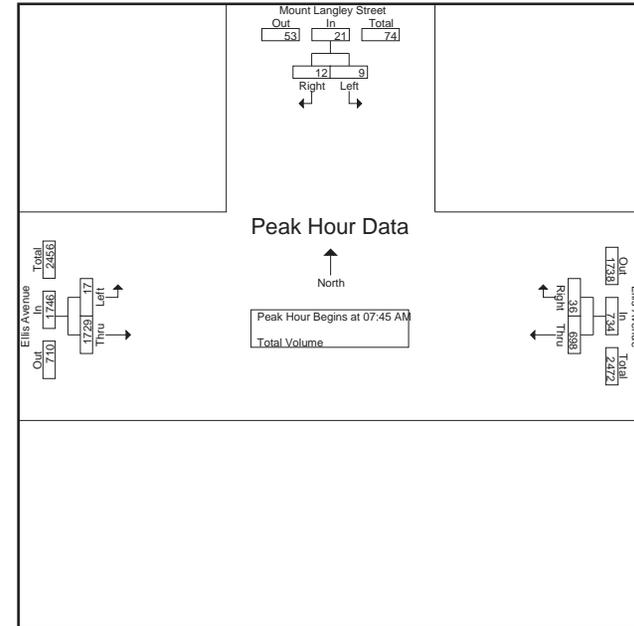
Start Time	Mount Langley Street Southbound			Ellis Avenue Westbound			Ellis Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:45 AM	2	1	3	180	8	188	1	420	421	612
08:00 AM	0	1	1	169	7	176	4	456	460	637
08:15 AM	5	4	9	180	8	188	7	458	465	662
08:30 AM	2	6	8	169	13	182	5	395	400	590
Total Volume	9	12	21	698	36	734	17	1729	1746	2501
% App. Total	42.9	57.1		95.1	4.9		1	99		
PHF	.450	.500	.583	.969	.692	.976	.607	.944	.939	.944

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 07:45 AM

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City of Fountain Valley
N/S: Mount Langley Street
E/W: Ellis Avenue
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File Name : 06_FTV_Mt Langley_Ellis AM
Site Code : 00319639
Start Date : 10/3/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			07:45 AM			07:45 AM		
+0 mins.	0	1	1	180	8	188	1	420	421
+15 mins.	5	4	9	169	7	176	4	456	460
+30 mins.	2	6	8	180	8	188	7	458	465
+45 mins.	1	3	4	169	13	182	5	395	400
Total Volume	8	14	22	698	36	734	17	1729	1746
% App. Total	36.4	63.6		95.1	4.9		1	99	
PHF	.400	.583	.611	.969	.692	.976	.607	.944	.939

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City of Fountain Valley
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 E/W: Ellis Avenue
 Weather: Clear

File Name : 06_FTV_Mt Langley_Ellis PM
 Site Code : 00319639
 Start Date : 10/3/2019
 Page No : 1

Groups Printed- Total Volume

Start Time	Mount Langley Street Southbound			Ellis Avenue Westbound			Ellis Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	16	15	31	252	8	260	7	259	266	557
04:15 PM	5	5	10	311	9	320	3	236	239	569
04:30 PM	4	12	16	315	6	321	2	240	242	579
04:45 PM	6	5	11	290	10	300	3	234	237	548
Total	31	37	68	1168	33	1201	15	969	984	2253
05:00 PM	18	15	33	348	10	358	2	234	236	627
05:15 PM	3	8	11	357	2	359	6	277	283	653
05:30 PM	8	14	22	340	7	347	4	247	251	620
05:45 PM	7	3	10	294	6	300	3	212	215	525
Total	36	40	76	1339	25	1364	15	970	985	2425
Grand Total	67	77	144	2507	58	2565	30	1939	1969	4678
Approch %	46.5	53.5		97.7	2.3		1.5	98.5		
Total %	1.4	1.6	3.1	53.6	1.2	54.8	0.6	41.4	42.1	

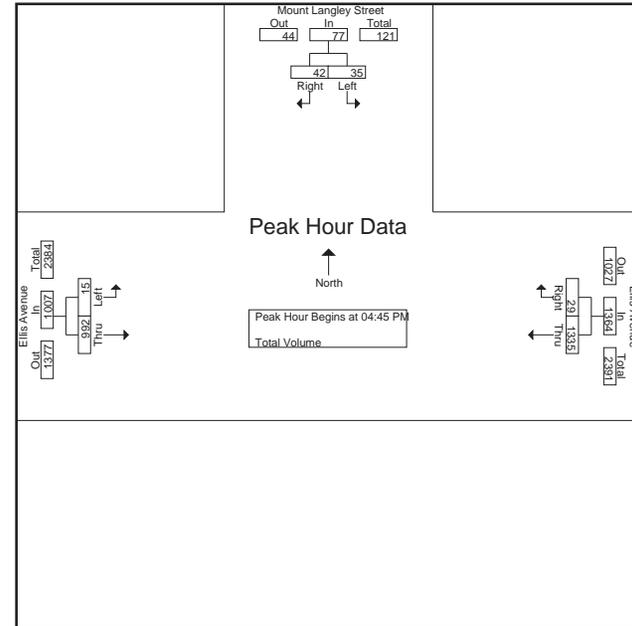
Start Time	Mount Langley Street Southbound			Ellis Avenue Westbound			Ellis Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:45 PM	6	5	11	290	10	300	3	234	237	548
05:00 PM	18	15	33	348	10	358	2	234	236	627
05:15 PM	3	8	11	357	2	359	6	277	283	653
05:30 PM	8	14	22	340	7	347	4	247	251	620
Total Volume	35	42	77	1335	29	1364	15	992	1007	2448
% App. Total	45.5	54.5		97.9	2.1		1.5	98.5		
PHF	.486	.700	.583	.935	.725	.950	.625	.895	.890	.937

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:45 PM

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City of Fountain Valley
 N/S: Mount Langley Street
 E/W: Ellis Avenue
 Weather: Clear

File Name : 06_FTV_Mt Langley_Ellis PM
 Site Code : 00319639
 Start Date : 10/3/2019
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	6	5	11	290	10	300	3	234	237
+15 mins.	18	15	33	348	10	358	2	234	236
+30 mins.	3	8	11	357	2	359	6	277	283
+45 mins.	8	14	22	340	7	347	4	247	251
Total Volume	35	42	77	1335	29	1364	15	992	1007
% App. Total	45.5	54.5		97.9	2.1		1.5	98.5	
PHF	.486	.700	.583	.935	.725	.950	.625	.895	.890

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City of Fountain Valley
 N/S: Bandilier Circle
 E/W: Ellis Avenue
 Weather: Clear

File Name : 05_FTV_Bandiier_Ellis AM
 Site Code : 00319639
 Start Date : 10/3/2019
 Page No : 1

Groups Printed- Total Volume

Start Time	Bandilier Circle Southbound			Ellis Avenue Westbound			Ellis Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	1	1	2	115	9	124	2	366	368	494
07:15 AM	1	0	1	119	3	122	1	372	373	496
07:30 AM	1	0	1	155	4	159	1	413	414	574
07:45 AM	1	0	1	186	8	194	3	414	417	612
Total	4	1	5	575	24	599	7	1565	1572	2176
08:00 AM	1	1	2	175	5	180	2	463	465	647
08:15 AM	0	1	1	191	7	198	1	465	466	665
08:30 AM	3	0	3	176	3	179	1	400	401	583
08:45 AM	0	1	1	168	6	174	4	370	374	549
Total	4	3	7	710	21	731	8	1698	1706	2444
Grand Total	8	4	12	1285	45	1330	15	3263	3278	4620
Apprch %	66.7	33.3		96.6	3.4		0.5	99.5		
Total %	0.2	0.1	0.3	27.8	1	28.8	0.3	70.6	71	

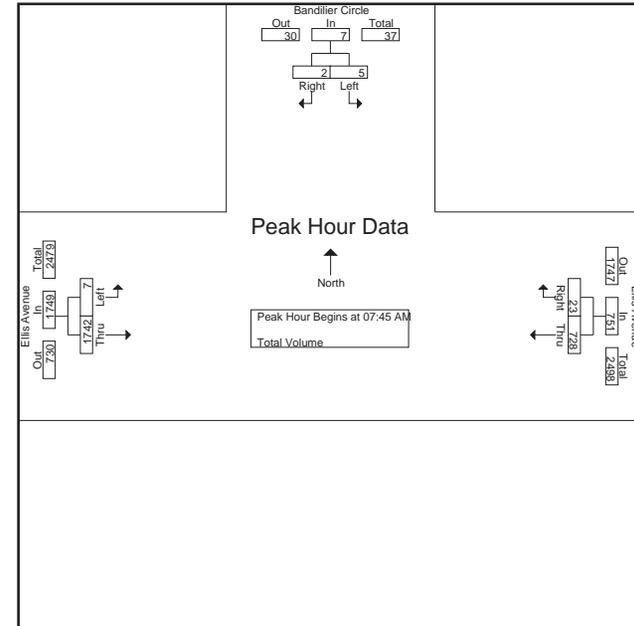
Start Time	Bandilier Circle Southbound			Ellis Avenue Westbound			Ellis Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:45 AM	1	0	1	186	8	194	3	414	417	612
08:00 AM	1	1	2	175	5	180	2	463	465	647
08:15 AM	0	1	1	191	7	198	1	465	466	665
08:30 AM	3	0	3	176	3	179	1	400	401	583
Total Volume	5	2	7	728	23	751	7	1742	1749	2507
% App. Total	71.4	28.6		96.9	3.1		0.4	99.6		
PHF	.417	.500	.583	.953	.719	.948	.583	.937	.938	.942

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

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City of Fountain Valley
 N/S: Bandilier Circle
 E/W: Ellis Avenue
 Weather: Clear

File Name : 05_FTV_Bandiier_Ellis AM
 Site Code : 00319639
 Start Date : 10/3/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:30 AM		
+0 mins.	1	0	1	186	8	194	1	413	414
+15 mins.	1	1	2	175	5	180	3	414	417
+30 mins.	0	1	1	191	7	198	2	463	465
+45 mins.	3	0	3	176	3	179	1	465	466
Total Volume	5	2	7	728	23	751	7	1755	1762
% App. Total	71.4	28.6		96.9	3.1		0.4	99.6	
PHF	.417	.500	.583	.953	.719	.948	.583	.944	.945

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City of Fountain Valley
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E/W: Ellis Avenue
Weather: Clear

File Name : 05_FTV_Bandiier_Ellis PM
Site Code : 00319639
Start Date : 10/3/2019
Page No : 1

Groups Printed- Total Volume

Start Time	Bandilier Circle Southbound			Ellis Avenue Westbound			Ellis Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	5	5	10	269	1	270	0	271	271	551
04:15 PM	7	3	10	313	2	315	1	244	245	570
04:30 PM	9	3	12	322	2	324	0	242	242	578
04:45 PM	5	4	9	316	1	317	0	251	251	577
Total	26	15	41	1220	6	1226	1	1008	1009	2276
05:00 PM	7	9	16	343	2	345	1	248	249	610
05:15 PM	3	2	5	356	0	356	0	285	285	646
05:30 PM	6	4	10	344	0	344	2	257	259	613
05:45 PM	0	0	0	316	1	317	1	221	222	539
Total	16	15	31	1359	3	1362	4	1011	1015	2408
Grand Total	42	30	72	2579	9	2588	5	2019	2024	4684
Apprch %	58.3	41.7		99.7	0.3		0.2	99.8		
Total %	0.9	0.6	1.5	55.1	0.2	55.3	0.1	43.1	43.2	

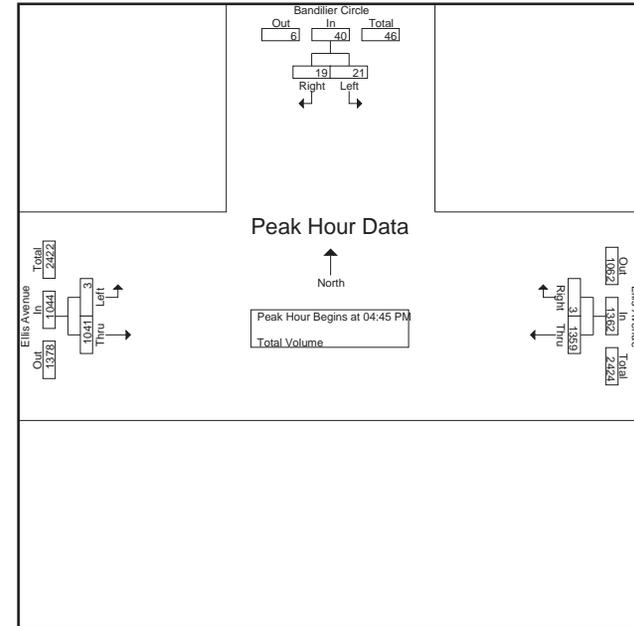
Start Time	Bandilier Circle Southbound			Ellis Avenue Westbound			Ellis Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:45 PM	5	4	9	316	1	317	0	251	251	577
05:00 PM	7	9	16	343	2	345	1	248	249	610
05:15 PM	3	2	5	356	0	356	0	285	285	646
05:30 PM	6	4	10	344	0	344	2	257	259	613
Total Volume	21	19	40	1359	3	1362	3	1041	1044	2446
% App. Total	52.5	47.5		99.8	0.2		0.3	99.7		
PHF	.750	.528	.625	.954	.375	.956	.375	.913	.916	.947

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 04:45 PM

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City of Fountain Valley
N/S: Bandilier Circle
E/W: Ellis Avenue
Weather: Clear

File Name : 05_FTV_Bandiier_Ellis PM
Site Code : 00319639
Start Date : 10/3/2019
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:45 PM			04:45 PM		
+0 mins.	7	3	10	316	1	317	0	251	251
+15 mins.	9	3	12	343	2	345	1	248	249
+30 mins.	5	4	9	356	0	356	0	285	285
+45 mins.	7	9	16	344	0	344	2	257	259
Total Volume	28	19	47	1359	3	1362	3	1041	1044
% App. Total	59.6	40.4		99.8	0.2		0.3	99.7	
PHF	.778	.528	.734	.954	.375	.956	.375	.913	.916

Counts Unlimited
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City of Fountain Valley
N/S: Pacific Street
E/W: Ellis Avenue
Weather: Clear

File Name : 04_FTV_Pacific_Ellis AM
Site Code : 00319639
Start Date : 10/3/2019
Page No : 1

Groups Printed- Total Volume

Start Time	Pacific Street Southbound			Ellis Avenue Westbound			Ellis Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	0	0	124	2	126	0	375	375	501
07:15 AM	1	0	1	128	14	142	0	375	375	518
07:30 AM	3	3	6	157	7	164	1	414	415	585
07:45 AM	2	3	5	185	13	198	0	421	421	624
Total	6	6	12	594	36	630	1	1585	1586	2228
08:00 AM	1	3	4	180	19	199	0	464	464	667
08:15 AM	2	5	7	198	9	207	1	469	470	684
08:30 AM	3	3	6	172	4	176	1	401	402	584
08:45 AM	1	5	6	168	10	178	0	368	368	552
Total	7	16	23	718	42	760	2	1702	1704	2487
Grand Total	13	22	35	1312	78	1390	3	3287	3290	4715
Apprch %	37.1	62.9		94.4	5.6		0.1	99.9		
Total %	0.3	0.5	0.7	27.8	1.7	29.5	0.1	69.7	69.8	

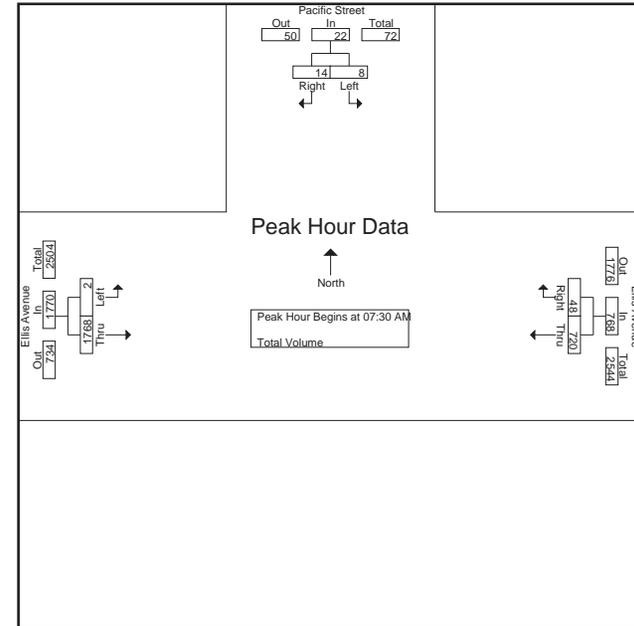
Start Time	Pacific Street Southbound			Ellis Avenue Westbound			Ellis Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:30 AM	3	3	6	157	7	164	1	414	415	585
07:45 AM	2	3	5	185	13	198	0	421	421	624
08:00 AM	1	3	4	180	19	199	0	464	464	667
08:15 AM	2	5	7	198	9	207	1	469	470	684
Total Volume	8	14	22	720	48	768	2	1768	1770	2560
% App. Total	36.4	63.6		93.8	6.2		0.1	99.9		
PHF	.667	.700	.786	.909	.632	.928	.500	.942	.941	.936

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 07:30 AM

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City of Fountain Valley
N/S: Pacific Street
E/W: Ellis Avenue
Weather: Clear

File Name : 04_FTV_Pacific_Ellis AM
Site Code : 00319639
Start Date : 10/3/2019
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			07:45 AM			07:30 AM		
+0 mins.	1	3	4	185	13	198	1	414	415
+15 mins.	2	5	7	180	19	199	0	421	421
+30 mins.	3	3	6	198	9	207	0	464	464
+45 mins.	1	5	6	172	4	176	1	469	470
Total Volume	7	16	23	735	45	780	2	1768	1770
% App. Total	30.4	69.6		94.2	5.8		0.1	99.9	
PHF	.583	.800	.821	.928	.592	.942	.500	.942	.941

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City of Fountain Valley
 N/S: Pacific Street
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 Weather: Clear

File Name : 04_FTV_Pacific_Ellis PM
 Site Code : 00319639
 Start Date : 10/3/2019
 Page No : 1

Groups Printed- Total Volume

Start Time	Pacific Street Southbound			Ellis Avenue Westbound			Ellis Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	17	15	32	259	8	267	5	276	281	580
04:15 PM	6	6	12	309	8	317	2	255	257	586
04:30 PM	14	4	18	318	7	325	3	252	255	598
04:45 PM	5	6	11	313	4	317	2	259	261	589
Total	42	31	73	1199	27	1226	12	1042	1054	2353
05:00 PM	20	18	38	322	1	323	0	252	252	613
05:15 PM	4	1	5	358	2	360	0	293	293	658
05:30 PM	6	2	8	348	3	351	0	269	269	628
05:45 PM	5	3	8	317	5	322	1	226	227	557
Total	35	24	59	1345	11	1356	1	1040	1041	2456
Grand Total	77	55	132	2544	38	2582	13	2082	2095	4809
Apprch %	58.3	41.7		98.5	1.5		0.6	99.4		
Total %	1.6	1.1	2.7	52.9	0.8	53.7	0.3	43.3	43.6	

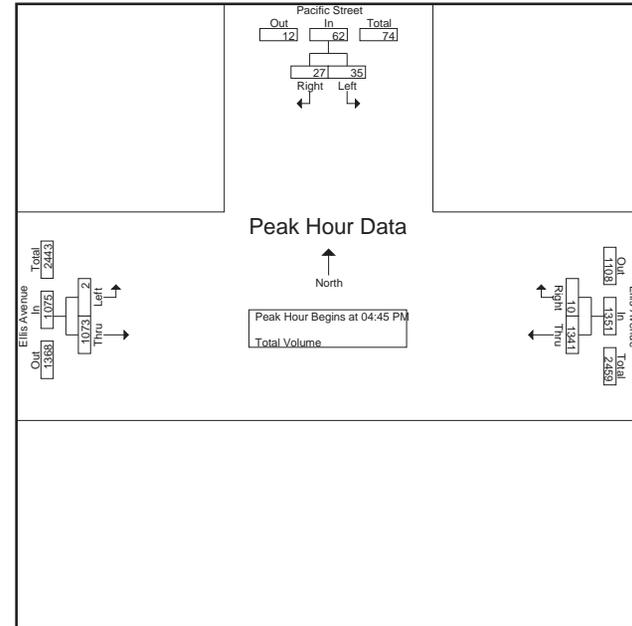
Start Time	Pacific Street Southbound			Ellis Avenue Westbound			Ellis Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:45 PM	5	6	11	313	4	317	2	259	261	589
05:00 PM	20	18	38	322	1	323	0	252	252	613
05:15 PM	4	1	5	358	2	360	0	293	293	658
05:30 PM	6	2	8	348	3	351	0	269	269	628
Total Volume	35	27	62	1341	10	1351	2	1073	1075	2488
% App. Total	56.5	43.5		99.3	0.7		0.2	99.8		
PHF	.438	.375	.408	.936	.625	.938	.250	.916	.917	.945

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:45 PM

Counts Unlimited
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City of Fountain Valley
 N/S: Pacific Street
 E/W: Ellis Avenue
 Weather: Clear

File Name : 04_FTV_Pacific_Ellis PM
 Site Code : 00319639
 Start Date : 10/3/2019
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM			05:00 PM			04:45 PM		
+0 mins.	6	6	12	322	1	323	2	259	261
+15 mins.	14	4	18	358	2	360	0	252	252
+30 mins.	5	6	11	348	3	351	0	293	293
+45 mins.	20	18	38	317	5	322	0	269	269
Total Volume	45	34	79	1345	11	1356	2	1073	1075
% App. Total	57	43		99.2	0.8		0.2	99.8	
PHF	.563	.472	.520	.939	.550	.942	.250	.916	.917

Counts Unlimited
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Fountain Valley
N/S: I-405 SB Ramps/OCS D Driveway
E/W: Ellis Avenue/Euclid Street
Weather: Clear

File Name : 03_FTV_405S_Ellis AM
Site Code : 00319639
Start Date : 10/3/2019
Page No : 1

Groups Printed- Total Volume

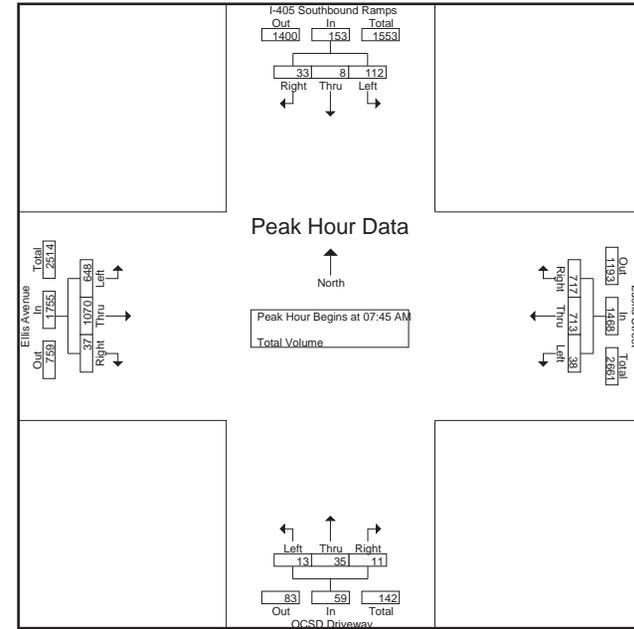
Start Time	I-405 Southbound Ramps Southbound				Euclid Street Westbound				OCS D Driveway Northbound				Ellis Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	23	4	10	37	18	114	198	330	2	2	0	4	154	201	14	369	740
07:15 AM	33	0	5	38	9	135	186	330	1	9	1	11	157	193	13	363	742
07:30 AM	21	0	3	24	13	168	169	350	0	12	1	13	166	253	7	426	813
07:45 AM	36	3	7	46	8	177	190	375	5	9	1	15	156	261	7	424	860
Total	113	7	25	145	48	594	743	1385	8	32	3	43	633	908	41	1582	3155
08:00 AM	25	2	8	35	8	181	166	355	5	11	2	18	174	280	10	464	872
08:15 AM	21	1	13	35	10	189	181	380	1	5	3	9	157	296	8	461	885
08:30 AM	30	2	5	37	12	166	180	358	2	10	5	17	161	233	12	406	818
08:45 AM	22	3	6	31	11	171	179	361	3	17	2	22	134	225	10	369	783
Total	98	8	32	138	41	707	706	1454	11	43	12	66	626	1034	40	1700	3358
Grand Total	211	15	57	283	89	1301	1449	2839	19	75	15	109	1259	1942	81	3282	6513
Apprch %	74.6	5.3	20.1		3.1	45.8	51		17.4	68.8	13.8		38.4	59.2	2.5		
Total %	3.2	0.2	0.9	4.3	1.4	20	22.2	43.6	0.3	1.2	0.2	1.7	19.3	29.8	1.2	50.4	

Start Time	I-405 Southbound Ramps Southbound				Euclid Street Westbound				OCS D Driveway Northbound				Ellis Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:45 AM	36	3	7	46	8	177	190	375	5	9	1	15	156	261	7	424	860
08:00 AM	25	2	8	35	8	181	166	355	5	11	2	18	174	280	10	464	872
08:15 AM	21	1	13	35	10	189	181	380	1	5	3	9	157	296	8	461	885
08:30 AM	30	2	5	37	12	166	180	358	2	10	5	17	161	233	12	406	818
Total Volume	112	8	33	153	38	713	717	1468	13	35	11	59	648	1070	37	1755	3435
% App. Total	73.2	5.2	21.6		2.6	48.6	48.8		2.2	59.3	18.6		36.9	61	2.1		
PHF	.778	.667	.635	.832	.792	.943	.943	.966	.650	.795	.550	.819	.931	.904	.771	.946	.970

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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				08:00 AM				07:30 AM			
+0 mins.	36	3	7	46	8	177	190	375	5	11	2	18	166	253	7	426
+15 mins.	25	2	8	35	8	181	166	355	1	5	3	9	156	261	7	424
+30 mins.	21	1	13	35	10	189	181	380	2	10	5	17	174	280	10	464
+45 mins.	30	2	5	37	12	166	180	358	3	17	2	22	157	296	8	461
Total Volume	112	8	33	153	38	713	717	1468	11	43	12	66	653	1090	32	1775
% App. Total	73.2	5.2	21.6		2.6	48.6	48.8		16.7	65.2	18.2		36.8	61.4	1.8	
PHF	.778	.667	.635	.832	.792	.943	.943	.966	.550	.632	.600	.750	.938	.921	.800	.956

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Groups Printed- Total Volume

Start Time	I-405 Southbound Ramps Southbound				Euclid Street Westbound				OCSD Driveway Northbound				Ellis Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	51	2	22	75	2	249	163	414	2	12	11	25	165	122	1	288	802
04:15 PM	48	0	20	68	0	277	178	455	4	4	17	25	156	113	2	271	819
04:30 PM	39	0	25	64	2	293	166	461	7	31	41	79	147	123	1	271	875
04:45 PM	42	0	21	63	5	298	166	469	3	5	11	19	143	117	1	261	812
Total	180	2	88	270	9	1117	673	1799	16	52	80	148	611	475	5	1091	3308
05:00 PM	35	0	16	51	3	289	204	496	3	10	9	22	135	121	0	256	825
05:15 PM	44	0	26	70	1	326	175	502	2	6	4	12	170	123	2	295	879
05:30 PM	33	1	18	52	2	329	174	505	1	3	3	7	156	120	0	276	840
05:45 PM	45	0	17	62	4	299	182	485	2	3	3	8	149	85	4	238	793
Total	157	1	77	235	10	1243	735	1988	8	22	19	49	610	449	6	1065	3337
Grand Total	337	3	165	505	19	2360	1408	3787	24	74	99	197	1221	924	11	2156	6645
Apprch %	66.7	0.6	32.7		0.5	62.3	37.2		12.2	37.6	50.3		56.6	42.9	0.5		
Total %	5.1	0	2.5	7.6	0.3	35.5	21.2	57	0.4	1.1	1.5	3	18.4	13.9	0.2	32.4	

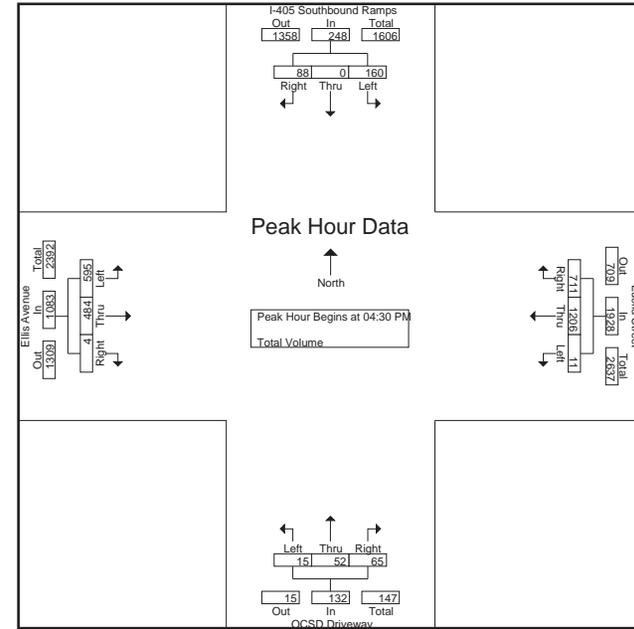
Start Time	I-405 Southbound Ramps Southbound				Euclid Street Westbound				OCSD Driveway Northbound				Ellis Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	39	0	25	64	2	293	166	461	7	31	41	79	147	123	1	271	875
04:45 PM	42	0	21	63	5	298	166	469	3	5	11	19	143	117	1	261	812
05:00 PM	35	0	16	51	3	289	204	496	3	10	9	22	135	121	0	256	825
05:15 PM	44	0	26	70	1	326	175	502	2	6	4	12	170	123	2	295	879
Total Volume	160	0	88	248	11	1206	711	1928	15	52	65	132	595	484	4	1083	3391
% App. Total	64.5	0	35.5		0.6	62.6	36.9		11.4	39.4	49.2		54.9	44.7	0.4		
PHF	.909	.000	.846	.886	.550	.925	.871	.960	.536	.419	.396	.418	.875	.984	.500	.918	.964

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 04:30 PM

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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				04:00 PM				04:00 PM			
+0 mins.	51	2	22	75	3	289	204	496	2	12	11	25	165	122	1	288
+15 mins.	48	0	20	68	1	326	175	502	4	4	17	25	156	113	2	271
+30 mins.	39	0	25	64	2	329	174	505	7	31	41	79	147	123	1	271
+45 mins.	42	0	21	63	4	299	182	485	3	5	11	19	143	117	1	261
Total Volume	180	2	88	270	10	1243	735	1988	16	52	80	148	611	475	5	1091
% App. Total	66.7	0.7	32.6		0.5	62.5	37		10.8	35.1	54.1		56	43.5	0.5	
PHF	.882	.250	.880	.900	.625	.945	.901	.984	.571	.419	.488	.468	.926	.965	.625	.947

HCM AND ICU WORKSHEETS

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	1729	698	36	9	12
Future Vol, veh/h	17	1729	698	36	9	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	215	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	1879	759	39	10	13

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	798	0	-	0	1755 399
Stage 1	-	-	-	-	779 -
Stage 2	-	-	-	-	976 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	820	-	-	-	76 601
Stage 1	-	-	-	-	413 -
Stage 2	-	-	-	-	326 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	820	-	-	-	74 601
Mov Cap-2 Maneuver	-	-	-	-	74 -
Stage 1	-	-	-	-	404 -
Stage 2	-	-	-	-	326 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	33.7
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	820	-	-	-	148
HCM Lane V/C Ratio	0.023	-	-	-	0.154
HCM Control Delay (s)	9.5	-	-	-	33.7
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	1742	728	23	5	2
Future Vol, veh/h	7	1742	728	23	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	110	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	1893	791	25	5	2

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	816	0	-	0	1767 408
Stage 1	-	-	-	-	804 -
Stage 2	-	-	-	-	963 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	807	-	-	-	75 593
Stage 1	-	-	-	-	401 -
Stage 2	-	-	-	-	331 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	807	-	-	-	74 593
Mov Cap-2 Maneuver	-	-	-	-	74 -
Stage 1	-	-	-	-	397 -
Stage 2	-	-	-	-	331 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	44.4
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	807	-	-	-	99
HCM Lane V/C Ratio	0.009	-	-	-	0.077
HCM Control Delay (s)	9.5	-	-	-	44.4
HCM Lane LOS	A	-	-	-	E
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑↑↑	↑↑		↘	
Traffic Vol, veh/h	2	1768	720	48	8	14
Future Vol, veh/h	2	1768	720	48	8	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	1922	783	52	9	15

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	835	0	-	0	1582
Stage 1	-	-	-	-	809
Stage 2	-	-	-	-	773
Critical Hdwy	4.14	-	-	-	6.29
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	6.04
Follow-up Hdwy	2.22	-	-	-	3.67
Pot Cap-1 Maneuver	794	-	-	-	125
Stage 1	-	-	-	-	388
Stage 2	-	-	-	-	388
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	794	-	-	-	125
Mov Cap-2 Maneuver	-	-	-	-	125
Stage 1	-	-	-	-	387
Stage 2	-	-	-	-	388

Approach	EB	WB	SB
HCM Control Delay, s	0	0	20.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	794	-	-	-	250
HCM Lane V/C Ratio	0.003	-	-	-	0.096
HCM Control Delay (s)	9.5	-	-	-	20.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection						
Int Delay, s/veh	5.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	992	1335	29	35	42
Future Vol, veh/h	15	992	1335	29	35	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	215	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	1078	1451	32	38	46

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1483	0	-	0	2038 742
Stage 1	-	-	-	-	1467 -
Stage 2	-	-	-	-	571 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	450	-	-	-	49 358
Stage 1	-	-	-	-	178 -
Stage 2	-	-	-	-	529 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	450	-	-	-	47 358
Mov Cap-2 Maneuver	-	-	-	-	47 -
Stage 1	-	-	-	-	172 -
Stage 2	-	-	-	-	529 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	163.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	450	-	-	-	89
HCM Lane V/C Ratio	0.036	-	-	-	0.94
HCM Control Delay (s)	13.3	-	-	-	163.6
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	5.3

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1041	1359	3	21	19
Future Vol, veh/h	3	1041	1359	3	21	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	110	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	1132	1477	3	23	21

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1480	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	451	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	451	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	90.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	451	-	-	-	82
HCM Lane V/C Ratio	0.007	-	-	-	0.53
HCM Control Delay (s)	13	-	-	-	90.3
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	2.3

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑↑↑	↑↑		↘	
Traffic Vol, veh/h	2	1073	1341	10	35	27
Future Vol, veh/h	2	1073	1341	10	35	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	1166	1458	11	38	29

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1469	0	-	0	1934 735
Stage 1	-	-	-	-	1464 -
Stage 2	-	-	-	-	470 -
Critical Hdwy	4.14	-	-	-	6.29 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	6.04 -
Follow-up Hdwy	2.22	-	-	-	3.67 3.32
Pot Cap-1 Maneuver	455	-	-	-	77 362
Stage 1	-	-	-	-	176 -
Stage 2	-	-	-	-	561 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	455	-	-	-	77 362
Mov Cap-2 Maneuver	-	-	-	-	77 -
Stage 1	-	-	-	-	175 -
Stage 2	-	-	-	-	561 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	71
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	455	-	-	-	117
HCM Lane V/C Ratio	0.005	-	-	-	0.576
HCM Control Delay (s)	12.9	-	-	-	71
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	2.8

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑↑	↑↑		↘	
Traffic Vol, veh/h	17	1774	699	36	9	12
Future Vol, veh/h	17	1774	699	36	9	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	215	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	1928	760	39	10	13

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	799	0	-	0	1780 400
Stage 1	-	-	-	-	780 -
Stage 2	-	-	-	-	1000 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	819	-	-	-	73 600
Stage 1	-	-	-	-	412 -
Stage 2	-	-	-	-	317 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	819	-	-	-	71 600
Mov Cap-2 Maneuver	-	-	-	-	71 -
Stage 1	-	-	-	-	403 -
Stage 2	-	-	-	-	317 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	34.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	819	-	-	-	143
HCM Lane V/C Ratio	0.023	-	-	-	0.16
HCM Control Delay (s)	9.5	-	-	-	34.9
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	39	1755	725	35	12	6
Future Vol, veh/h	39	1755	725	35	12	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	110	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	1908	788	38	13	7

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	826	0	-	0	1845 413
Stage 1	-	-	-	-	807 -
Stage 2	-	-	-	-	1038 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	800	-	-	-	66 588
Stage 1	-	-	-	-	399 -
Stage 2	-	-	-	-	302 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	800	-	-	-	63 588
Mov Cap-2 Maneuver	-	-	-	-	63 -
Stage 1	-	-	-	-	378 -
Stage 2	-	-	-	-	302 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	55.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	800	-	-	-	90
HCM Lane V/C Ratio	0.053	-	-	-	0.217
HCM Control Delay (s)	9.8	-	-	-	55.8
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0.2	-	-	-	0.8

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑↑	↑↑		↘	
Traffic Vol, veh/h	15	1775	732	75	13	11
Future Vol, veh/h	15	1775	732	75	13	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	1929	796	82	14	12

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	878	0	-	0	1641 439
Stage 1	-	-	-	-	837 -
Stage 2	-	-	-	-	804 -
Critical Hdwy	4.14	-	-	-	6.29 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	6.04 -
Follow-up Hdwy	2.22	-	-	-	3.67 3.32
Pot Cap-1 Maneuver	765	-	-	-	115 566
Stage 1	-	-	-	-	375 -
Stage 2	-	-	-	-	373 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	765	-	-	-	113 566
Mov Cap-2 Maneuver	-	-	-	-	113 -
Stage 1	-	-	-	-	367 -
Stage 2	-	-	-	-	373 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	28.7
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	765	-	-	-	178
HCM Lane V/C Ratio	0.021	-	-	-	0.147
HCM Control Delay (s)	9.8	-	-	-	28.7
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

HCM 6th TWSC
 1: Ellis Avenue & Mount Langley Street

09/01/2020

Intersection						
Int Delay, s/veh	5.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	995	1337	29	35	42
Future Vol, veh/h	15	995	1337	29	35	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	215	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	1082	1453	32	38	46

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1485	0	0 2042 743
Stage 1	-	-	- 1469 -
Stage 2	-	-	- 573 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	449	-	- 49 358
Stage 1	-	-	- 178 -
Stage 2	-	-	- 527 -
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	449	-	- 47 358
Mov Cap-2 Maneuver	-	-	- 47 -
Stage 1	-	-	- 172 -
Stage 2	-	-	- 527 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	163.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	449	-	-	-	89
HCM Lane V/C Ratio	0.036	-	-	-	0.94
HCM Control Delay (s)	13.3	-	-	-	163.6
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	5.3

HCM 6th TWSC
2: Ellis Avenue & Bandilier Circle

09/01/2020

Intersection						
Int Delay, s/veh	18.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	1041	1357	6	72	23
Future Vol, veh/h	6	1041	1357	6	72	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	110	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	1132	1475	7	78	25

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1482	0	0 2059 741
Stage 1	-	-	- 1479 -
Stage 2	-	-	- 580 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	450	-	- ~ 48 359
Stage 1	-	-	- 176 -
Stage 2	-	-	- 523 -
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	450	-	- ~ 47 359
Mov Cap-2 Maneuver	-	-	- ~ 47 -
Stage 1	-	-	- 173 -
Stage 2	-	-	- 523 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	\$ 497
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	450	-	-	-	60
HCM Lane V/C Ratio	0.014	-	-	-	1.721
HCM Control Delay (s)	13.1	-	-	-	\$ 497
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	9.5

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: Ellis Avenue & Pacific Street

09/01/2020

Intersection						
Int Delay, s/veh	6.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑↑↑	↑↑		↘	
Traffic Vol, veh/h	2	1124	1344	17	65	25
Future Vol, veh/h	2	1124	1344	17	65	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	1222	1461	18	71	27

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1479	0	-	0	1963 740
Stage 1	-	-	-	-	1470 -
Stage 2	-	-	-	-	493 -
Critical Hdwy	4.14	-	-	-	6.29 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	6.04 -
Follow-up Hdwy	2.22	-	-	-	3.67 3.32
Pot Cap-1 Maneuver	451	-	-	-	74 359
Stage 1	-	-	-	-	174 -
Stage 2	-	-	-	-	546 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	451	-	-	-	74 359
Mov Cap-2 Maneuver	-	-	-	-	74 -
Stage 1	-	-	-	-	173 -
Stage 2	-	-	-	-	546 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	182.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	451	-	-	-	95
HCM Lane V/C Ratio	0.005	-	-	-	1.03
HCM Control Delay (s)	13	-	-	-	182.3
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	6.2

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	1760	698	36	11	13
Future Vol, veh/h	31	1760	698	36	11	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	215	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	1913	759	39	12	14

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	798	0	-	0	1804 399
Stage 1	-	-	-	-	779 -
Stage 2	-	-	-	-	1025 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	820	-	-	-	71 601
Stage 1	-	-	-	-	413 -
Stage 2	-	-	-	-	307 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	820	-	-	-	68 601
Mov Cap-2 Maneuver	-	-	-	-	68 -
Stage 1	-	-	-	-	396 -
Stage 2	-	-	-	-	307 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	39.2
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	820	-	-	-	131
HCM Lane V/C Ratio	0.041	-	-	-	0.199
HCM Control Delay (s)	9.6	-	-	-	39.2
HCM Lane LOS	A	-	-	-	E
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	39	1743	725	35	10	5
Future Vol, veh/h	39	1743	725	35	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	110	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	1895	788	38	11	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	826	0	-	0	1839 413
Stage 1	-	-	-	-	807 -
Stage 2	-	-	-	-	1032 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	800	-	-	-	67 588
Stage 1	-	-	-	-	399 -
Stage 2	-	-	-	-	304 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	800	-	-	-	64 588
Mov Cap-2 Maneuver	-	-	-	-	64 -
Stage 1	-	-	-	-	378 -
Stage 2	-	-	-	-	304 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	53
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	800	-	-	-	91
HCM Lane V/C Ratio	0.053	-	-	-	0.179
HCM Control Delay (s)	9.8	-	-	-	53
HCM Lane LOS	A	-	-	-	F
HCM 95th %tile Q(veh)	0.2	-	-	-	0.6

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑↑↑	↑↑		↘	
Traffic Vol, veh/h	1	1775	732	75	13	11
Future Vol, veh/h	1	1775	732	75	13	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	1929	796	82	14	12

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	878	0	-	0	1611 439
Stage 1	-	-	-	-	837 -
Stage 2	-	-	-	-	774 -
Critical Hdwy	4.14	-	-	-	6.29 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	6.04 -
Follow-up Hdwy	2.22	-	-	-	3.67 3.32
Pot Cap-1 Maneuver	765	-	-	-	120 566
Stage 1	-	-	-	-	375 -
Stage 2	-	-	-	-	387 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	765	-	-	-	120 566
Mov Cap-2 Maneuver	-	-	-	-	120 -
Stage 1	-	-	-	-	375 -
Stage 2	-	-	-	-	387 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	27.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	765	-	-	-	188
HCM Lane V/C Ratio	0.001	-	-	-	0.139
HCM Control Delay (s)	9.7	-	-	-	27.2
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.5

HCM 6th TWSC
1: Ellis Avenue & Mount Langley Street

09/02/2020

Intersection						
Int Delay, s/veh	12.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	994	1333	29	52	46
Future Vol, veh/h	16	994	1333	29	52	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	215	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	1080	1449	32	57	50

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1481	0	0 2039 741
Stage 1	-	-	- 1465 -
Stage 2	-	-	- 574 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	450	-	- ~ 49 359
Stage 1	-	-	- 179 -
Stage 2	-	-	- 527 -
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	450	-	- ~ 47 359
Mov Cap-2 Maneuver	-	-	- ~ 47 -
Stage 1	-	-	- 172 -
Stage 2	-	-	- 527 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	\$ 312.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	450	-	-	-	79
HCM Lane V/C Ratio	0.039	-	-	-	1.348
HCM Control Delay (s)	13.3	-	-	-	\$ 312.8
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	8.3

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
2: Ellis Avenue & Bandilier Circle

09/02/2020

Intersection						
Int Delay, s/veh	11					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗	↖		↗	
Traffic Vol, veh/h	6	1057	1353	6	55	23
Future Vol, veh/h	6	1057	1353	6	55	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	110	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	1149	1471	7	60	25

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1478	0	-	0	2064 739
Stage 1	-	-	-	-	1475 -
Stage 2	-	-	-	-	589 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	452	-	-	-	~ 47 360
Stage 1	-	-	-	-	177 -
Stage 2	-	-	-	-	517 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	452	-	-	-	~ 46 360
Mov Cap-2 Maneuver	-	-	-	-	~ 46 -
Stage 1	-	-	-	-	174 -
Stage 2	-	-	-	-	517 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	\$ 352.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	452	-	-	-	62
HCM Lane V/C Ratio	0.014	-	-	-	1.367
HCM Control Delay (s)	13.1	-	-	-	\$ 352.1
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	7.2

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: Ellis Avenue & Pacific Street

09/02/2020

Intersection						
Int Delay, s/veh	6.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑↑↑	↑↑		↘	
Traffic Vol, veh/h	1	1124	1344	17	65	21
Future Vol, veh/h	1	1124	1344	17	65	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	1222	1461	18	71	23

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1479	0	-	0	1961 740
Stage 1	-	-	-	-	1470 -
Stage 2	-	-	-	-	491 -
Critical Hdwy	4.14	-	-	-	6.29 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	6.04 -
Follow-up Hdwy	2.22	-	-	-	3.67 3.32
Pot Cap-1 Maneuver	451	-	-	-	74 359
Stage 1	-	-	-	-	174 -
Stage 2	-	-	-	-	547 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	451	-	-	-	74 359
Mov Cap-2 Maneuver	-	-	-	-	74 -
Stage 1	-	-	-	-	174 -
Stage 2	-	-	-	-	547 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	181.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	451	-	-	-	92
HCM Lane V/C Ratio	0.002	-	-	-	1.016
HCM Control Delay (s)	13	-	-	-	181.6
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	6

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Bandilier Circle/Ellis Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 0.577
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Split Phase, Permitted), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns for different traffic movements. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table with 12 columns for different traffic movements. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns for different traffic movements. Rows include Vol/Sat and Crit Moves.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Bandilier Circle/Ellis Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 0.510
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Split Phase, Permitted), Rights (Include), Min. Green, Y+R, and Lanes.

Volume Module: Table with 12 columns representing different traffic movements. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table with 12 columns. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 12 columns. Rows include Vol/Sat and Crit Moves.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Mt Langley/Ellis Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 0.582
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with 13 columns representing different traffic movements and 13 rows of volume-related metrics like Base Vol, Growth Adj, etc.

Saturation Flow Module table with 13 columns and 5 rows showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 13 columns and 3 rows showing Vol/Sat and Crit Moves.

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Mt Langley/Ellis Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 0.518

Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 24 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Protected

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 0 0 1 0 0 0 0 1 0 0 0 1 0 1 0

-----|-----|-----|-----|-----|

Volume Module:

Base Vol: 0 0 0 52 0 46 16 994 0 0 1333 29

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 0 0 52 0 46 16 994 0 0 1333 29

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 0 0 0 52 0 46 16 994 0 0 1333 29

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 52 0 46 16 994 0 0 1333 29

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 52 0 46 16 994 0 0 1333 29

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 0 0 52 0 46 16 994 0 0 1333 29

-----|-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 0.00 1.00 0.00 0.53 0.00 0.47 1.00 2.00 0.00 0.00 1.96 0.04

Final Sat.: 0 1700 0 902 0 798 1700 3400 0 0 3328 72

-----|-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.06 0.00 0.06 0.01 0.29 0.00 0.00 0.40 0.40

Crit Moves: **** **

CALIFORNIA MUTCD WORKSHEETS

FIGURE 4C-101. TRAFFIC SIGNAL WARRANTS WORKSHEET (CALIFORNIA MUTCD 2014 EDITION)

MT. LANGLEY STREET/ELLIS AVENUE – EXISTING CONDITIONS

WARRANT 3 - Peak Hour SATISFIED YES NO
(Part A or Part B must be satisfied)

PART A SATISFIED YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B SATISFIED YES NO

APPROACH LANES	One	2 or More	PM	Hour
Both Approaches - Major Street		X		2371
Higher Approach - Minor Street	X			77

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

MT. LANGLEY STREET/ELLIS AVENUE – EXISTING PLUS PROJECT ALT 1 CONDITIONS

WARRANT 3 - Peak Hour SATISFIED YES NO
(Part A or Part B must be satisfied)

PART A SATISFIED YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B SATISFIED YES NO

APPROACH LANES	One	2 or More	PM	Hour
Both Approaches - Major Street		X		2376
Higher Approach - Minor Street	X			77

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

FIGURE 4C-101. TRAFFIC SIGNAL WARRANTS WORKSHEET (CALIFORNIA MUTCD 2014 EDITION)

BANDILIER CIRCLE/ELLIS AVENUE – EXISTING CONDITIONS

WARRANT 3 - Peak Hour (Part A or Part B must be satisfied) **SATISFIED** YES NO

PART A **SATISFIED** YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B **SATISFIED** YES NO

APPROACH LANES	One		2 or More		Hour
Both Approaches - Major Street					
Higher Approach - Minor Street					

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OR The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

BANDILIER CIRCLE/ELLIS AVENUE – EXISTING PLUS PROJECT ALT 1 CONDITIONS

WARRANT 3 - Peak Hour (Part A or Part B must be satisfied) **SATISFIED** YES NO

PART A **SATISFIED** YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B **SATISFIED** YES NO

APPROACH LANES	One		2 or More		Hour
Both Approaches - Major Street			X		2410
Higher Approach - Minor Street	X				95

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OR The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

FIGURE 4C-101. TRAFFIC SIGNAL WARRANTS WORKSHEET (CALIFORNIA MUTCD 2014 EDITION)

PACIFIC STREET/ELLIS AVENUE – EXISTING CONDITIONS

WARRANT 3 - Peak Hour SATISFIED YES NO
(Part A or Part B must be satisfied)

PART A SATISFIED YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

PART B SATISFIED YES NO

APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Higher Approach - Minor Street	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/> No <input type="checkbox"/>
<u>OR</u> The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

PACIFIC STREET/ELLIS AVENUE – EXISTING PLUS PROJECT ALT 1 CONDITIONS

WARRANT 3 - Peak Hour SATISFIED YES NO
(Part A or Part B must be satisfied)

PART A SATISFIED YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

PART B SATISFIED YES NO

APPROACH LANES	One	2 or More	PM Hour
Both Approaches - Major Street	<input type="checkbox"/>	X	2487
Higher Approach - Minor Street	X	<input type="checkbox"/>	90

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/> No <input type="checkbox"/>
<u>OR</u> The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

FIGURE 4C-101. TRAFFIC SIGNAL WARRANTS WORKSHEET (CALIFORNIA MUTCD 2014 EDITION)

MT. LANGLEY STREET/ELLIS AVENUE – EXISTING CONDITIONS

WARRANT 3 - Peak Hour (Part A or Part B must be satisfied) SATISFIED YES NO

PART A SATISFIED YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B SATISFIED YES NO

APPROACH LANES	One	2 or More	PM Hour
Both Approaches - Major Street		X	2371
Higher Approach - Minor Street	X		77

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

MT. LANGLEY STREET/ELLIS AVENUE – EXISTING PLUS PROJECT ALT 2 CONDITIONS

WARRANT 3 - Peak Hour (Part A or Part B must be satisfied) SATISFIED YES NO

PART A SATISFIED YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B SATISFIED YES NO

APPROACH LANES	One	2 or More	PM Hour
Both Approaches - Major Street		X	2372
Higher Approach - Minor Street	X		98

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

FIGURE 4C-101. TRAFFIC SIGNAL WARRANTS WORKSHEET (CALIFORNIA MUTCD 2014 EDITION)

BANDILIER CIRCLE/ELLIS AVENUE – EXISTING CONDITIONS

WARRANT 3 - Peak Hour (Part A or Part B must be satisfied) **SATISFIED** YES NO

PART A **SATISFIED** YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B **SATISFIED** YES NO

APPROACH LANES	One		2 or More		Hour
Both Approaches - Major Street					
Higher Approach - Minor Street					

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OR , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

BANDILIER CIRCLE/ELLIS AVENUE – EXISTING PLUS PROJECT ALT 2 CONDITIONS

WARRANT 3 - Peak Hour (Part A or Part B must be satisfied) **SATISFIED** YES NO

PART A **SATISFIED** YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B **SATISFIED** YES NO

APPROACH LANES	One		2 or More		Hour
Both Approaches - Major Street			X		2422
Higher Approach - Minor Street	X				78

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
OR , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

FIGURE 4C-101. TRAFFIC SIGNAL WARRANTS WORKSHEET (CALIFORNIA MUTCD 2014 EDITION)

PACIFIC STREET/ELLIS AVENUE – EXISTING CONDITIONS

WARRANT 3 - Peak Hour (Part A or Part B must be satisfied) **SATISFIED** YES NO

PART A **SATISFIED** YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B **SATISFIED** YES NO

APPROACH LANES	One		2 or More		Hour
Both Approaches - Major Street					
Higher Approach - Minor Street					

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

PACIFIC STREET/ELLIS AVENUE – EXISTING PLUS PROJECT ALT 2 CONDITIONS

WARRANT 3 - Peak Hour (Part A or Part B must be satisfied) **SATISFIED** YES NO

PART A **SATISFIED** YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PART B **SATISFIED** YES NO

APPROACH LANES	One		2 or More		PM Hour
Both Approaches - Major Street			X		2486
Higher Approach - Minor Street	X				86

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

**ADDENDUM
To the
Fountain Valley Crossings Specific Plan**

**California Environmental Quality Act Guidelines
Section 15164
City Council Resolution No. _____**

EXECUTIVE SUMMARY:

This document is an Addendum to the Final Environmental Impact Report (EIR), State Clearinghouse (SCH) No. 2015101042, prepared by the City of Fountain Valley (City) for the Fountain Valley Crossings Specific Plan (FVCSP), approved on January 23, 2018. The Final EIR can be accessed at <https://www.fountainvalley.org/1279/Fountain-Valley-Crossings>

PROJECT:

On January 23, 2018, the Fountain Valley City Council adopted the FVCSP that contains the development regulations for the FVCSP area generally located south of Talbert Avenue, north of Ellis Avenue, east of Ward Street, and west of the Santa Ana River. The FVCSP is divided into the Activity Core Target Area, the Workplace Neighborhood District, the Workplace Gateway District, and the Mixed Industry District.

The Orange County Sanitation District has submitted a request for the development of a three story, 109,914 square foot headquarters building, site improvements, and pedestrian bridge spanning Ellis Avenue. The project site is an approximate 5.2-acre property located east of Bandilier Circle, north of Ellis Avenue, and west of Pacific Street that includes the following existing properties:

- 18484 Bandilier Circle – APN 156-163-06
- 18475 Pacific Street – APN 156-163-08
- 18410 Bandilier Circle – APN 156-163-10
- 18368 Bandilier Circle – APN 156-163-11
- 18429 Pacific Street – APN 156-163-09

The use of the new building will be an administrative office including boardroom facilities for civic events and exhibit/touring facilities for educational functions. This use is classified as a Workplace – Professional Services use in the Mixed Industry District of the FVCSP and is permitted by-right.

The project includes the following entitlement requests that encompass the “Project”:

1. Development Plan Review 20-01:

- Demolition of 5 buildings to allow for the construction of a 109,914 square foot Headquarters Building for the Orange County Sanitation District (OCSD). The building will consist of a civic scaled lobby housing the Board Room/Multipurpose Room, a public exhibit displaying the history and values of OCSD as a kick-off for

public tours and events, and the administrative offices for the sanitation district. The site will include a public entrance plaza, an exhibit plaza, and a private landscaped employee courtyard.

The project includes 261 onsite parking spaces for employees and visitors, a building footprint of 43,100 square feet (19.1% of the property), hardscape totaling 126,600 square feet (55.8% of the property), and landscaping totaling 57,100 square feet (25.1% of the property).

2. Deviations to the FVCSP are permitted in the amount less than 20% of a standard requirement per FVCSP 2.0.5.F including:
 - Deviation 1 – Building Length (Ellis Avenue). FVCSP 2.3.3.B.1 – New buildings shall not exceed the specified maximum length as specified for each District in Section 2.1 – Development Standards.
 - Maximum 200'-0" allowed for Mixed Industry District
 - Designed – 203'-11 ¼" (deviation of 2.0%)
 - Deviation 2 – Street Façade Composition (Pacific Street). FVCSP 2.8.1.B.4.a – At street-facing facades, the proportion of window openings shall be a minimum of twenty (20) percent of the vertical wall area between the ground (finished grade) and the top of the uppermost floor (the percentage does not include parapet height).
 - Required for Mixed Industry District
 - Designed – 18.9% (deviation of 5.5%)
 - Deviation 3 – Parking Count. FVCSP 2.7.1 Provision for Parking requirement of 3.5 min spaces per 1000 GSF to be amended per submitted code amendment request to 2.5 min spaces per 1000 GSF.
 - Deviation request of 14 parking spaces, which is a 5% deviation in required parking spaces.
3. Lot Line Adjustment (LLA) No. 19-01. LLA No. 19-01 was initiated to complete a LLA that was initiated, but never completed, by the previous owner of the properties located at 18484 Bandilier Circle and 18475 Pacific Street. OCSD submitted a request under LLA 19-01 to complete this request so the two properties could be merged into one.
4. Lot Line Adjustment No. 19-02. LLA 19-02 merges of the rest of the parcels in the project (APNs 156-163-06, 156-163-08, 156-163-10, 156-163-11, and 156-163-09) into a single property.
5. Code Amendment No. 20-09 (CA) contains the following changes to the Crossings Specific Plan:
 - Eliminate Section 2.6.2 Special Public Open Space requirement along with all related references to Section 2.6.2 from the FVCSP.

- Amend Table 2.7 Parking Regulations for Workplace – Professional from 3.5 min/4.5 max to 2.5 min/3.5 max.
 - Amend the FVCSP to add “Section 2.5.5. Skyways” that would allow for skyway pedestrian bridges to connect government and quasi-government buildings. In the case of this project, the skyway bridge would connect the project to the OCSD Campus south of Ellis Avenue and the bridge would span over Ellis Avenue.
6. Variance No. 332 (VAR) contains the following differences from the standards of the FVCSP:
- Variance #1 – Frontage Coverage (Pacific Street) seeks variance for a reduction in the minimum amount of required building frontage coverage (FVCSP Section 2.4.6.B.1) along the Pacific Street property line. This is a variance for the reduction in the minimum amount of required building frontage coverage along the Pacific Street property line. The minimum required per the FVCSP is 50% coverage and the proposed design is for 32.2% coverage.
 - Variance #2 – Frontage Coverage (Bandilier Circle) seeks variance for a reduction in the minimum amount of required building frontage coverage (FVCSP Section 2.4.6.B.1) along the Bandilier Circle property line. This is a variance for the reduction in the minimum amount of required building frontage coverage along the Pacific Street property line. The minimum required per the FVCSP is 50% coverage and the proposed design is for 22.8% coverage.
 - Variance #3 – Build-To-Corner (Ellis Avenue/Bandilier Circle) seeks a variance to only be sited within one (1) of the two (2) Build-to-Corner conditions (FVCSP Section 2.4.8.B) present on the project site. This is a variance request to provide a project with the build-to-corner at only one of the front corners of the property (at Ellis Avenue and Pacific Street) and not the other front corner (Ellis Avenue and Bandilier Circle).
 - Variance #4 – Parking Count (NOT USED- WITHDRAWN)
 - Variance #5 – Curb Cuts & Driveways (Pacific Street) seeks a variance to permit a second two-lane curb cut along the Pacific Street frontage (FVCSP Section 2.7.3.A.2.a). Per the FVCSP, the maximum number of driveways/curb cuts associated with a single building are one (1) two-lane curb cut or two (2) one-lane curb cuts per street frontage. The project will provide two two-lane curb cuts on Pacific Street.
 - Variance #6 – Street Façade Base (Pacific Street) seeks a variance for a noncompliance for the Pacific Street base façade requirement (FVCSP Section 2.8.1.B.2.a.ii). The FVCSP requires a substantial horizontal articulation at the base of the street and public space facades shall be applied to form a base treatment on buildings between

the finish grade the top of the first floor. The project will not comply with this development standard.

- Variance #7 – Street Façade Base (Ellis Avenue) seeks a variance for a noncompliance for the Ellis Avenue street base façade requirement (FVCSP Section 2.8.1.B.2.a.ii). The FVCSP requires a substantial horizontal articulation at the base of the street and public space facades shall be applied to form a base treatment on buildings between the finish grade the top of the first floor. The project will not comply with this development standard.
- Variance #8 – Street Façade Base (Bandilier Circle) seeks a variance for a non-compliance for the Bandilier Circle street base façade requirement (FVCSP Section 2.8.1.B.2.a.ii). The FVCSP requires a substantial horizontal articulation at the base of the street and public space facades shall be applied to form a base treatment on buildings between the finish grade the top of the first floor. The project will not comply with this development standard.
- Variance #9 – Street Façade Top (Pacific Street, Bandilier Circle and Ellis Avenue – Board Room Volume, Ellis Avenue) seeks a variance for a noncompliance for the Pacific Street, Bandilier Circle and Ellis Avenue street façade top requirement (FVCSP Section 2.8.1.B.3.a.). The FVCSP requires a substantial horizontal articulation of street and public space facades shall be applied at the top of the uppermost floor of the façade to form a façade top treatment on buildings. The project's Board Room will not comply with this development standard.
- Variance #10 –Street Façade Wall Composition on Bandilier Circle (FVCSP Section 2.8.1.B.4) seeks a variance for a reduction in the minimum percentage of window openings within the Bandilier Circle street-facing façade (FVCSP Section 2.8.1.B.4.a). The FVCSP requires that the proportion of window openings at street-facing facades to be a minimum of twenty (20) percent of the vertical wall area between the ground (finished grade) and the top of the uppermost floor (the percentage does not include parapet height). The project will provide 11.7% window openings along Bandilier Circle.

7. Development Agreement between the Orange County Sanitation District and the City of Fountain Valley:

- Development Agreement will reimburse the City for the loss of local property tax revenues that will create a burden upon the delivery of local municipal services to the project and services required by the proposed development that are not otherwise being reimbursed by the City.

- The Development Agreement also includes the pedestrian bridge, which is a painted steel open-air structure spanning Ellis Avenue from the new building to inside the secure perimeter of Plant 1 to provide a safe pathway for employees, guided tour visitors, and select utilities to cross Ellis Avenue. The plant side bridge landing will include stairs and an elevator.

8. Vacation of Easement:

- The proposed vacation of easement is for a remnant street easement located between Parcel 5 (APN 156-163-11), Parcel 6 (APN 156-163-10), and Parcel 9 (APN 156-163-09 located near the end of the cul-de-sac of Bandilier Circle.

PURPOSE OF ADDENDUM:

In accordance with the California Environmental Quality Act (CEQA) and Section 15164 of the CEQA Guidelines, an Addendum to a certified EIR may be prepared if only minor technical changes or additions are necessary or none of the conditions described in CEQA Guidelines Section 15162 calling for the preparation of a subsequent EIR have occurred.

CEQA Section 16164. ADDENDUM TO AN EIR OR NEGATIVE DECLARATION

- (a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.
- (b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.
- (c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.
- (d) The decision making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.
- (e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

The City of Fountain Valley has evaluated the potential environmental impacts of the proposed modifications as set forth below. The City, acting as the Lead Agency, has determined that none of the CEQA conditions listed above apply and that this Addendum to the adopted Final EIR is the appropriate environmental documentation for the proposed modifications and fully complies with CEQA, as described in the CEQA Guidelines. An addendum does not need to be circulated for public review, but rather can be attached to

the Final EIR (CEQA Guidelines §15164(c)). Prior to initiating the modified Project, the City will consider this Addendum together with the adopted Final EIR and will make a decision regarding the modified Project [CEQA Guidelines §15164(d)]

ENVIRONMENTAL ANALYSIS:

The California Environmental Quality Act (CEQA) requires an EIR analysis to “identify and focus on the significant environmental effects of a proposed project” (CEQA Guidelines, §15126.2(a) and Public Resources Code Section 21000(a). The emphasis of the EIR should be placed on the potential “physical” adverse effects of a proposed project.

CEQA Guidelines §15360 defines “environment” as the physical conditions that exist within the area that will be affected by a proposed project including, but not limited to, land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The guidelines further define the area involved as the area in which significant effects would occur either directly or indirectly as a result of the project. The “environment” includes both natural and human-made conditions.

CEQA Guidelines §15382 further clarifies the definition of “significant effect on the environment” as a substantial, or potential substantial, adverse change in any of the physical conditions within the area affected by the project. An economic or social change by itself shall not be considered a significant effect on the environment. However, that economic or social change that may have a physical impact (such as urban decay) should be considered in an EIR (Bakersfield Citizens for Local Control v. City of Bakersfield (2004) 124 Cal.App.4th 1184).

For each impact section, thresholds for determining impact significance are identified along with descriptions of methodologies used to conduct the impact analysis. Determinations of impact significance levels in the EIR are made based on City impact significance guidelines and criteria for each impact topic, including Appendix G of the CEQA Guidelines. For some resource areas, such as air quality, transportation, and noise, the analysis of impacts are more quantitative in nature and involve the comparison of effects against a numerical threshold. For other resource areas, such as aesthetics and visual resources and land use, the analyses of impacts are inherently more qualitative, involving the consideration of a variety of factors, such as City policies.

The EIR impact discussions classify impact significance levels as:

1. **Significant and Unavoidable** - a significant impact to the environment that remains significant even after mitigation measures are applied;
2. **Less Than Significant with Mitigation** - a significant impact that can be avoided or reduced to a less than significant level with mitigation;
3. **Less Than Significant** - a potential impact that would not meet or exceed the identified thresholds of significance for the resource area;

4. **No Impact** – no impact would occur for the resource area; and
5. **Beneficial** – a potential impact that would improve the resource area.

The following environmental impact topics were originally analyzed in the Final EIR for the FVSP adopted by the City Council on January 23, 2018. As outlined below, as well as outlined in the attached Initial Study (Exhibit 1) to this Addendum to the FVCSP EIR, the proposed changes to the FVCSP will have **No Impact** on any identified environmental impacts.

AESTHETICS:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Aesthetics, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

The proposed project includes the construction of a 109,914 square foot Headquarters building for the Orange County Sanitation District (OCSD) located within the Mixed Industry District of the FVCSP. The project will consist of a civic scaled lobby housing the Board Room/Multipurpose Room, a public exhibit displaying the history and values of OCSD as a kick-off for public tours and events, and the administrative offices for the sanitation district. The site will include a public entrance plaza, an exhibit plaza, and a private landscaped employee courtyard.

The FVCSP includes development standards and design guidelines to ensure that future projects develop structures that would maintain and enhance the area's visual character. The design of the project, with approval of the requested entitlements listed above under Project, complies with the Development Standards of the Mixed Industry District and Section 2.8, Architectural Regulations, of the FVCSP. In addition, the Project would comply with many development standards outlined in Section 2.1.5 of the Specific Plan, which includes regulations pertaining to building scale, mass, placement, and architectural guidelines. At three stories in height, the Project would be consistent with development standards outlined in the Specific Plan, which allows up to four stories in height. The proposed Project would require variances, deviations, and code amendments to the Specific Plan as noted above under Project. The proposed Project would comply with all other development standards outlined in 2.1.5 of the Specific Plan. Therefore, with the approval of the above variances, deviations, and code amendments to the Specific Plan, the proposed Project would result in less than significant impacts related to the visual character of the site and views of the site.

The building would be designed to achieve United States Green Building Council Leadership in Energy and Environmental Design (LEED) Platinum Certification. In addition, similar to the Hyundai headquarters building on the north side of the 405 Freeway, the proposed project will allow a signature building in the City and one befitting one of Orange County's critical infrastructure operations and the future direction of the FVCSP.

The Project site does not have views of any scenic vistas and would not result in adverse impacts on scenic resources such as historic structures or mature landscaping. The proposed bridge spanning over Ellis Avenue would connect to the second-floor level of the new administration building on the north side of Ellis Avenue and then connect to an elevator tower inside the secure perimeter of Plant No. 1. The proposed bridge will provide lighting at an average illuminance of 6.3 footcandles (fc) when the lights are on a full output. The lighting design of the pedestrian bridge will provide the necessary light levels for safe egress to and from the bridge while also minimizing glare to the oncoming traffic. The luminaries on the pedestrian bridge will provide precise optics which reduce glare to a glare rating of 0 according to the Illuminating Engineering Society (IES) of North America. Additionally, the luminaires are dimmable so the light level can be adjusted to respond to the specific conditions in the immediate surroundings throughout the year. Lastly, the luminaires will be placed in the center of the bridge ceiling to provide light to the pedestrian bridge pathway. Because of this, and because the luminaire's light source is recessed up in the luminaire housing, there will be very limited view of the luminaire lens by passing cars and very little light will transmit from the bridge down onto the road surface. The pedestrian bridge would be designed architecturally similarly to the administration building. As such, the visual character of the site and views of the Project site from off-site areas would substantially change with implementation of the proposed Project. However, the Project would enhance the character and quality of the Project site and surrounding area by introducing updated buildings in place of the dated structures.

Mitigation Measures

The Specific Plan EIR does not include mitigation related to Aesthetics. No mitigation would be required for the proposed Project.

AGRICULTURE AND FORESTRY RESOURCES:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Agricultural and Forestry Resources, and there is no increase in the severity of impacts described in the Specific Plan EIR. The Project site does not contain agricultural or forestry resources and the developed nature of the Specific Plan area, including the Project site and Project vicinity, does not make the area suitable for future agricultural or forest land uses.

Mitigation Measures

The Specific Plan EIR does not include mitigation related to agricultural and forestry resources. No mitigation would be required for the proposed Project.

AIR QUALITY:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR.

Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measure that is applicable to the proposed Project is listed below. Potential Project impacts related to Air Quality would be reduced below a level of significance with implementation of the applicable mitigation measures.

The certified FVCSP Final EIR accounted for short-term construction impacts. When the EIR was evaluated against South Coast Air Quality Management District's (SCAQMD's) project-level thresholds, both the construction and operational emissions of land use changes anticipated to occur would not exceed SCAQMD's project-specific thresholds. The impact was determined to be less than significant in the EIR. The proposed Project does not propose to allow for any additional housing units nor will it allow for any larger non-residential projects previously analyzed in the EIR. Therefore, the Project would not create new or additional impacts to air or change the analysis and conclusions provided in the Final EIR.

Mitigation Measures

Based on the analysis contained in the Initial Study/Addendum, Mitigation Measure MM AQ-5c, included in the Specific Plan EIR, would be applicable to the proposed Project. No additional mitigation measures related to air quality beyond those identified in the Specific Plan EIR are required.

MM AQ-5c Placement of Air System Intake. When considering placement and direction of air intakes, the direction of prevailing winds shall be considered and the most logical decision shall be made. Design of the proposed development shall face air systems intakes appropriately, so as to reduce highly concentrated air pollution intake, considering placement on the opposite side of the building from the pollutant source. Development and heating, ventilation, and air conditioning (HVAC) system design shall be reviewed and approved by the City Planning and Building Department prior to issuance of a building permit. Monitoring and maintenance of HVAC systems and air intakes shall be conducted by the Applicant on a semiannual basis to ensure efficiency of the systems for development permits involving land uses that include or potentially affect sensitive populations.

BIOLOGICAL RESOURCES:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Biological Resources, and there is no increase in the severity of impacts described in the Specific Plan EIR.

The Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. The Project does not contain nor will it impact sensitive species or habitats. No federally protected wetlands would be affected by the proposed Project. The proposed Project site is not located in a migratory wildlife corridor or native wildlife nursery site. The proposed Project would also incorporate and be consistent with existing policies regarding the protection of biological resources and would therefore not result in new significant impacts beyond those identified in the Specific Plan EIR. Chapter 12.04.040 of the Fountain Valley Municipal Code (FVMC) requires that no person or development shall engage in the planting, trimming, cutting, or removal of any vegetation along any streets, parkways, or public spaces without prior approval from the City's Public Works Department. The proposed Project would comply with all City policies and regulations protecting biological resources.

Mitigation Measures

The Specific Plan EIR does not include mitigation related to Biological Resources. No mitigation would be required for the proposed Project.

CULTURAL RESOURCES:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Cultural Resources, and there is no increase in the severity of impacts described in the Specific Plan EIR.

The Specific Plan EIR determined that redevelopment activities associated with implementation of the Specific Plan would occur in previously disturbed areas, so it is unlikely that cultural resources would be encountered. No known human remains are interred on the Project site. Due to the level of past disturbance on the Project site, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during earth removal or disturbance activities. In the unlikely event that human remains are encountered during Project grading, the proper authorities would be notified and standard procedures for the respectful handling of human remains during the earthmoving activities would be adhered to in compliance with State Health and Safety Code Section 7050.5 and Public Resources Code (PRC) Section 5097.98.

Mitigation Measures

The Specific Plan EIR does not include mitigation related to cultural resources. No mitigation would be required for the proposed Project.

ENERGY CONSERVATION:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Energy Conservation, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

The proposed Project would not increase electricity or natural gas demand beyond the demand identified in the Specific Plan EIR. In fact, the electricity demand for the proposed Project would be less than the electricity demand evaluated in the Specific Plan EIR. The proposed Project would implement an energy-efficient design and sustainable development, and would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. The proposed Project would be required to comply with City-adopted codes and regulations governing energy-efficient design and sustainable development. In addition, the proposed Project would be designed to achieve LEED Platinum Certification, which would increase energy efficiency and conservation, and reduce wasteful use of energy resources. Therefore, the proposed Project would not conflict with existing energy standards and no impact would result from Project implementation.

Mitigation Measures

The Specific Plan EIR does not include mitigation related to energy conservation. No mitigation would be required for the proposed Project.

GEOLOGY AND SOILS:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Geology and Soils, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

The proposed Project does not propose to allow for any additional housing units nor will it allow for any larger non-residential projects previously analyzed in the EIR. No mitigation measures were required as indicated in the FVCSP EIR for geology and soils. Therefore, no new significant construction impacts affecting geology and soils would occur as a result of the proposed Project.

The proposed Project would comply with the California Building Code (CBC) requirements and recommendations of the geotechnical report and would, therefore, not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. There are no substantial hillsides or unstable slopes on the Project site; therefore, there is no potential for landslide hazards. The Project is located in the City of Fountain Valley and is therefore mapped as susceptible to subsidence and liquefaction. A site-specific geotechnical report will be prepared for the Project site to identify any geologic conditions that could affect the Project. The geotechnical

report will include recommendations to address effects related to or resulting from any identified geologic conditions. In addition, the Project design will comply with the design requirements of the CBC to address any potential for unstable geologic units or unstable soils that are identified in the geotechnical report. Compliance with the design requirements of the CBC and implementation of the recommendations of the geotechnical report would ensure that impacts related to unstable geologic units or soils would be less than significant.

Mitigation Measures

The Specific Plan EIR does not include mitigation related to Geology and Soils. No mitigation would be required for the proposed Project.

GREENHOUSE GAS EMISSIONS:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Greenhouse Gas (GHG) Emissions, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

The FVCSP EIR concluded that buildout per the adopted FVCSP would not conflict with any applicable plan, policy, or regulation pertaining to GHGs, and the impact would be less than significant. The proposed Project does not propose to allow for any additional housing units nor will it allow for any larger non-residential projects previously analyzed in the EIR. Therefore, the Project would not create new or additional impacts to GHGs or change the analysis and conclusions provided in the Final EIR.

The proposed Project involves the demolition of five existing buildings totaling 114,744 sf, and the development of an Administrative Headquarters Building totaling 109,914 sf. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels would create GHGs such as CO₂, CH₄, and N₂O. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. Annual emissions amortized over the 30-year life of the proposed Project would be substantially below the estimates for the Specific Plan. Therefore, construction of the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant Impacts.

The proposed Project, which is designed to achieve LEED Platinum Certification and would not conflict with any applicable plan, policy, or regulation pertaining to GHGs, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts.

The proposed Project would not generate any additional VMT as compared to existing conditions because OCSD would not increase the number of employees or hire additional staff for the proposed Administrative Headquarters Building. The proposed Project would relocate 228 existing employees from Plant No. 1 to the new HQ building directly across Ellis Avenue. In addition, the proposed Project is in the same VMT zone as Plant No. 1. Therefore, vehicle trips would be redistributed from south of Ellis Avenue to north of Ellis Avenue. In addition, the Project site is an infill location. Therefore, the proposed Project would not conflict with any applicable plan, policy, or regulation pertaining to GHGs, and the impact would remain less than significant.

Mitigation Measures

The Specific Plan EIR does not include mitigation related to GHG emissions. No mitigation would be required for the proposed Project.

HAZARDS AND HAZARDOUS MATERIALS:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measure that is applicable to the proposed Project is listed below. Potential Project impacts related to Hazards and Hazardous Materials would be reduced below a level of significance with implementation of the applicable mitigation measures.

The Specific Plan EIR included Mitigation Measure MM HAZ-1, which requires each development and redevelopment Project to prepare a Phase I Environmental Site Assessment (Phase I ESA) and/or additional technical investigations prior to demolition activities. The Phase I ESA would disclose the presence of hazards and hazardous materials and would require all applicable procedures related to the treatment, handling, and disposal of all hazardous materials to ensure public safety to be followed. The Phase I Environmental Site Assessment (ESA) prepared for the Project site did not identify any recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), or historical recognized environmental conditions (HRECs) in connection with the Project site, and no further investigation or remediation was recommended. Compliance with existing regulations and MM HAZ-1 would ensure that potential impacts related to hazardous materials sites would be less than significant.

Construction activities associated with the proposed Project would use a limited amount of hazardous and flammable substances/oils during heavy equipment operation for site excavation, grading, and construction. The proposed Project would also comply with existing regulations governing the transport, use, and disposal of hazardous materials. The amount of hazardous chemicals present during construction is limited and would be used in compliance with existing government regulations. The potential for the release of hazardous materials during Project construction is low, and even if a release would occur, it would not

result in a significant hazard to the public, surrounding land uses, or environment due to the small quantities of these materials associated with construction vehicles. In addition, I-405 in the vicinity of the Project site is designated as a route upon which hazardous materials may be transported. However, the proposed Project would not involve the routine transportation of hazardous materials. The proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Mitigation Measures

Based on the analysis and information above, Mitigation Measure MM HAZ-1 included in the Specific Plan EIR, would be applicable to the proposed Project. No additional mitigation measures related to hazards and hazardous materials beyond those identified in the Specific Plan EIR are required.

MM HAZ-1 Phase I ESA. Prior to demolition of a building or structure and/or excavation of subsurface improvements, Project applicants of site-specific development Projects in the Project area shall prepare a Phase I ESA. Consistent with local, state, and federal regulations, the Phase I ESA shall be subject to City review and address the following:

- **ACM, LBP, and PCBs.** Prior to the issuance of any demolition or excavation permit, the Applicant shall conduct a comprehensive survey of ACM, LBP, and PCBs. If such hazardous materials are found to be present, the Applicant shall follow all applicable local, state, and federal codes and regulations, as well as applicable best management practices, related to the treatment, handling, and disposal of ACM, LBP, and PCBs to ensure public safety.
- **Potential On-Site Hazardous Materials or Conditions.** A visual survey and reconnaissance-level investigation of the existing site shall be conducted to determine if there are any structures or features within or near the buildings that are used to store, contain, or dispose of hazardous materials or waste. For any development within the Project area that has not been subject to a Phase I ESA or successful remediation efforts in the past, a Phase I ESA shall be performed to determine the likelihood of contaminants in areas beyond what has already been assessed in accordance with USEPA ASTM Practice E 1527-05 as may be amended. If the Phase I ESA finds that contaminated soil or other hazardous materials or waste are suspected to be present within the area, the Applicant shall follow all applicable local, state and federal codes and regulations, as well as applicable best management practices, related to the treatment, handling, and disposal of each hazardous material or waste.

HYDROLOGY AND WATER QUALITY:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Hydrology and Water Quality and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

The proposed Project would comply with existing regulations and would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. With adherence to existing water quality regulations, including the Construction General Permit and County Municipal National Pollution Discharge Elimination System (NPDES) Stormwater Permit, which includes implementation of construction and operational BMP's, impacts associated with water quality standards, waste discharge requirements during construction and operation, and degradation of water quality during construction and operation would be less than significant.

The proposed Project does not propose to allow for any additional housing units nor will it allow for any larger non-residential projects previously analyzed in the EIR. No mitigation measures were required as indicated in the FVCSP EIR. Therefore, no new significant construction impacts affecting hydrology and water quality would occur as a result of the proposed Project.

Mitigation Measures

The Specific Plan EIR does not include mitigation related to Hydrology and Water Quality. No additional mitigation measures would be required for the proposed Project.

LAND USE AND PLANNING:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Land Use and Planning, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measures that are applicable to the proposed Project are listed in in the Noise and Transportation/Traffic Sections of the attached Initial Study and this Addendum to the FVCSP EIR. Potential Project impacts related to Land Use and Planning would be reduced below a level of significance with implementation of the applicable mitigation measures.

The use of the new building will be an administrative office including boardroom facilities for civic events and exhibit/touring facilities for educational functions. This use is classified as a Workplace – Professional Services use in the Mixed Industry District of the FVCSP and is permitted by-right.

The Project site is currently developed with five existing industrial warehouse buildings. The proposed Project includes demolition of the five existing industrial warehouse buildings and construction and operation of a new three-story administration building, surface parking lot, and site landscaping, in a fully developed part of the City of Fountain Valley. In addition, a pedestrian bridge would extend from the Project site to OCSD's Plant No. 1, directly south of Ellis Avenue. The pedestrian bridge would connect the proposed Project with the existing OCSD site and would not impact transportation facilities on Ellis Avenue. The proposed Project would include access to/from the Project site via driveways, as well as pedestrian and bicycle access to/from the Project site via sidewalks along the site's eastern, western, and southern boundaries, which are already developed. As a result, the proposed Project would not result in physical divisions in any established community.

The proposed Project would be consistent with all locally adopted land use plans, policies, and regulations, including most development standards outlined in the Specific Plan. The proposed Project would require the following variances, deviations, and code amendments to the Specific Plan:

- Variance 1 – Frontage Coverage (Pacific Street)
- Variance 2 – Frontage Coverage (Bandilier Circle)
- Variance 3 – Build-to-Corner (Ellis Avenue/Bandilier Circle)
- Variance 4 – Parking Count (Not Used)

- Variance 5 – Curb Cuts & Driveways (Pacific Street)
- Variance 6 – Street Façade Base (Pacific Street)
- Variance 7 – Street Façade Base (Ellis Avenue)
- Variance 8 – Street Façade Base (Bandilier Circle)
- Variance 9 – Street Façade Top (Pacific Street, Bandilier Circle and Ellis Avenue – Board Room Volume, Ellis Avenue)
- Variance 10 – Street Façade Wall Composition on Bandilier Circle
- Deviation 1 – Building Length (Ellis Avenue)
- Deviation 2 – Street Façade Composition (Pacific Street)
- Deviation 3 – Parking Count
- Code Amendment 1 – Amendment to permit the use of skyways to connect government buildings
- Code Amendment 2 – Amendment to change the minimum parking standard for the Workplace-Professional use type from 3.5 spaces per 1,000 sf to 2.5 spaces per 1,000 sf
- Code Amendment 3 – Amendment to eliminate the requirement for Special Public Open Space

As listed above, the proposed Project would require a code amendment to the Specific Plan to permit the use of skyways to connect government buildings. With the approval of this code amendment, the proposed pedestrian bridge would be allowed by the Specific Plan.

The development standards outlined in the Specific Plan require 3.5 parking spaces per 1,000 sf of building area; however, per Section 21.22.040 of the FVMC, office uses require 2.5 parking spaces per 1,000 sf of building area. The proposed 261 parking spaces are non-compliant with the existing Specific Plan, which requires 365 parking spaces, but are compliant with the FVMC. The proposed Project would require approval of a deviation to address the reduced parking.

The proposed Project also includes an amendment to the Specific Plan to change the minimum parking standard for the Workplace-Professional use type from 3.5 spaces per 1,000 sf to 2.5 spaces per 1,000 sf. This amendment would make the Specific Plan consistent with the FVMC parking requirements for office uses. With approval of the code amendment and a 5% deviation to the amended parking requirement, the proposed Project would be consistent with the parking requirements of the FVCSP.

The proposed Project would also require a code amendment to the FVCSP to eliminate the requirement for Special Public Open Space. With the approval of this code amendment, the requirement for Public Open Space would be eliminated and the proposed Project would be consistent with the Specific Plan.

The proposed Project would comply with all other development standards outlined in 2.1.5 of the Specific Plan. Therefore, with the approval of the above variances, deviations, and code amendments to the Specific Plan, the proposed Project would be consistent with development standards outlined in the Specific Plan.

Mitigation Measures

Based on the analysis and information above, Mitigation Measures MM N-1, MM T-1, MM T-2a through b, and MM T-7 (refer to Noise and Transportation/Traffic Sections) shall apply, are included in the Specific Plan EIR, and would be applicable to the proposed Project.

MINERAL RESOURCES:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Mineral Resources, and there is no increase in the severity of impacts described in the Specific Plan EIR.

The proposed Project site does not contain any known commercially valuable mineral resource. No impacts to known mineral resources would occur as a result of the proposed Project.

Mitigation Measures

The Specific Plan EIR does not include mitigation related to mineral resources. No additional mitigation measures would be required for the proposed Project.

NOISE:

Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Noise, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

. Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measure that is applicable to the proposed Project is listed below. Potential Project impacts related to Noise would be reduced below a level of significance with implementation of the applicable mitigation measures.

Cumulative projects in the area would contribute to increased traffic and related noise levels, primarily on arterials and major roadways; however, future development would require City planning review to ensure compliance with City noise policies and regulations. The mitigation measure below requires a construction noise management plan as well as compliance with Section 6.28.070 of the FVMC. The proposed Project will not result in any new or additional impacts to noise, or change the analysis and conclusions in the Final EIR.

Mitigation Measures

Based on the analysis and information above, Mitigation Measure MM N-1 included in the Specific Plan EIR would be applicable to the proposed Project.

MM N-1 Construction Noise Management Plan. A Construction Noise Management Plan shall be prepared by the Applicant and approved by the City prior to Grading Permit issuance. The Plan would address noise and vibration impacts and outline measures that would be used to reduce impacts. Measures would include but not be limited to:

- To the extent that they exceed the applicable construction noise limits, excavation, foundation-laying, and conditioning activities shall be restricted to between the hours of 7:00 a.m. and 8:00 p.m. Monday through Friday, and 9:00 a.m. and 8:00 p.m. Saturdays, in accordance with Section 6.28.070 of the FVMC.
- The Applicant's construction contracts shall require implementation of the following construction best management practices (BMPs) by all construction contractors and subcontractors working in or around the Project area to reduce construction noise levels:

- o The Applicant and its contractors and subcontractors shall ensure that all construction equipment, fixed or mobile, is properly muffled according to manufacturer's specifications or as required by the City's Building and Safety Division, whichever is the more stringent.
- o The Applicant and its contractors and subcontractors shall place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible, to the satisfaction of the Building and Safety Division.
- o The Applicant and its contractors and subcontractors shall implement noise attenuation measures which may include, but are not limited to, noise barriers or noise blankets to the satisfaction of the City's Building and Safety Division.
- The Applicant's contracts with its construction contractors and subcontractors shall include the requirement that construction staging areas, construction worker parking, and the operation of earthmoving equipment within the Project area, are located as far away from vibration- and noise-sensitive sites as possible. Contract provisions incorporating the above requirements shall be included as part of the Project's construction documents, which shall be reviewed and approved by the City.
- The Applicant shall require by contract specifications that heavily loaded trucks used during construction shall be routed away from residential streets to the extent possible. Contract specifications shall be included in the proposed Project's construction documents, which shall be reviewed by the City prior to issuance of a grading permit.
- Property owners and occupants located within 500 feet of the boundary of a construction Project occurring under the Specific Plan shall be sent a notice, at least 15 days prior to commencement of construction of each phase, regarding the construction schedule of the Project. A sign, legible at a distance of 50 feet, shall be posted at the construction site. All notices and signs shall be reviewed and approved by the City prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number where residents can inquire about the construction process and register complaints.

POPULATION AND HOUSING:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Population and Housing, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

The proposed Project would not displace any existing housing, and there are no existing or proposed residential uses on the Project site. Therefore, there would be no impacts related to the displacement of substantial numbers of housing.

Mitigation Measures

The Specific Plan EIR does not include mitigation related to population and housing. No additional mitigation measures would be required for the proposed Project.

PUBLIC SERVICES:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Public Services, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

The Specific Plan EIR concluded that an increase in the number of residents and employees generated by Specific Plan buildout would not be expected to significantly decrease adequate service levels or response times. Based on City growth Projections, the Fountain Valley Police Department (FVPD) does not currently anticipate the need for additional resources, and therefore, potential impacts to police services are considered less than significant.

The Project may result in limited effects on fire services during the construction period but these effects would be temporary in nature and would cease following completion. The new development proposed as part of the Project would not represent a net increase in businesses or jobs because the administrative use would provide work space for existing OCSD personnel currently located at OCSD's Plant No. 1, which is directly across Ellis Avenue from the Project site. Consequently, operation of the administration building would not result in increased demand for fire services in the Project vicinity compared to existing conditions. Further, the Project would be required to comply with building code requirements related to fire protection and prevention (e.g., installation of fire sprinklers, fire hydrant spacing, and minimum water pressure requirements). Therefore, the proposed Project would result in less than significant impacts to fire protection services.

The FVPD is responsible for the prevention, detection, and investigation of crime in the City. Construction and operation of the proposed Project may result in increased demand for police protection services. Although the Project site would be fenced during construction, construction activities may result in temporary effects on police services, including any potential calls for service FVPD may receive regarding conditions at the Project site. The new development proposed as part of the Project would not represent a net increase in businesses or jobs because the administrative use would provide work space for existing OCSD personnel currently working on the OCSD Plant No. 1 site. In addition, the proposed Project would install security lighting consistent with City requirements. The proposed Project also includes the installation on on-site security cameras and emergency call-boxes in the parking

lot. Further, the Project site would be patrolled by OCSD's security team. Consequently, operation of the administration building would not result in increased demand for police services in the Project vicinity compared to existing conditions. Therefore, the Project would not result in adverse impacts to police services.

The proposed Project does not include any residential uses and, as such, would not induce population growth that would generate an increased demand for schools. The proposed Project would not impact parks or libraries because it would not result in a substantial increase in population. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts.

The Project will also require the approval of a Development Agreement since OCSD is a government agency and is therefore exempt from paying property tax. Property tax exemptions result in a loss of local property tax revenues, require the community to subsidize its public services, and create a burden upon the delivery of local municipal services to the project. The Development Agreement will reimburse the City for the loss of local property tax revenues that will create a burden upon the delivery of municipal services to the project and services required by the proposed development that are not otherwise being reimbursed by the City.

Mitigation Measures

The Specific Plan EIR does not include mitigation related to public services. No additional mitigation measures would be required for the proposed Project.

RECREATION:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Recreation, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

The proposed Project would not impact parks and recreational facilities because it would not result in an increase in population. Also, the proposed Project would not include recreational facilities or require the construction or expansion of recreational facilities. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts.

Mitigation Measures

The Specific Plan EIR does not include mitigation related to recreation. No additional mitigation measures would be required for the proposed Project.

TRANSPORTATION/TRAFFIC:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Transportation/Traffic, and there is not substantial increase in the severity of impacts described in the Specific Plan EIR.

Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measure that is applicable to the proposed Project is listed below. The potential Project impact related to Transportation/Traffic would be reduced below a level of significance with implementation of applicable the mitigation measure from the Specific Plan EIR. The proposed Project would not contribute to the significant unavoidable impacts identified in the Specific Plan EIR.

As indicated in the FVCSP EIR, build-out associated with the proposed Specific Plan would include up to 785,532 square feet of new office floor area, 134,010 square feet of new retail floor area, and up to 491 residential units projected to occur through 2035. The proposed project will demolish 114,744 square feet of existing industrial space and replace it with 109,914 square feet of new office space.

As OCSD staff are relocating across Ellis Avenue, the proposed Project would not add additional traffic trips to the circulation system, and would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation measures are required. The proposed Project will consolidate the six existing driveways on the project frontage of Bandilier Circle into one driveway (providing access to employee and public parking) and consolidate the five existing driveways on Pacific Street into two driveways (one for bus and large vehicle access and one for employee and public parking). Consolidation of the driveways along both streets will remove turning-movement conflicts as a result of driveways currently being spaced too closely.

Additionally, a traffic signal may be installed in the future at the intersection of Bandilier Circle and Ellis Avenue or at the intersection of Mt. Langley Street and Ellis Avenue but it is not part of the proposed Project. The Traffic Analysis prepared for the proposed Project assumed two different design concepts. The first design concept (referred to as Alternative 1) does not include a parking lot connection from the Project site to the adjacent property located at 18350 Mt. Langley Street, and a traffic signal is recommended at the intersection of Bandilier Circle and Ellis Avenue. The second design concept (referred to as Alternative 2) includes a parking lot connection from the Project site to the adjacent property located at 18350 Mt. Langley Street, and a traffic signal is recommended at the intersection of Mt. Langley Street and Ellis Avenue. The need for the installation of a traffic signal at any intersection would ultimately be determined by the City. Design of the Project, including the driveway consolidation and a potential new signal, would be subject to review by the City's Department of Public Works for compliance with City regulations.

The Specific Plan EIR concluded that the implementation of the Specific Plan would have a less than significant impact on parking capacity. With approval of the proposed code amendment and parking deviation as outlined above under Project, the project will also be consistent with the FVCSP and would have a less than significant impact on parking capacity.

The Specific Plan EIR concluded that implementation of the Specific Plan would not substantially disrupt alternative transportation, and impacts would be less than significant. The proposed Project is consistent with existing and planned pedestrian, bicycle, and transit facilities, would, therefore, not result in new significant impacts beyond those identified in the Specific Plan EIR.

Pedestrian access to the Project site will be possible by existing sidewalks on Ellis Avenue, Bandilier Circle, and Pacific Street that will be expanded to 8 feet wide. The proposed Project will provide direct pedestrian access between the existing OCSD Plant No. 1 and the Project site via the proposed pedestrian bridge.

There are no designated bicycle routes in the City's Bicycle Master Plan adjacent to the Project site; however, bicyclists may share the roadway with vehicles on Ellis Avenue in order to reach the Class II Bike Path network via Ward Street and Ellis Avenue west of Ward Street. In addition, bicyclists may share the roadway with vehicles up to Talbert Avenue to reach the Class I Santa Ana River Trail. The proposed Project does not alter the existing roadways and would not conflict with this planned project.

OCTA operates Bus Line 37 with stops along Ellis Avenue in the Project vicinity. Employees are able to utilize the Bus Line 37 service to access the existing OCSD Plant No. 1 site and the proposed Project site. As the proposed Project would not increase the number of employees, no new transit trips are anticipated to be generated.

Since the Project is consistent with existing and planned pedestrian, bicycle, and transit facilities, implementation of the proposed Project would not conflict with any alternative transportation routes, including pedestrian, bicycle and transit facilities. Impacts would be less than significant.

Mitigation Measures

Based on the analysis and information above, the mitigation measures below from the Specific Plan EIR would be applicable to the proposed Project. No additional mitigation measures related to transportation/traffic beyond those identified in the Specific Plan EIR are required.

MM T-1 Construction Impact Mitigation Plan. Future development occurring under the proposed Fountain Valley Crossings Specific Plan shall be required to prepare a Construction Impact Mitigation Plan for review and approval prior to issuance of a grading or building permit to address and manage traffic during construction and shall be designed to:

- Prevent traffic impacts on the surrounding roadway network;

- Minimize parking impacts both to public parking and access to private parking to the greatest extent practicable;
- Ensure safety for both those constructing the Project and the surrounding community; and
- Prevent substantial truck traffic through residential neighborhoods.

The Construction Impact Mitigation Plan shall be subject to review and approval by the following City departments: Planning & Building, Public Works, and Police to ensure that the Construction Impact Mitigation Plan has been designed in accordance with this mitigation measure. Additionally, the plan shall be prepared and implemented in coordination with any affected agencies such as OCTA and Caltrans. The review of the plan shall occur prior to issuance of grading or building permits. It shall, at a minimum, include the following:

Ongoing Requirements throughout the Duration of Construction.

- A detailed Construction Impact Mitigation Plan for work zones shall be maintained. At a minimum, this shall include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, bicycle lanes, and parking lanes. The Construction Impact Mitigation Plan shall include specific information regarding the Project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions. Such plans shall be reviewed and approved by the Planning & Building and Public Works Departments prior to commencement of construction and implemented in accordance with this approval.
- Work within the public right-of-way, deliveries, haul trips, and construction employee trips shall be performed during off-peak vehicular traffic hours. No construction work would be permitted on Sundays and national holidays that City offices are closed. Construction work includes, but is not limited to dirt and demolition material hauling and construction material delivery. Work within the public right-of-way outside of these hours shall only be allowed after the issuance of an after-hours construction permit. Exceptions may be made for time sensitive construction activities (e.g., pouring concrete).
- "Flagger" construction personnel shall be required at construction site entrances.
- The closure of major arterials shall be limited to non-peak vehicular traffic hours only.
- Streets and equipment shall be cleaned in accordance with established Public Works requirements.
- Trucks shall only travel on a City-approved truck routes. Limited queuing may occur on the construction site itself.

- Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be on-site, with a minimum amount of materials within a work area in the public right-of-way, subject to a current Use of Public Property Permit.
- Any requests for work before or after normal construction hours within the public right-of-way shall be subject to review and approval through the After Hours Permit process administered by the Building and Safety Division.
- Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City.
- The Construction Impact Mitigation Plan shall ensure adequate emergency access is maintained throughout the duration of all construction activities. Consistent with the requirements and regulations of the MUTCD, adequate emergency access shall be ensured through measures such as coordination with local emergency services, training for flagmen for emergency vehicles traveling through the work zone, temporary lane separators that have sloping sides to facilitate crossover by emergency vehicles, and vehicle storage and staging areas for emergency vehicles.

Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction.

- The traveling public shall be advised of impending construction activities which may substantially affect key roadways or other facilities (e.g., information signs, portable message signs, media listing/notification, Hotline number, and implementation of an approved Construction Impact Mitigation Plan) in a manner appropriate to the scale and type of Projects.
- A Use of Public Property Permit, Excavation Permit, Sewer Permit, or Oversize Load Permit, as well as any Caltrans permits required for any construction work requiring encroachment into public rights-of-way, detours, or any other work within the public right-of-way shall be obtained.
- Timely notification of construction schedules shall be provided to all affected agencies (e.g., Police Department, Fire Department, Public Works Department, and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 500 feet.
- Construction work shall be coordinated with affected agencies in advance of start of work. Approvals may take up to two weeks per each submittal.
- Planning & Building and Public Works Departments approval of any haul routes for earth, concrete, or construction materials and equipment hauling shall be obtained.

MM T-2a Amended Implementation and Funding/Financing Strategy for the Fountain Valley Crossings Specific Plan. The City shall amend Section 3.5 of the FVCSP

Implementation and Funding/Financing Strategy prior to adoption of the Specific Plan. The Specific Plan shall require to include a subsequent fee justification study, identify costs for transportation improvements, apportion costs for improvements, and include fair share Projected costs for each funded and unfunded improvement. Prior to approval of the first entitlements for a development within the Project area, the City must adopt the regular fee update schedule for identified intersection improvements. The City shall coordinate with neighboring jurisdictions to identify intersection improvements, apportion costs for improvements, and scheduling of proposed improvements.

The Amended Implementation and Funding/Financing Strategy shall:

- Identify the cost of improvements to all identified transportation improvements, within the Project area and surround vicinity, needed to serve the proposed Fountain Valley Crossings Specific Plan.
- Clearly apportion existing and Projected demand on these facilities and costs between existing users, the City, and proposed future development Projects.
- Identify development impact fees for all residential and non-residential Projects to ensure that each Project pays its fair share of public infrastructure costs.
- Include a regular fee update schedule, consistent with the City's Capital Improvement Program.

MM T-2b Intersection Improvements Impact Fee. At the intersection of Talbert Avenue & Mt. Washington Street (Intersection #12), a traffic signal shall be installed. In addition, the six point stop-controlled intersection, within the Costco parking lot, shall be reconfigured into a standard four leg intersection by removing the northern eastbound and westbound approaches. To further reduce impacts, it is recommended that the westbound approach be restriped to convert the existing right-turn lane into a shared through/right turn lane. Additional geometric improvement options such as signal phasing and green times shall be considered and reviewed prior to final design of this intersection. In accordance with MM T-2a, approved improvements shall be included in Implementation and Funding/Financial Strategy and development Project applicants within the Project area shall pay a fair share contribution towards these improvements. The fair share fee shall be evaluated based on based on a metric approved by the City (e.g. dwelling units, acreage, square footage, ADT, etc.).

MM T-7 Intersection Modifications. At the intersection of Ellis Avenue & Ward Street, capacity improvements such as conversion to standard protected signal phasing, green times, and restriping of the northbound approach to include one left turn lane, one through lane, and two right turn lanes shall be considered and reviewed prior to final design on the intersection. In accordance with MM T-2a, the approved improvements shall be included in the Implementation and Funding/Financial Strategy and development Project applicants within the Project area shall pay a fair share contribution towards these improvements

based on a metric approved by the City (e.g. dwelling units, acreage, square footage, ADT, etc.).

TRIBAL CULTURAL RESOURCES:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Tribal Cultural Resources, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measures that are applicable to the proposed Project are listed below. Potential Project impacts related to Tribal Cultural Resources would be reduced below a level of significance with implementation of the applicable mitigation measures.

With the implementation of Mitigation Measures MM TCR-1a, MM TCR-1b, and MM TCR-1c, which were included in the Specific Plan EIR, impacts to tribal cultural resources would be reduced to a less than significant level. Mitigation Measure MM TCR-1a would require pre-construction training prior to any grading or other development activities associated with Project implementation. In the event of inadvertent discovery of tribal cultural resources during Project construction, Mitigation Measure MM TCR-1b would require retention of a qualified registered professional archaeologist (RPA) and a qualified Native American Monitor to evaluate the significance of the discovery pursuant to the Cultural Resources Treatment Plan procedures, which are outlined in Mitigation Measure MM TCR-1c.

Mitigation Measures

Based on the analysis and information above, Mitigation Measures MM TCR-1a, MM TCR-1b, and MM TCR-1c, included in the Specific Plan EIR, would be applicable to the proposed Project.

MM TRC-1a Pre-Construction Training: For individual discretionary development Projects, pre-construction training for construction personnel shall be conducted prior to commencement of any grading or other development activities. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (2008) and approved by the City, shall conduct tribal cultural resources identification and protocol training prior to site disturbance activities. Construction personnel shall be informed of the types of archaeological or tribal cultural resources that may be encountered, and of the proper protocols for agency notification. Construction personnel shall attend the training and shall retain documentation demonstrating attendance.

MM TRC-1b Inadvertent Discovery: In the event of any inadvertent discovery of archaeological or tribal cultural resources during construction, ground-

disturbing activities shall be suspended until an evaluation is performed. The Applicant shall retain a qualified registered professional archaeologist (RPA) and a qualified Native American Monitor selected by the City. The City's selection of a Native American Monitor will be based on cultural affiliation with the Project area, which may include consultation with the NAHC. In the event of discovery, construction personnel shall notify the City, the RPA, and Native American Monitor. The RPA and Native American Monitor shall evaluate the significance of the discovery pursuant to the Treatment Plan procedures outlined in MM TCR-1c, below. Work shall not resume until authorization is received from the City. If human remains are found, in compliance with California Health and Safety Code Section 7050.5, all ground disturbances must cease and the County Coroner must be contacted to determine the nature of the remains. In the event the remains are determined to be Native American in origin by the Coroner, the Coroner is required to contact the NAHC within 24 hours to relinquish jurisdiction.

MM TCR-1c Archaeological Data Recovery: If cultural resources are encountered during development activities, the City shall implement a Cultural Resources Treatment Plan to address resource identification, significance evaluation, and any necessary mitigation. The Treatment Plan shall be prepared by a City-approved RPA and a City-approved Native American Monitor, and at a minimum shall include:

- A review of historic maps, photographs, and other pertinent documents to predict the locations of former buildings, structures, and other historical features and sensitive locations within and adjacent to the specific development area;
- A context for evaluating resources that may be encountered during construction;
- A research design outlining important prehistoric and historic-period themes and research questions relevant to the known or anticipated sites in the study area;
- Specific and well-defined criteria for evaluating the significance of discovered remains; and
- Data requirements and the appropriate field and laboratory methods and procedures to be used to treat the effects of the Project on significant resources.

The City, in its discretion and supported by substantial evidence, may also determine that resource is significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. If the RPA determines that the find may qualify for listing in the California Register, the site shall be avoided or the resource preserved in place, or if avoidance or preservation in place is not determined feasible, a data recovery plan shall be developed. The preferred mitigation shall be to avoid the resource or preserve in place. Any required testing or data recovery shall be directed by a qualified RPA and Native American Monitor

prior to construction being resumed in the affected area. The Treatment Plan shall also include submission of a final technical report, funded by the developer and approved by the City.

UTILITIES AND SERVICE SYSTEMS:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Utilities and Service Systems, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measure that is applicable to the proposed Project is listed below. Potential Project impacts related to Utilities and Service Systems would be reduced below a level of significance with implementation of the applicable mitigation measures.

The FVCSP EIR included one (1) mitigation measure regarding projects that would potentially trigger the need for expansion or replacement of individual sewer lines. All new development projects shall be conditioned to be subject to payment of its fair share of any impact fees.

Planned and pending development in the City includes multiple mixed-use development, large-scale commercial development, and capital improvement projects. These projects are also expected to contribute to additional population increases in the City either through residential development or through generation of additional employment opportunities, thereby increasing demand for the City's utility infrastructure services. New projects in the FVCSP have the potential to increase the demand on utility services; however, these projects would be required to comply with standards for the provision of adequate utility services set forth in the City's General Plan and FVMC, and would be subject to City planning and review processes that would ensure that adequate utility infrastructure. Developers are required to pay development impact fees to offset any impacts to utility service infrastructure and capacities. As such, cumulatively the Project would not result in any significant or adverse effects on utilities and the provision of these services

The proposed Project does not propose to allow for any additional housing units nor will it allow for any larger non-residential projects previously analyzed in the EIR. In addition, the mitigation measures will still be applicable to new uses and projects. The proposed Project will not result in any new or additional impacts to transportation, circulation and traffic utilities, or change the analysis and conclusions in the Final EIR.

Mitigation Measures

Based on the analysis and information above, Mitigation Measure MM UT-3, included in the Specific Plan EIR, would be applicable to the proposed Project.

MM UT-3 FVCSP Utility Infrastructure Financing Program: The City shall ensure adequate financing for funding of infrastructure improvements to serve the FVCSP through implementation of the FVCSP Utility Infrastructure Financing Program, including preparation of an AB 1600 fee justification study, for the FVCSP area. The Financing Program shall be developed prior to the approval of the first entitlements for a development within the Project area, following adoption of the Project. All new development within the FVCSP shall be conditioned to be subject to payment of its fair share of any impact fees identified under this program. The City shall determine the costs of and establish a funding program for the following capital improvements to upgrade water and wastewater delivery as needed to serve the demands of new land uses anticipated to occur under the FVCSP.

The Program shall also:

- a. Identify the cost of improvements to or replacement of undersized water and wastewater lines within the FVCSP area needed to serve the Project.
- b. Clearly apportion existing and Projected demand on these facilities and costs between existing users, the City, and proposed future development.
- c. Identify potential funding mechanisms for sewer and water line construction, including the equitable sharing of costs between new development, the City and existing users, including development impact fees, grants, assessments, etc.
- d. Identify development impact fees for all residential and non-residential development to ensure that development pays its fair share of public infrastructure costs.
- e. Include a regular fee update schedule, consistent with the City's Capital Improvement Program.

MANDATORY FINDINGS OF SIGNIFICANCE:

Based on the analysis and information provided in the attached Initial Study to this Addendum to the FVCSP EIR, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Mandatory Findings of Significance, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

. Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measures that are applicable to the proposed Project are listed below. Potential Project impacts related to Mandatory Findings of Significance would be reduced below a level of significance with implementation of the applicable mitigation measures.

Both the Specific Plan and the proposed Project would require incorporation of Mitigation Measures TCR-1a through TCR-1c, which would reduce impacts to a less than significant level. As such, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts.

The Project site is currently developed and is located in an urban area. The proposed Project would redevelop the Project site to replace the five existing industrial warehouse buildings with an administration building, associated parking and additional landscaping. The design of the proposed Project would be consistent with the existing City zoning and General Plan designations for the site and the development standards of the Specific Plan. Development of the proposed Project would not cause substantial adverse effects on human beings related to air quality, greenhouse gas emissions, hazardous materials, and noise, because all potentially significant impacts of the proposed Project can be mitigated to a less than significant level. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts.

Mitigation Measures

No mitigation is required beyond those specified in the attached Initial Study/Addendum (Exhibit 1).

SUMMARY OF ENVIRONMENTAL EFFECTS:

As discussed in this Addendum, the proposed Project would not change the conclusions of the certified Final EIR. The proposed Project would not result in a new significant impact or substantially increase the severity of a previously identified significant impact. No mitigation is required beyond the existing commitments contained within the MMRP. All proposed development Projects will be analyzed against the findings of the FVCSP EIR and be required to comply with the mitigation measures listed in the Final EIR. The proposed Project does not meet any of the conditions that would require the preparation of a subsequent or supplemental EIR as set forth in Sections 15162 and 15163 of the CEQA Guidelines.

DETERMINATION:

Section 15164(a) of the CEQA Guidelines states the following:

The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for the preparation of subsequent EIR have occurred. The proposed

modifications to the original Project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

Furthermore, new information associated with the proposed modifications does not indicate that: the Project will have one or more significant effects not discussed in the adopted Final EIR; significant effects previously examined will be substantially more severe than shown in the adopted Final EIR; mitigation measures or alternatives previously found not to be feasible would in fact be feasible; or mitigation measures or alternatives which are considerably different from those analyzed in the adopted Final EIR would substantially reduce one or more significant effects on the environment. Accordingly, an addendum has been prepared as opposed to a supplemental or subsequent EIR. The City of Fountain Valley is adopting this Addendum in accordance with the CEQA Guidelines Section 16164.

Exhibit 1

INITIAL STUDY/ADDENDUM

ADMINISTRATIVE HEADQUARTERS BUILDING PROJECT

PROJECT NO. P1-128

Prepared for:



Orange County Sanitation District
Sanitation District Plant No. 1
10844 Ellis Avenue
Fountain Valley, California 92708

Prepared by:

LSA
20 Executive Park, Suite 200
Irvine, California 92614
(949) 553-0666

October 2020

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LIST OF ACRONYMS AND ABBREVIATIONS

AASHTO	American Association of State Highway and Transportation Officials
AAQS	ambient air quality standard
AB	Assembly Bill
acre-ft/yr	acre-feet per year
ACM	asbestos-containing material
AELUP	Airport Environs Land Use Plan
AFIP	Administrative Facilities Implementation Plan
APN	Assessor's Parcel Number
AQMP	air quality management plan
BMPs	Best Management Practices
Cal/OSHA	California Occupational Safety and Health Administration
CalEEMod	California Emission Estimator Model
CalGreen	California Green Building Standards Code
California Register	California Register of Historical Resources
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH ₄	methane
Channel	Fountain Valley Channel
CHRIS	California Historical Resources Information System
City	City of Fountain Valley
CMA	Congestion Management Agency
CMP	Congestion Management Program
CO	carbon monoxide
CO ₂	carbon dioxide



CO ₂ e	carbon dioxide equivalent
County	County of Orange
CREC	controlled recognized environmental condition
dB	decibel
dBA	A-weighted decibel
DOC	Department of Conservation
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
ft	foot/feet
FVCSP	Fountain Valley Crossings Specific Plan, or Specific Plan
FVFD	Fountain Valley Fire Department
FVPD	Fountain Valley Police Department
FVSD	Fountain Valley School District
GAP	Green Acres Project
GHG	greenhouse gas
gpd	gallons per day
GWh	gigawatt hour
HBM	hazardous building materials
HBUHSD	Huntington Beach Union High School District
HCP	Habitat Conservation Plan
HFCs	hydrofluorocarbons
HREC	historical recognized environmental condition
HRI	Historical Resources Inventory
HVAC	heating, ventilation, and air conditioning
I-405	Interstate 405
LBP	lead-based paint
lbs	pounds



LEED	(United States Green Building Council) Leadership in Energy and Environmental Design
L_{eq}	equivalent continuous sound level
LID	Low Impact Development
LOS	level of service
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
MRF	Materials Recovery Facility
MRZ	Mineral Resource Zones
MWD	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Orange County
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NCCP	Natural Community Conservation Plan
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
OCPL	Orange County Public Libraries
OCSD	Orange County Sanitation District
OCTA	Orange County Transportation Authority
OCWD	Orange County Water District
OHP	Office of Historic Preservation
Pb	lead
PCBs	polychlorinated biphenyls
PFCs	perfluorocarbons
Phase I ESA	Phase I Environmental Site Assessment
Plant No. 1	OCSD's Reclamation Plant No. 1
PM_{10}	particulate matter
$PM_{2.5}$	fine particulate matter
PRC	Public Resources Code
Project	Administrative Headquarters Building Project, Project No. P1-128



REC	recognized environmental condition
ROG	reactive organic gases
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SC	Standard Condition
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCG	Southern California Gas Company
sf	square foot/square feet
SF6	sulfur hexafluoride
SH	Seismic Hazard
SO ₂	sulfur dioxide
SP	Specific Plan
Specific Plan	Fountain Valley Crossings Specific Plan, or FVCSP
Specific Plan EIR	Specific Plan Environmental Impact Report
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
TDM	Transportation Demand Management
thm	therms
TIA	Transportation Impact Analysis
tpd	tons per day
USFWS	United States Fish and Wildlife Service
VMT	vehicle miles traveled
VOC	volatile organic compounds
Working Group	GHG CEQA Significance Threshold Stakeholder Working Group
WQMP	Water Quality Management Plan



1.0 INTRODUCTION

1.1 BACKGROUND

The Orange County Sanitation District (OCSD) provides wastewater collection and treatment for 2.5 million residents in Orange County, California. The administrative, engineering, and laboratory functions for OCSD are located at OCSD's Reclamation Plant No. 1 (Plant No. 1), located at 10844 Ellis Avenue, in the City of Fountain Valley (City). In addition, there is staff working out of aging office trailers throughout Plant No. 1.

In 2013, OCSD commissioned an Administrative Facilities Master Plan to provide management and the OCSD Board of Directors with the necessary information to make policy decisions regarding the administrative infrastructure facilities at Plant No. 1. OCSD later prepared an Administrative Facilities Implementation Plan (AFIP) to describe an organized program to replace the aging on-site buildings. Following preparation of the AFIP, OCSD prepared an Alternate Site Evaluation and developed four alternate site plan options showing building footprints, parking, and access, etc., for the administration building and laboratory. Around the time the CEQA evaluation was to begin, OCSD also began to evaluate the possibility of locating the administrative and laboratory facilities at an off-site location. Although several locations off of Plant No. 1 were evaluated in the AFIP, they were found to be infeasible, or OCSD was unable to acquire the property in question. Based on the evaluation, OCSD selected the Southwest Plant Alternative as the preferred alternative for evaluation under the California Environmental Quality Act (CEQA).

From 2017 to 2018, OCSD was able to acquire approximately 5.2 acres north of Plant No. 1 on Ellis Avenue between Pacific Street and Bandilier Circle. Following acquisition of the off-site property north of Plant No. 1, OCSD abandoned the siting recommendations in the Administrative Facilities Master Plan and the AFIP, in favor of the Project as currently proposed. The approximately 5.2-acre site north of Plant No. 1 on Ellis Avenue is herein referred to as the Project site. Following acquisition of the Project site, the proposed Administrative Headquarters Building Project, (Project) (OCSD Project No. P1-128), was redesigned and the CEQA process commenced. Due to the size of the Project site, the proposed Project only includes construction and operation of an administration building and surface parking lot. No laboratory building is proposed.

On January 23, 2018, the City of Fountain Valley adopted a Specific Plan for the Fountain Valley Crossings, a 162-acre office and industrial center located within the City. The purpose of the Specific Plan is to provide a policy and zoning framework to allow for additional land uses in the Specific Plan area. The Project site is located within the Fountain Valley Crossings Specific Plan (Specific Plan) area. This Initial Study/Addendum has been prepared to analyze the environmental effects, if any, of implementing the proposed Project within the Specific Plan area.

In accordance with *State CEQA Guidelines* Section 15051(a), OCSD is the appropriate Lead Agency for this Project as it is the public agency that will be directly implementing the Project (developing plans, paying construction, and acquiring property, etc.), even though the Project will be located within the jurisdiction of another agency (the City of Fountain Valley).



1.2 PREVIOUS ENVIRONMENTAL DOCUMENTATION

The City circulated an Initial Study/Notice of Preparation for preparation of a Program Environmental Impact Report (EIR) for the Specific Plan on October 15, 2015, for a 30-day public comment period. The City held a public Scoping Hearing on October 28, 2015, and public comments were received until November 16, 2015.

The Draft EIR for the Fountain Valley Crossings Specific Plan (State Clearinghouse No. 2015101042) was circulated for an extended 47-day public review period from January 6, 2017, to February 22, 2017. The City held a Public Hearing for the Draft EIR on January 25, 2017, to provide the public with an opportunity to provide comments on the Specific Plan and the Draft EIR.

Following release of the Draft EIR and closure of the public review period in February 2017, the City prepared and released for public review the pre-recirculation Final EIR on April 27, 2017. The City Planning Commission held a public hearing on May 10, 2017, to provide Specific Plan adoption recommendations to the City Council. The City scheduled a City Council public hearing for the Specific Plan and the Draft EIR on June 20, 2017; however, following receipt of public comments and staff's recommendations, the City directed staff to recirculate the Draft EIR to address public comments and make other clarifying revisions. The Partial Recirculated Draft EIR consisted of only the portions of the EIR that were modified. Specifically, Partial Recirculated Draft EIR sections that were revised include the cumulative impact analysis, the revised Transportation Impact Analysis, and a new section to address Tribal Cultural Resources, as well as sections that were revised to provide clarity.

The Partial Recirculated Draft EIR was circulated to the public for a 45-day public review and comment period pursuant to *State CEQA Guidelines* Section 15088.5(c) from October 6, 2017, to November 20, 2017. The Specific Plan and Revised Final EIR were adopted by the City Council on January 23, 2018.

For purposes of this Initial Study/Addendum, the Initial Study, Draft EIR, Final EIR, Recirculated Draft EIR, and Revised Final EIR for the Specific Plan are referred to as the Specific Plan EIR. The Specific Plan EIR (January 2018) is herein incorporated by reference.

1.3 PURPOSE OF THE ADDENDUM TO THE SPECIFIC PLAN EIR

This Initial Study/Addendum provides the basis for preparing an Addendum to the Fountain Valley Crossings Final EIR and serves as the CEQA documentation for the following:

- Demolition of the five existing industrial warehouse buildings;
- Construction and operation of an approximately 109,914 square-foot (sf) three-story administration building;
- Construction and operation of a surface parking lot with 261 spaces;
- Construction and operation of an approximately 128-foot (ft) -long pedestrian bridge connecting the Project site to the existing Plant No. 1 site; and



- Installation of landscaping, signage, and security lighting.

This Initial Study/Addendum has been prepared pursuant to the provisions of CEQA (Public Resources Code Sections 21000 et seq.) and the *State CEQA Guidelines*.

1.4 ENVIRONMENTAL PROCEDURES

A Program EIR is prepared for a project consisting of a series of actions that can be characterized as one large project and that are related either geographically; as logical parts in the chain of contemplated actions; in connection with the general criteria to govern the conduct of a continuing program; or as individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways (*State CEQA Guidelines* Section 15168). Once a Program EIR has been prepared, subsequent activities within the program are evaluated to determine whether additional CEQA analysis is needed. These subsequent activities could be found to be within the Program EIR scope, and additional environmental documents may not be required if the Program EIR adequately addressed impacts of the subsequent activity (*State CEQA Guidelines* Section 15168[c]). When a Program EIR is relied upon for a subsequent activity, the Lead Agency incorporates applicable mitigation measures and alternatives developed in the Program EIR into the subsequent activities (*State CEQA Guidelines* Section 15168 [c] [3]). If a subsequent activity would have effects that are not identified in the Program EIR, the Lead Agency would prepare additional environmental review documentation, as applicable.

The Specific Plan EIR is a Program EIR that addresses the total build out of the Specific Plan area with a goal of revitalizing the existing light industrial uses. The environmental analysis provided in the Specific Plan EIR provides sufficient analysis in compliance with the requirements of CEQA to enable decision-makers to approve subsequent projects proposed in the Specific Plan area, that are consistent with the Specific Plan, without subsequent environmental review. However, if any substantial changes to the development parameters (e.g., building envelope, height, or use, etc.) analyzed in the Specific Plan EIR are later revised, subsequent environmental review would be required prior to approval.

Pursuant to CEQA, the *State CEQA Guidelines*, and the local CEQA guidelines, this Initial Study/Addendum focuses on demolition of the five existing industrial warehouse buildings and the construction and operation of the new Administrative Headquarters Building on the Project site, and whether the proposed Project would result in new significant impacts or a substantial increase in previously identified significant impacts.

Pursuant to Sections 15162 and 15168(c) of the *State CEQA Guidelines*, when an EIR has been certified for a project, no subsequent EIR shall be prepared for the Project unless the lead agency determines, on the basis of substantial evidence, that one or more of the following conditions are met:

1. Substantial changes are proposed in the Project that will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;



2. Substantial changes occur with respect to the circumstances under which the Project is undertaken that will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, suggests any of the following:
 - a. The Project would have one or more significant effects not discussed in the previous EIR.
 - b. Significant effects previously examined would be substantially more severe than identified in the previous EIR.
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project, but the Project proponent declines to adopt the mitigation measures or alternatives.
 - d. Mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the Project proponent declines to adopt the mitigation measures or alternatives.

Section 15164(a) of the *State CEQA Guidelines* provides that an Addendum to an EIR shall be prepared “if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.” This Initial Study/Addendum reviews the proposed Project and any changes to the existing conditions that have occurred since the Specific Plan EIR was certified by the City of Fountain Valley. It also reviews any new information of substantial importance that was not known and could not have been known with exercise of reasonable diligence at the time that the Specific Plan EIR was certified. It further examines whether, as a result of any changes or any new information, a subsequent or supplemental EIR may be required. This examination includes an analysis of the provisions of Section 21166 of the Public Resources Code and Section 15162 of the *State CEQA Guidelines* and their applicability to the proposed Project. This Initial Study/Addendum relies on the Analysis of Environmental Impacts (Section 4), which addresses environmental checklist issues on a section-by-section basis.

The Environmental Checklist Form has been prepared pursuant to Section 15168(c)(4) of CEQA, which states that “where the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.”

The proposed Project is within the scope of the Specific Plan EIR. The Project site is designated Industrial (Commercial Manufacturing) in the City’s General Plan and is zoned as Specific Plan (SP) – Fountain Valley Crossings Specific Plan (FVCSP) Mixed Industry District. The proposed administrative



uses are consistent with the commercial manufacturing designation, which allows for office (administrative, business, and professional) uses. (*State CEQA Guidelines* Sections 15168(c)(2).) The Specific Plan anticipated, and the Specific Plan EIR evaluated, the potential net increase of 811,408 sf for the office uses within the Specific Plan area. The proposed Project, at 109,914 sf, is thus consistent with the build out of new office uses projected in the Specific Plan. Build out of the Specific Plan would result in an increase in population associated with approximately 2,063 new employees, 1,444 new residents, and customers of commercial and retail businesses. Build out of the Specific Plan would increase the density of commercial uses and introduce new residential uses, thereby increasing the total population of the Specific Plan area. Implementation of the proposed Project would not add any new population to the Planning Area as this is a relocation of administrative operations from the existing administrative building and temporary trailers on Plant No. 1 to a new fixed headquarters building. Thus, the Project would be consistent with population growth projected in the Specific Plan. (*Id.*) In addition, the proposed Project site is within the geographic area analyzed in the Specific Plan EIR. (*Id.*) As a result, the proposed Project is within the scope of the Specific Plan EIR. As evidenced in this document, the Orange County Sanitation District (OCSD), the Lead Agency, determined that an Addendum to the previously approved Specific Plan EIR is appropriate.

1.5 CONCLUSIONS

This Initial Study/Addendum addresses the environmental effects associated with the demolition of the existing industrial warehouse buildings and construction and operation of the new Administrative Headquarters Building that has been proposed within the Specific Plan area. The proposed Project would not create new significant impacts related to any of the environmental topics discussed below or a substantial increase in the severity of significant effects previously studied and disclosed in the Specific Plan EIR. The conclusions of the analysis in this Initial Study/Addendum are not substantially different from those identified in the Specific Plan EIR. In addition, no new mitigation measures that would reduce impacts have been found to be feasible, and mitigation measures or alternatives previously found not to be feasible would remain infeasible. Appendix B provides a summary of mitigation measures from the Specific Plan EIR that are applicable and included in this Initial Study/Addendum.



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2.0 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

Orange County Sanitation District (OCSD) Reclamation Plant No. 1 (Plant No. 1) is a 114-acre facility, located at 10844 Ellis Avenue, in the City of Fountain Valley (City), that treats approximately 130 million gallons of wastewater per day. Refer to Figure 1 for the location of OCSD's Plant No. 1. OCSD's administrative, engineering, and laboratory facilities are located primarily at Plant No. 1. In addition to the existing aging administrative and laboratory buildings on Plant No. 1, there is also staff located in aging office trailers. OCSD has decided the most cost-effective solution is to construct a new Administrative Headquarters Building on a Project site north of Plant No. 1 to serve administrative and engineering functions; the new building is intended to replace the existing administrative building and the office trailers. As such, the proposed Administrative Headquarters Building Project (OCSD Project number P1-128), includes the construction and operation of an Administrative Headquarters Building on an approximately 5.2-acre site north of Ellis Avenue (Project site). Approximately 228 employees would be relocated from Plant No. 1 to the new Administrative Headquarters Building. Refer to Figure 1 for the location of the Project site.

2.2 PROJECT LOCATION

2.2.1 Regional Setting

The Project site is located in the City of Fountain Valley (Fountain Valley; City). The City encompasses approximately 9 square miles is located in the northwestern portion of Orange County (refer to Figure 1, Regional Location), along the Santa Ana River. The City is in close proximity to major Orange County attractions including the Pacific Ocean (4 miles) and Orange County's John Wayne Airport (6 miles). Fountain Valley is located southwest and northeast of the San Diego Freeway (Interstate 405 [I-405]), which diagonally bisects the City. Fountain Valley is bounded by the cities of Westminster and Garden Grove to the north, Santa Ana to the northeast, Costa Mesa to the southeast, and Huntington Beach to the southwest.

The City is an urban community which has been almost fully developed with a broad mix of land uses including housing, commercial, industrial, public, recreation and open space uses. According to the City's General Plan, the City is largely built-out.

2.2.2 Local Setting

The 5.2-acre Project site is located north of Ellis Avenue (and north of OCSD's Plant No. 1) in the Fountain Valley Crossing Specific Plan (FVCSP) area. The FVCSP area is roughly bounded by Ward Street to the west, Talbert Avenue to the north, the Santa Ana River to the east, Ellis Avenue to the south, and is bisected by the I-405 freeway, which runs diagonally northwest to southeast through the Specific Plan area. The FVCSP area covers approximately 0.24 square miles within the City.



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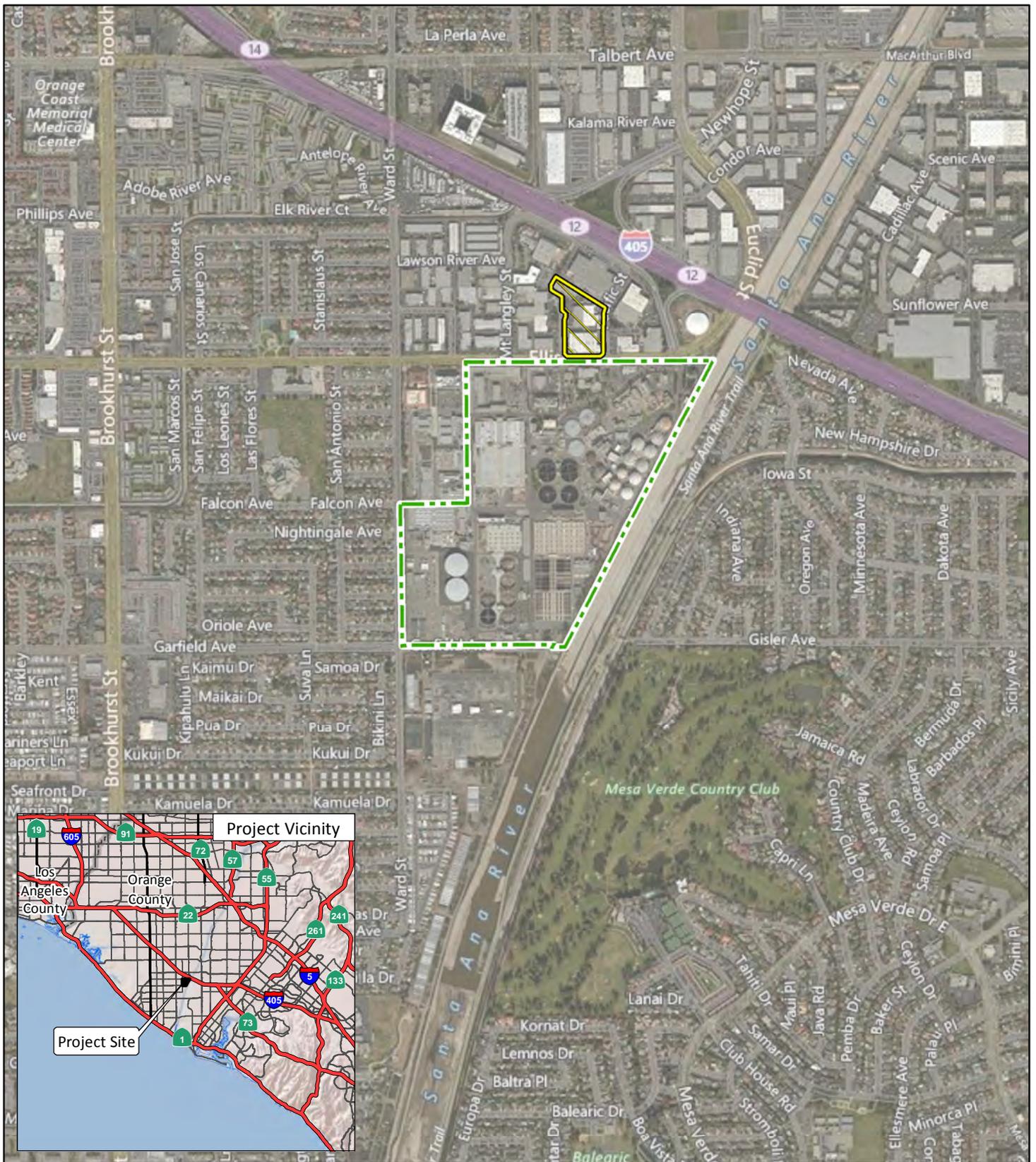
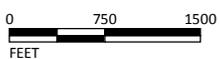


FIGURE 1

LSA

LEGEND

-  Project Site
-  Existing Orange County Sanitation District Plant No. 1



SOURCE: Bing Maps (2015)

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Orange County Sanitation District
 Headquarters Complex Project
 Project Location



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As shown on Figure 2, the Project site¹ (Assessor's Parcel Numbers [APNs] 156-163-06, 08, 09, 10 and 11) is bordered by industrial uses to the north, Pacific Street to the east, industrial uses and Bandilier Circle to the west, and Ellis Avenue with OCSD's Plant No. 1 beyond to the south. I-405 is 414 ft north of the Project site. The Santa Ana River Trail and Channel are located approximately 0.2 mile east of the Project site.

2.2.3 Existing Site Conditions

The Project site and the adjacent properties are characterized by 1970s concrete tilt-up buildings that are occupied by a variety of light industrial (e.g., warehousing), retail, and office uses. Many of these buildings were constructed pursuant to Fountain Valley's former Industrial Redevelopment Plan Area.

The Project site is flat and is currently developed with five industrial warehouse buildings (totaling approximately 114,744 square feet [sf]) and associated surface parking lots (refer to Figure 2, Project Site). Landscaping on the Project site is comprised of several mature trees, shrubs, and small grassy areas around the perimeter of the site. The Project site is accessible from Bandilier Circle and Pacific Street.

2.2.4 Existing Project Site Land Use Designation

As stated above, the Project site is located in the FVCSP area. The FVCSP was adopted by the City of Fountain Valley on January 23, 2018. The Project site is designated Industrial (Commercial Manufacturing) in the City's General Plan and is zoned as Specific Plan (SP) – FVCSP Mixed Industry District. The proposed administrative uses are consistent with the commercial manufacturing designation, which allows for office (administrative, business, and professional) uses. Additionally, the proposed Project would be consistent with the zoning because it would be consistent with development standards required by the FVCSP.

2.3 PROPOSED PROJECT

2.3.1 Project Characteristics

The proposed Project is a plan to construct a new administration building on the Project site north of Ellis Avenue, and to relocate the existing administrative uses from Plant No. 1 to the Project site.

The Project includes demolition of five industrial warehouse buildings on the Project site. As shown on Figure 3, Conceptual Site Plan, the following facilities would be constructed on the Project site:

- An approximately 109,914 sf three-story administration building;
- A surface parking lot with 261 spaces;
- An approximately 128 ft long pedestrian bridge constructed across Ellis Avenue to connect Plant No. 1 with the new Administrative Headquarters Building on the Project site; and
- Landscaping, signage, and security lighting.

¹ The Project site includes 18368 Bandilier Circle, 18410 Bandilier Circle, 18484 Bandilier Circle, 18429 Pacific Street, and 18475 Pacific Street.



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FIGURE 2

LSA

LEGEND

 Project Site



0 62.5 125
FEET

SOURCE: Bing Maps (2015)

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Orange County Sanitation District
Headquarters Complex Project
Project Site



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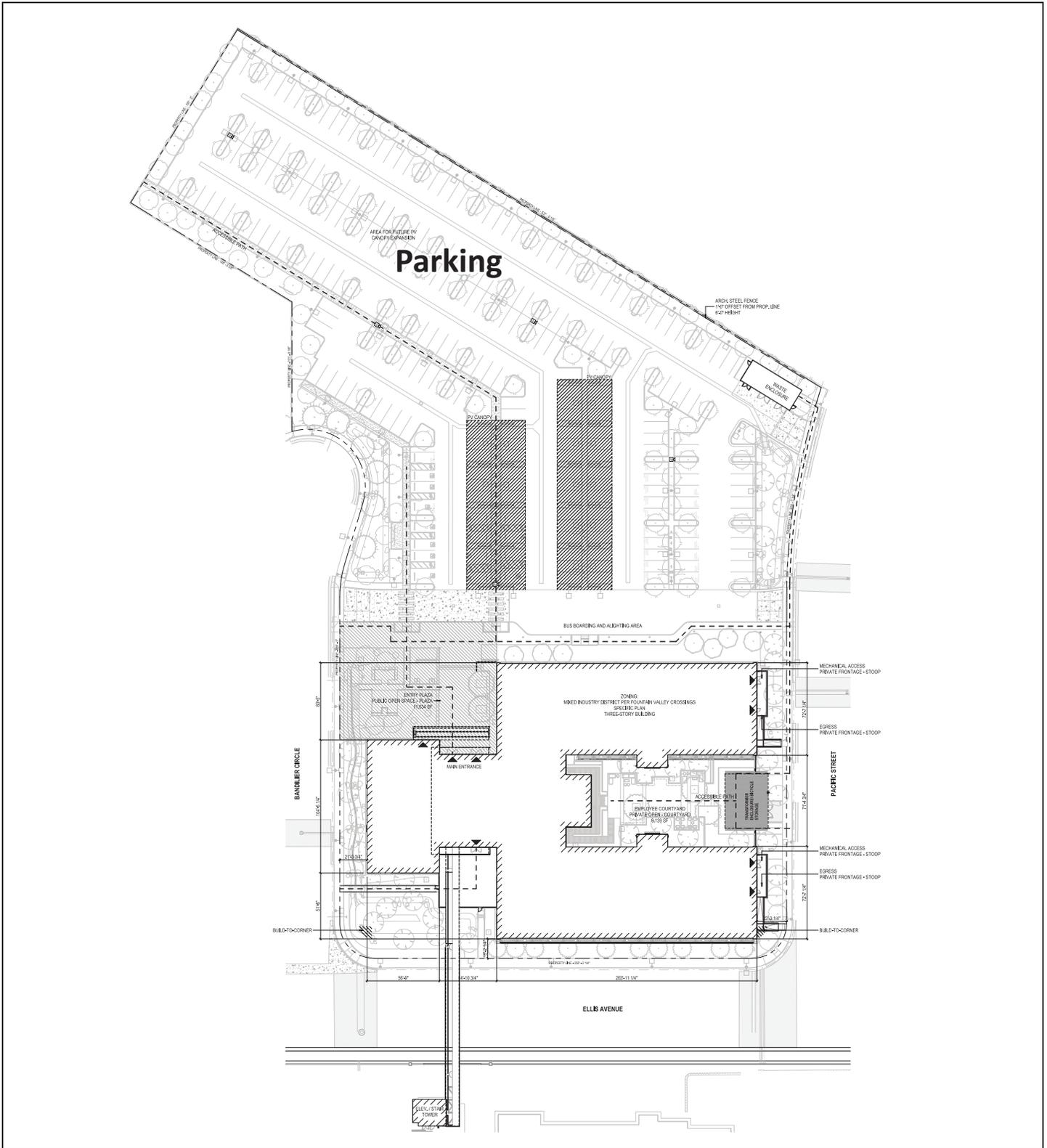
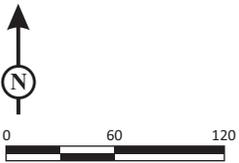


FIGURE 3

LSA



SOURCE: EPT Design

Orange County Sanitation District
Headquarters Complex Project
Conceptual Site Plan



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Implementation of the proposed Project would not result in an increase in OCSD employees because the Project is characterized as a relocation, rather than an expansion, of existing operations. In addition, other than the relocation of staff/uses from the existing administration building, no changes to operations are proposed at Plant No. 1.

2.3.2 Administrative Headquarters Building

The proposed Project includes the demolition of five existing industrial buildings on the Project site and the construction of one new Administrative Headquarters Building. Refer to Figures 4(a) through 4(c) for Project renderings. The proposed three-story Administrative Headquarters Building would be approximately 109,914 sf in size, and would include a lobby, a boardroom/multipurpose room, a public exhibit displaying the history and values of OCSD for use during public tours and events, and administrative offices for OCSD staff. The Administrative Headquarters Building would operate during OCSD's normal business hours, which are Monday through Friday from 8:00 a.m. to 6:00 p.m. Limited monthly events would occur on some evenings, including meetings of OCSD's Board of Directors. While the current COVID-19 pandemic has temporarily altered OCSD's normal operations, OCSD has no plans to make these changes permanent. As a result, any permanent changes to OCSD's normal operations are not reasonably foreseeable.

The new Administrative Headquarters Building would provide modern, state-of-the-art office space that would consolidate OCSD business operations, providing a collaborative, sustainable, and flexible work environment. The new building would replace a combination of outdated, non-compliant buildings and trailers located at Plant No. 1. Approximately 228 employees would be relocated from Plant No. 1 to the new Administrative Headquarters Building. The building would be designed to achieve United States Green Building Council Leadership in Energy and Environmental Design (LEED) Platinum Certification.

The proposed Project would also include a public entrance plaza, an exhibit plaza, and a private landscaped employee courtyard on the Project site.

2.3.3 Pedestrian Bridge

An approximately 128 ft long pedestrian bridge would be constructed across Ellis Avenue to connect Plant No. 1 with the new Administrative Headquarters Building on the Project site. Refer to Figure 4(c) for a rendering of the pedestrian bridge. The pedestrian bridge is designed to reflect the character of the new administration building. The bridge would consist of two painted exposed Warren steel trusses spanning Ellis Avenue with a concrete metal deck floor and a metal roof. Although the bridge would be enclosed with stainless steel cable mesh for protection from any potential falls, it would not be climate controlled.

The tallest point of the bridge structure would be a maximum of 30 ft above grade. The lowest point of the bridge structure would be a minimum of 19 ft above grade in accordance with the American Association of State Highway and Transportation Officials' (AASHTO) standards requiring a minimum of 18.5 ft between pedestrian bridges and the roadway. The bridge would be supported by reinforced concrete columns located outside of the public right-of-way on each side of Ellis Avenue.



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FIGURE 4a

SOURCE: HDR

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*Orange County Sanitation District
Headquarters Complex Project
Entry Rendering*



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LSA

FIGURE 4b

*Orange County Sanitation District
Headquarters Complex Project
Courtyard Rendering*

SOURCE: HDR

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LSA

FIGURE 4c

*Orange County Sanitation District
Headquarters Complex Project
Pedestrian Bridge Rendering*

SOURCE: HDR

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The bridge would connect to the second-floor level of the new administration building on the north side of Ellis Avenue and then connect to an elevator tower inside the secure perimeter of Plant No. 1. Security lighting would be included within the bridge enclosure.

The proposed Project would require a code amendment to the Specific Plan to permit the use of skyways (i.e., pedestrian bridges) to connect government buildings.

2.3.4 Parking

As shown on Figure 3, Conceptual Site Plan, the proposed Project would include 261 parking spaces within the surface parking lot. While a majority of parking spaces would be uncovered, some would be covered with overhead canopies featuring photovoltaic panels. Table 2.A shows the type and number of parking spaces proposed by the Project.

Table 2.A: Proposed Parking

Type of Parking Space	Number of Spaces
Uncovered Parking	
Standard	185
ADA-Accessible	5
Van-Accessible ADA	1
Electric Charging	7
ADA-Accessible Charging	1
Van-Accessible Charging	1
Clean Air/Van Pool/Electric Vehicle	11
Covered Parking	
Standard	27
ADA-Accessible	4
Van-Accessible ADA	1
Electric Charging	5
ADA-Accessible Charging	1
Van-Accessible Charging	1
Clean Air/Van Pool/Electric Vehicle	11
Total Parking	261

ADA = Americans with Disabilities Act of 1990

The development standards outlined in the Specific Plan require 3.5 parking spaces per 1,000 sf of building area; however, per Section 21.22.040 of the City’s Municipal Code, office uses require 2.5 parking spaces per 1,000 sf of building area. The proposed 261 parking spaces are non-compliant with the existing Specific Plan, which requires 365 parking spaces, but are compliant with the City’s Municipal Code. The proposed Project would require approval of a deviation to address the reduced parking. The proposed Project also includes an amendment to the Specific Plan to change the minimum parking standard for the Workplace-Professional use type from 3.5 spaces per 1,000 square feet (sf) to 2.5 spaces per 1,000 sf. The amendment would make the Specific Plan consistent with the City’s Municipal Code parking requirements for office uses.

With approval of the deviation and the code amendment, the proposed Project would be consistent with the parking requirements in both the Specific Plan and the City’s Municipal Code.



In addition to the parking space details shown in Table 2.A, the Project would provide 4 motorcycle spaces (2 uncovered and 2 covered) and 13 bicycle parking spaces (all uncovered).

2.3.5 Site Access

The proposed Project would consolidate the six existing driveways on the Project frontage of Bandilier Circle into one driveway (providing access to employee and public parking) and consolidate the five existing driveways on Pacific Street into two driveways (one for bus and large vehicle access and one for employee and public parking). Consolidation of the driveways along both streets would remove turning-movement conflicts as a result of driveways currently being spaced too closely.

The *Unsignalized Intersection Level of Service and Signal Warrant Analysis (Traffic Analysis) (LSA, September 2020)* was prepared for the proposed Project and assumed two different design concepts. The first design concept (referred to as Alternative 1) does not include a parking lot connection from the Project site to the adjacent property located at 18350 Mt. Langley Street, and a traffic signal is recommended at the intersection of Bandilier Circle and Ellis Avenue. The second design concept (referred to as Alternative 2) includes a parking lot connection from the Project site to the adjacent property located at 18350 Mt. Langley Street, and a traffic signal is recommended at the intersection of Mt. Langley Street and Ellis Avenue. Table 2.B provides a summary of the two alternatives. The installation of a traffic signal at either the intersection of Bandilier Circle and Ellis Avenue or the intersection of Mt. Langley Street and Ellis Avenue would ultimately be determined by the City.

Table 2.B: Project Alternatives Summary

Description	Alternative 1	Alternative 2
Proposed Headquarters Building Square Footage	109,914	109,914
Proposed No. of Employees ¹	228	228
Proposed Pedestrian Bridge ²	Yes	Yes
Site Access Driveways		
Mt. Langley Street (1 proposed via new parking lot connection)	No	Yes
Bandilier Circle (1 existing)	Yes	Yes
Pacific Street (2 existing)	Yes	Yes
Unsignalized Access Intersections		
Mt. Langley Street/Ellis Avenue	No	Yes
Bandilier Circle/Ellis Avenue	Yes	Yes
Pacific Street/Ellis Avenue	Yes	Yes
Recommendations		
Signalize Mt. Langley Street/Ellis Avenue	No	Yes
Signalize Bandilier Circle/Ellis Avenue	Yes	No
Signalize Pacific Street/Ellis Avenue	No	No

¹ Employees to be relocated from the existing Plant No. 1 to the new building.

² Pedestrian bridge to be constructed over Ellis Avenue to connect the new building and Plant No. 1.

2.3.6 Landscaping, Fencing, and Security

In total, 57,094 sf of landscaping is proposed throughout the Project site. Approximately 187 trees would be planted as part of Project implementation. Trees would be comprised of a variety of 25to 70-inch box sizes and would include sweet bay (*Laurus nobilis*), Canary Island Pine (*Pinus*



canarienses), Mexican sycamore (*Platanus Mexicana*), African sumac (*Rhus lancea*), blue palo verde (*Parkinsonia x, Desert Museum*), Torrey pine (*Pinus torreyana*), and Southern live oak (*Quercus virginiana*). As shown in Figure 5, Conceptual Landscaping Plan, a variety of shrubs, vines, and groundcover would also be planted throughout the Project site. Proposed landscaping would comply with the City's Water Efficient Landscape Ordinance (refer to Section 21.20.050 of the City's Municipal Code).

As part of the Project, fencing is proposed along the northern diagonal property line. Proposed fencing would incorporate a flush top rail, which produces a contemporary appearance. This fence style would highlight the landscape by blending with the surrounding architectural design.

Other than the proposed fence, the Project site would be open. Security cameras would be installed within the Project site, and there will be emergency call-boxes located in the parking lot. Additionally, the Project site will be patrolled by OCSD's security team.

2.3.7 Lighting

As shown in Figure 6, Conceptual Lighting Plan, the Project would include the installation of new lighting, including lighting associated with way finding, building identification signage, and security lighting on the Project site. Parking lot lighting will be provided by 14-ft light poles or by surface-mounted area lights mounted to the underside of the photovoltaic canopies. Accent lighting will be used to highlight select landscape features, such as trees. The new pedestrian bridge would be illuminated on the inside for pedestrian safety. It would also include minimal lighting on the exterior façade of the bridge. The proposed Project would comply with requirements outlined in the FVCSP Specific Plan, as well as Section 21.18.060 of the City's Municipal Code, which include regulations pertaining to exterior lighting and glare.

2.3.8 Water Quality

The proposed Project would include bioretention basins to retain and treat stormwater runoff prior to discharge to the City's stormdrain system located within Ellis Avenue. As shown in Figure 7, Bioretention Basin Locations, four locations for bioretention basins have been identified: (1) on the southeast corner of the site, (2) at the east limit of the parking lot, (3) at the west limit of the parking lot, and (4) a smaller area within the employee courtyard.

2.3.9 Construction Schedule

Construction is anticipated to begin in January 2021 and be completed in May 2023.

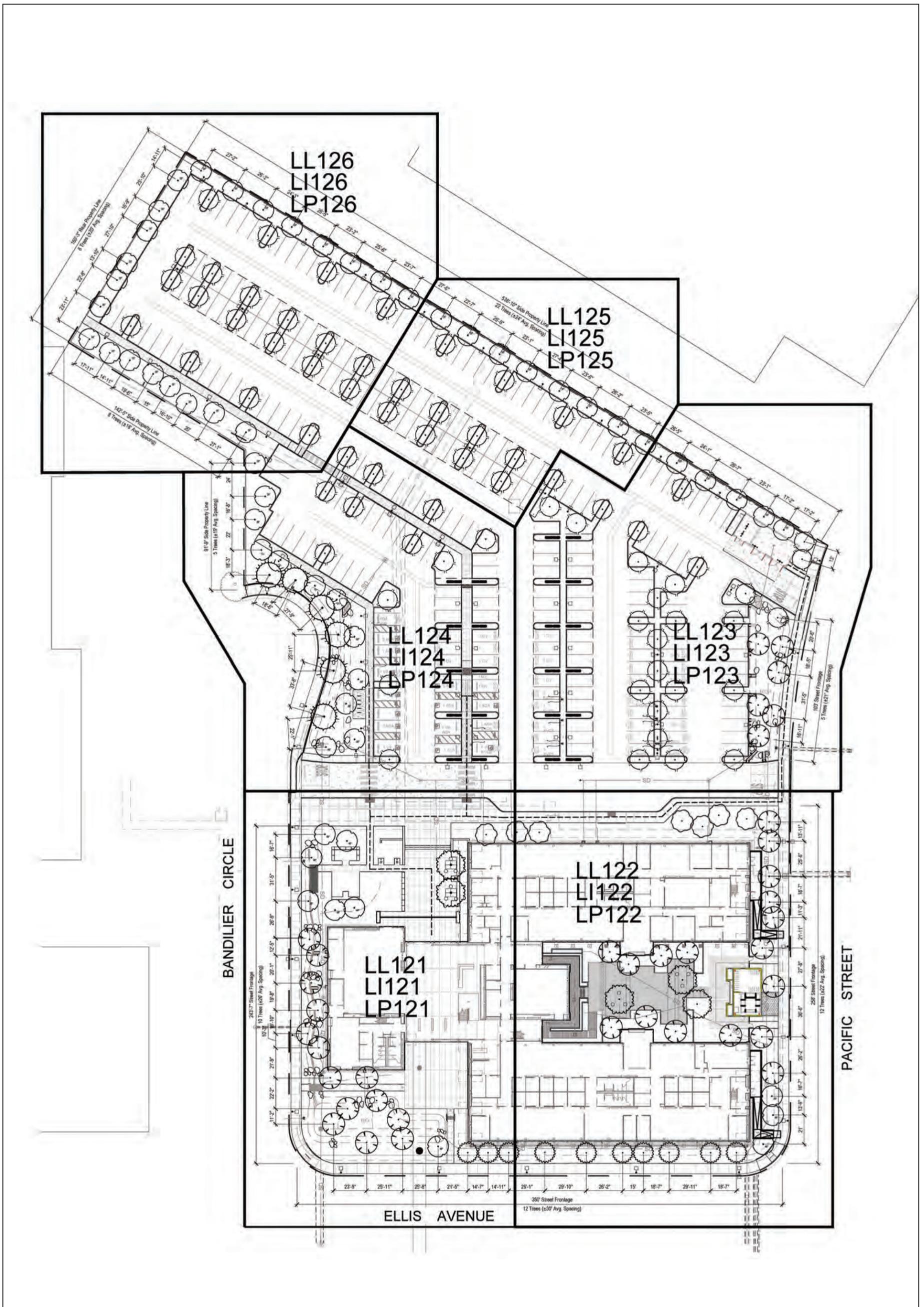
2.4 PERMITS AND APPROVALS

Public agencies may use this Initial Study/Addendum as the basis for their decisions to issue discretionary approvals and/or permits for the proposed Project. Table 2.C, Discretionary Permits and Approvals, below, provides a list of entitlements and permits that may be required for the proposed Project.

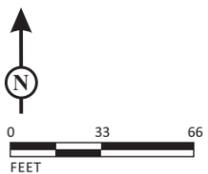


Table 2.C: Discretionary Permits and Approvals

Agency Name	Permit or Approval
Orange County Sanitation District (OCSD)	Approval of the Initial Study/Addendum Approval of the Site Plan Issuance of Construction Bid Package
City of Fountain Valley	Approval of Traffic Control Plan Approval of Entitlement Applications, including Development Agreement, Development Plan Review No. 1, Variance No. 332, and Lot Line Adjustments Nos. 19-01 and 19-02 Variance No. 332 would include the following: <ul style="list-style-type: none"> • Variance 1 – Frontage Coverage (Pacific Street) • Variance 2 – Frontage Coverage (Bandilier Circle) • Variance 3 – Build-to-Corner (Ellis Avenue/Bandilier Circle) • Variance 4 – Parking Count (Not Used) • Variance 5 – Curb Cuts & Driveways (Pacific Street) • Variance 6 – Street Façade Base (Pacific Street) • Variance 7 – Street Façade Base (Ellis Avenue) • Variance 8– Street Façade Base (Bandilier Circle) • Variance 9 – Street Façade Top (Pacific Street, Bandilier Circle and Ellis Avenue – Board Room Volume, Ellis Avenue) • Variance 10 – Street Façade Wall Composition on Bandilier Circle The proposed Project would also request the following deviations: <ul style="list-style-type: none"> • Deviation 1 – Building Length (Ellis Avenue) • Deviation 2 – Street Façade Composition (Pacific Street) • Deviation 3 – Parking Count The proposed Project would also request the following amendments to the Fountain Valley Crossings Specific Plan (FVCSP): <ul style="list-style-type: none"> • FVCSP Amendment 1 – Amendment to permit the construction and use of skyways to connect government buildings • FVCSP Amendment 2 – Amendment to change the minimum parking standard for the Workplace-Professional use type from 3.5 spaces per 1,000 square feet (sf) to 2.5 spaces per 1,000 sf • FVCSP Amendment 3 – Amendment to eliminate the requirement for Special Public Open Space



LSA



SOURCE: HDR

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FIGURE 5

Orange County Sanitation District
 Headquarters Complex Project
 Conceptual Landscape Plan



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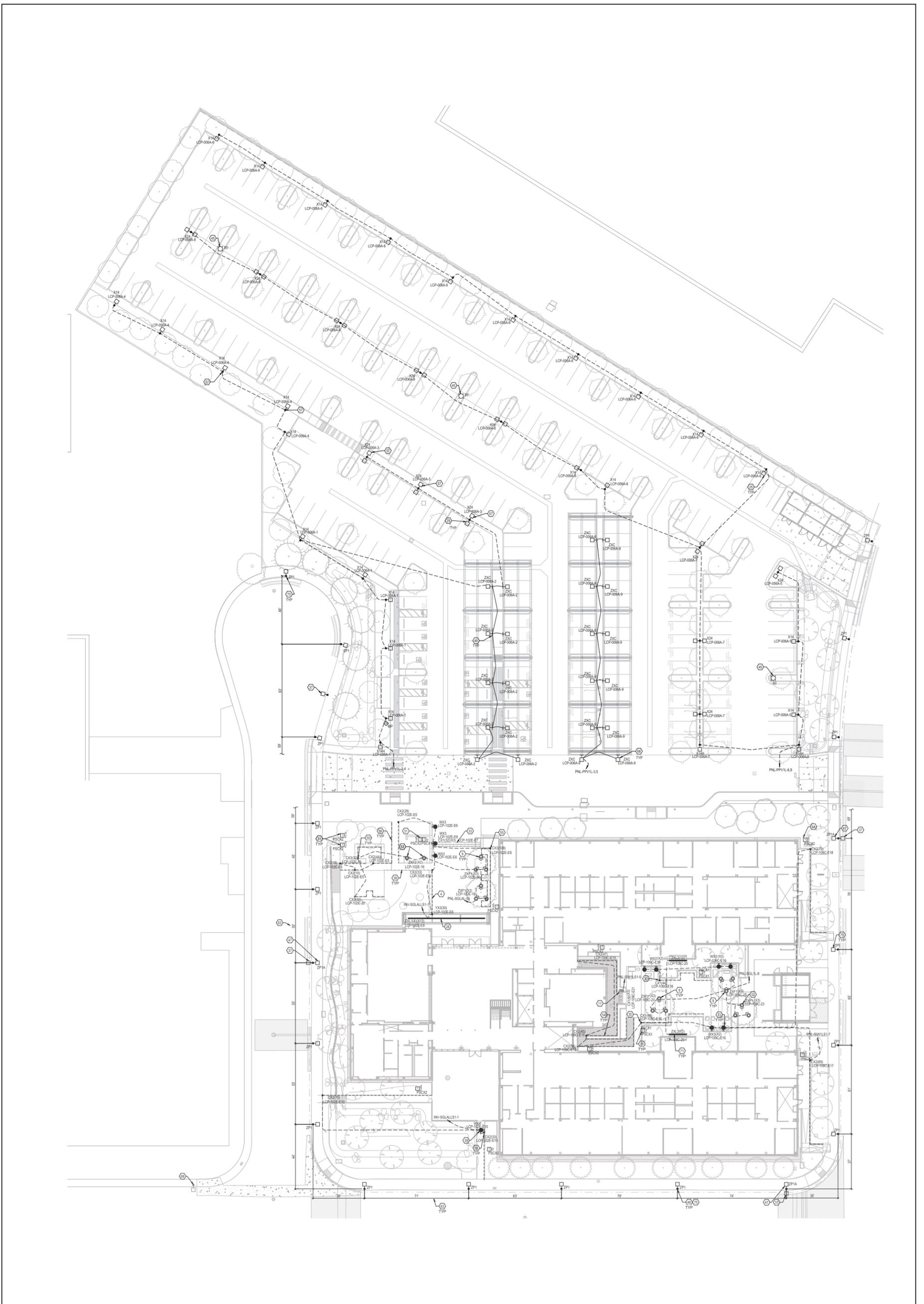


FIGURE 6

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FEET

SOURCE: HDR

Orange County Sanitation District
Headquarters Complex Project
Conceptual Lighting Plan



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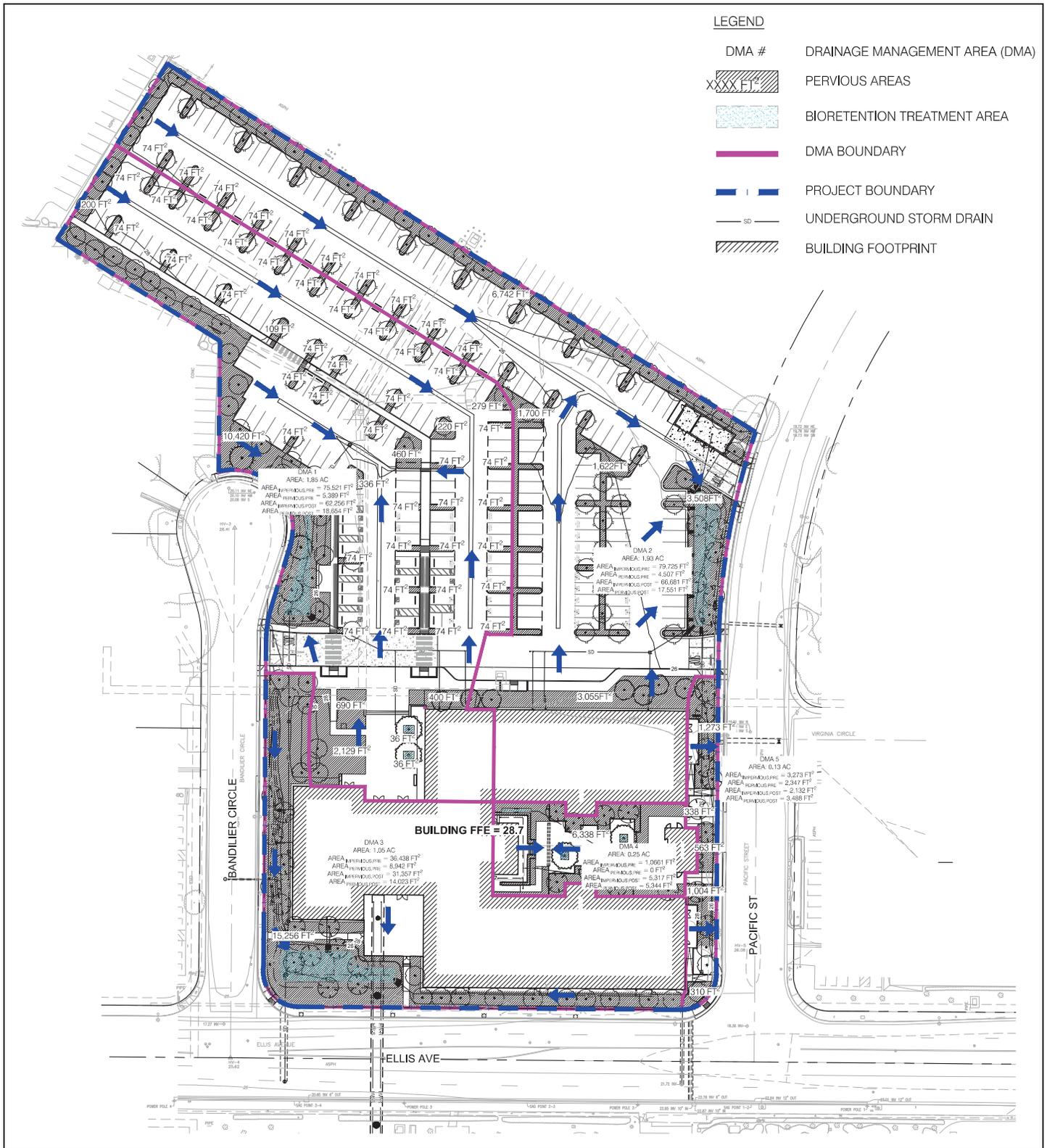
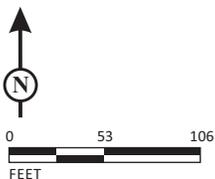


FIGURE 7

LSA



SOURCE: HDR

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Orange County Sanitation District
 Headquarters Complex Project
 Bioretention Basin Locations



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Variations and deviations are both forms of discretionary entitlements that may waive or relax the development standards of the Municipal Code and the FVCSP. As defined by FVCSP Section 2.0.5.F.3, deviations may request a nonconformity of up to 20 percent of any single standard; requests for deviations greater than 20 percent require a variance in accordance with Section 21.50 of the City's Municipal Code. For example, FVCSP Section 2.4.6.B.1 requires two Build-to-Corner conditions. Variance 3 is requesting that the City waive one of the two Build-to-Corner conditions for the Project, which represents a reduction of 50 percent of the development standard requirement. Additionally, FVCSP Section 2.3.3.B.1 allows a maximum building length of 200 ft. Deviation 1 is requesting an overage in the allowable maximum building length, which would be no greater than 20 percent, for the frontage on Ellis Avenue.

2.4.1 Ministerial Actions and Other Permits

Ministerial permits/approvals would be issued by the City or other appropriate agency to allow demolition, site preparation, curb cuts, connections to the utility infrastructure, paving, landscaping, and other Project features subject to ministerial permits.

In addition, the following Santa Ana Regional Water Quality Control Board (RWQCB) permits would also be required for approval of the Project; however, they are not considered discretionary approvals.

- National Pollutant Discharge Elimination System (NPDES) Construction General Permit
- NPDES Dewatering Permit (if groundwater dewatering during construction is required)

2.5 AGENCY CONSULTATION AND COORDINATION

The proposed Project will require approvals, permits, or authorization from other agencies, classified as "Responsible Agencies" under CEQA. According to Section 15381 of the *State CEQA Guidelines*, a Responsible Agency is defined as a public agency other than the Lead Agency that will have discretionary approval power over the Project or some component of the Project, including mitigation.

In accordance with *State CEQA Guidelines* Section 15051(a), OCSA is the appropriate Lead Agency for this Project as it is the public agency that will be directly implementing the Project (developing plans, paying construction, and acquiring property, etc.) and the City of Fountain Valley, is considered a "Responsible Agency" under *State CEQA Guidelines* Section 15381. Only agencies with discretionary approval power over the project are considered responsible agencies.

During the development of the Project plans, OCSA formally consulted with the City to obtain its input as a Responsible Agency, and to determine that an Addendum is the appropriate documentation required for this Project (Public Resources Code Section 21080.3[a]). In addition, it was determined that this Initial Study/Addendum would provide the City with information to inform the discretionary approvals process.



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3.0 ENVIRONMENTAL CHECKLIST

3.1 PROJECT DESCRIPTION AND BACKGROUND

3.1.1 Project Title

Administrative Headquarters Building Project, Project No. P1-128

3.1.2 Lead Agency Name and Address

Orange County Sanitation District (OCSD)
Sanitation District Plant No. 1
10844 Ellis Avenue
Fountain Valley, CA 92708

3.1.3 Contact Person and Phone Number

Kevin Hadden, (714) 593-7462

3.1.4 Project Location

The Project site (Assessor's Parcel Numbers [APNs] 156-163-06, 08, 09, 10 and 11), is located in the City of Fountain Valley. The Project site includes 18368 Bandilier Circle, 18410 Bandilier Circle, 18484 Bandilier Circle, 18429 Pacific Street, and 18475 Pacific Street. The Project site is bordered by industrial uses to the north, Pacific Street to the east, industrial uses and Bandilier Circle to the west, and Ellis Avenue with OCSD's Plant No. 1 beyond to the south. I-405 is 414 ft north of the Project site. The Santa Ana River Trail and Channel are located approximately 0.2 mile east of the Project site.

3.1.5 Project Sponsor's Name and Address

Orange County Sanitation District (OCSD)
10844 Ellis Avenue
Fountain Valley, CA 92708

3.1.6 General Plan Designation

The Project site is designated "Industrial – Commercial Manufacturing."

3.1.7 Zoning

The Project site is zoned "Specific Plan (SP) – FVCSP Mixed Industry District."

3.1.8 Specific Plan District

The Project site is located within a mixed industry district within the Fountain Valley Crossings Specific Plan area.



3.1.9 Description of Project

The proposed Project includes demolition of the five existing industrial warehouse buildings and construction and operation of a new Administrative Headquarters Building on the Project site. The proposed Project would include the construction and operation of a three-story, 109,914 sf administration building, and a surface parking lot with 261 parking spaces on the Project site. Landscaping and security lighting would be installed along the perimeter of the building. An approximately 128 ft long pedestrian overcrossing would also be constructed across Ellis Avenue to connect OCSD Plant No. 1 with the new Administrative Headquarters Building on the Project site.

3.1.10 Surrounding Land Uses and Setting

A mix of light industrial (e.g., warehousing), retail, and office uses make up the general character of the area around the Project site.

3.1.11 Other Public Agencies Whose Approval is Required

OCSD may be required to obtain approval or permits from the Santa Ana Regional Water Quality Control Board (RWQCB) and the City. Refer to Table B and Section 2.4.1.

3.1.12 Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

In accordance with Assembly Bill 52 (AB 52), letters were distributed on September 28, 2017, to the Gabrieleño Band of Mission Indians – Kizh Nation, the Juaneño Band of Mission Indians/Acjachemen Nation, and the San Gabriel Band of Mission Indians, notifying each of the tribes of the opportunity to consult with OCSD regarding the proposed Project. No responses or requests for consultation have been received from the Juaneño Band of Mission Indians/Acjachemen Nation or the San Gabriel Band of Mission Indians. On October 5, 2017, Andrew Salas, Chairman of the Gabrieleño Band of Mission Indians – Kizh Nation, requested to be consulted on the Project. OCSD responded to the request via emails on October 5, 2017, and October 24, 2017, to arrange a meeting with the tribe, to which Mr. Salas has not responded. OCSD will continue the consultation process with the Gabrieleño Band of Mission Indians – Kizh Nation during the California Environmental Quality Act (CEQA) process.



3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would result in a substantial change from the previous analysis in the Specific Plan EIR as indicated by the checklist on the following pages. Please see the Analysis of Environmental Impacts in Section 4.0 for additional information. No environmental factors listed below would result in a substantial change from the previous analysis contained in the Specific Plan EIR.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input type="checkbox"/>	Air Quality
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Energy
<input type="checkbox"/>	Geology and Soils	<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials
<input type="checkbox"/>	Hydrology and 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 and Service Systems	<input type="checkbox"/>	Findings of Mandatory Significance		

3.3 DETERMINATION

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 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 checked="" 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

Orange County Sanitation District
Agency

Printed Name/Title

Date



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4.0 ANALYSIS OF ENVIRONMENTAL IMPACTS

This following environmental analysis evaluates the proposed Administrative Headquarters Building Project, Project No. P1-128 (Project) as compared to the analysis of environmental impacts in the certified Fountain Valley Crossings Specific Plan EIR (Specific Plan EIR). The Checklist takes into consideration the preparation of the previous environmental document and the changes in circumstances that have occurred subsequent to adoption of the Specific Plan EIR, pursuant to Public Resources Code Section 21166, and Sections 15162 and 15164 of the *State CEQA Guidelines*. The comparative analysis for each of the environmental issues listed in the Checklist provides OCSD decision-makers with a factual basis for determining whether the proposed Project, changes in circumstances, or new information since the adoption of the Specific Plan EIR require the preparation of a subsequent or supplemental EIR, or other additional environmental review. The basis for each finding, and the supporting substantial evidence, is explained in the analysis in this section.



4.1 AESTHETICS

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the Project:			
a. Have a substantial adverse effect on a scenic vista?	<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 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"/>
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"/>

4.1.1 Existing Setting

The City of Fountain Valley (City) is an urbanized community located within north-central Orange County. There are no General Plan-designated scenic views or vistas within the City. According to the Specific Plan EIR, there are no unique or unusual features in the Fountain Valley Crossings Specific Plan (FVCSP) area that comprise a dominant portion of a viewshed. The Santa Ana and San Gabriel Mountains lie approximately 17 miles and 35 miles north of the FVCSP area, respectively. However, views to these scenic resources are substantially limited due to intervening structures and vegetation.

According to the Specific Plan EIR, the visual character of the FVCSP area is dominated by light industrial uses, with one- to two-story structures setback from wide surface streets and surface parking lots. The FVCSP area is relatively flat and gently slopes to the southwest. Individual parcels typically support established landscaping including shade trees, hedges, grassy lawns, and other small landscaped areas along the perimeter of properties and throughout surface parking lots. Some public roadways in the Specific Plan area are developed with sidewalks and street trees. Mature trees in the Specific Plan area are comprised of street trees in public rights-of-way and those on private property. Shade and shadow effects are minimal due to the low profile of most structures. However, even with larger structures, shade and shadow effects are negligible due to the distance of separation between taller structures from adjacent buildings. Street lighting and vehicular traffic lights are the predominant source of nighttime light and glare.

Public views within the Specific Plan area are characterized by existing structures, surface parking lots, and street trees. There are no State-designated scenic highways or eligible scenic highways within the City or in its immediate vicinity.²

4.1.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan’s potential Aesthetics impacts on pages 3.1-1 through 3.1-22.

² California Department of Transportation (Caltrans). California Scenic Highways Mapping System. Website: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways> (accessed November 24, 2019).



The Specific Plan EIR determined that there are no roadways or areas designated as scenic routes or vistas within the Specific Plan area. Additionally, there are no designated historic structures within the Specific Plan area. Views within the Specific Plan area are typical of urbanized light industrial areas, and there are no unobstructed distant views of scenic natural features. The topography of the area is relatively flat and does not contain any unique topographic features that would offer a scenic view. Therefore, the Specific Plan EIR concluded that the FVCSP Project would not block or diminish views from scenic vistas or block scenic views. In addition, the Specific Plan EIR concluded that the FVCSP Project would not damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic highway.

The Specific Plan EIR concluded that development of the Specific Plan area could result in the removal of mature trees due to redevelopment. Typically, redevelopment of parking lots and buildings would primarily result in removal of trees within each property. As such, street trees are expected to be minimally impacted. The Specific Plan encourages the preservation of mature trees and encourages new development to incorporate trees within landscape areas. In addition, Chapter 12.04.040 in the City's Municipal Code contains regulations regarding cutting, trimming, planting, pruning, removing, injuring, or interfering with trees, shrubs, or plants on streets, parkways, or public places. Adherence to the City's Municipal Code would assist in limiting the impacts of tree removal over the long term. Therefore, these impacts would be reduced to a less than significant level.

The Specific Plan EIR determined that implementation of the Specific Plan would change the existing visual character of the area because it could facilitate a new three-story development, as allowed under the Specific Plan (SP) – FVCSP Mixed Industry District zone. Future development within the Specific Plan area is subject to a formal development review process, which requires adherence to development standards provided in the Specific Plan and operating under the City's General Plan. These requirements would include maintaining and enhancing high-quality mixed-use development, retaining interesting architectural design elements, and installing new sidewalks and natural landscaping features. These regulations would ensure that the design of proposed buildings would enhance the character and quality of the Specific Plan area and contribute to a high quality urban environment. Thus, with implementation of existing and proposed design standards from the Specific Plan, the Specific Plan's impacts to visual character would be less than significant.

The Specific Plan EIR determined that implementation of the Specific Plan could increase the amount of light and glare in the area because it proposes to increase land use intensity and building heights and may result in the use of reflective building materials. Development projects under the Specific Plan would adhere to the Municipal Code Chapter 21.18.060, which implements restrictions on exterior lighting. In addition, the Specific Plan outlines development standards and design requirements to reduce potential glare and light spillover from future development projects. As such, lighting as a result of Specific Plan implementation is anticipated to be compatible with other uses in the vicinity of the area and would not introduce a substantial new source of nighttime light pollution. Therefore, impacts related to light and glare from development of the Specific Plan area were determined to be less than significant.



4.1.3 Analysis of Project Impacts

a. Would the Project have a substantial adverse effect on a scenic vista?

The Project site is located in a fully developed area in the southeastern portion of Fountain Valley in Orange County. The Project site is approximately 0.2 mile west of the Santa Ana River and 5 miles north of the Pacific Ocean, although neither the river nor ocean can be seen from the Project site due to intervening land uses. In addition, the City's General Plan (adopted March 1995, revised November 2017) does not designate any scenic vistas or resources in Fountain Valley. As a result, the Project site does not have views of any scenic vistas. ***Therefore, the proposed Project would not result in adverse impacts on scenic vistas. No mitigation is required.***

The Specific Plan EIR also concluded that no impacts to scenic vistas would occur. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

b. Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic highway?

The Project site is currently occupied by five industrial warehouse buildings and does not contain any scenic resources or historic structures. In addition, the Project site does not provide scenic views from adjacent land uses or public roads or sidewalks. According to the California Scenic Highway Mapping System, there are no State-designated scenic highways or eligible scenic highways within the City or in the immediate vicinity. Although the Project may require removal of trees located on the property, the Project would adhere to Chapter 12.04.040 in the City's Municipal Code and intends to comply with design standards in the Specific Plan. ***Therefore, the proposed Project would not result in adverse impacts on scenic resources and no mitigation would be required.***

The Specific Plan EIR also concluded that impacts to scenic resources would be less than significant. Specifically, the removal of mature trees that would occur as a result of implementation of the Specific Plan would be less than significant with compliance with design standards in the Specific Plan and adherence to Chapter 12.04.040 in the City's Municipal Code. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

c. Would the Project substantially degrade the existing visual character or quality of the site and its surroundings? (This may include loss of major onsite landscape features, or degradation by change of character when placed in the context of the existing surroundings.)

The vicinity of the Project site is characterized by a mix of industrial and residential land uses. The Project site is currently developed with one- and two-story industrial warehouse buildings and surface parking lots. The Project would include demolition of the five existing on-site



industrial warehouse buildings and construction and operation of a new three-story administration building and surface parking lot on the Project site. In addition, a pedestrian bridge would extend from the Project site to OCSD's Plant No. 1, directly south of the Project site. The bridge would consist of two painted exposed Warren steel trusses spanning Ellis Avenue with a concrete metal deck floor and a metal roof. Although the bridge would be enclosed with stainless steel cable mesh for protection from any potential falls, it would not be not climate controlled. The tallest point of the bridge structure would be a maximum of 30 ft above grade, and the lowest point of the structure would be a minimum of 19 ft above grade. The bridge would be supported by reinforced concrete columns located outside of the public right-of-way on each side of Ellis Avenue. The bridge would connect to the second-floor level of the new administration building on the north side of Ellis Avenue and then connect to an elevator tower inside the secure perimeter of Plant No. 1. Security lighting would be included within the bridge enclosure. The pedestrian bridge would be designed architecturally similarly to the administration building. As such, the visual character of the site and views of the Project site from off-site areas would substantially change with implementation of the proposed Project. However, the Project would enhance the character and quality of the Project site and surrounding area by introducing updated buildings in place of the dated structures. In addition, the Project would comply with many development standards outlined in Section 2.1.5 of the Specific Plan, which includes regulations pertaining to building scale, mass, placement, and architectural guidelines. At three stories in height, the Project would be consistent with development standards outlined in the Specific Plan, which allows up to four stories in height. The proposed Project would require the following variances, deviations, and code amendments to the Specific Plan:

- Variance 1 – Frontage Coverage (Pacific Street)
- Variance 2 – Frontage Coverage (Bandilier Circle)
- Variance 3 – Build-to-Corner (Ellis Avenue/Bandilier Circle)
- Variance 4 – Parking Count (Not Used)
- Variance 5 – Curb Cuts & Driveways (Pacific Street)
- Variance 6 – Street Façade Base (Pacific Street)
- Variance 7 – Street Façade Base (Ellis Avenue)
- Variance 8 – Street Façade Base (Bandilier Circle)
- Variance 9 – Street Façade Top (Pacific Street, Bandilier Circle and Ellis Avenue – Board Room Volume, Ellis Avenue)
- Variance 10 – Street Façade Wall Composition on Bandilier Circle
- Deviation 1 – Building Length (Ellis Avenue)
- Deviation 2 – Street Façade Composition (Pacific Street)
- Deviation 3 – Parking Count



- Code Amendment 1 – Amendment to permit the use of skyways to connect government buildings
- Code Amendment 2 – Amendment to change the minimum parking standard for the Workplace-Professional use type from 3.5 spaces per 1,000 sf to 2.5 spaces per 1,000 sf
- Code Amendment 3 – Amendment to eliminate the requirement for Special Public Open Space

The proposed Project would comply with all other development standards outlined in 2.1.5 of the Specific Plan. **Therefore, with the approval of the above variances, deviations, and code amendments to the Specific Plan, the proposed Project would result in less than significant impacts related to the visual character of the site and views of the site. No mitigation is required.**

The Specific Plan EIR also concluded that impacts to visual character would be less than significant because development standards outlined in the Specific Plan would enhance the character and quality of the Specific Plan area. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

d. Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Light and glare levels surrounding the Project site are typical for industrial park and residential uses. As described in Section 2.3.7 of this document, the proposed Project would include the installation of new lighting, including lighting associated with signage, wayfinding, and security lighting on the Project site. In addition, security lighting would be included within the bridge enclosure. The Project intends to comply with requirements outlined in the Specific Plan, as well as Section 21.18.060 of the City's Municipal Code, which include regulations pertaining to exterior lighting and glare. **Therefore, new sources of light and glare associated with the proposed Project would have less than significant impacts to views in the Project area and no mitigation would be required.**

The Specific Plan EIR also concluded that impacts as a result of light and glare would be less than significant because future development would be in compliance with design standards in the Specific Plan and adherence to Chapter 12.18.060 in the City's Municipal Code. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

4.1.3.1 Mitigation Measures

The Specific Plan EIR does not include mitigation related to Aesthetics. No mitigation would be required for the proposed Project.



4.1.4 Findings Related to Aesthetics

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Aesthetics, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Aesthetics that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Aesthetics requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. The proposed Project would not result in any potentially significant impacts related to Aesthetics. CEQA does not require consideration of alternatives to the Project or consideration of additional mitigation measures because there would not be any significant impacts to avoid or reduce related to this topic, and no mitigation is required.



4.2 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 Department 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.

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
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 checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<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 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 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 forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.2.1 Existing Setting

The City of Fountain Valley (City) is an urbanized community located within northwestern Orange County. There are no General Plan-designated agricultural land uses within the City, but the City does have agriculturally zoned land. The Specific Plan EIR does not identify any agricultural land uses within the Specific Plan area, including the Project site and the Project vicinity. The Specific Plan area does not contain land zoned or designated for agriculture use or as forest or timberland. The California Department of Conservation (DOC 2016) designates the entire Specific Plan area, including the Project site, as Urban and Built-Up Land.³

4.2.2 Impacts Identified in the Specific Plan EIR

Agriculture and Forestry are included within Section 4.3, Effects Found Not to be Significant, on page 4-5 of the Specific Plan EIR; this topic was also discussed on pages 17–18 of the Initial Study and was scoped out.

³ Department of Conservation (DOC). 2016. Farmland Mapping and Monitoring Program. Orange County Important Farmland 2014. July.



The Specific Plan EIR concluded that implementation of the Specific Plan would not result in impacts to agricultural and forestry resources because these uses do not currently exist within Specific Plan area. The developed nature of the Specific Plan area, including the Project site and Project vicinity, does not make the area suitable for existing or future agricultural or forest land uses.

4.2.3 Analysis of Project Impacts

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

The Project site, like most of Orange County, is in an area that has been designated as Urban and Built-Up Land by the DOC (2016). The Project site is not currently designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. **Therefore, the proposed Project would not 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, and no mitigation would be required.**

The Specific Plan EIR also concluded that no impacts to designated farmlands would occur. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

- b. **Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

Within the Specific Plan area, the Project site is designated Mixed Industry District. The Project site is designated Industrial (Commercial Manufacturing) in the City's General Plan and is zoned as Specific Plan (SP) – FVCSP Mixed Industry District. The Project site is not zoned or currently used for agricultural purposes, and no Williamson Act contracts are in effect for the Project site. **Therefore, the proposed Project would not conflict with existing zoning or Williamson Act contracts, and no mitigation would be required.**

The Specific Plan EIR also concluded that no conflicts with existing zoning or Williamson Act contracts would occur. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.



- c. **Would the Project 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))?**

Within the Specific Plan area, the Project site is designated Mixed Industry District. The Project site is designated Industrial (Commercial Manufacturing) in the City's General Plan and is zoned as Specific Plan (SP) – FVCSP Mixed Industry District. **The Project site and the surrounding area are not zoned as forest land, timberland, or timberland production, and consequently, no significant impacts would occur, and no mitigation would be required.**

The Specific Plan EIR also concluded that no conflicts with existing zoning of forestland, timberland, or timberland production would occur. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

- d. **Would the Project result in the loss of forest land or conversion of forest land to non-forest use?**

The Project site is located in a high-density urban setting. No forest or timberland exists at the Project site or in the surrounding area. The Project would not result in the loss of forest land or the conversion of forest land to non-forest use. **Therefore, no impact related to the loss of forest land or the conversion of forest land to non-forest land use would occur and no mitigation would be required.**

The Specific Plan EIR also concluded that no loss of forest land or conversion of forest land to non-forest use would occur. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

- e. **Would the Project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use?**

The Project site is developed with five industrial warehouse buildings. The Project site is not currently used for agricultural purposes and is adjacent to non-agricultural, manufacturing uses. The Project would not result in the conversion of farmland to non-agricultural use because there are no agricultural uses on or in the immediate vicinity of the Project site. **As a result, the Project would not result in impacts related to the conversion of agricultural land to non-agricultural uses, and no mitigation would be required.**

The Specific Plan EIR also concluded that conversion of farmland to non-agricultural use would not occur because there are no agricultural uses on or in the immediate vicinity of the Specific Plan area. The proposed Project, which is located within the Specific Plan area, would not result



in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

4.2.3.1 Mitigation Measures

The Specific Plan EIR does not include mitigation related to agricultural and forestry resources. No mitigation would be required for the proposed Project.

4.2.4 Findings Related to Agricultural and Forestry Resources

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Agricultural and Forestry Resources, and there is no increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Agricultural and Forestry Resources that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Agricultural and Forestry Resources requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. The proposed Project would not result in any potentially significant impacts related to Agriculture and Forestry. CEQA does not require consideration of alternatives to the Project or consideration of additional mitigation measures because there would not be any significant impacts to avoid or reduce related to this topic, and no mitigation is required.



4.3 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.

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
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"/>
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"/>
b. Result in a cumulatively considerable net increase to any criteria pollutant for which the Project region is in nonattainment under an applicable federal or state ambient air quality standard? (including releasing emissions which exceed quantitative standards for ozone precursors).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.3.1 Existing Setting

The proposed Project is located within the South Coast Air Basin (Basin). The South Coast Air Quality Management District (SCAQMD) is the regional government agency that monitors and regulates air pollution within the Basin. The Federal Clean Air Act and the California Clean Air Act mandate the control and reduction of specific air pollutants produced during the construction and operation of a project. Under these Acts, the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for specific "criteria" pollutants (both primary and secondary), designed to protect public health and welfare. Primary criteria pollutants include carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NO_x), particulate matter (PM₁₀), sulfur dioxide (SO₂), and lead (Pb). Secondary criteria pollutants include ozone (O₃), and fine particulate matter (PM_{2.5}). Therefore ambient air quality standards are levels of contaminants that avoid specific adverse health effects associated with each criteria pollutant.

Based on the SCAQMD attainment status and ambient air quality monitoring data, ambient air quality in the vicinity of the Project site has basically remained unchanged since approval of the Specific Plan EIR in 2018. The SCAQMD is in nonattainment for the federal and State standards for O₃ and PM_{2.5}. In addition, the Basin is in nonattainment for the PM₁₀ standard and in attainment/maintenance for the federal PM₁₀, CO, and NO₂ standards.

To meet these standards, the SCAQMD has established project-level thresholds for volatile organic compounds (VOC), NO_x, and PM_{2.5}. The SCAQMD has established thresholds of significance for criteria pollutant emissions generated during both construction and operation of projects as shown in Table 4.3.A below.



Table 4.3.A: SCAQMD Construction and Operation Thresholds of Significance (lbs/day)

	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Construction Thresholds	75	100	550	150	150	55
Operation Thresholds	55	55	550	150	150	55

Source: South Coast Air Quality Management District (1993).

CO = carbon monoxide

lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO₂ = sulfur dioxide

VOC = volatile organic compounds

Projects in the Basin with construction-related emissions that exceed any of the emission thresholds in Table 4.3.A are considered potentially significant by the SCAQMD.

4.3.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan’s potential Air Quality impacts on pages 3.2-1 through 3.2-31.

The Specific Plan EIR evaluated the potential impacts of the Specific Plan on air quality in the Specific Plan area and the Basin. The Specific Plan EIR determined that all construction occurring under the Specific Plan would occur in accordance with applicable regulations and plans to reduce emissions from construction activities, including SCAQMD Rule 403, SCAQMD Rule 1113, and SCAQMD Rule 1186. The Specific Plan EIR also quantified construction emissions associated with the Specific Plan using the California Emissions Estimator Model (CalEEMod) and determined that overall construction emissions would not exceed SCAQMD thresholds for VOC, NO_x, CO, SO₂, PM₁₀, or PM_{2.5}.

The Specific Plan EIR also evaluated daily operational emissions associated with the Specific Plan using CalEEMod. The CalEEMod analysis included the existing development as part of the baseline, and evaluated the potential operational impacts of proposed land use changes within the Specific Plan area. The Specific Plan’s net emissions were compared to the SCAQMD thresholds (refer to Table 4.3.A), and impacts were determined to be below the thresholds. Therefore, the Specific Plan EIR determined operational air quality impacts would be less than significant.

In addition, the Specific Plan EIR determined that implementation of the Specific Plan would not conflict with or obstruct implementation of the SCAQMD’s adopted 2016 Air Quality Management Plan (AQMP). The Specific Plan EIR also determined that construction and operation of the Specific Plan would result in a less than significant cumulative impact.

The Specific Plan EIR found that the Specific Plan has the potential to expose sensitive land uses (e.g., residential units) to substantial pollutant concentrations. Therefore, the Specific Plan EIR identified Mitigation Measures MM AQ-5a, MM AQ-5b, and MM AQ-5d through MM AQ-5f to reduce adverse effects for sensitive receptors within 500 ft of the I-405 freeway and/or for sensitive receptors near the potential development of a distribution center, rail yard, refinery, chrome plater, dry cleaning operation, or gas station. The Specific Plan EIR determined that these mitigation measures would ensure the potential for exposure of hazardous air emissions to sensitive receptors



would be reviewed and project designs revised if necessary to address air quality issues. Further, MM AQ-5c, which is applicable to all projects in the Specific Plan area, would reduce air quality impacts resulting from the placement of the air system intake. Therefore, after implementation of mitigation, it was determined that impacts related to the exposure of sensitive land uses to substantial pollution concentrations would be less than significant.

In addition, the Specific Plan EIR determined that impacts associated with construction- and operation-generated odors would be less than significant.

4.3.3 Analysis of Project Impacts

a. Would the Project conflict or obstruct implementation of the applicable air quality plan?

An Air Quality Management Plan (AQMP) describes air pollution control strategies to be undertaken by a city, county, or air quality management district in a region classified as a nonattainment area to meet the requirements of the Federal Clean Air Act. The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State ambient air quality standards (AAQSs). The applicable air quality plan is the SCAQMD's adopted 2016 AQMP. For a project to be consistent with the 2016 AQMP, the pollutants emitted from project operation should not exceed the SCAQMD daily threshold or cause a significant impact on air quality, or the project must already have been included in the AQMP projection. Since the AQMP is based on local General Plans, projects that are deemed consistent with a specific General Plan are usually found to be consistent with the AQMP.

The proposed Project would construct a new administration building and associated parking. The Project site is in the Specific Plan area and is designated Commercial Manufacturing in the City's General Plan and is zoned as Specific Plan (SP) – FVCSP Mixed Industry District. As discussed in Section 3.11, Land Use and Planning, the proposed Project land use is consistent with the City's General Plan designation for the Project site. In addition, as shown in Table 4.3.B, construction of the proposed Project would not result in the generation of criteria air pollutants that would exceed SCAQMD thresholds of significance. As shown in Table 4.3.C, operational emissions associated with the proposed Project would not exceed SCAQMD established significance thresholds for VOC, NO_x, CO, SO₂, PM₁₀, or PM_{2.5} emissions. Existing development on the site includes 113,749 sf of warehouse uses. The proposed Project would develop 109,914 sf of administrative office uses designed to achieve United States Green Building Council Leadership in Energy and Environmental Design (LEED) Platinum Certification. The proposed Project may have a similar or reduced air quality impact on employees in the vicinity of the Project site. It should be noted that employees in vicinity of the Project site are not considered to be sensitive receptors. Refer to the discussion under 4.3.d for a discussion of potential impacts to sensitive receptors. **Therefore, the proposed Project would have no impact related to conflicts with or obstruction of implementation of the 2016 AQMP and no mitigation would be required.**

The Specific Plan EIR also concluded that no impacts would occur related to conflicts with or obstruction to implementation of the 2016 AQMP. Similarly, the proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those



identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

b. Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The following sections describe the proposed Project's construction- and operation-related air quality impacts.

Construction Emissions. Construction activities such as earthmoving and construction vehicle traffic would generate exhaust emissions and fugitive particulate matter emissions that affect local and regional air quality. Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-water-based paints, thinners, some insulating materials, and caulking materials could evaporate into the atmosphere and could participate in the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application. Construction dust could affect local air quality at various times during construction of the Project. The dry, windy climate of the area during the summer months creates a high potential for dust generation when, and if, underlying materials are exposed to the atmosphere. The effects of construction activities would be increased dustfall and locally elevated levels of particulate matter downwind of construction activity.

The Specific Plan EIR determined that construction emissions associated with implementation of the Specific Plan would not exceed SCAQMD thresholds for VOC, NO_x, CO, SO₂, PM₁₀, or PM_{2.5}. In addition, the Specific Plan EIR determined that all construction occurring under the Specific Plan would occur in accordance with applicable regulations and plans to reduce emissions from construction activities, including SCAQMD Rule 403, SCAQMD Rule 1113, and SCAQMD Rule 1186.

As previously stated, based on the SCAQMD attainment status and ambient air quality monitoring data, ambient air quality in the vicinity of the Project site has basically remained unchanged since approval of the Specific Plan EIR. Construction emissions were estimated for the proposed Project using CalEEMod. Specific construction details are not yet known; therefore, default assumptions (e.g., construction fleet activities) from CalEEMod were used. Construction of the proposed Project is anticipated to begin in January 2021 and be completed in May 2023. In addition, construction of the proposed Project would include the demolition of five industrial warehouse buildings on site, totaling approximately 114,744 sf, which was included in CalEEMod. Construction of the proposed Project would be required to comply with SCAQMD Rule 403, Fugitive Dust; therefore, fugitive dust control measures were also included in CalEEMod. Peak daily construction-related emissions are presented in 4.3.B, below. CalEEMod output sheets are provided in Appendix A.

As shown in Table 4.3.B, construction emissions associated with the proposed Project would be less than significant for VOC, NO_x, CO, SO₂, PM_{2.5}, and PM₁₀ emissions. No mitigation would be required. In addition, the proposed Project would also be required to comply with the applicable regulations and plans to reduce emissions from construction activities, including SCAQMD Rule 403, SCAQMD Rule 1113, and SCAQMD Rule 1186.



Table 4.3.B: Peak Daily Construction Emissions (lbs/day)

Peak Construction Emissions	VOC	NO _x	CO	SO ₂	PM ₁₀ (total)	PM _{2.5} (total)
Demolition	3.3	34.8	22.8	0.1	3.0	1.7
Site Preparation	4.0	40.6	21.8	0.0	9.0	5.8
Grading	2.4	24.8	16.4	0.0	3.8	2.4
Building Construction	2.4	21.0	20.3	0.0	2.1	1.2
Paving	1.3	10.2	15.1	0.0	0.7	0.5
Architectural Coating	29.4	1.3	2.3	0.0	0.3	0.1
Peak Daily Emissions	29.4	40.6	22.8	0.1	9.0	5.8
SCAQMD Construction Emissions Threshold	75.0	100.0	550.0	150.0	150.0	55.0
Exceed Significance?	No	No	No	No	No	No

Source: LSA (November 2019).

CO = carbon monoxide

lbs/day = pounds per day

NO_x = nitrogen oxide

PM_{2.5} = particulate matter less than 2.5 microns in diameter

PM₁₀ = particulate matter less than 10 microns in diameter

SCAQMD = South Coast Air Quality Management District

SO₂ = sulfur dioxide

VOC = volatile organic compounds

The Specific Plan EIR determined that construction emissions associated with construction of the Specific Plan would not exceed SCAQMD thresholds for VOC, NO_x, CO, SO₂, PM₁₀, or PM_{2.5}. In addition, the Specific Plan EIR determined that all construction occurring under the Specific Plan would occur in accordance with applicable regulations and plans to reduce emissions from construction activities, including SCAQMD Rule 403, SCAQMD Rule 1113, and SCAQMD Rule 1186. Development of the proposed Project would result in similar, but fewer, construction-related, short-term air quality impacts to those identified in the Specific Plan EIR.

Therefore, the proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

Operational Emissions. The proposed Project would include construction and operation of a new administration building and surface parking lot and would relocate the existing administrative uses from Plant No. 1, to the Project site north of Ellis Avenue. Implementation of the proposed Project would not result in an increase in OCSA employees because the Project is characterized as a relocation, rather than an expansion, of existing operations. As a result, the Project would not increase existing vehicle trips. The new land uses would result in area source air quality impacts such as emissions generated from the use of landscaping equipment and water heating.

Emission estimates for operation of the proposed Project were calculated using CalEEMod, consistent with SCAQMD recommendations. The proposed Project would be designed to achieve United States Green Building Council Leadership in Energy and Environmental Design (LEED) Platinum Certification, which was reflected in CalEEMod inputs. Model results are shown in Table 4.3.C. CalEEMod output sheets are provided in Appendix A.



Table 4.3.C: Operational Emissions (lbs/day)

Source	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area Sources	2.5	0.0	0.0	0.0	0.0	0.0
Energy Sources	0.0	0.2	0.2	0.0	0.0	0.0
Mobile Sources	0.0	0.0	0.0	0.0	0.0	0.0
Total Emissions	2.5	0.2	0.2	0.0	0.0	0.0
SCAQMD Thresholds	55.0	55.0	550.0	150.0	150.0	55.0
Significant?	No	No	No	No	No	No

Source: LSA (November 2019).

CO = carbon monoxide

lbs/day = pounds per day

NO_x = nitrogen oxides

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

SCAQMD = South Coast Air Quality Management District

SO₂ = sulfur dioxide

VOC = volatile organic compounds

The primary emissions associated with the Project are regional in nature, meaning that air pollutants are rapidly dispersed on release. The daily emissions associated with Project operational trip generation, energy, and area sources are identified in Table 4.3.C for VOC, NO_x, CO, SO₂, PM₁₀, and PM_{2.5}. **As shown in Table 4.3.C, the proposed Project would not exceed SCAQMD thresholds for operational emissions, and no mitigation would be required.**

However, MM AQ-5c, is applicable to all projects in the Specific Plan area, and would further reduce operational air quality emissions resulting from the placement of the air system intake.

The Specific Plan EIR determined that operational emissions associated with the Specific Plan would not exceed the SCAQMD significance thresholds and, therefore, would result in a less than significant impact. In addition, the Specific Plan EIR analysis assumed that the Specific Plan area was emitting operational air pollutant emissions from its existing land uses and evaluated existing development as part of the baseline. The Specific Plan EIR therefore focused operational impacts to proposed land use changes that alter build out, and thus determined that implementation of the Specific Plan would result in a net decrease in VOC, NO_x, CO, and SO₂ emissions. For a worst-case analysis, existing on-site industrial warehouse buildings were evaluated as vacant as part of the baseline for the SP. However, as shown in Table 4.3.C above, the proposed Project would not exceed the significance criteria for daily VOC, NO_x, CO, SO₂, PM₁₀, or PM_{2.5} emissions; therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

- c. **Would the Project result in a cumulatively considerable net increase to any criteria pollutant for which the Project region is in nonattainment under an applicable federal or state ambient air quality standard? This includes releasing emissions which exceed quantitative standards for ozone precursors.**

As indicated in Table 4.3.C above, the proposed Project individually would not result in significant regional emissions for criteria pollutants. **A project that would result in less than significant emissions at the individual project level would also result in less than significant cumulative emissions. No mitigation would be required.** As noted above, the proposed Project would also be consistent with the region’s 2016 AQMP.



The Specific Plan EIR determined that implementation of the Specific Plan would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors). Similarly, the proposed Project would not result in emissions that are cumulatively significant and, therefore, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

d. Would the Project expose sensitive receptors to substantial pollutant concentrations?

As discussed in the Specific Plan EIR, the CARB guidebook, *Air Quality and Land Use Handbook: A Community Health Perspective*,⁴ recommends avoiding siting sensitive uses (e.g., residences, schools, day care centers, playgrounds, and hospitals) within 500 ft of a freeway or urban roads carrying 100,000 vehicles per day, or within 1,000 ft of a distribution center (warehouse) that accommodates more than 100 trucks or more than 90 refrigerator trucks per day. In addition, the Specific Plan EIR identified Mitigation Measures MM AQ-5a, MM AQ-5b, and MM AQ-5d through MM AQ-5f to reduce adverse effects for sensitive receptors within 500 ft of the I-405 freeway and/or for sensitive receptors near the potential development of a distribution center, rail yard, refinery, chrome plater, dry cleaning operation, or gas station. The Specific Plan EIR determined that after mitigation, residual impacts related to the exposure of sensitive land uses to substantial pollution concentrations would be less than significant.

The closest sensitive receptors to the Project site include the single-family residences located approximately 1,350 ft southeast of the Project site along Alabama Circle. Construction activities associated with the Project would generate airborne particles and fugitive dust, as well as a small quantity of pollutants associated with the use of construction equipment (e.g., diesel-fueled vehicles and equipment) on a short-term basis. As shown in Table 4.3.B, construction would generate emissions that are well below the SCAQMD significance criteria. In addition, due to the distance of the nearest receptors from the Project construction area, Project construction emissions would not impact sensitive receptors.

The proposed Project would include a new administration building and associated parking, and, therefore, the proposed Project would not include new sensitive receptors. Once the proposed Project is constructed, the Project would not be a source of substantial toxic air contaminant (TAC) emissions. In addition, the nearest sensitive receptors are located approximately 1,350 ft from the Project site, and, therefore, sensitive receptors would not be exposed to substantial pollutant concentrations from Project construction/operations, that would cause harmful effects. **Neither construction nor operation of the proposed Project would result in the exposure of sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant and no mitigation would be required.**

⁴ California Environmental Protection Agency (CalEPA) and California Air Resources Board (CARB). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April. Website: www.arb.ca.gov/ch/handbook.pdf (accessed November 24, 2019).



The Specific Plan EIR determined that after mitigation, residual impacts related to the exposure of sensitive land uses to substantial pollution concentrations would be less than significant. However, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations that would cause harmful effects. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

e. Would the Project create objectionable odors affecting a substantial number of people?

During construction, the various diesel-powered vehicles and equipment in use on site would create localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the Project site. The potential for diesel odor impacts is, therefore, considered less than significant. Additionally, the proposed uses that would be developed within the Project site are not expected to produce any offensive odors that would result in frequent odor complaints. The proposed Project would not include sensitive receptors; therefore, odor impacts on the Project would not occur and do not require further evaluation. **Therefore, this impact would be less than significant, and no further mitigation would be required.**

The Specific Plan EIR also determined that impacts associated with construction- and operation-generated odors would be less than significant. The proposed Project, which is located within the Specific Plan area and does not propose uses that would produce offensive odors, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

4.3.3.1 Mitigation Measures

Based on the analysis contained in the Initial Study/Addendum, Mitigation Measure MM AQ-5c, included in the Specific Plan EIR, would be applicable to the proposed Project. No additional mitigation measures related to air quality beyond those identified in the Specific Plan EIR are required.

MM AQ-5a Health Risk Assessment (HRA). Development of a proposed sensitive land use within 500 feet of I-405 or the development of a distribution center, rail yard, refinery, chrome plater, dry cleaning operation, or large gas station near a sensitive land use shall prepare a site-specific HRA prior to developing such land uses as a way to more accurately evaluate the risk. The HRA for air quality and “hot spots” of air pollutions shall be prepared consistent with Cal EPA’s Office of Environmental Health Hazard Assessment’s A Guide to Health Risk Assessment and The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (HRAs) to aid California projects’ compliance with the 1987 “Hot Spots” Act. The HRA shall identify the hazard or hazardous material, assess the amount, duration, and pattern of exposure to the hazard or hazardous material, assess the amount it would take to cause negative health effects, and characterize the risk to general



population and sensitive receptors from the hazard or hazardous material. The HRA shall be reviewed and approved by the City Planning and Building Department prior to approval of development permits for land uses that include or potentially affect sensitive populations.

MM AQ-5b Interior Air Quality Protection. Development of a proposed sensitive land use within 500 feet of I-405 and/or within 100 feet of an intersection operating or projected to operate at Level of Service (LOS) E or F shall include heating, ventilation, and air conditioning (HVAC) infrastructure within the building to circulate and purify outdoor air sources sufficiently to reduce Toxic Air Contaminants (TACs), such as diesel particulate matter and vehicle emissions. HVAC control systems shall include particulate filters that have a minimum efficiency reporting value (MERV) of 15 as indicated by the American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2. The proposed HVAC system shall be reviewed and approved by the City Planning and Building Department prior to approval of a development permit. Monitoring and maintenance of HVAC systems and particulate filters shall be conducted by the Applicant on a semiannual basis to ensure efficiency of the system for development permits involving land uses that include or potentially affect sensitive populations.

MM AQ-5c Placement of Air System Intake. When considering placement and direction of air intakes, the direction of prevailing winds shall be considered and the most logical decision shall be made. Design of the proposed development shall face air systems intakes appropriately, so as to reduce highly concentrated air pollution intake, considering placement on the opposite side of the building from the pollutant source. Development and HVAC system design shall be reviewed and approved by the City Planning and Building Department prior to issuance of a building permit. Monitoring and maintenance of HVAC systems and air intakes shall be conducted by the Applicant on a semiannual basis to ensure efficiency of the systems for development permits involving land uses that include or potentially affect sensitive populations.

MM AQ-5d Vegetation Barriers. The Applicant of development permits involving land uses that include or potentially affect sensitive populations shall consider the installation of vegetation barriers that disrupt pollutant dispersal, absorb carbon-based particulates, or reduce air pollutant concentrations during design of the proposed development. Vegetation barriers shall be chosen and installed where most appropriate to provide additional reduction of onsite air pollutant concentrations, while providing an aesthetically pleasing natural barrier. The vegetation types chosen should shall be appropriate for the location, including water requirements, non-invasive species, and aesthetic quality. Development designs and vegetative screening shall be reviewed and approved by the City Planning and Building Department prior to approval of a development permit. Plans for the maintenance of landscaping and vegetation barriers shall be made by the Applicant to ensure



efficiency of vegetation barriers and maintain the visual quality of onsite landscape design.

MM AQ-5e Reduced Number of Openable Windows Facing I-405. During the preliminary design process, the Applicant of development permits involving land uses that include sensitive populations shall reduce the number of openable windows facing the I-405. The reduction in number of openable windows facing the pollutant source will reduce potential exposure of harmful vehicle pollutants, as well as reduce potential contamination of interior air quality. Careful consideration of the location of openable and un-openable windows, prevailing wind direction and daylighting shall be made during design of the development so as not to substantially diminish comfortability and livability of the residential development or other sensitive receptor. Development and building design shall be reviewed and approved by the City Planning and Building Department prior to approval of a development permit.

MM AQ-5f Development Design, Siting, and Setbacks. Where appropriate, the Applicant of land uses that include sensitive populations shall develop the site such that open spaces (i.e., walkways, alley ways, streetways, and other non-sensitive open space land uses) are placed closest to the I-405, increasing the distance of sensitive receptors from the pollutant source. The setback of sensitive receptors remains the most certain method for reducing health risk from traffic pollution exposure. Development and site design shall be reviewed by the City Planning and Building Department prior to approval of a development permit.

4.3.4 Findings Related to Air Quality

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Air Quality, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Air Quality that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Air Quality requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. This Addendum has analyzed all available relevant information and has determined that there is no new information of substantial importance that was unknown and could not have been known with the



exercise of reasonable diligence at the time the Specific Plan EIR was certified indicating that: (1) mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project, but the Project proponent declines to adopt the mitigation measures or alternatives; or (2) mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the Project proponent declines to adopt the mitigation measures or alternatives.

As discussed above, the proposed Project would result in a potentially significant impact related to Air Quality. Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measure that is applicable to the proposed Project is listed in Section 4.3.3.1. Potential Project impacts related to Air Quality would be reduced below a level of significance with implementation of the applicable mitigation measures, none of which the Project proponent is declining to adopt.



4.4 BIOLOGICAL RESOURCES

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
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 Wildlife or U.S. Fish and Wildlife Service?	<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 Wildlife or U.S. Fish and Wildlife Service?	<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, wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	<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 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 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 checked="" type="checkbox"/>

4.4.1 Existing Setting

The City is urban and developed with few areas of natural open space or habitat occurring in the City and immediate vicinity. No native habitats or open space areas occur within the Specific Plan area. Although the Santa Ana River’s west bank is adjacent to the Specific Plan and Project areas, this portion of the river is extensively channelized with concrete embankments, and it functions for both flood control and waste drainage purposes. The Santa Ana River drains to the Pacific Ocean in the City of Newport Beach. Similarly, the Fountain Valley Channel (Channel), which runs through the west portion of the Specific Plan area, contains concrete embankments and is not associated with any riparian habitat areas.

According to the Specific Plan EIR, the Specific Plan area supports a number of healthy, mature trees, which provide some habitat for both resident and migratory native and non-native bird species as well as small mammals. Chapter 12.04.040 of the City’s Municipal Code contains regulations regarding cutting, trimming, planting, pruning, removing, injuring, or interfering with trees, shrubs, or plants on streets, parkways, or public places. Established landscapes in this urban setting consist predominantly of non-native plant and tree species, which provide habitat for some



species, primarily birds. However, the Specific Plan area does not support any designated or recognized sensitive habitats or mapped critical habitat for any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or the United States Fish and Wildlife Service (USFWS). The Specific Plan area, including the Project site, is not known to support endangered species, nor does it contain sensitive habitat area that would support those species.

The 5.2-acre Project site is in an urbanized area surrounded by existing urban and suburban land uses. The Santa Ana River Trail and Channel are located approximately 0.2 mile east of the Project site. The Project site is flat and is currently developed with five industrial warehouse buildings (totaling approximately 114,744 square feet [sf]) and associated surface parking lots (refer to Figure 2, Project Site). Landscaping on the Project site is comprised of several mature trees, shrubs, and small grassy areas around the perimeter of the site.

4.4.2 Impacts Identified in the Specific Plan EIR

Biological Resources are included within Section 4.3, Effects Found Not to be Significant, on pages 4-5 through 4-6 of the Specific Plan EIR; this topic was also discussed on pages 24 through 27 of the Initial Study and was scoped out.

The Specific Plan EIR concluded that implementation of the Specific Plan would result in less than significant impacts to biological resources because the Specific Plan area is fully urbanized and does not contain potential natural habitats for sensitive species and other natural communities. Further, implementation of the Specific Plan would incorporate and be consistent with existing policies regarding the protection of biological resources, and therefore, would not significantly impact biological resources.

4.4.3 Analysis of Project Impacts

- a. **Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

The Project site is in an urbanized area surrounded by existing urban and suburban land uses. The Santa Ana River is located approximately 1,000 ft east of the Project site. In addition, the improvements associated with the Project would not have the capacity to significantly affect sensitive biological resources given the amount of previous development that has occurred in the vicinity and on the Project site. Project construction and operation would have no impacts either directly or through habitat modification to any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. **No impacts to these resources are anticipated as a result of the Project, and no mitigation would be required.**

The Specific Plan EIR also concluded that no impacts to any species identified as a candidate, sensitive, or special-status species would occur because the Specific Plan area is fully urbanized and does not contain potential natural habitats for sensitive species. The Project site is located



within the Specific Plan area and would likewise not impact sensitive species or habitats. The proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

b. Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The Project site does not support any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. **No impacts to these resources are anticipated as a result of the Project, and no mitigation would be required.**

The Specific Plan EIR concluded that the Specific Plan area is fully urbanized and does not include any riparian habitat or other sensitive natural communities. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

c. Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No federally protected wetlands would be affected by the proposed Project. **Therefore, no impacts to these resources are anticipated as a result of the Project. No mitigation is required.**

The Specific Plan EIR concluded that the Specific Plan area is fully urbanized and does not contain any federally protected wetlands. Intensification of use as a result of implementation of the Specific Plan could potentially increase the amount of pollutants, such as leaked oil, that could enter stormwater runoff, impacting the quality of water that flows from the Specific Plan area and ultimately to the Pacific Ocean. However, implementation of the Specific Plan would result in less than significant impacts to biological resources as a result of impacts to water quality because the Specific Plan would comply with existing federal, state, and local water quality regulations. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

d. Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The proposed Project site is not located in a migratory wildlife corridor or native wildlife nursery site. The existing trees on the Project site may, however, provide suitable habitat for nesting migratory birds. The removal of trees on the Project site has the potential to impact active bird



nests if vegetation and trees are removed during the nesting season. Nesting birds are protected under the federal Migratory Bird Treaty Act (MBTA) (Title 33, United States Code [USC], Section 703 et seq.; see also Title 50, Code of Federal Regulations [CFR], Part 10) and Section 3503 of the California Fish and Game Code. Therefore, implementation of the proposed Project would be subject to the provisions of the MBTA, which prohibits disturbing or destroying active nests. In order to comply with the MBTA, Project implementation must be accomplished in a manner that avoids impacts to active nests during the breeding season. If Project construction occurs between February 1 and September 15, a qualified biologist would conduct a nesting bird survey prior to ground- and/or vegetation-disturbing activities to confirm the absence of nesting birds. Compliance with the MBTA is required for Project implementation, and therefore, does not constitute mitigation. **With compliance with the MBTA, impacts to nesting birds would be less than significant, and no further mitigation would be required.**

The Specific Plan EIR also concluded that implementation of the Specific Plan would not interfere with migratory fish or birds. No fish species are known to occur in the portion of the Channel that is located in Specific Plan area. Although street trees may serve as wildlife corridors, the distance between major open space areas limit the use of the area as a wildlife corridor for most species other than birds. In addition, the Specific Plan would protect and maintain street trees where possible. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

e. Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Chapter 12.04.040 of the City's Municipal Code requires that no person or development shall engage in the planting, trimming, cutting, or removal of any vegetation along any streets, parkways, or public spaces without prior approval from the City's Public Works Department. The proposed Project would comply with all City policies and regulations protecting biological resources. **Therefore, the proposed Project would not conflict with any plan, policy, or ordinance relating to the protection of biological resources, and the impact would be less than significant and no mitigation is required.**

The Specific Plan EIR also concluded that implementation of the Specific Plan would not conflict with any plan, policy, or ordinance relating to the protection of biological resources. Further, the Specific Plan would incorporate and be consistent with existing policies regarding the protection of biological resources. The proposed Project, which is located within the Specific Plan area, would also incorporate and be consistent with existing policies regarding the protection of biological resources and would, therefore, not result in new significant impacts beyond those identified in the Specific Plan EIR. No new mitigation measures are required.



f. Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The County of Orange has approved a Habitat Conservation Plan (HCP) and a Natural Community Conservation Plan (NCCP), but the City has not enrolled in such plans and is not included in the planning area covered by these plans. Consequently, the Project will not conflict with any such plans. While no designated HCP or NCCP exists in the Project area, the Project would comply with all City policies and regulations protecting biological resources. Therefore, the proposed Project would not conflict with any HCP or NCCP or other local, regional, or State HCPs. **There would be no impact and therefore mitigation measures are not required.**

The Specific Plan EIR also concluded that the Specific plan area does not include any habitat areas that are protected by an approved local, regional, or state HCP or NCCP. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation measures are required.

4.4.3.1 Mitigation Measures

The Specific Plan EIR does not include mitigation related to Biological Resources. No mitigation would be required for the proposed Project.

4.4.4 Findings Related to Biological Resources

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Biological Resources, and there is no increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Biological Resources that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Biological Resources requiring major revisions to the Specific Plan EIR.



No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. The proposed Project would not result in any potentially significant impacts related to Biological Resources. CEQA does not require consideration of alternatives to the Project or consideration of additional mitigation measures because there would not be any significant impacts to avoid or reduce related to this topic, and no mitigation is required.



4.5 CULTURAL RESOURCES

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
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 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"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.5.1 Existing Setting

According to the Specific Plan EIR, the Project area and the City are located in the Santa Ana Valley-Capistrano Valley Province, which is a lowland strip separating the coastal hills from the Santa Ana Mountains. This province includes the flood plain of the northern segment of the Santa Ana River where it flows through the City. The geology in this area does not contain abundant paleontological resources. Fossils primarily consist of non-marine species from the Pleistocene and Holocene ages, including mammoth, bison, horse, camel, sloth, and a variety of birds.

The Specific Plan area was largely developed in the 1970s and primarily consists of industrial uses. The City's General Plan does not contain a Historic Preservation Element, and no historic or older structures are known to be located within the Specific Plan area. Although the area has been heavily developed, subsurface archaeological or paleontological resources that have not been previously evaluated could potentially exist within the Specific Plan area, including the Project site.

4.5.2 Impacts Identified in the Specific Plan EIR

Cultural Resources are included within Section 4.3, Effects Found Not to be Significant, on pages 4-6 through 4-7 of the Specific Plan EIR; this topic was also discussed on pages 27 through 29 of the Initial Study and was scoped out.

The Specific Plan EIR determined that redevelopment activities associated with implementation of the Specific Plan would occur in previously disturbed areas, so it is unlikely that cultural resources would be encountered. However, the potential remains that previously undiscovered resources could be exposed during construction activities. The Specific Plan EIR concluded that inclusion of standard conditions during discretionary project review and approval, including compliance with the *State CEQA Guidelines* relating to protocols for discovery of important historic and pre-historic resources, would ensure that potential impacts to such resources would be reduced to a less than significant level. **Therefore, based on the limited potential for undiscovered cultural resources to exist within the Specific Plan area and existing procedure requirements regulating the discovery of buried resources, the Specific Plan EIR concluded that impacts to cultural resources would be less than significant, and no further mitigation would be required.**



4.5.3 Analysis of Project Impacts

a. Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

CEQA defines a “historical resource” as a resource that meets one or more of the following criteria: (1) listed in, or determined eligible for listing in, the California Register of Historical Resources; (2) listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k); (3) identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by a project’s Lead Agency (PRC Section 21084.1 and *State CEQA Guidelines* Section 15064.5[a]).

In its existing condition, the Project site includes five one- and two-story industrial warehouse buildings that were constructed in 1971. The Project would include the demolition of the five existing industrial warehouse buildings on the Project site. A Historic Resources Assessment (ESA 2018) was prepared for OCSD’s Plant No. 1 and included a records search at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC), conducted on August 23, 2017. According to the Historic Resources Assessment, Plant No. 1 and adjacent properties, which include the Project site, are not eligible for inclusion in the National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), or the Statewide Historical Resources Inventory (HRI) database maintained by the California Office of Historic Preservation (OHP). **As a result, the Project will not cause a substantial change in the significance of a historical resource as defined in Section 15064.5; no impacts to a historical resource would result from Project implementation and no mitigation would be required.**

The City’s General Plan does not contain a Historic Preservation Element and does not provide criteria for identification of potential historic resources. Based on the analysis contained in the Specific Plan EIR, there are no historic structures located within the Specific Plan area. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

b. Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

According to the Specific Plan EIR, soils within the Specific Plan area consist of approximately 80 percent Hueneme fine sandy loam, drained, and 20 percent Metz loamy sand, moderately fine substratum. In its existing state, the Project site is developed with industrial uses and associated paved surface parking lots. The Project site has been previously disturbed and significantly altered as a result of past construction activities on the site.

The proposed Project would include the demolition of five existing industrial warehouse buildings on the Project site. Soils on the Project site have been disturbed previously from development of the existing warehouse buildings, and any unknown archaeological resources



would have likely been unearthed at the time of previous activities on the Project site. New ground-disturbing activities associated with Project construction activities are unlikely to disturb any previously unknown archaeological resources. **In the unlikely event that previously undiscovered archaeological resources are found, implementation of standard conditions required by the City of Fountain Valley, including compliance with State CEQA Guidelines Section 15064.5(f) relating to provisions for the accidental discovery of important historic or unique archaeological resources, would ensure that potential impacts to previously undiscovered archaeological resources would be less than significant and no mitigation would be required.**

The Specific Plan EIR concluded that the presence of cultural resources in the Specific Plan area is unlikely due to the developed nature of the area. Additionally, the Specific Plan EIR determined that adherence to City of Fountain Valley standard conditions related to the unanticipated discovery of archaeological resources would ensure that impacts to cultural resources would be less than significant should any be recovered within the Specific Plan area. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

c. Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Similar to Response 4.5.3 (b), the Project site has been previously disturbed and significantly altered as a result of past construction activities on the site. Due to the developed nature of the site and surrounding area, it is likely that any unknown paleontological resources would have been unearthed at the time of previous activities on the Project site.

The Project would include the demolition of five existing industrial warehouse buildings on the Project site. Soils on the Project site have been disturbed previously from development of the existing industrial warehouse buildings, and any unknown paleontological resources would have likely been unearthed at the time of previous activities on the site. New ground-disturbing activities associated with Project construction activities are unlikely to disturb any previously unknown paleontological resources. **In the unlikely event paleontological resources are encountered during project excavation, compliance with standard conditions required by the City of Fountain Valley for protection of such resources would ensure that impacts to unknown paleontological resources would be less than significant, and no further mitigation would be required.**

The Specific Plan EIR concluded that the Specific Plan area does not contain abundant paleontological resources. Additionally, the Specific Plan EIR determined that adherence to City of Fountain Valley standard conditions related to the unanticipated discovery of paleontological resources would ensure that impacts to paleontological resources would be less than significant should any be recovered within the Specific Plan area. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified



in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

d. Would the Project disturb any human remains, including those interred outside of formal cemeteries?

No known human remains are interred on the Project site. Due to the level of past disturbance on the Project site, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during earth removal or disturbance activities. In the unlikely event that human remains are encountered during Project grading, the proper authorities would be notified and standard procedures for the respectful handling of human remains during the earthmoving activities would be adhered to in compliance with State Health and Safety Code Section 7050.5 and PRC Section 5097.98. **Following compliance with existing State regulations, impacts related to the disturbance of human remains would be considered less than significant, and no further mitigation would be required.**

The Specific Plan EIR concluded that the Specific Plan area does not likely contain any undiscovered human remains. Additionally, the Specific Plan EIR determined that compliance with State Health and Safety Code Section 7050.5 and PRC Section 5097.98 would ensure that impacts to human remains would be less than significant should any be recovered within the Specific Plan area. The proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

4.5.3.1 Mitigation Measures

The Specific Plan EIR does not include mitigation related to cultural resources. No mitigation would be required for the proposed Project.

4.5.4 Findings Related to Cultural Resources

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Cultural Resources, and there is no increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Cultural Resources that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would



be a new significant impact related to Cultural Resources requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. The proposed Project would not result in any potentially significant impacts related to Cultural Resources. CEQA does not require consideration of alternatives to the Project or consideration of additional mitigation measures because there would not be any significant impacts to avoid or reduce related to this topic, and no mitigation is required.



4.6 ENERGY CONSERVATION

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the Project:			
a. Use large amounts of fuel or energy in an unnecessary, wasteful, or inefficient manner.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Constrain local or regional energy supplies, affect peak and base periods of electrical demand, require or result in the construction of new electrical generation and/or transmission facilities, or necessitate the expansion of existing facilities, the construction of which could cause significant environmental effects.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing energy standards, including standards for energy conservation.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.6.1 Existing Setting

Energy service providers to the FVCSP area, which includes the Project site, are Southern California Edison (SCE) for electrical service and Southern California Gas Company (SCG) for natural gas. Based on consumption factors provided by the CEC in the 2006 California Commercial End-use Survey, electrical energy demand within the FVCSP area was estimated to be approximately 36.16 million kilowatt-hours (kWh), or 36.16 GWh per year, contributing to approximately 0.17 percent of the total County energy consumption, with Office/Industrial land uses consuming the largest amount. Within the FVCSP area, natural gas demand was estimated to be approximately 312,554.88 therms (thms) per year, approximately 0.06 percent of the County's total consumption, with Office/Industrial land uses consuming the largest amount.

4.6.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan's potential Energy Conservation impacts on pages 3.13-1 through 3.13-12.

The Specific Plan EIR evaluated issues related to energy conservation associated with implementation of the Specific Plan. The Specific Plan EIR found that the Specific Plan would increase energy demand, but would not result in wasteful, inefficient, or unnecessary consumption of energy. The Specific Plan EIR also determined that implementation of standard regulations, as well as conformance with the City-adopted 2013 California Energy Code, the California Green Building Standards Code, and policies of the City General Plan would reduce potential impacts. This impact was considered to be less than significant.

The Specific Plan EIR also determined that implementation of the Specific Plan would not constrain local or regional energy supplies, necessitating the construction of new or expansion of existing electrical generation or transmission facilities, resulting in a less than significant impact.

In addition, the Specific Plan EIR found that implementation of the Specific Plan would require new development within the Specific Plan area to comply with federal, State, and local regulations governing the use and conservation of energy resources. It was also determined that much of the



redevelopment associated with the Specific Plan would increase energy efficiency and conservation throughout the Specific Plan area, resulting in a beneficial impact.

4.6.3 Analysis of Project Impacts

a. Would the Project use large amounts of fuel or energy in an unnecessary, wasteful, or inefficient manner.

Similar to build out of the Specific Plan, the proposed Project would increase the demand for electricity and natural gas within the FVCSP area, due to the construction and operation of an approximately 109,914 sf administration building. Table 4.6.A, below, shows the estimated potential increased electricity demand associated with the proposed Project, and Table 4.6.B, below, shows the estimated potential increase in natural gas demand associated with the proposed Project.

Table 4.6.A: Electricity Demand from Proposed Project

Land Use	Consumption Factor ¹	Projected Change in Land Use	Estimated Electricity
Administration/Office	16.08 kWh/sf/yr	109,914 sf	1.8 GWh/yr

Source: California Energy Commission (2006); compiled by LSA (November 2019).

¹ Estimated electricity demand for office uses were calculated using statewide average energy consumption factors by land use as documented in the California Energy Commission's California Commercial End-use Survey.

GWh = gigawatt hour
kWh = kilowatt hour
sf = square foot/feet
yr = year

Table 4.6.B: Natural Gas Demand from Proposed Project

Land Use	Consumption Factor ¹	Projected Change in Land Use	Estimated Natural Gas
Administration/Office	0.18 thm/sf/yr	109,914 sf	19,785 thm/yr

Source: California Energy Commission (2006); compiled by LSA (November 2019).

¹ Estimated natural gas demand for office uses were calculated using statewide average energy consumption factors by land use as documented in the California Energy Commission's California Commercial End-use Survey.

sf = square foot/feet
thm = therms
yr = year

As shown in Table 4.6.A, the estimated potential increased electricity demand associated with the proposed Project is 1.8 gigawatt hour (GWh) per year, while the Specific Plan EIR determined that build out of the Specific Plan would increase electricity demand by 10.9 GWh per year. Therefore, the proposed Project would not increase electricity demand beyond the demand identified in the Specific Plan EIR. In addition, as shown in Table 4.6.B, the estimated potential natural gas demand associated with the proposed Project is 19,785 thm per year, while the Specific Plan EIR determined that build out of the Specific Plan would increase natural



gas demand by 333,871.9 thm per year. Therefore, the proposed Project would also not increase natural gas demand beyond demand identified in the Specific Plan EIR.

In addition, as discussed in the Specific Plan EIR, this estimated energy demand is highly conservative as the demand factors do not account for the most current efficiency standards of the Title 24 of the California Code of Regulations (California Green Building Standards Code [CALGreen]) in effect at the time of Project implementation (i.e., energy efficiency standards usually increase with time). Implementation of the proposed Project would be required to comply with applicable federal, State, and local rules and regulations governing the use and conservation of California's energy resources. Development under the proposed Project would be required to comply with the regulations of the California Energy Code in effect at the time of Project implementation. In addition, the new building would be designed to achieve LEED Platinum Certification. Therefore, the proposed Project would be consistent with adopted codes and regulations, and would not contribute to the wasteful or inefficient consumption of energy resources.

While the Project would result in an increase in electricity and natural gas consumption as compared to existing uses on the Project site, the proposed Project would be consistent with federal, State, and locally established goals, policies, and regulation governing energy conservation and fostering sustainable development, the proposed Project is not expected to result in the substantially wasteful or inefficient use of California's energy resources. **Therefore, implementation of the proposed Project is considered to have a less than significant impact on the consumption and use of energy resources, and no further mitigation would be required.**

The Specific Plan EIR determined that the Specific Plan would not result in the wasteful or inefficient use of California's energy resources. The proposed Project would not increase electricity or natural gas demand beyond the demand identified in the Specific Plan EIR. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

- b. Would the Project constrain local or regional energy supplies, affect peak and base periods of electrical demand, require or result in the construction of new electrical generation and/or transmission facilities, or necessitate the expansion of existing facilities, the construction of which could cause significant environmental effects.**

The proposed Project is located in the City of Fountain Valley, which is within the County of Orange (County). The Specific Plan EIR determined that at the time the Specific Plan EIR was prepared, the Specific Plan area contributed to approximately 36.16 GWh per year of energy demand, which is approximately 0.17 percent of the County's total energy demand. As discussed above, the Specific Plan EIR also determined that build out of the Specific Plan would result in an increase in electricity demand of approximately 10.9 GWh per year, which would result in an incremental increase in County energy demand for SCE services by approximately 0.0005 percent. As discussed above, the proposed Project would increase energy demand by approximately 1.8 GWh per year, which would be less than the electricity demand evaluated in the Specific Plan EIR. Therefore, implementation of the proposed Project would negligibly affect



local or regional energy supplies. **The proposed Project would not constrain local or regional energy supplies or require or result in the construction of new electrical generation and/or transmission facilities or necessitate the expansion of existing facilities and Project impacts would be less than significant and no mitigation would be required.**

The Specific Plan EIR determined that the Specific Plan would result in an incremental increase in County energy demand for SCE services that would be less than significant. The electricity demand for the proposed Project would be less than the electricity demand evaluated in the Specific Plan EIR. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

c. Would the Project conflict with existing energy standards, including standards for energy conservation.

The proposed Project would be required to comply with City-adopted codes and regulations governing energy-efficient design and sustainable development. In addition, the proposed Project would be designed to achieve LEED Platinum Certification, which would increase energy efficiency and conservation, and reduce wasteful use of energy resources. Therefore, similar to implementation of the Specific Plan, it is anticipated that the proposed Project would increase energy efficiency and conservation. **Therefore, the proposed Project would not conflict with existing energy standards; no impact would result from Project implementation and no mitigation would be required.**

The Specific Plan EIR determined that the Project would increase energy efficiency and conservation throughout the Specific Plan area, resulting in a beneficial impact. Similarly, the proposed Project would implement an energy-efficient design and sustainable development, and would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

4.6.3.1 Mitigation Measures

The Specific Plan EIR does not include mitigation related to energy conservation. No mitigation would be required for the proposed Project.

4.6.4 Findings Related to Energy Conservation

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Energy Conservation, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in



circumstances pertaining to Energy Conservation that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Energy Conservation requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. The proposed Project would not result in any potentially significant impacts related to Energy Conservation. CEQA does not require consideration of alternatives to the Project or consideration of additional mitigation measures because there would not be any significant impacts to avoid or reduce related to this topic, and no mitigation is required.



4.7 GEOLOGY AND SOILS

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
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 checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Landslides?	<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"/>
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"/>
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"/>
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 checked="" type="checkbox"/>

4.7.1 Existing Setting

The Project area is located within the seismically active region of southern California. However, according to the State of California Department of Conservation Earthquake Zones of Required Investigation for the Newport Beach Quadrangle, the Project site is not in an identified Alquist-Priolo Earthquake Fault Zone. The nearest identified Alquist-Priolo Earthquake Fault Zone is approximately 4 miles southwest of the Project site.

According to the United States Department of Agriculture Natural Resources Conservation Service's Web Soil Survey, the soils on the Project site are comprised entirely of Hueneme fine sandy loam, drained. The shrink-swell potential for Hueneme fine sandy loam, drained, is slight. Therefore, soils within the FVCSP area do not have a high expansion potential

According to the City's Public Safety Element of the General Plan, the area along the Santa Ana River and south of the I-405, which includes the Project area, has a high potential for liquefaction. In addition, the City of Fountain Valley, including the Project site, is located within an area of known subsidence.

Neither the FVCSP nor the proposed Project involve use or development of septic tanks or alternative wastewater disposal systems as sewers are available for the disposal of wastewater.



4.7.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan's potential Geology and Soils impacts on pages 3.3-1 through 3.3-12.

As detailed in the Specific Plan EIR, new land uses anticipated to occur under within the Specific Plan area would potentially be exposed to moderate to strong seismic ground shaking in the event of an earthquake on a nearby fault. The five active and potentially active faults within and near the City that pose the most serious threat to the FVCSP area include the Newport-Inglewood, San Andreas, Palos Verdes, San Clemente, and San Joaquin Hills Faults. The closest active fault to the FVCSP area is the Newport-Inglewood Fault, which is capable of producing earthquakes ranging in magnitude from 6.3 to 7.5. All new structures constructed in the Specific Plan area would be required to adhere to the most current building standards of the Fountain Valley Municipal Code and the Fountain Valley Building Code, which adopt California Building Code (CBC) standards by reference, with local amendments. Compliance with the CBC includes seismic design and construction parameters to ensure the protection of structures and occupants from seismic hazards during an earthquake. In addition, applicants of new projects would be required to prepare and submit a site-specific geotechnical report for review and approval by the City's Building and Safety Division prior to the issuance of a grading or a building permit. Design of future projects would be required to incorporate the design requirements for structures and foundations to maintain structural integrity during an earthquake that are identified in the geotechnical report. In addition, no known faults traverse the Specific Plan area, and the Specific Plan area is not located in an Alquist-Priolo Fault Zone. Therefore, the Specific Plan EIR concluded that there is no reasonably foreseeable hazard of fault rupture in the Specific Plan area, and impacts would be less than significant.

According to the Specific Plan EIR, the City has a very high potential for liquefaction, due to the high groundwater level (within 10 ft of the surface) throughout the City. The entire City is mapped within an area potentially susceptible to liquefaction according to the Newport Beach Quadrangle Seismic Hazard Zone map. Further, the City of Fountain Valley is located within an area of known subsidence associated with drainage of organic and peat soils. All new structures constructed in the Specific Plan area would be required to adhere to the most current building standards of the Fountain Valley Municipal Code, the Fountain Valley Building Code, and the CBC. Adherence to the applicable building codes, specifically to the soil stability construction parameters, would ensure the maximum practicable protection available for all structures constructed within the Specific Plan area and their occupants and visitors. Compliance with the CBC includes procedures to ensure the protection of structures and occupants from liquefaction and subsidence hazards. As a result, impacts related to soil instability would be less than significant.

The Specific Plan EIR concluded that, because there are no soils in the Specific Plan area that have a high expansion potential, the potential for expansive soils to create substantial risks to life or property would be less than significant.

According to the Specific Plan EIR, the Specific Plan area is developed with most of the land surface covered by impervious materials such as buildings and paved parking areas. Due to the very small quantity of soil currently exposed at the surface, and the relatively level topography of the Specific Plan area, the Specific Plan EIR concluded that the potential for erosion hazards is low.



The Specific Plan EIR concluded that no impacts related to alternative wastewater disposal systems would occur because the Specific Plan area does not involve use or development of septic tanks or alternative wastewater disposal systems as sewers are available for the disposal of wastewater.

4.7.3 Analysis of Project Impacts

- a. **Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**
- i. **Would the Project expose people or structures to a 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?**

The Project site is located in southern California, which is a seismically active region. However, the Project site is not in an identified Alquist-Priolo Earthquake Fault Zone; the nearest Alquist-Priolo Special Studies Zone is located approximately 3.2 miles southwest of the Project Site. Therefore, the proposed Project would not expose people or structures to substantial adverse effects involving the rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. Potential impacts related to the rupture of a known earthquake fault would be less than significant and no mitigation is required.

The Specific Plan EIR concluded that there is no reasonably foreseeable hazard or fault rupture in the Specific Plan area and that such impacts would be less than significant. The proposed Project, which is located in the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

- ii. **Would the Project expose people or structures to a strong seismic ground shaking?**

The Project site is located in southern California, a known seismically active region. Active and potentially active faults in southern California are capable of producing seismic shaking on the Project site. Several active faults are located in close proximity to the Project site, with the most active being the Newport-Inglewood Rose Canyon Fault Zone (Los Angeles Basin), Palos Verdes Fault Zone, and Elsinore Fault Zone (Whittier Fault), located at distances of approximately 3.3 miles, 13.9 miles, and 17.5 miles from the site, respectively. In addition, the San Joaquin Hills Blind Thrust Fault is located at a distance of approximately 0.3 mile from the Project site. Thus, it is likely the proposed Project site would periodically experience ground acceleration as a result of exposure to moderate-to-large magnitude earthquakes, and seismic ground shaking on one of the nearby regional faults may cause damage to development. Therefore, the Project has the potential to expose people and structures to substantial adverse effects related to the site and regional geology, including those associated with strong seismic ground shaking.



Project design would comply with the seismic design standards and construction parameters of the CBC, the Fountain Valley Municipal Code, and the Fountain Valley Building Code. In addition, as part of the discretionary project review process, a Project-specific geotechnical report would be prepared for the Project, which would identify design requirements for structures and foundations to maintain structural integrity during an earthquake. As required by Section 18.04.070 of the City's Municipal Code, a site specific geotechnical report would be prepared for the proposed project and the geotechnical report recommendations would be incorporated into the design of the proposed Project. Compliance with the design requirements of the CBC and implementation of the recommendations of the geotechnical report would ensure that impacts related to strong seismic ground shaking would be less than significant. No mitigation is required.

The Specific Plan EIR concluded that impacts related to strong seismic shaking would be less than significant with compliance with the CBC and Project-specific geotechnical report recommendations. The proposed Project would also comply with the CBC and the Project-specific geotechnical report recommendations and would, therefore, not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

iii. Would the Project expose people or structures to a seismic-related ground failure, including liquefaction?

The Project has the potential to expose people and structures to substantial adverse effects related to the site and regional geology, including those associated with liquefaction. As stated above, the Project site is mapped within an area with a high potential for liquefaction. According to the City's Municipal Code, Section 21.14.050, the Project site is in the Seismic Hazard (SH) overlay zoning district. This section states that development in the SH overlay zone may be subject to specific design requirements and preparation of a site-specific soils report due to the high potential for liquefaction to take place. As required by Section 18.04.070 of the City's Municipal Code, a site-specific geotechnical report would be prepared for the Project and would include recommendations to address effects related to or resulting from geologic conditions. In addition, the Project design would comply with the design requirements of the CBC to address any potential for seismic-related ground failure that is identified in the geotechnical report. **Compliance with the design requirements of the CBC and implementation of the recommendations of the geotechnical report would ensure that impacts related to seismic-related ground failure would be less than significant. No mitigation is required.**

The Specific Plan EIR concluded that impacts related to seismic-related ground failure would be less than significant with compliance with the CBC and Project-specific geotechnical report recommendations. The proposed Project would also comply with the CBC and Project-specific geotechnical report recommendations and would, therefore, not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.



iv. Would the Project expose people or structures to landslides?

The Project site is relatively flat, and no substantial hillsides or unstable slopes are immediately adjacent to the site boundary. As a result, there is no potential for landslide hazards. **There would be no impact related to the potential exposure of people or structures to landslides, and no mitigation is required.**

The Specific Plan EIR concluded that the risk of landslide and slope instability is minimal as a result of the relatively level topography of the City. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

b. Would the Project result in substantial soil erosion or the loss of topsoil?

As discussed in Section 4.10, Hydrology and Water Quality, construction activities would disturb and expose topsoil and increase the potential for erosion. However, Project construction would comply with the requirements of the Construction General Permit, including preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Construction Best Management Practices (BMPs). Construction BMPs would include, but not be limited to: Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site. Compliance with the Construction General Permit would ensure that impacts related to erosion would be low.

In the proposed condition, a portion of the Project site would be impervious surface area and not prone to on-site erosion because no soil would be included in these areas. The remaining portion of the site would consist of pervious area, which would contain landscaping that would minimize on-site erosion by stabilizing the soil and allowing for infiltration. **Therefore, impacts related to erosion would be low and less than significant. No mitigation is required.**

The Specific Plan EIR concluded that, due to the very small quantity of soil currently exposed at the surface, and the relatively level topography of the Specific Plan area, the potential for erosion hazards is low. Similarly, the proposed Project is located within the Specific Plan area and proposes development of a majority of the site with impervious structures with little soil exposed at the surface. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

c. Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Refer to Responses 4.6 (a) (iii) and (iv), above, for discussion on the potential impacts associated with liquefaction and landslides, respectively. There are no substantial hillsides or unstable slopes on the Project site; therefore, there is no potential for landslide hazards. However, the Project is located in the City of Fountain Valley, which is mapped as susceptible to subsidence



and liquefaction. A site-specific geotechnical report will be prepared for the Project site to identify any geologic conditions that could affect the Project. The geotechnical report will include recommendations to address effects related to or resulting from any identified geologic conditions. In addition, the Project design will comply with the design requirements of the CBC to address any potential for unstable geologic units or unstable soils that are identified in the geotechnical report. **Compliance with the design requirements of the CBC and implementation of the recommendations of the geotechnical report would ensure that impacts related to unstable geologic units or soils would be less than significant. No mitigation is required.**

The Specific Plan EIR concluded that impacts related to unstable geologic units or soils would be less than significant with compliance with the CBC and Project-specific geotechnical report recommendations. The proposed Project would comply with the CBC requirements and recommendations of the geotechnical report and would, therefore, not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

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

As discussed previously, the soils on the Project site are comprised entirely of Hueneme fine sandy loam, drained, which has a slight shrink-swell potential. Therefore, the on-site soils do not have a high expansion potential. **The potential of the Project being located on expansive soils thereby creating substantial risks to life or property would be less than significant. No mitigation is required.**

The Specific Plan EIR concluded that, because there are no soils in the Project site that have a high expansion potential, the potential for expansive soils to create substantial risks to life or property would be less than significant. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

e. Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The proposed Project would not include the use of septic tanks or alternative methods for disposal of wastewater into subsurface soils. No on-site sewage disposal systems (e.g., septic tanks) are planned. The proposed Project would connect to existing public wastewater infrastructure. **Therefore, the proposed Project would not result in any impacts related to septic tanks or alternative wastewater disposal methods. No mitigation is required.**

The Specific Plan EIR concluded that no impacts related to alternative wastewater disposal systems would occur because sewers are available for the disposal of wastewater. The proposed Project, which would also connect to sewers for wastewater, would not result in new significant



impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

4.7.3.1 Mitigation Measures

The Specific Plan EIR does not include mitigation related to Geology and Soils. No additional mitigation measures would be required for the proposed Project.

4.7.4 Findings Related to Geology and Soils

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Geology and Soils, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Geology and Soils that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Geology and Soils requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. The proposed Project would not result in any potentially significant impacts related to Geology and Soils. CEQA does not require consideration of alternatives to the Project or consideration of additional mitigation measures because there would not be any significant impacts to avoid or reduce related to this topic, and no mitigation is required.



4.8 GREENHOUSE GAS EMISSIONS

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
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"/>
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 checked="" type="checkbox"/>

4.8.1 Existing Setting

Greenhouse gases (GHGs) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. However, over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global climate change. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulfur Hexafluoride (SF₆)

While GHGs produced by human activities include naturally-occurring GHGs such as CO₂, CH₄, and N₂O, some gases like HFCs, PFCs, and SF₆ are completely new to the atmosphere. Certain other gases, such as water vapor, are short-lived in the atmosphere compared to those GHGs that remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is generally excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. For the purposes of this analysis, the term “GHGs” will refer collectively to the six gases identified in the bulleted list provided above.

Section 15064.4 of the *State CEQA Guidelines* states that: “A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project.” In performing that analysis, the lead agency has discretion to determine whether to use a model or methodology to quantify GHG emissions, or to rely on a qualitative analysis or performance-based standards. In making a determination as to the significance of potential impacts, the lead agency then considers the extent to which the Project may increase or reduce GHG emissions as compared to the existing environmental setting, whether the Project emissions exceed a threshold of significance that the lead agency determines applies to the Project, and the extent to which the Project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of GHG emissions.



Currently, there is no Statewide GHG emissions threshold that has been used to determine the potential GHG emissions impacts of a project. Thresholds and threshold methodology are still being developed and revised by air quality districts in the State. Therefore, this environmental issue remains unsettled and must be evaluated on a case-by-case basis until such time as the South Coast Air Quality Management District (SCAQMD) adopts significance thresholds and GHG emissions impact methodology. In addition, the City of Fountain Valley currently has no polices, plans, regulations, and thresholds of significance, or other municipal laws that directly address climate change. Therefore, in the absence of a climate action plan for the City, SCAQMD thresholds, when adopted, would apply to future development in the City, including the Project site.

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Stakeholder Working Group (Working Group).⁵ Based on the September 2010 Working Group meeting (Meeting No. 15), SCAQMD suggested a “bright-line” screening-level threshold of 3,000 metric tons of carbon dioxide equivalent (CO₂e) annually for office land use types, which is applicable to the proposed Project and is used in this analysis.

4.8.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan’s potential GHG impacts on pages 3.4-1 through 3.4-20.

The Specific Plan EIR analyzed the Specific Plan impacts related to GHGs based on the SCAQMD’s “bright-line” screening-level threshold of 3,000 metric tons of CO₂e. The Specific Plan EIR determined that implementation of the Specific Plan would generate GHG emissions both from mobile and operational sources, as well as short-term GHG emissions from construction. GHG emissions associated with construction and operation of the Specific Plan were quantified using California Emissions Estimator Model (CalEEMod). As identified in the Specific Plan EIR, short-term construction GHG emissions were considered to be approximately 2,415.2 metric tons per year for build out of the Specific Plan. When amortized over the 30-year life of the Specific Plan, annual emissions would be 1,027.4 metric tons of CO₂e. In addition, the Specific Plan EIR determined that build out of the Specific Plan would result in approximately 2,472.4 metric tons of CO₂e per year. As such, the results of CalEEMod analysis determined that impacts related to GHG emissions would be less than significant.

In addition, the Specific Plan EIR determined that the Specific Plan would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs as Specific Plan-related GHG emissions would be below adopted regional 2035 GHG reduction goals. In addition, consistent with Southern California Association of Governments’ (SCAG) 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) alignment of transportation, land use, and housing strategies, the Specific Plan EIR determined that the Specific Plan area is an infill location and would provide residential and commercial uses in

⁵ South Coast Air Quality Management District (SCAQMD). Greenhouse Gases (GHG) CEQA Significance Thresholds. Website: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds/> (accessed May 2018).



walking distance to proposed recreational uses, entertainment, and commercial retail, which would result in reduced vehicle miles traveled (VMT), as compared to a project of similar size and land uses at a more suburban location.

4.8.3 Analysis of Project Impacts

a. Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The following section describes the proposed Project's construction- and operational-related GHG emissions and contribution to global climate change.

Construction Emissions. Construction activities associated with the proposed Project would produce combustion emissions from various sources. The proposed Project involves the demolition of five existing buildings totaling 114,744 sf, and the development of an Administrative Headquarters Building totaling 109,914 sf. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels would create GHGs such as CO₂, CH₄, and N₂O. Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SCAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are required to quantify and disclose GHG emissions. The SCAQMD requires the construction GHG emissions to be amortized over the life of the Project, defined as 30 years, added to the operational emissions, and compared to the applicable interim GHG threshold tier. Using CalEEMod, it is estimated that the proposed Project would generate approximately 1,083.7 metric tons of CO₂e during construction of the Project (compared to 2,415.2 metric tons per year identified for build out of the Specific Plan). When amortized over the 30-year life of the proposed Project, annual emissions would be 36.1 metric tons of CO₂e (compared to 1,027.4 metric tons per year identified for build out of the Specific Plan). **Project impacts would be less than significant and no mitigation is required.**

The Specific Plan EIR analysis determined that impacts related to GHG emissions would be less than significant. Annual emissions amortized over the 30-year life of the proposed Project would be substantially below the estimates for the Specific Plan. Therefore, construction of the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

Operational Emissions. Development of the proposed Project would contribute to the significant GHG impacts identified in the Specific Plan EIR. As with the Specific Plan, long-term operation of the proposed Project would generate GHG emissions from area sources and indirect emissions from sources associated with energy consumption. Area-source emissions would be associated with activities such as landscaping and maintenance on the Project site, and other sources. This analysis assumes that the proposed Project would not increase vehicle



trips as the proposed Project would construct new administration buildings and relocate these uses from Plant No. 1 to the Project site north of Ellis Avenue.

Following guidance from the SCAQMD, GHG emissions were estimated for the proposed Project using CalEEMod. Table 4.8.A shows the calculated GHG emissions for the proposed Project. CalEEMod output sheets are provided in Appendix A.

Table 4.8.A: Operational Greenhouse Gas Emissions (MT/yr)

Source	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Area Sources	0.0	0.0	0.0	0.0	0.0	0.0
Energy Sources	0.0	515.3	515.3	0.0	0.0	517.3
Mobile Sources	0.0	0.0	0.0	0.0	0.0	0.0
Waste Sources	15.6	0.0	15.6	0.9	0.0	38.6
Water Usage	5.2	110.8	116.0	0.5	0.0	133.6
Total Operational Emissions	20.8	626.1	646.9	1.5	0.0	689.5
Amortized Construction Emissions						36.1
Total Emissions						725.6
SCAQMD Threshold						3,000
Significant?						No

Source: LSA (November 2019).

Note: While the CH₄ and N₂O emissions are shown as zero, some are actually just less than 1. However, they do contribute to the CO₂e total.

Bio-CO₂ = biologically generated CO₂

CH₄ = methane

CO₂ = carbon dioxide

CO₂e = carbon dioxide equivalent

MT/yr = metric tons per year

N₂O = nitrous oxide

NBio-CO₂ = Non-biologically generated CO₂

SCAQMD = South Coast Air Quality Management District

As discussed above, according to SCAQMD, a project would have less than significant GHG emissions if it would result in operational-related GHG emissions of less than 3,000 metric tons of CO₂e per year. Based on the analysis results, the proposed Project would result in approximately 725.6 metric tons of CO₂e per year and, therefore, would not exceed the SCAQMD's numeric threshold of 3,000 metric tons of CO₂e per year. **Project impacts related to GHG emissions would be less than significant and no mitigation is required.**

The Specific Plan EIR determined that build out of the Specific Plan would result in approximately 2,472.4 metric tons of CO₂e per year, with an overall net decrease of 997.8 metric tons of CO₂e per year compared to the existing land uses, and would not exceed the SCAQMD threshold of 3,000 metric tons of CO₂e per year. Therefore, the proposed Project emissions, which are also below the SCAQMD threshold of 3,000 metric tons of CO₂e per year, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.



b. Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As indicated above, the City does not currently have an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. In addition, the proposed Project would be designed to achieve LEED Platinum Certification, which would reduce energy and water consumption and reduce area emissions. As with implementation of the Specific Plan, the Project would not hinder the State's GHG reduction goals established by Assembly Bill (AB) 32 and Senate Bill (SB) 375 because it would not exceed SCAQMD's screening level threshold.

The SCAG RTP/SCS focuses on an integrated land use and transportation strategy to reduce GHG emissions. The purpose of the SCAG RTP/SCS is to achieve the regional per capita GHG reduction targets for the passenger vehicle and light-duty truck sector established by CARB pursuant to SB 375. An update to the 2016-2040 RTP/SCS (the 2020-2045 RTP/SCS - Connect SoCal) updated the growth forecast, land use assumptions, and transportation investments that served as the foundation of the 2016-2040 RTP/SCS and was approved by SCAG on September 3, 2020; however, CARB has not yet made a determination regarding whether the update will meet SB 375's 2035 emissions reduction target.

The proposed Project would involve construction and operation of a new administration building and a surface parking lot and would relocate the existing administrative uses from Plant No. 1 to the Project site north of Ellis Avenue. Implementation of the proposed Project would not result in an increase in OCSD employees because the Project is characterized as a relocation, rather than an expansion, of existing operations. As a result, the Project would not increase existing vehicle trips. Similarly, the proposed Project would not generate any additional VMT as compared to existing conditions because OCSD would not increase the number of employees or hire additional staff for the proposed Administrative Headquarters Building. The proposed Project would relocate 228 existing employees from Plant No. 1 to the new HQ building. In addition, the proposed Project is in the same VMT zone as Plant No. 1. Therefore, vehicle trips would be redistributed from south of Ellis Avenue to north of Ellis Avenue. In addition, the Project site is an infill location. As such, the proposed Project would not conflict with the goals of the 2016-2040 RTP/SCS or the 2020-2045 SCAG RTP/SCS. **Therefore, the proposed Project would not conflict with any applicable plan, policy, or regulation pertaining to GHGs, and the impact would remain less than significant. No mitigation is required.**

The Specific Plan EIR determined that build out of the Specific Plan would not conflict with any applicable plan, policy, or regulation pertaining to GHGs. Similarly, the proposed Project, which is designed to achieve LEED Platinum Certification and would not conflict with any applicable plan, policy, or regulation pertaining to GHGs, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

4.8.3.1 Mitigation Measures

The Specific Plan EIR does not include mitigation related to GHG emissions. No mitigation would be required for the proposed Project.



4.8.4 Findings Related to Greenhouse Gas Emissions

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Greenhouse Gas Emissions, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Greenhouse Gas Emissions that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Greenhouse Gas Emissions requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. The proposed Project would not result in any potentially significant impacts related to Greenhouse Gas Emissions. CEQA does not require consideration of alternatives to the Project or consideration of additional mitigation measures because there would not be any significant impacts to avoid or reduce related to this topic, and no mitigation is required.



4.9 HAZARDS AND HAZARDOUS MATERIALS

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
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"/>
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 type="checkbox"/>	<input checked="" 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"/>
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 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 Plan area?	<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 Plan area?	<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"/>
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 checked="" type="checkbox"/>

4.9.1 Existing Setting

The five existing industrial warehouse buildings on the Project site were constructed in 1971 and would be demolished upon Project implementation. Based on the ages of these buildings, there is a potential for building materials to contain asbestos or lead-based paint (LBP). A potential release of hazardous materials could occur when asbestos-containing materials (ACM) or LBPs are disturbed during demolition activities. This disturbance could be harmful to human health. As part of the Property Conditions Summary (Jacobs 2016) prepared for the Project, a hazardous building materials (HBM) survey was conducted, which confirmed that materials containing ACMs and LBPs are present in the existing industrial warehouse buildings on the Project site.

Standard equipment suspected of potentially containing polychlorinated biphenyls (PCBs) includes industrial-capacity transformers, fluorescent light ballasts, and oil-cooled machinery. The visual inspection of the Project site conducted as part of the Property Conditions Summary identified 461



fluorescent light bulbs on the Project site; however, the labeling on the ballasts did not indicate the presence of PCBs.

Other hazardous materials such as refrigerant (in heating, ventilation, and air conditioning [HVAC] units), transformers, batteries, and numerous chemicals (e.g., spray paints, solvents, and cleaning chemicals) were observed on the Project site during the visual inspection.

No existing or proposed schools are located within a 0.25-mile-radius of the Project site. The nearest schools are Gisler Elementary School and Cox Elementary School, approximately 0.5 mile to the southwest and 0.8 mile to the northwest, respectively, of the Project site.

The Project site is approximately 6 miles west of John Wayne Airport in the City of Santa Ana. According to the Airport Land Use Commission, the Project site does not fall within the John Wayne Airport Planning Area. There are no private airstrips in the vicinity of the Project site.

The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

I-405 in the vicinity of the Project site is designated as a route upon which hazardous materials may be transported.⁶

The Fountain Valley Fire Department (FVFD) is responsible for providing emergency response, fire prevention, education, and emergency medical services to citizens and visitors to Fountain Valley. Roads used as response corridors/evacuation routes usually follow the most direct path to or from various parts of a community. For the Project site, and the surrounding areas, the main corridors anticipated to be used by emergency services providers are Brookhurst Street, Ellis Avenue, I-405, and other arterials and freeways in this part of Fountain Valley. In addition, the City of Huntington Beach has designated Brookhurst Street as a tsunami evacuation path.

The Project site and the surrounding areas are developed with urban and suburban uses and do not include brush- and grass-covered areas typically found in areas susceptible to wildfires.

4.9.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan's potential Hazards and Hazardous Materials impacts on pages 3.5-1 through 3.5-18.

According to the Specific Plan EIR, the majority of existing buildings in the Specific Plan area were constructed in the 1960s and 1970s. Based on their age, these structures may have been constructed with hazardous building materials such as LBPs and ACMs. In addition, fluorescent light tubes containing mercury vapors, fluorescent light ballasts containing PCBs, and PCB-containing electrical equipment may be present in the buildings. Demolition and excavation activities could

⁶ Federal Motor Carrier Safety Administration. National Hazardous Materials Route Registry: California. Webpage: <https://www.fmcsa.dot.gov/regulations/hazardous-materials/national-hazardous-materials-route-registry-state>. Accessed September 27, 2020.



result in the accidental release and expose of construction workers and the public to hazardous materials.

Any renovation or demolition would be required by law to follow South Coast Air Quality Management District (SCAQMD) and California Occupational Safety and Health Administration (Cal/OSHA) regulations regarding abatement of ACMs and the Cal/OSHA Lead in Construction Standard for the abatement of LBPs. Together, these regulations require sampling, safe work practices, and appropriate disposal that would protect workers from harmful exposures to these substances during construction activities and prevent contamination of surrounding soil or water. The Specific Plan EIR concluded that impacts related to the release of hazardous building materials would be less than significant with compliance with existing laws and regulations.

According to the Specific Plan EIR, existing businesses within the Specific Plan area may use and store hazardous materials such as solvents, chemicals, or other hazardous materials to support normal business operations that could expose workers and occupants to hazardous materials or waste or result in the event of an accidental release. The Specific Plan concluded that this would be a significant impact prior to mitigation. As such, the Specific Plan EIR included Mitigation Measure MM HAZ-1, which requires each development and redevelopment project to prepare a Phase I Environmental Site Assessment (Phase I ESA) and/or additional technical investigations prior to demolition activities. Prior to demolition, hazardous materials or waste stored at these locations would be removed and the hazardous materials and waste facilities in these buildings would be closed in accordance with applicable laws and regulations designed to address hazardous materials or waste and protect human health and the environment. Compliance with these regulatory requirements, including preparation of a Phase I ESA and/or additional technical investigations would ensure that impacts related to exposure to hazardous materials or waste stored or used in the existing buildings would be less than significant with implementation of Mitigation Measure MM HAZ-1.

A database search of regulatory records was conducted for the Specific Plan EIR. All sites identified within the Specific Plan area are either cleanup sites under a tiered permit, non-operating permitted sites, or underground fuel tanks with cleanup completed. Nonetheless, the Specific Plan EIR concluded that land use changes could potentially occur on hazardous materials sites and could result in potential hazards risk to the environment and public health, resulting in a potentially significant impact. Individual development projects engaging in activities involving the handling of hazardous substances or waste would be required to receive all necessary permits and authorization by the appropriate governing agencies. The Specific Plan EIR concluded that, with compliance with the regulatory codes, the potential for projects to result in substantial adverse impacts related to redevelopment of an existing known hazardous waste site would be low. The Specific Plan EIR also included MM HAZ-1, which requires individual development projects within the Specific Plan area to prepare a Phase 1 ESA prior to commencement of demolition or excavation. The Specific Plan EIR concluded that implementation of MM HAZ-1 would ensure that impacts from hazardous waste sites compiled pursuant to Government Code Section 65962.5 would be less than significant with mitigation.



There are no existing or proposed schools within 0.25 mile of the Specific Plan area. Therefore, the Specific Plan EIR concluded that impacts from emissions or handling of hazardous materials within the vicinity of a school would be less than significant.

The Specific Plan area lies 3.7 miles northwest of John Wayne Airport, and is located just outside of the Airport's Influence Area. Therefore, the Specific Plan EIR determined that it is not subject to any development restrictions from the Airport Environs Land Use Plan (AELUP). Therefore, the Specific Plan EIR concluded that impacts related to airport land use plans would be less than significant.

The Specific Plan area does not contain and is not proximate to a private airstrip; therefore, the Specific Plan EIR concluded that no impacts related to hazards from a private airstrip would occur.

Growth anticipated from development within the Specific Plan area would increase demand for emergency response capabilities in the immediate vicinity. However, the Specific Plan EIR found that this intensification of land uses would be consistent with general development in the region and would not result in a substantial increase in emergency response requirements beyond the capacity of existing services. Further, projects within the Specific Plan area would be built in compliance with the City of Fountain Valley General Plan Public Safety Element and the 2004 Huntington Beach/Fountain Valley Hazard Mitigation Plan including all applicable building, fire, and emergency response plans. Individual development projects would require approval of the City and payment of fees to support any required increases and services that would potentially occur. Therefore, impacts related to impairment of implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan would be less than significant.

The Specific Plan area is fully urbanized and is not directly adjacent to hillsides or other wildland areas. Therefore, the Specific Plan EIR concluded that no risk of loss, injury, or death involving wildland fires would occur from build out of the Specific Plan.

4.9.3 Analysis of Project Impacts

a. Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction activities associated with the proposed Project would use a limited amount of hazardous and flammable substances/oils during heavy equipment operation for site excavation, grading, and construction. The amount of hazardous chemicals present during construction is limited and would be used in compliance with existing government regulations. The potential for the release of hazardous materials during Project construction is low, and even if a release would occur, it would not result in a significant hazard to the public, surrounding land uses, or environment due to the small quantities of these materials associated with construction vehicles.

The Project proposes to construct a new administration building. The proposed use typically does not present a hazard associated with the accidental release of hazardous substances into the environment because employees are not anticipated to use, store, dispose, or transport large volumes of hazardous materials. Although Project operation would involve the use of



potentially hazardous materials (e.g., solvents, cleaning agents, paints, fertilizers, and pesticides) typical of office uses used correctly and in compliance with existing laws and regulations. As such, use of such products would not result in a significant hazard to residents or workers in the vicinity of the proposed Project.

In addition, I-405 in the vicinity of the Project site is designated as a route upon which hazardous materials may be transported. However, the proposed Project would not involve the routine transportation of hazardous materials.

The proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. **Operational impacts are considered less than significant, and no mitigation is required.**

The Specific Plan EIR concluded that impacts related to the routine transport, use, or disposal of hazardous materials would be less than significant with compliance with existing government regulations. The proposed Project would also comply with existing regulations governing the transport, use, and disposal of hazardous materials. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts because the proposed Project would not require the transport, use, or disposal of substantial amounts of hazardous materials. No mitigation measures are required.

b. Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The following Phase I ESAs were prepared for the Project site (not the entire Specific Plan area): *Hazardous Building Materials Survey for 18475 Pacific Street & 18484 Bandilier Circle (Arcadis 2016)*, *Phase I ESA for 18429 Pacific Street (Arcadis 2018a)*, *Phase I ESA for 18368 - 18384 Bandilier Circle (Arcadis 2018b)*, and *Phase I ESA for 18410 - 18436 Bandilier Circle (Arcadis 2018c)*. The Phase I ESAs did not identify any recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), or historical recognized environmental conditions (HRECs) in connection with the Project site, and no further investigation was recommended. However, out of an abundance of caution due to the Project site's previous use for agricultural activities, a Phase II Soil Sampling Report (Arcadis 2018d) was prepared for four of the existing properties on the Project site. The Phase II Report evaluated the potential for residual pesticides to be present in near surface soil to determine if soil contains concentrated amounts of organochlorine pesticides (OCPs). In the soil samples analyzed, the Phase II did not detect OCPs at concentrations exceeding the EPA's regulatory screening criteria. The Phase II determined that no additional assessment, remediation, or removal is necessary.

The proposed Project would include demolition of the existing on-site industrial warehouse buildings, which as discussed previously, contain ACMs and LBPs. Any renovation or demolition would be required by law to follow SCAQMD and Cal/OSHA regulations regarding abatement of ACMs and the Cal/OSHA Lead in Construction Standard for the abatement of LBPs. Together, these regulations require sampling, safe work practices, and appropriate disposal that would



protect workers from harmful exposures to these substances during construction activities and prevent contamination of surrounding soil or water. Demolition activities would also comply with the recommendations of the Property Conditions Summary, and the Phase I ESAs, which include recommendations to ensure compliance with existing regulations. In addition, MM HAZ-1, which requires individual development projects within the Specific Plan area to prepare a Phase 1 ESA prior to commencement of demolition or excavation, states that project Applicants shall follow all applicable local, State, and federal codes and regulations, as well as applicable best management practices, related to the treatment, handling, and disposal of ACMs, LBPs, and PCBs to ensure public safety.

As stated previously, hazardous materials such as solvents, chemicals, or other hazardous materials are currently stored and used on the Project site. The public could be exposed to hazardous materials or waste in the event of an accidental release. Mitigation measure MM HAZ-1 from the Specific Plan EIR would be applicable to the proposed Project, which requires each development and redevelopment project to prepare a Phase I ESA and/or additional technical investigations prior to demolition activities. Prior to demolition, hazardous materials or waste stored at these locations would be removed and the hazardous materials and waste facilities in the existing industrial warehouse buildings would be closed in accordance with applicable laws and regulations designed to address hazardous materials or waste and protect human health and the environment. Compliance with these regulatory requirements, including preparation of a Phase I ESA and/or additional technical investigations would ensure that impacts related to exposure to hazardous materials or waste stored or used in the existing industrial warehouse buildings would be less than significant with implementation of Mitigation Measure MM HAZ-1. **Compliance with existing regulations and MM HAZ-1 would ensure that impacts related to the upset of hazardous materials would be less than significant. No additional mitigation would be required.**

Hazardous substances associated with the proposed office uses would be limited in both amount and use such that they can be contained without impacting the environment. Project operation would involve the use of potentially hazardous materials (e.g., solvents, cleaning agents, paints, fertilizers, and pesticides) typical of office uses that, when used correctly and in compliance with existing laws and regulations, would not result in a significant hazard to residents or workers in the vicinity of the Project site. Operation of the proposed Project would not create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **Project impacts would be less than significant and no mitigation would be required.**

The Specific Plan EIR concluded that impacts related to the accidental release of hazardous materials would be less than significant with implementation of MM HAZ-1, which requires preparation of a Phase 1 ESA. MM HAZ-1 is also applicable to the proposed Project, and Phase I ESAs have been prepared and any recommendations related to hazardous materials present in the existing industrial warehouse buildings will be implemented. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan



EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

c. Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

As discussed above, no existing or proposed schools are located within a 0.25-mile-radius of the Project site. **Therefore, the proposed Project would have no impacts related to hazardous materials and proximity to schools, and no mitigation is required.**

The Specific Plan EIR concluded that impacts related to emissions or handling of hazardous materials within the vicinity of a school would be less than significant because no schools are located within 0.25 mile of the Specific Plan area. Therefore, the proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts because no schools are located in the vicinity of the Project site. No new mitigation measures are required.

d. Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

Refer to Response 4.8 (a), above. A records search, that included the Project area, was conducted as part of the Specific Plan EIR. The Project site was not identified as a Permitted or Cleanup Site. In addition, of the 10 listed Permitted or Cleanup Sites, none were listed as open cases and none indicated that further action is required. All sites shown within the FVCSP area are either cleanup sites under a tiered permit, non-operating permitted sites, or underground fuel tanks undergoing cleanup.. Regardless, MM HAZ-1 in the Specific Plan EIR, which is applicable to the proposed Project site, requires preparation of an updated site-specific Phase I ESA, which would include a government record search. The government records search would determine if the Project site could pose a potential environmental concern to the surrounding area, identify any environmental violations associated with activities conducted at the Project site, and identify if there are any nearby hazardous waste sites that could pose a hazard to the Project site. The Phase I ESAs prepared for the Project site did not identify any RECs, CRECs, or HRECs in connection with the Project site, and no further investigation or remediation was recommended. **Compliance with existing regulations and MM HAZ-1 would ensure that potential impacts related to hazardous materials sites would be less than significant. No additional mitigation is required.**

The Specific Plan EIR concluded that impacts related to hazardous material sites would be less than significant with implementation of MM HAZ-1, which requires preparation of a Phase 1 ESA. MM HAZ-1 is also applicable to the proposed Project, and Phase I ESAs have been prepared and any recommendations related to hazardous waste sites will be implemented. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.



- 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?**

As discussed above, the Project site does not fall within the John Wayne Airport Planning Area. Further, the proposed Project would not result in safety hazards for people living or working in the area different than would occur under existing conditions. In total, 327 OCSD employees would move to a new site across Ellis Avenue from Plant No. 1. As a result, the Project would not increase the number of OCSD employees in the area. Consequently, the risk of safety hazards associated with John Wayne Airport would not be substantively different in this area of Fountain Valley with or without the Project. **Therefore, no impacts would result, and no mitigation is required.**

The Specific Plan EIR concluded that impacts related to airport land use plans would be less than significant because the Specific Plan area is not located within an airport land use plan area. Therefore, the proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

- 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 private airports or airstrips are located in the vicinity of the Project site. As a result, the proposed Project will not affect or be affected by aviation activities associated with private airports or airstrips. There would be no impacts and no mitigation is required.

The Specific Plan EIR concluded that no impacts related to hazards from a private airstrip would occur because no private airstrips are located within or in the vicinity of the Specific Plan area. Therefore, the proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

- g. Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

The City of Fountain Valley General Plan Public Safety Element and the 2004 Huntington Beach/Fountain Valley Hazard Mitigation Plan are applicable to the Project site. The proposed Project would involve construction and operation of a new administration building across the street from Plant No. 1, where the current administrative uses are presently housed. Existing employees would be relocated across Ellis Avenue from Plant No. 1 to the new administration building. As stated in Section 4.14, Population and Housing, the proposed Project would not represent a net increase in employees, require substantial roadwork on Ellis, or require other activities that could impair or interfere with emergency responses or evacuations. Further, the Project would be built in compliance with the City of Fountain Valley General Plan Public Safety



Element, the City's Municipal Code, and applicable portions of the 2004 Huntington Beach/Fountain Valley Hazard Mitigation Plan including all applicable building, fire, and emergency response plans. **Therefore, impacts related to impairing the implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan would be less than significant. No mitigation is required.**

The Specific Plan EIR also concluded that impacts related to an emergency plan would be less than significant because projects would not result in a substantial increase in emergency response requirements beyond the capacity of existing services and the Project would be built in compliance with existing City regulations. Similarly, the proposed Project would not increase demand for emergency services and would also be built in compliance with City requirements. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

h. Would the Project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Wildland fires occur in geographic areas that contain the types and conditions of vegetation, topography, weather, and structure density susceptible to risks associated with uncontrolled fires that can be started by lightning, improperly managed camp fires, cigarettes, sparks from automobiles, and other ignition sources. The Project site and the surrounding areas are developed with urban and suburban uses and do not include brush- and grass-covered areas typically found in areas susceptible to wildfires. As a result, the proposed Project would not expose people or structures to a significant risk of loss, injury, or death associated with wildland fires. Here would be no impacts and no mitigation is required.

The Specific Plan EIR also concluded that no risk of loss, injury, or death involving wildland fires would occur because the Specific Plan area is urban and not susceptible to wildfires. Therefore, the proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

4.9.3.1 Mitigation Measure

Based on the analysis and information above, Mitigation Measure MM HAZ-1 included in the Specific Plan EIR, would be applicable to the proposed Project. No additional mitigation measures related to hazards and hazardous materials beyond those identified in the Specific Plan EIR are required.

MM HAZ-1 Phase I ESA. Prior to demolition of a building or structure and/or excavation of subsurface improvements, project applicants of site-specific development projects in the Project area shall prepare a Phase I ESA. Consistent with local, state, and



federal regulations, the Phase I ESA shall be subject to City review and address the following:

- **ACM, LBP, and PCBs.** Prior to the issuance of any demolition or excavation permit, the Applicant shall conduct a comprehensive survey of ACM, LBP, and PCBs. If such hazardous materials are found to be present, the Applicant shall follow all applicable local, state, and federal codes and regulations, as well as applicable best management practices, related to the treatment, handling, and disposal of ACM, LBP, and PCBs to ensure public safety.
- **Potential On-Site Hazardous Materials or Conditions.** A visual survey and reconnaissance-level investigation of the existing site shall be conducted to determine if there are any structures or features within or near the buildings that are used to store, contain, or dispose of hazardous materials or waste. For any development within the Project area that has not been subject to a Phase I ESA or successful remediation efforts in the past, a Phase I ESA shall be performed to determine the likelihood of contaminants in areas beyond what has already been assessed in accordance with USEPA ASTM Practice E 1527-05 as may be amended. If the Phase I ESA finds that contaminated soil or other hazardous materials or waste are suspected to be present within the area, the Applicant shall follow all applicable local, state and federal codes and regulations, as well as applicable best management practices, related to the treatment, handling, and disposal of each hazardous material or waste.

4.9.4 Findings Related to Hazards and Hazardous Materials

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Hazards and Hazardous Materials, and there is substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Hazards and Hazardous Materials that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Hazards and Hazardous Materials requiring major revisions to the Specific Plan EIR.



No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. This Addendum has analyzed all available relevant information and has determined that there is no new information of substantial importance that was unknown and could not have been known with the exercise of reasonable diligence at the time the Specific Plan EIR was certified indicating that: (1) mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project, but the Project proponent declines to adopt the mitigation measures or alternatives; or (2) mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the Project proponent declines to adopt the mitigation measures or alternatives.

As discussed above, the proposed Project would result in a potentially significant impact related to Hazards and Hazardous Materials. Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measure that is applicable to the proposed Project is listed in Section 4.9.3.1. Potential Project impacts related to Hazards and Hazardous Materials would be reduced below a level of significance with implementation of the applicable mitigation measures, none of which the Project proponent is declining to adopt.



4.10 HYDROLOGY AND WATER QUALITY

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the Project:			
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>
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"/>
i) 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"/>
ii) 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"/>
iii) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) 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 checked="" type="checkbox"/>
d. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. 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 checked="" type="checkbox"/>
f. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.10.1 Existing Setting

According to the Specific Plan EIR, the Project site is located within the approximately 210-square-mile Santa Ana River watershed. The Santa Ana River originates approximately 75 miles northeast of the Project site in the San Bernardino Mountains, crosses through San Bernardino County and central Orange County, where it is channelized at the Prado Dam before it flows through Orange County and empties into the Pacific Ocean. The Santa Ana River is located approximately 0.2 mile to the east of the Project site.



The Project site is underlain by the approximately 350-square-mile Coastal Plain of the Orange County Groundwater Basin, which is managed by the OCWD. The Orange County Groundwater Basin is bound by the Puente and Chino Hills on the north, the Santa Ana Mountains on the east, and the San Joaquin Hills on the south. The Orange County Groundwater Basin is bound by the Pacific Ocean on the southwest and by a low topographic divide approximated by the Orange County - Los Angeles County line on the northwest (DWR 2004).

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Map No. 06059C0254J (December 2, 2009), the Project site is in an area designated as Zone X: Other Flood Areas. Zone X: Other Flood Areas identifies areas of 0.2 percent annual chance flood (500-year flood), areas of 1 percent annual chance flood (100-year flood) with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from a 1 percent annual chance flood. Specifically, according to the FIRM Map, the Project site is in an area protected by a levee and the 100-year flood is contained in the Santa Ana Channel. In addition, according to the Safety Element of the County of Orange General Plan (2005, amended in 2012), the Project site is in the Prado Dam Inundation Area.

The Pacific Ocean is approximately 5.5 miles from Plant No. 1 and the Project site. According to the Tsunami Inundation Map for the Newport Beach Quadrangle (California Emergency Management Agency, California Geological Survey, and University of Southern California, 2009), Plant No. 1 and the Project site do not fall within the tsunami inundation zone.

4.10.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan's potential Hydrology and Water Quality impacts on pages 3.6-1 through 3.6-14.

The Specific Plan EIR determined that construction of projects within the Specific Plan area would increase soil erosion and sediment transport that would have the potential to impact downstream receiving waters. However, each individual project would be required to comply with the requirements of the General Construction Permit, prepare and implement a Stormwater Pollution Prevention Plan, and implement and inspect stormwater pollution prevention measures and control practices. The Specific Plan EIR also determined that additional development and redevelopment within the Specific Plan area would not substantially increase the amount of impermeable surfaces and associated runoff because, in the existing condition, most of the Specific Plan area is fully developed with impermeable surfaces. Rather, redevelopment would have a slightly beneficial impact on urban runoff and water quality because each project would require more open space, landscaping, and permeable areas compared to existing conditions. Additionally, future projects would be required to comply with the County Municipal National Pollutant Discharge Elimination System (NPDES) Stormwater Permit, which requires that new development and redevelopment projects incorporate Low Impact Development (LID) measures to reduce pollutants washing off site and to maintain pre-development runoff rates. Stormwater runoff from new impervious surface areas would be infiltrated through bioretention areas where possible. With adherence to existing water quality regulations governing development and redevelopment, the Specific Plan EIR concluded that impacts associated with water quality standards and waste discharge requirements



and degraded water quality during construction and operation would be less than significant, and no mitigation was required.

The Specific Plan EIR determined that, given the relatively shallow depth of groundwater at the Project area, it is possible that subsurface excavation during construction could intercept shallow groundwater tables and that groundwater dewatering may be required. However, groundwater dewatering activities would be temporary and unlikely to be extensive and would, therefore, not substantially affect groundwater levels. Build out of the Specific Plan area would result in redevelopment and a net increase in approximately 258,011 sf of developed areas and impervious surfaces. The Specific Plan area is primarily built out and impervious, a condition that does not support groundwater recharge. The Specific Plan EIR estimated that a minimum of 3 acres of public space would be added to the Specific Plan area as a result of implementation of the Specific Plan, which would increase the overall permeable surfaces within the Specific Plan area. In addition, the Specific Plan requires the installation of landscaped areas or other pervious surfaces to minimize runoff and provide additional opportunities for groundwater recharge. Furthermore, the Specific Plan would require development and redevelopment projects to implement LID and stormwater Best Management Practices (BMPs) to improve water quality and reduce runoff. Overall, build out of the Specific Plan would reduce runoff and increase opportunities for permeable area and groundwater recharge. Therefore, the Specific Plan EIR concluded that impacts to groundwater supply and aquifer levels would be less than significant, and no mitigation was required.

The Specific Plan EIR determined that build out of the Specific Plan would not alter natural streams, creeks, lakes, or other water bodies because none are present within the Specific Plan area. The Specific Plan area is served by an existing municipal stormwater drainage system. Construction activities could slightly alter on-site drainage patterns; however, any alteration in flows would be temporary and would continue to be directed into the existing storm drain system. Given that impermeable surfaces currently cover almost all of the Specific Plan area, implementation of the Specific Plan would not substantially increase the amount of impermeable surfaces and associated urban runoff.

The Specific Plan would provide for increased permeable area through development standards that require new landscaping and planted areas. As a result, the amount of urban runoff would decrease as compared to existing conditions. In addition, each development and redevelopment project would be subject to City review to ensure inclusion of design features that would continue to convey stormwater runoff to the existing municipal storm drain system. Therefore, the Specific Plan EIR concluded that impacts related to alteration of existing drainage patterns of the area such that substantial erosion, siltation, or flooding would occur would be less than significant.

The Specific Plan EIR determined that while minor flooding may be experienced within the Specific Plan area, because the Specific Plan area is not subject to the 100-year flooding, people or structures would not be exposed to a significant risk of loss, injury, or death involving flooding.

In addition, the Specific Plan area is located adjacent to the Santa Ana River and is likely subject to inundation in the event of failure or collapse the Prado Dam. However, due to the distance from Prado Dam and current emergency procedures that address dam failure or flooding, the likelihood of dam failure is low, and impacts related to flooding would be less than significant.



The Specific Plan EIR concluded that no impacts related to inundation by tsunami would occur because the Specific Plan area is not located within a tsunami inundation zone.

4.10.3 Analysis of Project Impacts

a. Would the Project violate any water quality standards or waste discharge requirements?

The proposed Project would result in changes to existing conditions, including the demolition of the five existing industrial warehouse buildings and construction and operation of a new administration building and surface parking lot on the Project site.

Construction and operation of the proposed Project has the potential to introduce additional pollutants into the storm drain system. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked and have the potential to be transported via storm runoff into receiving waters.

During construction, the total disturbed soil area would be approximately 5.2 acres. Projects that disturb greater than 1 acre of soil are required to obtain coverage under the State Water Resources Control Board (SWRCB) Construction General Permit. Project construction would comply with the requirements of the Construction General Permit, including preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Construction BMPs. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site; and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

During operation, the proposed Project would change the operational pollutants, such as suspended solids/sediments, nutrients, heavy metals, pathogens (bacteria/viruses), pesticides, oil and grease, and trash and debris, that are introduced into stormwater runoff. However, the proposed Project would reduce impervious surface area and would include BMPs, which combined would reduce the volume of and pollutants in stormwater runoff from the Project site compared to existing conditions. In its existing condition, the Project site has an impervious surface area of approximately 205,920 sf, or 91 percent. In the proposed condition, approximately 166,684 sf, or 73.5 percent, of the Project site would be comprised of impervious surface area. As such, implementation of the proposed Project would result in a decrease of impervious surface area on the Project site (from 91 percent to 73.5 percent).

The proposed Project would comply with the requirements of the County Municipal NPDES Stormwater Permit. In accordance with the County of Orange Model Water Quality Management Plan (WQMP) template and the Technical Guidance Document for the County of Orange and the City, a Water Quality Management Plan (WQMP) is required to be prepared for the Project, which details the Low Impact Development features and treatment control BMPs to be included in the proposed Project to reduce pollutants of concern in stormwater runoff. According to the *Conceptual Water Quality Management Plan* (Sepber 2019) prepared for the Project, the proposed BMPs are bioretention basins. Four locations for bioretention basins have



been identified: (1) on the southeast corner of the site, (2) at the east limit of the parking lot, (3) at the west limit of the parking lot, and (4) a smaller area within the employee courtyard (refer to Figure 7, Bioretention Basin Locations, in Section 2.0, Project Description). After being treated within the bioretention basins, stormwater runoff would discharge to the City of Fountain Valley stormdrain system located within Ellis Avenue. Because stormwater runoff from the Project site is not currently treated, implementation of BMPs would reduce pollutants of concern in stormwater runoff and improve water quality of stormwater discharge from the Project site compared to existing conditions.

With adherence to existing water quality regulations, including the Construction General Permit and County Municipal NPDES Stormwater Permit, impacts associated with water quality standards and waste discharge requirements during construction and operation would be less than significant, and no mitigation is required.

The Specific Plan EIR concluded that impacts related to water quality standards and waste discharge requirements would be less than significant with compliance with existing regulations. Similarly, the proposed Project would comply with existing regulations and would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

- b. Would the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**

The potential for groundwater dewatering during construction cannot be ruled out at this time. As such, it is possible that that subsurface excavation during construction could intercept shallow groundwater tables and that groundwater dewatering may be required. However, groundwater-dewatering activities would be temporary and unlikely to be extensive and would, therefore, not substantially affect groundwater levels.

In its existing condition, the Project site consists of primarily impervious surface areas, which do not promote infiltration. By decreasing the sizes and amounts of building areas, the proposed Project would reduce the impervious surface area of the site, which can provide more opportunities for infiltration. However, because the infiltration potential of on-site soils is low, any increase in infiltration would be minimal. As such, the proposed Project would not substantially change on-site infiltration or alter groundwater infiltration or recharge. **Therefore, Project impacts to groundwater supply and aquifer levels would be less than significant, and no mitigation is required.**

The Specific Plan EIR concluded that build out of the Specific Plan would reduce runoff and increase opportunities for permeable area and groundwater recharge; therefore, impacts to groundwater supply and aquifer levels would be less than significant, and no mitigation was required. Any change in infiltration resulting from the proposed Project would be anticipated to



be minimal. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

c. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

The proposed Project would not alter the course of a stream or river because there are no rivers or streams on the Project site and the closest river is located 0.2 mile east of the Project site. Construction activities would slightly alter on-site drainage patterns and increase the potential for erosion and siltation due to ground-disturbing activities that would expose the top soil. However, Project construction would comply with the requirements of the Construction General Permit, including preparation of a SWPPP and implementation of Construction BMPs. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site.

The proposed Project would not permanently alter drainage patterns of the Project site, which is already developed. In the proposed condition, a portion of the Project site would consist of impervious surface area and not prone to on-site erosion or siltation because no soil would be included in these areas. The remaining portion of the site would consist of pervious area, which would contain landscaping that would minimize on-site erosion and siltation by stabilizing the soil. The proposed Project would decrease on-site impervious surface areas, which would decrease stormwater runoff and decrease the potential for downstream erosion and siltation. In addition, the County MS4 Permit requires implementation of LID and stormwater BMPs to minimize runoff. The proposed Project includes bioretention basins in compliance with this requirement. **As the Project would decrease stormwater runoff from the Project site by reducing impervious surface area and including BMPs, impacts related to alteration of existing drainage patterns in a manner that could result in on- or off-site erosion or siltation would be less than significant, and no mitigation is required.**

The Specific Plan EIR concluded that impacts related to alteration of existing drainage patterns of the area such that substantial erosion or siltation would occur and impacts would be less than significant. The proposed Project would reduce impervious surface area and would comply with the County MS4 Permit, which requires implementation of LID and stormwater BMPs to minimize runoff. Because the Project would decrease stormwater runoff from the project site by reducing impervious surface area and including BMPs, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.



- d. **Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**

Construction activities has the potential to alter on-site drainage patterns; however, any alteration in flows would be temporary and would continue to be directed into the existing storm drain system. The proposed Project would include on-site drainage features that would accommodate and convey on-site stormwater runoff such that on-site flooding would not occur. These drainage features would convey stormwater runoff to the existing municipal storm drain system. The proposed Project would reduce impervious surface area and would include implementation of LID and stormwater BMPs to reduce stormwater runoff discharged from the Project site. Since the proposed Project would decrease stormwater runoff from the Project site, the Project would not increase the potential downstream flooding. **Implementation of drainage features and BMPs would ensure that Project impacts related to alteration of existing drainage patterns of the area such that substantial flooding would occur would be less than significant, and no mitigation is required.**

The Specific Plan EIR concluded that, because each project would include design features that would convey stormwater runoff to the existing municipal storm drain system, impacts related to the alteration of existing drainage patterns of the area such that flooding would occur and impacts would be less than significant. The proposed Project requires implementation of drainage features and BMPs to minimize runoff and flooding and would, therefore, not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

- e. **Would the Project 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?**

Refer to Responses 4.9 (a) and 4.9 (d). The proposed Project would decrease impervious surface area on the Project site, which would decrease runoff and pollutant loading from the Project site. Additionally, the Project would include drainage features that would continue to convey stormwater runoff to the existing municipal storm drain system. In addition, the County MS4 Permit requires the installation of landscaped areas or other pervious surfaces and implementation of LID and stormwater BMPs to minimize and treat stormwater runoff. The proposed Project would include bioretention basins in compliance with this requirement to reduce both volume of and pollutants in stormwater runoff compared to existing conditions. **Therefore, impacts related to exceedance of the capacity of stormwater drainage systems or provision of polluted runoff would be less than significant. No further mitigation is required.**

The Specific Plan concluded that impacts related to the exceedance of the capacity of stormwater drainage systems or the provision of polluted runoff would be less than significant. The proposed Project requires implementation of drainage features and BMPs to minimize runoff and flooding and would, therefore, not result in new significant impacts beyond those



identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

f. Would the Project otherwise substantially degrade water quality?

Refer to Response 4.9 (a), above. **With adherence to existing water quality regulations, including the Construction General Permit and County Municipal NPDES Stormwater Permit, which includes implementation of construction and operational BMPs, impacts associated with degradation of water quality during construction and operation would be less than significant, and no mitigation is required.**

The Specific Plan EIR concluded that impacts related to degradation of water quality would be less than significant with compliance with existing regulations. Similarly, the proposed Project would comply with existing water quality regulations and would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

g. Would the Project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The proposed Project does not include a housing component. Therefore, the Project would not place housing in a 100-year flood hazard area. **No impacts would occur related to placement of housing in a 100-year flood hazard area, and no mitigation is required.**

The Specific Plan EIR concluded that impacts related to flooding would be less than significant. Similarly, the proposed Project would not place housing in a 100-year flood hazard area and would, therefore, not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

h. Would the Project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

As discussed above, the Project site is not located in a 100-year flood hazard area. **Since the Project site is not located in a 100-year flood hazard area, the proposed Project would not place structures in a 100-year flood hazard area or impede or redirect flood flows. Therefore there would be no impact and no mitigation is required.**

The Specific Plan EIR concluded that impacts related to flooding would be less than significant. The proposed Project is not located in a 100-year flood hazard area and would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.



i. Would the Project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The Project site is located in an area protected from inundation by levees (the Santa Ana River levee system) and within in the Prado Dam Inundation Area.

Prado Dam was designed in the 1930s, but increased its functioning capability due to Seven Oaks Dam, which was completed in November 1999, and is approximately 40 miles upstream on the Santa Ana River. During a flood, Seven Oaks Dam stores water destined for Prado Dam for as long as the reservoir pool at Prado Dam is rising. When the flood threat at Prado Dam has passed, Seven Oaks Dam begins to release its stored floodwater at a rate that does not exceed the downstream channel capacity. Working in tandem, the Prado and Seven Oaks Dams provide increased flood protection to Orange County.

Prado Dam is maintained and inspected to ensure its integrity and to ensure that risks are minimized. In addition, construction of the Santa Ana River Mainstem Project was initiated in 1989, and is scheduled for completion in 2021. The Santa Ana River Mainstem Project will increase levels of flood protection to more than 3.35 million people in Orange, San Bernardino, and Riverside Counties. Improvements to 23 miles of the Lower Santa Ana River channel, from Prado Dam to the Pacific Ocean, are 95 percent complete, with the remaining bank protection improvements in Yorba Linda currently under construction. Improvements to the Santa Ana River channel include construction of new levees and dikes. In addition, the Santa Ana River Mainstem Project includes improvements to Prado Dam that are currently underway and are estimated to be completed in 2021. The Prado Dam embankment has been raised and the outlet works have been reconstructed to convey additional discharges. Remaining improvements to Prado Dam include acquisition of additional land for the expansion of the Prado Reservoir, construction of protective dikes, and raising of the spillway (Orange County Flood Division 2018).

Although the Project would construct a new structure in an inundation zone, the proposed Project would not increase the chance of inundation from failure of Prado Dam. **In addition, due to the distance from Prado Dam and current emergency procedures that address dam failure or flooding, the likelihood of dam failure is low, and impacts related to flooding as a result of dam or levee failure would be less than significant. No mitigation is required.**

The Specific Plan EIR also concluded that impacts related to flooding as a result of failure of a dam or levee would be less than significant. Similarly, the proposed Project would not increase the chance of inundation from failure of Prado Dam and would, therefore, not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

j. Would the Project have inundation by seiche, tsunami, or mudflow?

No large standing bodies of water are located in the immediate vicinity of the Project site that could cause flooding due to seiches. The Pacific Ocean is approximately 5.5 miles from the



Project site and is not located within the tsunami inundation zone. The Project site is essentially flat and there are no substantial slopes on or in the vicinity of the Project site. As a result, there is no risk of mudflow at the Project site. **No impacts associated with possible seiche, tsunami, and mudflow would occur, and no mitigation is necessary.**

The Specific Plan EIR also concluded that no impacts related to inundation by seiche, tsunami, or mudflow would occur. The proposed Project is located within the Specific Plan area and would, therefore, not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

4.10.3.1 Mitigation Measures

The Specific Plan EIR does not include mitigation related to Hydrology and Water Quality. No additional mitigation measures would be required for the proposed Project.

4.10.4 Findings Related to Hydrology and Water Quality

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Hydrology and Water Quality and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Hydrology and Water Quality that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Hydrology and Water Quality requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. The proposed Project would not result in any potentially significant impacts related to Hydrology and Water Quality. CEQA does not require consideration of alternatives to the Project or consideration of additional mitigation measures because there would not be any significant impacts to avoid or reduce related to this topic, and no mitigation is required.



4.11 LAND USE AND PLANNING

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the Project:			
a. Physically divide an established community?	<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"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.11.1 Existing Setting

The Project site is designated Industrial (Commercial Manufacturing) in the City’s General Plan and is zoned as Specific Plan (SP) – FVCSP Mixed Industry District. The zoning is consistent with the General Plan land use designations. Permitted uses in the SP zone are detailed in the Specific Plan.

The Project site and the adjacent properties are characterized by 1970s concrete tilt-up buildings that are occupied by a variety of light industrial (e.g., warehousing), retail, and office uses. Many of these buildings were constructed pursuant to Fountain Valley’s former Industrial Redevelopment Plan Area.

The Project site is flat and is currently developed with five industrial warehouse buildings (totaling approximately 114,744 square feet [sf]) and associated surface parking lots (refer to Figure 2, Project Site). Landscaping on the Project site is comprised of several mature trees, shrubs, and small grassy areas around the perimeter of the site. The Project site is accessible from Bandilier Circle and Pacific Street.

While the Project site lies approximately 4 miles from John Wayne Airport, it remains just outside of the Airport’s Influence Area. Therefore, the Project site is not subject to any development restrictions from the Airport Environs Land Use Plan (AELUP).

4.11.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan’s potential Land Use and Planning impacts on pages 3.7-1 through 3.7-34.

According to the Specific Plan EIR, the Specific Plan area includes approximately 35 acres in the eastern portion of the City of Fountain Valley along I-405 and the Santa Ana River, which serves as the eastern border for the City. The FVCSP area is fully developed with no notable vacant areas, and there are no residential uses within the FVCSP area. Access between the northern and southern portions of the FVCSP area is currently inhibited by the I-405, and connectivity between land uses is limited to Euclid Street and Ward Street. The Specific Plan EIR concluded that implementation of the Specific Plan would not result in new development that would affect travel to and from Districts within the area. Further, streetscape improvements, district design, and land use plans proposed



under the Specific Plan are intended to enhance connectivity within each of these areas, as well as improve pedestrian access to and from the commercial and employment centers of the FVCSP area from outlying uses and adjacent communities, such as residential uses located to the north and northwest. Development under the Specific Plan would conform to existing infrastructure configuration; no road closures or other physical barriers would be installed, and no new large-scale infrastructure improvements would take place. On the contrary, the current street system, including pedestrian and bike facilities, would be improved over time with implementation of the Specific Plan. Therefore, the implementation of the Specific Plan would not physically divide existing communities, but instead is expected to improve land use connectivity north and south of the I-405. Impacts are considered to be less than significant.

The Specific Plan was developed by the City and is designed to be consistent with City's goals to encourage the development of a place of gathering and activity center within the City and the Southern California Association of Governments (SCAG) planning region. The primary components of the Specific Plan that would guide future development include updated zoning standards for form-based development and design standards for new development to address site design, building façade, size, bulk, and scale, as well as open space and walkability, and to promote and improve compatibility with existing residential, commercial, manufacturing, and industrial development surrounding the Specific Plan area. The Specific Plan is designed to comply with City's General Plan policies and SCAG planning goals and principles. Therefore, the Specific Plan would be consistent with applicable plans and policies.

According to the Specific Plan EIR, the Specific Plan is required to comply with the planning principles and goals established by SCAG and relating to the provision of residential opportunities near transit corridors, encouragement of active multi-modal uses, creation of workplace-oriented spaces, and encouragement of profitable business uses, and balanced industry and housing opportunities. The primary components of the Specific Plan that would guide future development include updated zoning standards for form-based development, and design standards for new development to address site design, building façade, size, bulk, and scale, as well as open space and walkability, and to promote and improve compatibility with existing residential, commercial, manufacturing, and industrial development surrounding the Specific Plan area. The Specific Plan is designed to comply with City General Plan policies and SCAG planning goals and principles, and overall, the Specific Plan would be consistent with applicable plans and policies. In addition to land use planning policies and regulations, the City and SCAG establish goals and policies oriented towards reducing impacts to the human and natural environment that may result from increases in development, increases in transportation-related emissions, and effects to local and regional transportation systems. Implementation of the Specific Plan would result in the emissions of additional air quality and greenhouse gas (GHG) pollutants, noise impacts, and transportation impacts. Mitigation measures designed to reduce potential impacts to air quality, noise, and transportation would ensure that impacts associated with the Specific Plan build out are mitigated to a less than significant level. Therefore, with implementation of mitigation measures, the Specific Plan is consistent with goals and policies established by SCAG.

The Specific Plan EIR concluded that there are no adopted Habitat Conservation Plans (HCPs) or Natural Community Conservation Plans (NCCPs) in the Specific Plan area vicinity. The Specific Plan



area does not include any habitat areas that are protected through an approved local, regional, or State HCP or NCCP. The County has approved an NCCP and an HCP, but the City has not enrolled in such plans, and is not included in the associated planning area.

4.11.3 Analysis of Project Impacts

a. Would the Project physically divide an established community?

The Project site is currently developed with five existing industrial warehouse buildings. The proposed Project includes demolition of the five existing industrial warehouse buildings and construction and operation of a new three-story administration building, surface parking lot, and site landscaping, in a fully developed part of the City of Fountain Valley. In addition, a pedestrian bridge would extend from the Project site to OCSD's Plant No. 1, directly south of Ellis Avenue. The pedestrian bridge would connect the proposed Project with the existing OCSD site and would not impact transportation facilities on Ellis Avenue. Land uses in the vicinity of the Project site include I-405 to the north, industrial uses to the north and west, residential uses and the OCWD to the west, the Santa Ana River and associated trail to the east, and OCSD to the south. The proposed Project would include access to/from the Project site via driveways, as well as pedestrian and bicycle access to/from the Project site via sidewalks along the site's eastern, western, and southern boundaries, which are already developed. As a result, the proposed Project would not result in physical divisions in any established community. **There would be no impact related to the division of an established community and no mitigation is required.**

The Specific Plan EIR also concluded that implementation of the Specific Plan would not divide an established community because it would conform to the existing infrastructure configuration. In addition, land use plans proposed under the Specific Plan are intended to enhance connectivity through pedestrian improvements, provision of public gathering places, and creation of pedestrian and bike friendly streetscapes. The proposed Project, which is located within the Specific Plan area and would not divide an established community, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

b. Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Locally adopted land use plans, policies, or regulations that would be applicable to the proposed Project include the City of Fountain Valley's Crossing Specific Plan, the City of Fountain Valley General Plan, and the City's Zoning Code. The Specific Plan designates the Project site as Mixed Industry District. The Project site is designated Industrial (Commercial Manufacturing) in the City's General Plan and is zoned as Specific Plan (SP) – FVCSP Mixed Industry District. The proposed administrative uses are consistent with the commercial manufacturing designation, which allows for office (administrative, business, and professional) uses. The Specific Plan anticipated, and the Specific Plan EIR evaluated, a potential net increase of 811,408 sf for the



office uses within the Specific Plan area. The proposed Project, at 109,914 sf, is thus consistent with the build out of new office uses projected in the Specific Plan EIR. Build out of the Specific Plan would result in an increase in population associated with approximately 2,063 new employees, 1,444 new residents, and customers of commercial and retail businesses. Build out of the Specific Plan would increase the density of commercial uses and introduce new residential uses, thereby increasing the total population of the Specific Plan area. Implementation of the proposed Project would not result in an increase in OCSD employees because the Project is characterized as a relocation, rather than an expansion, of existing operations. Thus, the Project would be consistent with population growth projected in the Specific Plan.

The proposed Project would be consistent with all locally adopted land use plans, policies, and regulations, including most development standards outlined in the Specific Plan. The proposed Project would require the following variances, deviations, and code amendments to the Specific Plan:

- Variance 1 – Frontage Coverage (Pacific Street)
- Variance 2 – Frontage Coverage (Bandilier Circle)
- Variance 3 – Build-to-Corner (Ellis Avenue/Bandilier Circle)
- Variance 4 – Parking Count (Not Used)

- Variance 5 – Curb Cuts & Driveways (Pacific Street)
- Variance 6 – Street Façade Base (Pacific Street)
- Variance 7 – Street Façade Base (Ellis Avenue)
- Variance 8 – Street Façade Base (Bandilier Circle)
- Variance 9 – Street Façade Top (Pacific Street, Bandilier Circle and Ellis Avenue – Board Room Volume, Ellis Avenue)
- Variance 10 – Street Façade Wall Composition on Bandilier Circle
- Deviation 1 – Building Length (Ellis Avenue)
- Deviation 2 – Street Façade Composition (Pacific Street)
- Deviation 3 – Parking Count
- Code Amendment 1 – Amendment to permit the use of skyways to connect government buildings
- Code Amendment 2 – Amendment to change the minimum parking standard for the Workplace-Professional use type from 3.5 spaces per 1,000 sf to 2.5 spaces per 1,000 sf
- Code Amendment 3 – Amendment to eliminate the requirement for Special Public Open Space



As listed above, the proposed Project would require a code amendment to the Specific Plan to permit the use of skyways to connect government buildings. With the approval of this code amendment, the proposed pedestrian bridge would be allowed by the Specific Plan.

The development standards outlined in the Specific Plan require 3.5 parking spaces per 1,000 sf of building area; however, per Section 21.22.040 of the City's Municipal Code, office uses require 2.5 parking spaces per 1,000 sf of building area. The proposed 261 parking spaces are non-compliant with the existing Specific Plan, which requires 365 parking spaces, but are compliant with the City's Municipal Code. The proposed Project would require approval of a deviation to address the reduced parking. The proposed Project also includes an amendment to the Specific Plan to change the minimum parking standard for the Workplace-Professional use type from 3.5 spaces per 1,000 sf to 2.5 spaces per 1,000 sf. This amendment would make the Specific Plan consistent with the City's Municipal Code parking requirements for office uses. With approval of the deviation and the code amendment, the proposed Project would be consistent with the parking requirements in both the Specific Plan and the City's Municipal Code.

The proposed Project would require a code amendment to the Specific Plan to eliminate the requirement for Special Public Open Space. With the approval of this code amendment, the requirement for Public Open Space would be eliminated and the proposed Project would be consistent with the Specific Plan.

The proposed Project would comply with all other development standards outlined in 2.1.5 of the Specific Plan. Therefore, with the approval of the above variances, deviations, and code amendments to the Specific Plan, the proposed Project would be consistent with development standards outlined in the Specific Plan.

The Project would be subject to existing local and regional land use plans and policies established by the City and SCAG. The Project would be designed to comply with applicable City General Plan policies, Specific Plan policies, and SCAG planning goals and principles. In addition to land use planning policies and regulations, the City and SCAG establish goals and policies oriented towards reducing impacts related to noise and transportation. The Project would be in compliance with SCAG policies following the incorporation of mitigation measures related to noise and transportation, which would reduce impacts to a less than significant level. **With implementation of the mitigation measures, the Project would be consistent with the applicable goals and policies of SCAG and the City's General Plan, and impacts would, therefore, be less than significant. No further mitigation is required.**

The Specific Plan EIR concluded the Specific Plan was created by the City, and therefore, would be consistent with applicable land use plans, policies, and regulations. The proposed Project, which is located within the Specific Plan area, would be consistent with the Specific Plan as amended, the General Plan, and the Zoning Code. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.



c. Would the Project conflict with any applicable habitat conservation plan or natural community conservation plan?

As discussed in Response 4.4.3 (f), the Project site and the surrounding areas are not subject to any HCP or NCCP. **Therefore, the proposed Project would not conflict with any HCP or NCCP relating to the protection of biological resources; there would be no impact and no mitigation would be required.**

The Specific Plan EIR also concluded that the Specific Plan area and vicinity are not subject to any HCP or NCCP. Similarly, the proposed Project is located within the Specific Plan area and would not conflict with any HCP or NCCP. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

4.11.3.1 Mitigation Measures

Based on the analysis and information above, Mitigation Measures MM N-1, MM T-1, MM T-2a through b, and MM T-7 (refer to Sections 3.13, Noise, and 3.17, Transportation/Traffic) shall apply, are included in the Specific Plan EIR, and would be applicable to the proposed Project.

4.11.4 Findings Related to Land Use and Planning

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Land Use and Planning, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Land Use and Planning that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Land Use and Planning requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. This Addendum has analyzed all available relevant information and has determined that there is no new information of substantial importance that was unknown and could not have been known with the exercise of reasonable diligence at the time the Specific Plan EIR was certified indicating that: (1) mitigation measures or alternatives previously found not to be feasible would in fact be feasible,



and would substantially reduce one or more significant effects of the Project, but the Project proponent declines to adopt the mitigation measures or alternatives; or (2) mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the Project proponent declines to adopt the mitigation measures or alternatives.

As discussed above, the proposed Project would result in a potentially significant impact related to Land Use and Planning. Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measures that are applicable to the proposed Project are listed in Sections 4.13.3.1 and 3.17.3.1. Potential Project impacts related to Land Use and Planning would be reduced below a level of significance with implementation of the applicable mitigation measures, none of which the Project proponent is declining to adopt.



4.12 MINERAL RESOURCES

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
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 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 checked="" type="checkbox"/>

4.12.1 Existing Setting

There are no known mineral resources within the Specific Plan area, including the Project site, and there are no operational mineral recovery sites within the Specific Plan area or in the nearby Project vicinity.⁷

4.12.2 Impacts Identified in the Specific Plan EIR

Mineral Resources are included within Section 4.3, Effects Found Not to be Significant, on pages 4-5 through 4-6 of the Specific Plan EIR; this topic was also discussed in page 44 of the Initial Study and was scoped out. The Specific Plan EIR concluded that implementation of the Specific Plan would not result in impacts to mineral resources because there are no known mineral resources within the Specific Plan area.

4.12.3 Analysis of Project Impacts

a. Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

In 1975, the California Legislature enacted the Surface Mining and Reclamation Act, which, among other things, provided guidelines for the classification and designation of mineral lands. Areas are classified on the basis of geologic factors without regard to existing land use and land ownership. The areas are categorized into four Mineral Resource Zones (MRZs):

- **MRZ-1:** An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** An area containing mineral deposits, the significance of which cannot be evaluated.
- **MRZ-4:** An area where available information is inadequate for assignment to any other MRZ zone.

⁷ California Department of Conservation (DOC), Division of Mine Reclamation. Mines Online. Website: <http://maps.conservation.ca.gov/mol/index.html> (accessed November 24, 2019).



Of the four categories, lands classified as MRZ-2 are of the greatest importance. Such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are designated by the State of California Mining and Geology Board as being “regionally significant.” Such designations require that a Lead Agency’s land use decisions involving designated areas are to be made in accordance with its mineral resource management policies, and that it consider the importance of the mineral resource to the region or the State as a whole, not just to the Lead Agency’s jurisdiction.

The Project site has been classified by the California Department of Mines and Geology as MRZ-3, indicating it is located in an area containing mineral deposits for which the significance cannot be determined using available data.⁸ The Project site is developed with urban uses. In addition, the Project site is designated Industrial (Commercial Manufacturing) in the City’s General Plan and is zoned as Specific Plan (SP) – FVCSP Mixed Industry District. Though the Project site is in MRZ-3, no known mineral resources are located on the Project site, and the Project site is not designated or zoned for the extraction of mineral deposits.

The proposed Project would not result in the loss of a known commercially valuable mineral resource. No impacts to known mineral resources would occur as a result of the proposed Project and no mitigation is required.

The Specific Plan EIR also concluded that no impacts to known mineral resources would occur. Similarly, the proposed Project is located within the Specific Plan area and would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

b. Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Refer to Response 4.11.3 (a), above. The proposed Project would not result in the loss of a known locally important mineral resource. No impacts to known mineral resources would occur as a result of the proposed Project.

The Specific Plan EIR also concluded that no impacts to locally important mineral resource recovery sites would occur. Similarly, the proposed Project is located within the Specific Plan area and would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

⁸ DOC, Division of Mines and Geology. Mineral Land Classification Map. Newport Beach Quadrangle, Special Report 143, Plate 3.24. Website: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_143/PartIII/Plate_3-24.pdf (accessed November 24, 2019).



4.12.3.1 Mitigation Measures

The Specific Plan EIR does not include mitigation related to mineral resources. No additional mitigation measures would be required for the proposed Project.

4.12.4 Findings Related to Mineral Resources

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Mineral Resources, and there is no increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Mineral Resources that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Mineral Resources requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. The proposed Project would not result in any potentially significant impacts related to Mineral Resources. CEQA does not require consideration of alternatives to the Project or consideration of additional mitigation measures because there would not be any significant impacts to avoid or reduce related to this topic, and no mitigation is required.



4.13 NOISE

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the Project:			
a. Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in 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"/>
d. Result in a substantial temporary or periodic 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"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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 checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the Plan area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.13.1 Existing Setting

The Project site is located in an urban area amid industrial and commercial development. The primary source of ambient noise in the vicinity of the Project site is associated with roadway traffic noise. Motor vehicle noise generated by automobiles, buses, motorcycles, and trucks on streets is the most common source of sustained noise levels. The main source of traffic noise comes from the Interstate 405 (I-405) freeway, which receives approximately 320,000 vehicle trips per day (based on 2017 count data) and is located approximately 500 feet northeast of the Project site. Traffic noise is also generated on major streets within the Project area vicinity, particularly along Ellis Avenue, which receive around 30,500 vehicle trips per day (based on 2016 count data). Noise in the vicinity of the Project site also occurs from various stationary sources, especially urban-related activities (e.g., mechanical equipment, parking areas, conversations, etc.) that may represent a single event or a continuous occurrence.

While the Project site lies approximately 4 miles from John Wayne Airport, it remains just outside of the Airport's Influence Area. Therefore, the Project site is not subject to any development restrictions from the Airport Environs Land Use Plan (AELUP). There are no private airstrips in the vicinity of the Project site.

Regulatory requirements and standards that govern the generation of and exposure to noise within the community have not changed since the preparation of the Specific Plan EIR. Potential impacts of the proposed Project as compared to the Specific Plan with respect to noise are discussed below.



4.13.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan's potential Noise impacts on pages 3.8-1 through 3.8-26. The Specific Plan EIR evaluated the potential noise and vibration impacts that could result from implementation of the Specific Plan.

According to the Specific Plan EIR, noise data was gathered from the Hyundai Motor America North American Corporate Campus (Hyundai Project) and used in the analysis as noise data representative of the FVCSP area. Monitoring was conducted at four unique locations around the Hyundai Project, which coincides with the northwesternmost corner of the FVCSP area.⁹ The noise monitoring results indicate that existing daytime ambient noise levels in the area range from 53.9 A-weighted decibels (dBA) to 70.8 dBA equivalent continuous sound level (L_{eq}).¹⁰ The predominant source of noise affecting the Hyundai Project was traffic along I-405.

The Specific Plan EIR determined that construction of the Specific Plan could result in significant temporary noise impacts to nearby noise-sensitive receptors.¹¹ Therefore, the Specific Plan EIR identified Mitigation Measure MM N-1 to reduce the noise levels resulting from construction of the Specific Plan for off-site noise-sensitive uses to a less than significant level.

The Specific Plan EIR also evaluated ground-borne vibration and ground-borne noise levels associated with construction of the Specific Plan. The Specific Plan EIR determined that ground-borne vibration from construction activities would not exceed thresholds, and impacts would be less than significant.

In addition, the Specific Plan EIR evaluated the potential increase in ambient noise levels due to increased traffic and associated noise. The Specific Plan EIR determined that the maximum noise level increase would be less than 1 decibel (dB) in any location, and were considered to be less than significant.

The Specific Plan EIR also evaluated potential impacts from the exposure of persons to excessive ground-borne vibration or noise levels, including truck deliveries and trash hauling, mechanical equipment, and parking areas. The Specific Plan EIR determined that implementation of the Specific Plan would result in less than significant impacts associated with these noise sources.

⁹ The Hyundai Project is approximately 1,000 ft northwest of the Project site.

¹⁰ Table 3.8-4 of the Specific Plan EIR provides the results of the noise measurements taken at the Hyundai Project site which are summarized in this section.

¹¹ Table 3.8-11 of the Specific Plan EIR indicates the anticipated noise levels of construction equipment noise levels, which are summarized in this section.



4.13.3 Analysis of Project Impacts

- a. **Would the Project increase 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?**

Construction- and operation-period noise impacts of the proposed Project as compared to the impacts identified in the Specific Plan EIR are discussed below.

Construction Impacts. Noise generated by the construction period for the proposed Project would temporarily increase noise levels in the vicinity of the Project site. Each stage of construction would involve a different mix of operating equipment, and noise levels would vary based on the amount and types of equipment in operation as well as the location of the activity. These activities would be similar for the proposed Project as compared to the Specific Plan.

The Specific Plan EIR identified that the closest sensitive receptors to construction associated with the Specific Plan would be located approximately 75 ft from construction activities and would be subject to a maximum noise level reaching approximately 94.5 dBA L_{eq} . The closest sensitive receptors to the proposed Project would be located approximately 1,350 ft from the Project site. Therefore, attenuated for distance, these receptors would be subject to a noise level of approximately 69.4 dBA L_{eq} .

As identified in the Specific Plan EIR, the City's Municipal Code Section 6.28.050 states that exterior noise standards for residential zones can reach up to 75 dBA from 7:00 a.m. to 10:00 p.m. and up to 70 dBA from 10:00 p.m. to 7:00 a.m. for any period of time. In addition, pursuant to the City's Municipal Code Section 6.28.070 (Special Provisions), noise due to construction activities would be exempt from the Noise Ordinance between the hours of 7:00 a.m. and 8:00 p.m. on weekdays and 9:00 a.m. and 8:00 p.m. on Saturdays, with no construction activities permitted on Sundays or legal holidays. In addition, although construction noise levels at the nearest sensitive receptors would be below the City's threshold of 75 dBA from 7:00 a.m. to 10:00 p.m. and up to 70 dBA from 10:00 p.m. to 7:00 a.m. for any period of time and therefore less than significant, Mitigation Measure MN-N-1 is applicable to the proposed Project. The Specific Plan EIR requires the implementation of Mitigation Measure MM N-1 to further reduce noise levels by requiring mobile equipment to be muffled and requiring best management practices for hauling activities. **Project impacts related to exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance would be less than significant.**

The Specific Plan EIR determined that construction of the Specific Plan could result in significant temporary noise impacts to nearby noise-sensitive receptors. However, the proposed Project site is located further from sensitive receptors than those identified in the Specific Plan EIR, and would not be subject to construction noise exceeding exterior noise standards for residential zones. Therefore, construction of the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.



Operation-Period Impacts. The proposed Project would involve the construction and operation of a new administration building and surface parking lot and would relocate the existing administrative uses from Plant No. 1 to the Project site north of Ellis Avenue. The proposed Project would result in an increase in the number of employees on the Project site; there are approximately 20 employees on the Project site in the existing condition and there would be approximately 230 employees on the Project site after Project implementation. Implementation of the proposed Project would not result in an increase in OCSD employees because the proposed Project is characterized as a relocation, rather than an expansion, of existing operations. As a result, the proposed Project would not increase existing vehicle trips. However, the proposed Project would redistribute traffic from Plant No.1 to the Project site north of Ellis Avenue, which would result in an increase of traffic noise in the vicinity of the proposed Project. The proposed Project would also generate stationary noise during operation that could result in a permanent increase in the ambient noise environment. Potential impacts associated with these noise sources are discussed below.

Traffic Noise. As identified in the Specific Plan EIR, traffic is a major source of noise in the Project vicinity. The amount of noise varies according to many factors, such as volume of traffic, vehicle mix (percentage of cars and trucks), average traffic speed, and distance from the receiver. A characteristic of sound is that a doubling of a noise source is required in order to result in a perceptible (3 dBA or greater) increase in the resulting noise level.

As identified in the Specific Plan EIR, the I-405 southbound ramps/Ellis Avenue/Euclid Street intersection (the closest intersection to the Project site) carries approximately 3,492 AM peak hour trips or approximately 34,920 average daily trips. The proposed Project would only result in a redistribution of vehicular traffic and would not add any new trips to the surrounding circulation system. Therefore, the proposed Project daily trips would not result in a doubling of traffic volumes on nearby roadways and would not result in a perceptible increase in traffic noise levels at sensitive receptors in the Project vicinity, which are located approximately 1,350 ft southeast of the site. While traffic noise may increase on other roadway segments within the immediate vicinity of the site, land uses in this area consist of a variety of light industrial (e.g., warehousing), retail, and office uses, which would not be sensitive to increased traffic noise levels. **Therefore, Project-related vehicle noise would be considered less than significant and no further mitigation is required.**

The Specific Plan EIR determined that the maximum noise level increase would be less than 1 dB in any location, and impacts were considered to be less than significant. Similar to the Specific Plan, the proposed Project would not result in a doubling of traffic volumes on nearby roadways and would not result in a perceptible increase in traffic noise levels at sensitive receptors in the Project vicinity. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

Stationary Source Noise. Operation of the proposed Project would contribute new noise sources that would incrementally increase noise levels. The noise sources that may be present during operation of the Project include delivery and trash trucks, mechanical equipment, and typical parking lot activities.



The closest sensitive receptors to the proposed Project include the single-family residences located approximately 1,350 ft southeast of the Project site along Alabama Circle. These sensitive receptors are located further than those identified in the Specific Plan EIR (nearest residences include the Adobe River Avenue Neighborhood, located approximately 75 ft west of the Specific Plan area). **As such, due to noise attenuation based on the increased distance from the nearest sensitive receptors, noise levels from Project-related stationary noise sources would remain a less than significant impact on off-site sensitive receptors and no mitigation would be required.**

The Specific Plan EIR determined that implementation of the Specific Plan would result in less than significant impacts associated with stationary noise sources. Similarly, noise levels from the proposed Project stationary noise sources would be a less than significant impact on off-site sensitive receptors, due to their greater distance from the proposed Project site. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

b. Would the Project increase exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

Construction of the proposed Project would occur in phases that would include demolition, site preparation, grading, building construction, and architectural coating. During construction, ground-borne vibration would be generated from various types of construction equipment such as loaded trucks, jack hammers, and bulldozers.

The Specific Plan EIR determined that there are no fragile historic structures in the Specific Plan area that could be affected by construction vibration. In addition, the Specific Plan EIR identified that ground-borne vibration from construction activities could potentially be felt by surrounding sensitive uses; however, vibration levels at the closest sensitive receptors would not exceed the threshold of 0.1 inches per second. The closest sensitive receptors to the proposed Project are located further than those identified in the Specific Plan EIR (nearest residences include the Adobe River Avenue Neighborhood, located approximately 75 ft west of the Specific Plan area). **As such, due to noise attenuation based on the increased distance from the nearest sensitive receptors, ground-borne vibration impacts would remain less than significant for the proposed Project. No mitigation is required.**

The Specific Plan EIR determined that vibration levels at the closest sensitive receptors would not exceed the threshold of 0.1 inches per second. The proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR as the closest sensitive receptors to the proposed Project are located further than those identified in the Specific Plan EIR. No new mitigation measures are required.



c. Would the Project result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Please refer to Response 4.13 (a), above. Audible increases in noise levels generally refer to a change of 3 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. Implementation of the proposed Project would not result in substantial increases in traffic noise levels on local roadways in the Project vicinity or operational noise at sensitive receptor locations. **Therefore, Project-related noise increases and impacts associated with permanent increases in noise levels would be a less than significant impact and no mitigation is required.**

The Specific Plan EIR determined that impacts associated with permanent increases in noise levels would be less than significant. Similarly, the proposed Project, which would not result in substantial increases in traffic noise levels or operational noise, would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation measures are required.

d. Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Refer to Response 4.13 (a), above. **Project-related construction activities could result in high intermittent noise levels but would be reduced to a less than significant level with implementation of Mitigation Measure MM N-1, which requires mobile equipment to be muffled and the use of BMPs for hauling activities. No further mitigation is required.**

The Specific Plan EIR determined that construction of the Specific Plan could result in a temporary increase in noise levels during construction. Similarly, construction of the proposed Project could result in a temporary increase in noise levels during construction. However, the proposed Project would not subject sensitive receptors to construction noise exceeding exterior noise standards for residential zones. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation measures are required.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

The Project site is approximately 6 miles west of John Wayne Airport in Santa Ana. According to the Airport Land Use Commission, the Project site does not fall within the John Wayne Airport Planning Area. The proposed Project would not expose employees or visitors of the proposed office uses to aviation-related noise levels different than that which would occur under existing conditions. Further, the Project site is not in the 2016 Annual 60 to 75 Community Noise Equivalent Level Noise Contours area for John Wayne Airport. **Therefore, there would be no impacts from aviation-related noise. No mitigation is required.**



The Specific Plan project area is not located within an airport land use plan or within 2 miles of a public airport and would not expose residents or employees to excessive aviation-related noise levels. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation measures are required.

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 private airfields are located in the vicinity of the Project site. Therefore, the proposed Project would have no impacts associated with excessive noise levels from a private airfield. No mitigation is required.

The Specific Plan project area is not located within the vicinity of a private airstrip and would not expose residents or employees to excessive aviation-related noise levels. The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation measures are required.

4.13.3.1 Mitigation Measures

Based on the analysis and information above, Mitigation Measure MM N-1 included in the Specific Plan EIR would be applicable to the proposed Project.

MM N-1 Construction Noise Management Plan. A Construction Noise Management Plan shall be prepared by the Applicant and approved by the City prior to Grading Permit issuance. The Plan would address noise and vibration impacts and outline measures that would be used to reduce impacts. Measures would include but not be limited to:

- To the extent that they exceed the applicable construction noise limits, excavation, foundation-laying, and conditioning activities shall be restricted to between the hours of 7:00 a.m. and 8:00 p.m. Monday through Friday, and 9:00 a.m. and 8:00 p.m. Saturdays, in accordance with Section 6.28.070 of the Fountain Valley Municipal Code.
- The Applicant's construction contracts shall require implementation of the following construction best management practices (BMPs) by all construction contractors and subcontractors working in or around the Project area to reduce construction noise levels:
 - The Applicant and its contractors and subcontractors shall ensure that all construction equipment, fixed or mobile, is properly muffled according to manufacturer's specifications or as required by the City's Building and Safety Division, whichever is the more stringent.
 - The Applicant and its contractors and subcontractors shall place noise-generating construction equipment and locate construction staging areas



away from sensitive uses, where feasible, to the satisfaction of the Building and Safety Division.

- The Applicant and its contractors and subcontractors shall implement noise attenuation measures which may include, but are not limited to, noise barriers or noise blankets to the satisfaction of the City's Building and Safety Division.
- The Applicant's contracts with its construction contractors and subcontractors shall include the requirement that construction staging areas, construction worker parking, and the operation of earthmoving equipment within the Project area, are located as far away from vibration- and noise-sensitive sites as possible. Contract provisions incorporating the above requirements shall be included as part of the Project's construction documents, which shall be reviewed and approved by the City.
- The Applicant shall require by contract specifications that heavily loaded trucks used during construction shall be routed away from residential streets to the extent possible. Contract specifications shall be included in the proposed Project's construction documents, which shall be reviewed by the City prior to issuance of a grading permit.
- Property owners and occupants located within 500 feet of the boundary of a construction project occurring under the Specific Plan shall be sent a notice, at least 15 days prior to commencement of construction of each phase, regarding the construction schedule of the Project. A sign, legible at a distance of 50 feet, shall be posted at the construction site. All notices and signs shall be reviewed and approved by the City prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number where residents can inquire about the construction process and register complaints.

4.13.4 Findings Related to Noise

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Noise, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Noise that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new



information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Noise requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. This Addendum has analyzed all available relevant information and has determined that there is no new information of substantial importance that was unknown and could not have been known with the exercise of reasonable diligence at the time the Specific Plan EIR was certified indicating that: (1) mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project, but the Project proponent declines to adopt the mitigation measures or alternatives; or (2) mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the Project proponent declines to adopt the mitigation measures or alternatives.

As discussed above, the proposed Project would result in a potentially significant impact related to Noise. Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measure that is applicable to the proposed Project is listed in Section 4.13.3.1. Potential Project impacts related to Noise would be reduced below a level of significance with implementation of the applicable mitigation measures, none of which the Project proponent is declining to adopt.



4.14 POPULATION AND HOUSING

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.14.1 Existing Setting

According to the State of California Department of Finance, the City’s 2020 population is 55,878 people, while Orange County had a population of 3,194,332.¹² In January 2020, the County’s unemployment rate was 2.9 percent, however, due to the COVID-19 Pandemic, the County’s unemployment rate was 9.9 percent by August 2020.^{13,14} In August 2020, the unemployment rates in the City was 10.5 percent compared to an average unemployment rate of 2.8 percent in 2019.^{15,16}

There are no residential uses on the Project site or immediately adjacent to the Project site. There were approximately 20 employees on the Project site prior to OCSD acquisition of the Project site. There are approximately 230 employees in the existing administrative offices on OCSD’s Plant No. 1.

4.14.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan’s potential Population and Housing impacts on pages 3.9-1 through 3.9-18.

The Specific Plan is intended to guide future land use changes occurring within the Specific Plan area through adoption of development standards and policies, including provisions for new housing and employment opportunities. The Specific Plan EIR determined that implementation of the Specific Plan would facilitate approximately 258,010 sf of net new development and 491 new housing units within the Specific Plan area.

¹² California Department of Finance Demographic Research Unit. Population Estimates for Cities, Counties, and the State, January 1, 2019 and 2020. May 1, 2020.

¹³ State of California Employment Development Department. Labor Market Information Division. Monthly Labor Force Data for Counties for January 2020. March 27, 2020

¹⁴ State of California Employment Development Department. Labor Market Information Division. Monthly Labor Force Data for Counties for August 2020. September 18, 2020.

¹⁵ State of California Employment Development Department. Labor Market Information Division. Monthly Labor Force Data for Cities and Census Designated Placed for August 2020. September 18, 2020.

¹⁶ State of California Employment Development Department. Labor Market Information Division. Monthly Labor Force Data for Cities and Census Designated Placed Annual Average 2019. March 27, 2020.



Consistent with the goals and policies of the City's General Plan and the adopted Housing Element, projected housing development within the Specific Plan area would involve creating more housing opportunities and minimizing impacts to existing neighborhoods. In addition, the Specific Plan contains objectives to support the City's commitment to providing adequate housing for families and individuals of all economic levels. Although the estimated increase in housing would be insignificant relative to the existing number of housing units in the City, the Specific Plan would adhere to City policies to provide adequate housing. Therefore, housing impacts are considered less than significant.

The Specific Plan EIR determined that the addition of 491 housing units would result in a net population increase of approximately 1,444 residents. However, population growth associated with implementation of the Specific Plan is considered incremental relative to the existing population in the Specific Plan area. In addition, implementation of the Specific Plan would result in the creation of approximately 2,063 jobs. Similar to population growth, employment growth associated with implementation of the Specific Plan is considered incremental relative to the existing jobs in the Specific Plan area. Employment growth would be consistent with the Specific Plan's goals to create a sustainable economy through development of a broad mix of retail, entertainment, office, and light industrial uses in the Specific Plan area. Therefore, potential impacts related to population and employment growth are considered less than significant.

The Specific Plan EIR concluded that land use changes occurring in the Specific Plan area would have no impact on existing housing or people. The Specific Plan area is fully developed and the proposed land use changes would be integrated within the existing industrial uses. The Specific Plan area does not currently support residential uses, and no demolition of residential uses is anticipated upon implementation of the Specific Plan. Conversely, the overall housing stock of the City would increase with implementation of the Specific Plan. The Specific Plan does not identify land uses changes in residential areas or the conversion of residential neighborhoods to non-residential uses, and therefore, it is not anticipated that housing or people would be displaced. Impacts related to the displacement of housing or people would be less than significant.

4.14.3 Analysis of Project Impacts

- a. **Would the Project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

The proposed Project would not provide new housing opportunities or extend roads or other infrastructure to areas not previously served. The Project would include demolition of the five existing industrial warehouse buildings, and the construction and operation of a new three-story administration building and surface parking lot on the Project site. OCSD's existing administrative functions and personnel will be shifted from Plant No. 1 to the new headquarters facility. In addition, a pedestrian bridge would connect the Project site to OCSD's Plant No. 1 site south of Ellis Avenue. Thus, the Project would not represent a net increase in businesses or jobs because the administrative use would provide work space for existing OCSD personnel.

Therefore, the proposed Project would not result in impacts related to population growth and no mitigation is required.



The Specific Plan EIR also concluded that implementation of the Specific Plan would not induce substantial population growth in the area because increases in the number of housing units, population, and jobs in the Specific Plan area would be considered incremental relative to existing levels. The proposed Project would similarly not increase population or job growth as it will serve the existing employees from the established Plant No. 1 facility. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

b. Would the Project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The proposed Project would not displace any existing housing, and there are no existing or proposed residential uses on the Project site. **Therefore, there would be no impacts related to the displacement of substantial numbers of housing and no mitigation is required.**

The Specific Plan EIR also concluded that implementation of the Specific Plan would not displace substantial numbers of existing housing because the Specific Plan area does not currently contain and is not planned for residential uses. Similarly, the proposed Project would not displace any existing housing and would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

c. Would the Project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

There are no existing or proposed residential uses on the Project site. The proposed Project would not displace housing and would not, therefore, displace a substantial number of people, necessitating the construction of replacement housing elsewhere. **Therefore, there would be no impacts related to the displacement of substantial numbers of people and no mitigation is required.**

The Specific Plan EIR also concluded that implementation of the Specific Plan would not displace a substantial number of people because the Specific Plan area does not support residential populations and is not planned for residential uses. Similarly, the proposed Project, which is located within the Specific Plan area, would not displace housing or result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

4.14.3.1 Mitigation Measures

The Specific Plan EIR does not include mitigation related to population and housing. No additional mitigation measures would be required for the proposed Project.



4.14.4 Findings Related to Population and Housing

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Population and Housing, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Population and Housing that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Population and Housing requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. The proposed Project would not result in any potentially significant impacts related to Population and Housing. CEQA does not require consideration of alternatives to the Project or consideration of additional mitigation measures because there would not be any significant impacts to avoid or reduce related to this topic, and no mitigation is required.



4.15 PUBLIC SERVICES

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the Project:			
a. 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:			
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.15.1 Existing Setting

The City provides public services that serve the Specific Plan area including the Project site. The City has two fire stations; Fire Station No. 1 located at 17737 Bushard Street, is approximately 2.1 miles from the Project site, and Fire Station No. 2 located at 16767 Newhope Street, is approximately 2.4 miles from the Project site. Response times to the Project site are approximately 6 minutes from Fire Station No. 1 and 8 minutes from Fire Station No. 2. Neither of these stations is located within the FVCSP area. The current response time for fire events in the City as calculated from dispatch to on-scene arrival is within 5 minutes, 90 percent of the time. Fire and emergency service response times in the Project area may be shorter than for the City as a whole, due to the proximity of both fire stations to the Project site. The Fire Department responded to 4,598 incidents in 2012, including 96 fire events and 3,870 medical emergencies

The Fountain Valley Police Department (FVPD) operates out of a central location at City Hall and provides police protection to the community. FVPD response time for police events is calculated from dispatch to on-scene arrival and on average took 5 minutes and 32 seconds for emergency events in 2015. With implementation of a new computer-aided dispatch and records management system, the FVPD has been collecting and analyzing crime data and traffic collision data to direct enforcement efforts. In 2015, the FVPD responded to 46,607 calls for service, addressed 3,046 crime reports, and responded to 731 traffic collisions. FVPD does not have established response time goals. Current response time to the FVCSP area as calculated from dispatch to on-scene arrival is approximately 3 minutes 28 seconds for Priority 1 calls and approximately 4 minutes 51 seconds for Priority 2 calls.

The Fountain Valley School District (FVSD) includes seven elementary schools, and three middle schools. Fountain Valley High School, located within the City, is part of the Huntington Beach Union High School District (HBUHSD).



The City's Recreation and Community Services Division operates a total of 20 parks within the City. Ellis Park is the closest Fountain Valley Park to the Project site; it is approximately 0.50-miles from the Project site. The City includes additional public services, such as the library and recreational facilities.

The closest library to the Project site is the Fountain Valley Library at 17635 Los Alamos Street. The library is approximately 1.8 miles from the Project site and is located outside the FVCSP area.

4.15.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan's potential Public Services impacts on pages 3.10-1 through 3.10-16.

Implementation of the Specific Plan would result in a net increase of approximately 258,010 sf of new development and construction of approximately 491 new residential units. As described in Section 4.14, Population and Housing, build out of the Specific Plan would result in an increase in service demands from an estimated 2,063 new employees, 1,444 new residents, and customers of commercial and retail businesses. In addition, the Specific Plan EIR determined the associated increase in demand for fire protection and emergency services within the Specific Plan area could potentially impact operational services of fire protection and emergency medical providers. Although the Specific Plan does not contain any specific development standards that address fire protection services, the City's General Plan (1995) contains fire protection goals and associated policies (Goal PS-6.4, Policy PS-6.4.1, and Policy PS-6.4.2) to ensure that equipment and facilities are provided and maintained to meet reasonable standards of safety, dependability, and efficiency. Pursuant to the City's Fire Code, all new structures built within the Specific Plan area would be required to meet standard fire code requirements and be subject to review by the City Fire Marshal, ensuring that the Project would provide adequate infrastructure for firefighting services. Therefore, compliance with the City's General Plan and Fire Code would ensure less than significant impacts to fire and emergency medical services.

Similar to fire services, the increase in population from new employees, residents, and customers in the Specific Plan area could generate an increased need for police services and additional patrol. Although the Specific Plan does not contain specific development standards addressing police protection, Section 2.0.3.E states that all developments shall comply with applicable regulations, including the City's Municipal Code and development review procedures. As part of the City's development review and approval process, the City of Fountain Valley Planning and Building Department would review proposed developments in the Specific Plan area and provide specific recommendations related to security features and opportunities to reduce crime. Further, the City's General Plan contains police service and law enforcement goals and associated policies (Goal PS-6.6, Policy PS-6.6.1, and Policy PS-6.6.3) to ensure that the City provides effective and rapid response to all emergencies. The Specific Plan EIR concluded that an increase in the number of residents and employees generated by Specific Plan build out would not be expected to significantly decrease adequate service levels or response times. Based on City growth projections, the FVPD does not currently anticipate the need for additional resources, and therefore, potential impacts to police services are considered less than significant.



Similar to fire and police services, the increase in population from new employees and residents in the Specific Plan area could generate increased enrollment at schools in the FVSD and HBUHSD. To account for these increases in demand for public school services, FVSD and HBUHSD require the payment of development fees for both residential, and non-residential development within the City. These fees are calculated on a per-square-foot basis on new development and would be collected for the 491 housing units and commercial development projects based on their square footage. **As a result of payment of these required fees, potential impacts to schools resulting from development under the Specific Plan are considered less than significant and no mitigation is required.**

Similarly to other public services discussed above, the increase in population from new employees and residents in the Specific Plan area could incrementally increase the demand for other public facilities, including libraries. Although there are no library facilities located within the Specific Plan area, increased demand would not exceed existing service capabilities of the nearby Fountain Valley Library or other nearby libraries. The Orange County Public Libraries (OCPL) System allows access to materials from all branches. Therefore, the incremental increase in demand for library services would not result in the need for new or physically altered facilities or additional staff, and potential impacts to library services are considered less than significant.

4.15.3 Analysis of Project Impacts

a. i. 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 fire protection?

The proposed Project would result in the demolition of the five existing industrial warehouse buildings on the Project site, and construction and operation of a new three-story administration building and surface parking lot on the Project site. In addition, a pedestrian bridge would connect the Project site to Orange County Sanitation District (OCSD)'s Plant No. 1 south of Ellis Avenue. The proposed Project would relocate the existing administrative uses from Plant No. 1 to the Project site north of Ellis Avenue. Implementation of the proposed Project would not result in an increase in OCSD employees because the Project is characterized as a relocation, rather than an expansion, of existing operations. As such, the Project would not result in an increase in jobs or employment beyond what currently exists at Plant No. 1.

The FVFD is responsible for providing emergency response, fire prevention, education, and emergency medical services to citizens and visitors to the City of Fountain Valley. The City is served by two fire stations: Fire Station No. 1 located at 17737 Bushard Street, is approximately 2.1 miles from the Project site, and Fire Station No. 2 located at 16767 Newhope Street, is approximately 2.4 miles from the Project site.

The Project may result in limited effects on fire services during the construction period (such as any potential calls for service FVFD may receive regarding conditions at the Project site), but these effects would be temporary in nature and would cease following completion. As stated in Section 4.14, Population and Housing, new development proposed as part of the Project would



not represent a net increase in businesses or jobs because the administrative use would provide work space for existing OCSD personnel currently located at OCSD's Plant No. 1, which is directly across Ellis Avenue (approximately 150 ft) from the Project site. Consequently, operation of the administration building would not result in increased demand for fire services in the Project vicinity compared to existing conditions. Further, the Project intends to comply with policies related to fire and emergency medical services in the City's General Plan and Fire Code, ensuring minimal impacts to public services. In addition, the Project would be required to comply with building code requirements related to fire protection and prevention (e.g., installation of fire sprinklers, fire hydrant spacing, and minimum water pressure requirements). **Therefore, the proposed Project would result in less than significant impacts to fire protection services and no mitigation is required.**

The Specific Plan EIR also concluded that implementation of the Specific Plan would not result in adverse impacts related to provision of fire services because development under the Specific Plan would comply with the General Plan and the Fire Code. Similarly, the proposed Project intends to comply with the General Plan and the Fire Code, thereby reducing impacts to fire services. Therefore, the proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

a. ii. 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 police protection?

As stated previously, the proposed Project would relocate the existing administrative uses from Plant No. 1 to the Project site north of Ellis Avenue (approximately 150 ft). Implementation of the proposed Project would not result in an increase in OCSD employees because the Project is characterized as a relocation, rather than an expansion, of existing operations. As such, the Project would not result in an increase in jobs or employment beyond what currently exists at Plant No. 1.

The FVPD is responsible for the prevention, detection, and investigation of crime in the City. Similar to Response 4.14 (a), construction and operation of the proposed Project may result in increased demand for police protection services. Although the Project site would be fenced during construction, construction activities may result in temporary effects on police services, including any potential calls for service FVPD may receive regarding conditions at the Project site. As stated in Section 4.14, Population and Housing, new development proposed as part of the Project would not represent a net increase in businesses or jobs because the administrative use would provide work space for existing OCSD personnel currently working on the OCSD Plant No. 1 site. In addition, the proposed Project would install security lighting consistent with City requirements (refer to Section XXX of the Project Description). The proposed Project also includes the installation on on-site security cameras and emergency call-boxes in the parking lot. Further, the Project site would be patrolled by OCSD's security team. Consequently, operation



of the administration building would not result in increased demand for police services in the Project vicinity compared to existing conditions. **Further, the Project intends to comply with policies related to police services in the City's General Plan and Municipal Code, ensuring minimal impacts to public services. Therefore, the Project would not result in adverse impacts to police services and no mitigation is required.**

The Specific Plan EIR also concluded that implementation of the Specific Plan would not result in adverse impacts related to provision of police services because development under the Specific Plan would comply with the General Plan and the Fire Code. Similarly, the proposed Project intends to comply with the General Plan and Municipal Code, thereby reducing impacts to police services. Therefore, the proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

- a. iii. **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 schools?**

The proposed Project does not include any residential uses and, as such, would not induce population growth that would generate an increased demand for schools. The relocation of OCSD employees and functions from the existing Plant No. 1 to the Project site is not expected to result in substantial population growth because the Project would not increase the number of staff employed by the OCSD. **Therefore, the proposed Project would have no impact on school services and facilities and no mitigation is required.**

The Specific Plan EIR also concluded that implementation of the Specific Plan would not result in adverse impacts related to schools because residential and commercial development would be required to pay development fees to FVSD and HBUHSD. The proposed Project does not involve residential or commercial development and, therefore, would not be subject to such development fees. Further, the Project would not impact school enrollment because it would not result in a substantial increase in population. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

- a. iv. **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 parks?**

As stated previously, the proposed Project would relocate the existing administrative uses from Plant No. 1 to the Project site north of Ellis Avenue (approximately 150 ft). Implementation of



the proposed Project would not result in an increase in OCSD employees because the Project is characterized as a relocation, rather than an expansion, of existing operations. As such, the Project would not require an increase in jobs or employment beyond what currently exists at Plant No. 1. Refer to Section 4.16, Recreation, for the discussion on Project impacts related to parks.

Ellis Park is the closest Fountain Valley Park to the Project site; it is approximately 0.50-miles from the Project site. The proposed Project does not include any residential uses and, as such, would not induce substantial population growth that would generate an increased demand for park facilities. In addition, the Project would not increase the number of OCSD employees. While it is possible employees may use parks in Fountain Valley during lunch breaks or after-work hours, the Project would not increase the number of employees and would not, therefore, increase the existing use of parks or contribute to substantial physical deterioration of those facilities. **Therefore, the proposed Project would not impact park facilities in Fountain Valley and no mitigation is required.**

The Specific Plan EIR also concluded that implementation of the Specific Plan would not result in adverse impacts related to parks because the incremental increase in demand for parks would not result in the need for new or physically altered facilities or additional staff. Similarly, the proposed Project would not impact parks because it would not result in a substantial increase in population. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

a. v. 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 other public facilities?

As stated previously, the proposed Project would relocate the existing administrative uses from Plant No. 1 to the Project site north of Ellis Avenue (approximately 150 ft). Implementation of the proposed Project would not result in an increase in OCSD employees because the Project is characterized as a relocation, rather than an expansion, of existing operations. As such, the Project would not require an increase in jobs or employment beyond what currently exists at Plant No. 1.

The proposed Project does not include any residential uses and, as such, would not induce substantial population growth that would generate an increased demand for public facilities (e.g., libraries). In addition, the Project would not increase the number of OCSD employees. While it is possible employees may use libraries or other public facilities in Fountain Valley during lunch breaks or after-work hours, the Project would not increase the number of employees and would not, therefore, increase the existing use of libraries or other public facilities or contribute to substantial physical deterioration of those facilities. **Therefore, the proposed Project would not impact other public facilities in Fountain Valley and no mitigation is required.**



The Specific Plan EIR also concluded that implementation of the Specific Plan would not result in adverse impacts related to libraries or other public facilities because the incremental increase in demand for library services would not result in the need for new or physically altered facilities or additional staff. Similarly, the proposed Project would not impact libraries because it would not result in a substantial increase in population. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

4.15.3.1 Mitigation Measures

The Specific Plan EIR does not include mitigation related to public services. No additional mitigation measures would be required for the proposed Project.

4.15.4 Findings Related to Public Services

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Public Services, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Public Services that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Public Services requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. The proposed Project would not result in any potentially significant impacts related to Public Services. CEQA does not require consideration of alternatives to the Project or consideration of additional mitigation measures because there would not be any significant impacts to avoid or reduce related to this topic, and no mitigation is required.



4.16 RECREATION

Would the Project:	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
a. 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"/>
b. 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"/>

4.16.1 Existing Setting

The City’s Recreation and Community Services Division operates a total of 20 parks within the City. There are no parks or recreational facilities within the Specific Plan area, which includes the Project site. The nearest parks are Los Alamos Park, located at 17901 Los Alamos Street (approximately 0.25 mile northwest of the Specific Plan area) and Ellis Park, located at 10301 Ellis Avenue (approximately 0.25 mile west of the Specific Plan area). Both parks are in the jurisdiction of the City of Fountain Valley. Ellis Park is the closest Fountain Valley Park to the Project site; it is approximately 0.50-miles from the Project site. Ellis Park is 3.0 acres and offers a range of active and passive recreational facilities, including tennis courts, a basketball court, a volleyball court, playground areas, picnic tables, and barbeque pits. Moon Park in the City of Costa Mesa is also near the Project site, but because of its location south of the Santa Ana River it is not easily accessible from the Project site.

4.16.2 Impacts Identified in the Specific Plan EIR

Recreation impacts were discussed on pages 50 through 51 of the Initial Study for the Specific Plan EIR and the topic was scoped out. However, the Specific Plan EIR analyzed the Specific Plan’s potential Public Services impacts, including impacts to Recreation, on pages 3.10-1 through 3.10-16.

The Specific Plan does not include recreational facilities or require the construction or expansion of recreational facilities. Implementation of the Specific Plan would result in a net increase of approximately 258,010 sf of new development and construction of approximately 491 new residential units. As described in Section 4.14, Population and Housing, build out of the Specific Plan would result in an increase in population associated with approximately 2,063 new employees, 1,444 new residents, and customers of commercial and retail businesses. Build out of the Specific Plan would increase the density of commercial uses and introduce new residential uses, thereby increasing the total population of the Specific Plan area. The Specific Plan EIR determined that the addition of new employees and residents in the Specific Plan area could increase demands on area parks and recreational facilities; however, while there are no parks within the Specific Plan area, there are multiple parks and recreational opportunities within the City that could accommodate the increase in population. Therefore, impacts to recreational opportunities would be less than significant.

The Specific Plan EIR found that the City currently surpasses the National Recreation and Park Association’s recommended parkland-to-resident ratio of 4 to 6 acres of parkland per 1,000 residents. In addition, the Specific Plan includes open space requirements and bicycle network



improvements to satisfy increased demand and to allow better connectivity to recreational facilities and adjacent land uses. Pursuant to the Quimby Act and the City's Municipal Code Chapter 21.78.070, development of the 491 residential units proposed under the Specific Plan would contribute to the park dedication fee of 5 acres of park for every 1,000 new residents. This fee would contribute to development of park areas within the City, thereby further reducing potential impacts from the Specific Plan on parks and recreation facilities in the City. Although build out of the Specific Plan would incrementally increase demand for parks and recreational facilities, new or physically altered facilities would not be necessary because the Specific Plan includes open space requirements. In addition, the payment of a park dedication fee would address impacts on existing parkland. As a result, potential impacts from the Specific Plan on local and regional parks would be less than significant.

4.16.3 Analysis of Project Impacts

- 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?**

No existing parks or other recreation uses are located adjacent to the Project site. The nearest parks are Moon Park (a Costa Mesa park), approximately 0.2 mile east of the Project site on the opposite side of the Santa Ana River, and Ellis Park, approximately 0.5 mile west of the Project site. The Project does not propose any residential uses and, therefore, would not increase the population near those parks. As discussed in Section 4.14, Population and Housing, the Project is not anticipated to result in the creation of new jobs and employees in the area. Although it is possible employees might use Moon Park, Ellis Park, or other parks in Fountain Valley during lunch breaks or after-work hours, the proposed Project would not increase the number of employees in the immediate area and would not, therefore, increase the use of those parks or contribute to substantial physical deterioration of those facilities. **Therefore, the Project would not impact existing neighborhood and regional parks and recreational facilities and no mitigation is required.**

The Specific Plan EIR also concluded that implementation of the Specific Plan would not result in adverse impacts related to parks and recreational facilities because the incremental increase in demand for parks can be accommodated by existing City facilities. Similarly, the proposed Project would not impact parks and recreational facilities because it would not result in an increase in population. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

- b. **Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

Refer to Response 4.16.3 (a), above. The proposed Project would not include recreational facilities or require the construction or expansion of recreational facilities. **Therefore, the proposed project would not result in impacts related to the construction or expansion of recreational facilities and no mitigation is required.**



The Specific Plan does not include recreational facilities or require the construction or expansion of recreational facilities. The Specific Plan EIR concluded that implementation of the Specific Plan would not result in adverse impacts related to recreational facilities because the incremental increase in demand for parks can be accommodated by existing City facilities. Similarly, the proposed Project would not include recreational facilities or require the construction or expansion of recreational facilities. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

4.16.3.1 Mitigation Measures

The Specific Plan EIR does not include mitigation related to recreation. No additional mitigation measures would be required for the proposed Project.

4.16.4 Findings Related to Recreation

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Recreation, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Recreation that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Recreation requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. The proposed Project would not result in any potentially significant impacts related to Recreation. CEQA does not require consideration of alternatives to the Project or consideration of additional mitigation measures because there would not be any significant impacts to avoid or reduce related to this topic, and no mitigation is required.



4.17 TRANSPORTATION/TRAFFIC

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
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"/>
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"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location which results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Substantially disrupt alternative transportation, including pedestrian, bicycle, and transit facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.17.1 Existing Setting

The Project site for the new Administrative Headquarters Building is located in Fountain Valley, California. The proposed Project site is bordered by industrial uses to the north, Pacific Street to the east, industrial uses and Bandilier Circle to the west, and Ellis Avenue and OCSD's Plant No. 1 site to the south. As mentioned in the Project Description, the Project site is in the Fountain Valley Crossings Specific Plan area, which the City of Fountain Valley adopted on January 23, 2018. The Project site is designated Industrial (Commercial Manufacturing) in the City's General Plan and is zoned as Specific Plan (SP) – FVCSP Mixed Industry District.

4.17.1.1 Existing Roadways

Access to OCSD Plant No. 1 is currently provided as the south leg of the I-405/Ellis Avenue-Euclid Avenue intersection. Access to the Project site is currently available from either Bandilier Circle or Pacific Street. Regional access to the site is primarily provided via I-405 and local traffic uses Ellis Avenue to reach the Project site.

- **Ellis Avenue:** Ellis Avenue is a four-lane arterial divided by a striped median with dedicated left-turn lanes for local streets. Ellis Avenue is located directly adjacent to the Project site. According to the City's Circulation Plan, Ellis Avenue is designated as a Secondary Arterial. The posted speed limit is 45 miles per hour. On-street parking is prohibited, and no bicycle facilities are



provided. Sidewalks are provided on both sides of the roadway. Ellis Avenue is serviced by Orange County Transportation Authority Bus Route 37, which provides service between La Habra and Fountain Valley via Euclid Avenue.

- **Bandilier Circle:** Bandilier Circle is a two-lane undivided local street that provides access to warehouse, office, and retail uses, including direct access to the Project site. On-street parking is permitted. No bicycle or pedestrian facilities are provided on this roadway.
- **Pacific Street:** Similar to Bandilier Circle, Pacific Street is a two-lane undivided local street that provides access to warehouse, office, and retail uses, including direct access to the Project site. On-street parking is permitted. No bicycle or pedestrian facilities are provided on this roadway.

4.17.1.2 Existing Intersections

The *Unsignalized Intersection Level of Service and Signal Warrant Analysis* (Traffic Analysis) (LSA, September 2020) was prepared for the Project in order to evaluate the three unsignalized intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue for each Project design concepts. The first design concept (referred to as Alternative 1) does not include a parking lot connection from the Project site to the adjacent property located at 18350 Mt. Langley Street, and a traffic signal is recommended at the intersection of Bandilier Circle and Ellis Avenue. The second design concept (referred to as Alternative 2) includes a parking lot connection from the Project site to the adjacent property located at 18350 Mt. Langley Street, and a traffic signal is recommended at the intersection of Mt. Langley Street and Ellis Avenue. Refer to Table 2.B in Section 2.0, Project Description, which provides a summary of the two Project design concepts. The installation of a traffic signal at either the intersection of Bandilier Circle and Ellis Avenue or the intersection of Mt. Langley Street and Ellis Avenue would ultimately be determined by the City.

4.17.1.3 Traffic Volumes

In order to establish the existing condition, traffic volumes were collected for the unsignalized intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue by an independent data collection firm, Counts Unlimited, on October 3, 2019.

For the purposes of the Traffic Analysis, the City noted that the October 2019 side street (Mt. Langley, Bandelier, and Pacific) volumes are acceptable. However, the City stated that the October 2019 volumes for Ellis Avenue may not be representative of normal traffic conditions. The Traffic Analysis included a review of the existing (2015) counts from the *Fountain Valley Crossings Specific Plan Traffic Impact Analysis* (TIA) (Fehr & Peers, December 2017), as well as 2016 counts provided by the City, and compared that data with the October 2019 counts. More specifically, the Traffic Analysis identified the eastbound, westbound, and total (eastbound and westbound) volumes for Ellis Avenue based on 2015 volumes for the adjacent signalized intersections of Ward Street/Ellis Avenue and the I-405 southbound ramps/Ellis Avenue–Euclid Street. In addition, the Traffic Analysis determined the eastbound, westbound, and total (eastbound and westbound) volumes for Ellis Avenue between Ward Street and Euclid Avenue based on the 2016 counts from the City. A comparison was then made with the eastbound, westbound, and total (eastbound and westbound)



Ellis Avenue volumes from the 2019 unsignalized intersection volumes. The 2015, 2016, 2019, and Δ Ellis Avenue volumes (rounded to the nearest hundred) are shown below:

- **2015 Ellis Avenue Volumes**
 - AM Peak Hour: 1,800 Eastbound, 800 Westbound, and 2,600 Total
 - PM Peak Hour: 1,000 Eastbound, 1,400 Westbound, and 2,400 Total
- **2016 Ellis Avenue Volumes**
 - AM Peak Hour: 1,300 Eastbound, 600 Westbound, and 1,900 Total
 - PM Peak Hour: 900 Eastbound, 1,400 Westbound, and 2,300 Total
- **2019 Ellis Avenue Volumes**
 - AM Peak Hour: 1,800 Eastbound, 700 Westbound, and 2,500 Total
 - PM Peak Hour: 1,100 Eastbound, 1,400 Westbound, and 2,500 Total
- **Δ Ellis Volumes (2019 – 2015)**
 - AM Peak Hour: 0 Eastbound, -100 Westbound, and -100 Total
 - PM Peak Hour: +100 Eastbound, 0 Westbound, and +100 Total
- **Δ Ellis Volumes (2019 – 2016)**
 - AM Peak Hour: +500 Eastbound, +100 Westbound, and +600 Total
 - PM Peak Hour: +200 Eastbound, 0 Westbound, and +200 Total

The Traffic Analysis noted that the Project site was generating more traffic in 2015 and 2016 than in 2019, as several buildings/uses on the Project site that were occupied in 2015 and 2016 are now vacant (as of the October 3, 2019, count date). Based on comparison of the 2015 Ellis Avenue volumes from the Fountain Valley Crossings Specific Plan TIA and the October 2019 Ellis Avenue volumes, the 100-trip differential (for eastbound, westbound, and total volumes) in the a.m. peak hour (-100) and p.m. peak hour (+100) is nominal. In addition, the 100-trip differential in 2015 and 2019 directional data could be the variation in the days counted. Lastly, the October 2019 Ellis Avenue volumes are higher (+600 in the a.m. peak hour and +200 in the p.m. peak hour) than the 2016 Ellis Avenue volumes from the City. As such, the October 2019 traffic counts are representative of typical conditions and are appropriate for this analysis.

4.17.1.4 Project Site Access

Access to the Project site is provided via Bandilier Circle and Pacific Street along Ellis Avenue. The proposed Project also includes the potential for Project site access at Mt. Langley Street through a connection from the proposed parking lot to an existing parking lot serving the adjacent parcels to the west. As such, the following two project design concepts (each including the proposed 109,914 sf Administrative Headquarters Building, pedestrian bridge over Ellis Avenue, and access at Bandilier Circle and Pacific Street) are under consideration:

- Project Alternative 1: No access via Mt. Langley Street



- Project Alternative 2: Access via Mt. Langley Street

4.17.2 Impacts Identified in the Specific Plan EIR

Level of Service Analysis. The Fountain Valley Crossings Specific Plan TIA evaluated the effects of the proposed land use plan on the surrounding circulation system, including intersections and freeway segments, in accordance with the Orange County Congestion Management Plan guidelines and the Fountain Valley General Plan. According to the Specific Plan EIR, the following impacts from implementation of the Specific Plan related to Transportation/Traffic were identified in Table 3.11-8 and in Table 3.11-10.

Construction activities anticipated to occur under the proposed Fountain Valley Crossings Specific Plan would potentially create short-term traffic impacts due to congestion from construction vehicles (e.g., construction trucks, construction worker vehicles, and equipment, etc.), traffic lane and sidewalk closures, and loss of on-street parking. With implementation of a Construction Impact Mitigation Plan (identified as Mitigation Measure MM T-1 in the Specific Plan EIR), construction impacts would be less than significant with mitigation.

Under existing with Project conditions, increased traffic generated by build out of the Specific Plan would increase congestion at 3 of the 20 study intersections. While implementation of the Specific Plan would include transit, pedestrian, and bike improvements and a Transportation Demand Management (TDM) Program to minimize new vehicle trips, potential peak-period congestion would still exceed existing City and California Department of Transportation (Caltrans) LOS thresholds. Intersection impacts to Euclid Street and Newhope Street/Northbound I-405 Ramps (Intersection No. 15) and Ellis Avenue/Euclid Street and Southbound I-405 Ramps (Intersection No. 19) would be temporarily significant and unavoidable. With implementation of intersection improvements, intersection impacts to all other impacted intersections would be less than significant with implementation of mitigation.

Increased traffic generated by build out of the proposed Fountain Valley Specific Plan under existing conditions would increase congestion at 11 freeway facilities, resulting in significant and unavoidable impacts.

Increases in traffic would incrementally increase delays at the intersections of residential roads with local arterials in the Specific Plan area, degrading the effectiveness and performance of the circulation system. However, such increases in delays at residential side streets would be incremental and would not exceed established thresholds under existing conditions. Therefore, impacts would be adverse but less than significant.

Implementation of the Specific Plan would not substantially disrupt alternative transportation, and impacts would be less than significant without mitigation.

Buildout of the Specific Plan area would contribute towards potential cumulative short-term traffic impacts due to congestion from construction vehicles (e.g., construction trucks, construction worker vehicles, and equipment, etc.), traffic lane and sidewalk closures, and loss of on-street parking. With



implementation of a Construction Impact Mitigation Plan, construction impacts would be less than significant with mitigation.

Under Future Year (2035) cumulative conditions, increased traffic would contribute considerably to increased congestion at 4 of the 20 study intersections. While multiple improvements to transportation facilities, including transit, pedestrian, and bike facilities are assumed to be completed by 2035, potential peak-period congestion would still exceed City and Caltrans LOS thresholds. Intersection impacts to MacArthur Boulevard and Harbor Boulevard (Intersection No. 13) would be significant and unavoidable. Impacts at Euclid Street and Newhope Street/Northbound I-405 Ramps (Intersection No. 15) would be temporarily significant and unavoidable before implementation of planned roadway improvements. Impacts at Intersection No. 15 would be reduced to less than significant once planned improvements by other agencies have been implemented. With implementation of additional intersection improvements, all other impacted intersections would be improved to less than significant with mitigation.

Under cumulative conditions, traffic from build out of the Specific Plan would cumulatively contribute to congestion at seven freeway facilities. Operational conditions at freeway facilities in the Specific Plan area and surrounding vicinity would be depleted beyond thresholds. Therefore, impacts to freeway facilities would be a significant and unavoidable impact.

Vehicle Miles Traveled. The Specific Plan EIR included an assessment to quantify VMT. The VMT assessment included the use of the SCAG forecasting model and the Mixed-use development trip generation model (MXD Model) methodology to estimate trip internalization based on land use mix and accessibility within the Specific Plan area. With trip generation and trip lengths, the Specific Plan TIA calculated that existing VMT in the Specific Plan area is 279,638 VMT per day and Future Year with Project VMT would be 341,008 VMT per day. Using service population and employment numbers, the Specific Plan TIA also calculated that existing VMT per service population is 55.86 VMT per day per service population and in Future Year with Project VMT would be 34.61 VMT per day per service population. With TDM reductions project VMT per day per service population under implementation of the Specific Plan would be reduced substantially from the existing average VMT. The Specific Plan TIA calculated that TDM-adjusted VMT in Future Year with Project would be 332,483 VMT per day and TDM-adjusted VMT per service population would be 33.75 VMT per day per service population. This represents that even with TDM reductions, buildout of the Specific Plan would increase overall VMT per day relative to existing VMT; however, future year VMT per service population would be decreased.

4.17.3 Analysis of Project Impacts

- a. **Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

The proposed Project includes the construction and operation of an Administrative Headquarters Building. The proposed Project would relocate 228 existing employees and the



associated vehicle trips from Plant No. 1 on the south side of Ellis Avenue to the proposed Administrative Headquarters Building on the north side of Ellis Avenue. As a result, the proposed Project would reduce vehicle trips from Plant No. 1 and the signalized intersection of the I-405 southbound ramps—OCSD driveway/Ellis Avenue and add (redistribute) these vehicle trips to the proposed Administrative Headquarters Building and the unsignalized intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue.

Level of Service Analysis. For CEQA purposes, automobile delay is no longer considered a significant effect on the environment. (Public Resources Code section 21099(b)(2).) As a result, the following analysis is provided for informational purposes only.

Table 4.17.A provides a Project trip generation summary of the proposed 109,914 sf Administrative Headquarters Building and the existing 53,590 sf of occupied uses. The Project trip generation is the same for both design concepts. As shown on Table 4.17.A, the proposed Project would generate approximately 1,071 daily trips, including 128 trips (110 inbound and 18 outbound) in the a.m. peak hour and 127 trips (20 inbound and 107 outbound) in the p.m. peak hour. The existing uses on the Project site generate approximately 314 daily trips, including 31 trips (26 inbound and 5 outbound) in the a.m. peak hour and 31 trips (7 inbound and 24 outbound) in the p.m. peak hour. Because the existing uses on the Project site would be demolished as part of Project implementation, the net trip generation of the Project (both alternatives) is 757 daily trips, including 97 trips (84 inbound and 13 outbound) in the a.m. peak hour and 96 trips (13 inbound and 83 outbound) in the p.m. peak hour.

Table 4.17.A: Project Trip Generation (Alternatives 1 and 2)

Land Use	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates (Land Use Code)¹									
General Office Building (710)		TSF	9.74	1.00	0.16	1.16	0.18	0.97	1.15
Manufacturing (140)		TSF	3.93	0.48	0.14	0.62	0.21	0.46	0.67
Research and Development Center (760)		TSF	11.26	0.32	0.10	0.42	0.06	0.34	0.40
Warehouse (150)		TSF	1.74	0.13	0.04	0.17	0.05	0.14	0.19
Project Trip Generation									
New OCSD Office Building	109,914	TSF	1,071	110	18	128	20	107	127
Existing Site (Occupied Uses) Trip Generation									
18368 Bandilier Cir (General Office)	5,942	TSF	58	6	1	7	1	6	7
18375 Bandilier Cir (Manufacturing)	5,942	TSF	23	3	1	4	1	3	4
18381 Bandilier Cir (Manufacturing)	5,942	TSF	23	3	1	4	1	3	4
18384 Bandilier Cir (General Office)	5,942	TSF	58	6	1	7	1	6	7
18436 Bandilier Cir (Warehousing)	5,975	TSF	10	1	0	1	0	1	1
18429 Pacific St, Suite A (Research and Development)	9,760	TSF	110	3	1	4	1	3	4
18429 Pacific St, Suite B (Warehousing)	10,790	TSF	19	2	0	2	1	1	2
18429 Pacific St, Suite C (Manufacturing)	3,297	TSF	13	2	0	2	1	1	2
Total	53,590	TSF	314	26	5	31	7	24	31
Net Trip Generation (Project - Existing)			757	84	13	97	13	83	96

¹ Trip rates referenced from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition (2017).

ADT = average daily traffic

OCSD = Orange County Sanitation District

TSF = thousand square feet



The City has established LOS D as the upper limit of satisfactory operation. If a project causes an intersection to deteriorate from satisfactory to unsatisfactory LOS, improvements are required to return the LOS to the acceptable level. Improvements are not required for intersections operating at LOS D or better with implementation of a project.

A project would require improvements for any of the following conditions:

- An intersection degrades from satisfactory LOS D to unsatisfactory LOS E or F.
- The ICU increases by 0.01 or more at a signalized intersection operating at unsatisfactory LOS E or F.
- The delay is increased at an unsignalized intersection operating at unsatisfactory LOS E or F.

An existing and existing plus project LOS analysis (for both design concepts) was conducted for Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue. These intersections were not evaluated as part of the Specific Plan EIR.

Based on the results of the existing and existing plus project LOS analysis for the proposed Project, it was determined that these unsignalized intersections operate at unsatisfactory LOS E or F during one or both peak hours in the existing condition. Although both design concepts of the proposed Project would increase the deficient delays at Bandilier Circle/Ellis Avenue and Pacific Street/Ellis Avenue, the deficient delay at the intersection of Mt. Langley Street/Ellis Avenue would only increase with Alternatives 2 (access via Mt. Langley Street).

The Peak-Hour Warrant (Warrant 3) from the California MUTCD was evaluated for the unsignalized intersections of Mt. Langley Street/Ellis Avenue, Bandilier Circle/Ellis Avenue, and Pacific Street/Ellis Avenue for existing and existing plus project conditions (for both design concepts). Given the traffic volume thresholds established for a rural setting, Warrant 3 is satisfied for Mt. Langley Street/Ellis Avenue (2 vph over the traffic volume threshold) during the existing condition, but not for Bandilier Circle Ellis Avenue or Pacific Street/Ellis Avenue.

With implementation of Project Alternative 1, Warrant 3 would be satisfied for Mt. Langley Street/Ellis Avenue (2 vph over the traffic volume threshold, but Project Alternative 1 would not add any inbound or outbound trips to Mt. Langley Street), Bandilier Circle/Ellis Avenue (20 vph over the traffic volume threshold), and Pacific Street/Ellis Avenue (15 vph over the traffic volume threshold).

Project Alternative 1 would offset its volume and delay contributions and improve the existing conditions of the unsignalized intersection of Bandilier Circle/Ellis Avenue with the following improvement:

- Installation of a traffic signal at Bandilier Circle/Ellis Avenue

Although the recommended improvement would improve upon existing conditions at Bandilier Circle/Ellis Avenue, the installation of a traffic signal at Bandilier Circle/Ellis Avenue will ultimately be determined by the City.



With implementation of Project Alternative 2, Warrant 3 would be satisfied for Mt. Langley Street/Ellis Avenue (23 vph over the traffic volume threshold), Bandilier Circle/Ellis Avenue (3 vph over the traffic volume threshold), and Pacific Street/Ellis Avenue (11 vph over the traffic volume threshold).

Project Alternative 2 would offset its volume and delay contributions and improve the existing conditions of the unsignalized intersection of Mt. Langley Street/Ellis Avenue, while providing regional access for the surrounding land uses, with the following improvements:

- Installation of a traffic signal at Mt. Langley Street/Ellis Avenue

The recommended improvement would improve upon existing conditions at Mt. Langley Street/Ellis Avenue while providing better access for the surrounding land uses. However, the installation of a traffic signal at this intersection will ultimately be determined by the City.

Vehicle Miles Traveled. For purposes of Senate Bill 743 compliance, a VMT analysis should be conducted for land use projects. The approach to a VMT analysis includes project screening as a first step to see if a full VMT assessment would be required. Some projects can be assumed to result in a less-than-significant transportation impact based on project type and trip generation. According to the City's *Transportation Impact Assessment Guidelines for Land Use Projects in CEQA and for General Plan Consistency* (June 2020), a project that would generate less than 110 net new daily vehicle trips may be screened from a full VMT assessment and may be presumed to have a less-than-significant transportation impact.

The proposed Project would not generate any additional VMT, as OCSD would not increase the number of employees or hire additional staff for the proposed Administrative Headquarters Building. The proposed Project would relocate 228 existing employees from Plant No. 1 to the new Administrative Headquarters Building, and the Project would demolish the buildings currently occupied by these 228 employees. In addition, the proposed Project is in the same VMT zone as Plant No. 1. Therefore, vehicle trips would be redistributed from south of Ellis Avenue to north of Ellis Avenue (i.e., reduced from the Plant No. 1 driveway and added to Mt. Langley Street, Bandilier Circle, and Pacific Street along Ellis Avenue). As such, the proposed Project (two design concepts) would not increase VMT. **There would be no impact related to the conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, and no mitigation is required.**

The Specific Plan EIR concluded that impacts to any applicable plans, ordinances, or policies establishing measures of effectiveness for the performance of the circulation system as a result of traffic would be significant and unavoidable. The proposed Project, which is located within the Specific Plan TIA study area, would not add additional traffic trips to the circulation system, and would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation measures are required. Mitigation Measure T-1, from the Specific Plan EIR is applicable to the proposed Project and is described in greater detail in 4.17.d. Mitigation Measures T-2a, T-2b, and T-7, from the Specific Plan EIR are not applicable to the proposed Project, as no new additional trips are generated. Mitigation measures T-2a, T-2b, and T-7 identified in the Specific Plan EIR are not applicable to the proposed Project. As previously



mentioned, the proposed Project would not add additional traffic trips to the circulation system, and would not result in any new significant impacts beyond those identified in the Specific Plan EIR. As such, the proposed Project would not be subject to mitigation measures associated with fair-share payments of improvements located within the Specific Plan study area.

b. Would the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

As the Congestion Management Agency (CMA) for Orange County, the OCTA is responsible for establishing, implementing, and monitoring the County's Congestion Management Program (CMP). Through its implementation of the CMP, the OCTA works to ensure that roadways operate at acceptable LOS and reviews development proposals to ensure that transportation impacts are minimized. OCTA has established a threshold of 2,400 or more daily trips for projects adjacent to the CMP Highway System. The Project is not located near a CMP monitoring facility.

As described in Response 4.17 (a), the proposed Project will not add any new trips to the surrounding circulation system. **Therefore, the proposed Project is not expected to conflict with the applicable CMP; Project impacts would be less than significant and no mitigation is required.**

The Specific Plan EIR concluded that conflict with an applicable CMP established by the County CMA for the I-405 freeway segments as a result of traffic would be significant and unavoidable. The proposed Project, which is located within the Specific Plan TIA study area and would not add additional traffic trips to the circulation system, would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation measures are required. No feasible mitigation was identified in the Specific Plan EIR.

c. Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location which results in substantial safety risks?

The Specific Plan area lies 3.7 miles northwest of John Wayne Airport, and is located just outside of the Airport's Influence Area. Therefore, the Specific Plan EIR determined that it is not subject to any development restrictions from the Airport Environs Land Use Plan (AELUP). The proposed three-story building would not be of sufficient height to potentially interfere with air traffic patterns and the proposed Project is not an air traffic generating use. Therefore, the proposed Project would not interfere with air traffic patterns, nor would it increase traffic levels. **There would be no impacts related to air traffic. No mitigation measures are required.**

The Specific Plan EIR concluded that the build out of the Specific Plan would have no impact on air traffic patterns because there are no airport facilities in the Specific Plan area and implementation of the proposed Specific Plan would not substantially impacts surrounding airports (e.g., John Wayne Airport). The proposed Project, which is located within the Specific Plan area, would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation measures are required.



d. Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed Project will consolidate the six existing driveways on the project frontage of Bandilier Circle into one driveway (providing access to employee and public parking) and consolidate the five existing driveways on Pacific Street into two driveways (one for bus and large vehicle access and one for employee and public parking). Consolidation of the driveways along both streets will remove turning-movement conflicts as a result of driveways currently being spaced too closely. Additionally, a traffic signal may be installed at the intersection of Bandilier Circle and Ellis Avenue or at the intersection of Mt. Langley Street and Ellis Avenue. The Traffic Analysis prepared for the proposed Project assumed two different design concepts. The first design concept (referred to as Alternative 1) does not include a parking lot connection from the Project site to the adjacent property located at 18350 Mt. Langley Street, and a traffic signal is recommended at the intersection of Bandilier Circle and Ellis Avenue. The second design concept (referred to as Alternative 2) includes a parking lot connection from the Project site to the adjacent property located at 18350 Mt. Langley Street, and a traffic signal is recommended at the intersection of Mt. Langley Street and Ellis Avenue. The installation of a traffic signal at any intersection would ultimately be determined by the City. Design of the Project, including the driveway consolidation and a potential new signal, would be subject to review by the City's Department of Public Works for compliance with City regulations. **There would be no Project impacts related to hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

The Specific Plan EIR concluded that the implementation of the Specific Plan would have a less than significant impact on the increase of hazards due to design features or incompatible uses. The proposed Project would remove the existing turning-movement conflicts and would not include design features that would increase hazards. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation measures are required.

e. Would the Project result in inadequate emergency access?

The Construction Impact Mitigation Plan (Mitigation Measure MM T-1 of the EIR) shall ensure adequate emergency access is maintained throughout the duration of all construction activities. Direct access for emergency vehicles would be provided via all three project driveways on Pacific Street and Bandilier Circle. The proposed Project would not alter the existing roadway network and would provide one vehicular access driveway on Bandilier Circle and two vehicular access driveways on Pacific Street. While the proposed Project may include the installation of a new traffic signal, this Project feature would not adversely affect emergency access with implementation of Mitigation Measure MM T-1. The Construction Impact Mitigation Plan required by Mitigation Measure MM T-1 would manage traffic during construction and would be designed to prevent traffic impacts on the surrounding roadway network, including impacts to emergency access. **With implementation of MM T-1, Project impacts would be less than significant.** The proposed Project would also comply with all applicable codes and ordinances for emergency vehicle access.



The Specific Plan EIR concluded that implementation of the Specific Plan would have a less than significant impact on emergency access. Since the proposed Project would comply with applicable codes and ordinances for emergency vehicle access, it would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation measures are required.

f. Would the Project result in inadequate parking capacity?

The proposed Project would include 261 parking spaces within the surface parking lot. While a majority of parking spaces would be uncovered, some would be covered with overhead canopies featuring photovoltaic panels. Table 2.A in Section 2.0, Project Description, shows the type and number of parking spaces proposed by the Project.

The development standards outlined in the Specific Plan require 3.5 parking spaces per 1,000 sf of building area; however, per Section 21.22.040 of the City's Municipal Code, office uses require 2.5 parking spaces per 1,000 sf of building area. The proposed 261 parking spaces are non-compliant with the existing Specific Plan, which requires 365 parking spaces, but are compliant with the City's Municipal Code. The proposed Project would require approval of a deviation to address the reduced parking. The proposed Project also includes an amendment to the Specific Plan to change the minimum parking standard for the Workplace-Professional use type from 3.5 spaces per 1,000 square feet (sf) to 2.5 spaces per 1,000 sf. The amendment would make the Specific Plan consistent with the City's Municipal Code parking requirements for office uses.

With approval of the deviation and the code amendment, the proposed Project would be consistent with the parking requirements in both the Specific Plan and the City's Municipal Code. Therefore, the proposed Project would result in no impact related to inadequate parking. No mitigation is required.

The Specific Plan EIR concluded that the implementation of the Specific Plan would have a less than significant impact on parking capacity. Implementation of the Specific Plan would increase the number of vehicles in the Specific Plan area, and therefore, would increase the need for parking. However, the increased parking demand would be addressed through parking requirements applicable to development within the Specific Plan area, such that additional parking demand would be satisfied. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation measures are required.

g. Would the Project substantially disrupt alternative transportation, including pedestrian, bicycle, and transit facilities?

Pedestrian access to the Project site will be possible by existing sidewalks on Ellis Avenue. The proposed Project will provide direct pedestrian access between the existing OCSO Plant No. 1 and the Project site by constructing an approximately 128 ft long pedestrian bridge over Ellis Avenue, between Plant No. 1 and the proposed Administrative Headquarters Building.



There are no designated bicycle routes in the City's Bicycle Master Plan adjacent to the Project site; however, bicyclists may share the roadway with vehicles on Ellis Avenue in order to reach the Class II Bike Path network via Ward Street and Ellis Avenue west of Ward Street. In addition, bicyclists may share the roadway with vehicles up to MacArthur Boulevard to reach the Class I Santa Ana River Trail. The proposed Project does not alter the existing roadways and would not conflict with this planned project.

OCTA operates Bus Line 37 with stops along Ellis Avenue in the Project vicinity. Employees are able to utilize the Bus Line 37 service to access the existing OCSD Plant No. 1 site and the proposed Project site. As the proposed Project would not increase the number of employees, no new transit trips are anticipated to be generated.

Since the Project is consistent with existing and planned pedestrian, bicycle, and transit facilities, implementation of the proposed Project would not conflict with any alternative transportation routes, including pedestrian, bicycle and transit facilities. Impacts would be less than significant and no mitigation is required.

The Specific Plan EIR concluded that implementation of the Specific Plan would not substantially disrupt alternative transportation, and impacts would be less than significant. The proposed Project, which is located within the Specific Plan area and is consistent with existing and planned pedestrian, bicycle, and transit facilities, would, therefore, not result in new significant impacts beyond those identified in the Specific Plan EIR. No new mitigation measures are required.

4.17.3.1 Mitigation Measures

The TIA outlined improvement measures for all impacted intersections to bring project operations back to acceptable or pre-project conditions. All intersections were able to be mitigated back to a less than significant level with the exception of Harbor Boulevard/MacArthur Boulevard at which the impact is considered significant and unavoidable due to the fact that the intersection is shared with the Cities of Costa Mesa and Santa Ana and the City of Fountain Valley cannot guarantee the implementation of mitigation measures. The TIA explains in detail why improvements to freeway segments are not considered feasible at this time; therefore, all identified impacts to the freeway system are considered significant and unavoidable.

Based on the analysis and information above, the one mitigation measure (MM T-1) listed below from the Specific Plan EIR would be applicable to the proposed Project. No additional mitigation measures related to transportation/traffic beyond those identified in the Specific Plan EIR are required.

MM T-1 **Construction Impact Mitigation Plan.** Future development occurring under the proposed Fountain Valley Crossings Specific Plan shall be required to prepare a Construction Impact Mitigation Plan for review and approval prior to issuance of a grading or building permit to address and manage traffic during construction and shall be designed to:

- Prevent traffic impacts on the surrounding roadway network;



- Minimize parking impacts both to public parking and access to private parking to the greatest extent practicable;
- Ensure safety for both those constructing the project and the surrounding community; and
- Prevent substantial truck traffic through residential neighborhoods.

The Construction Impact Mitigation Plan shall be subject to review and approval by the following City departments: Planning & Building, Public Works, and Police to ensure that the Construction Impact Mitigation Plan has been designed in accordance with this mitigation measure. Additionally, the plan shall be prepared and implemented in coordination with any affected agencies such as OCTA and Caltrans. The review of the plan shall occur prior to issuance of grading or building permits. It shall, at a minimum, include the following:

Ongoing Requirements throughout the Duration of Construction.

- A detailed Construction Impact Mitigation Plan for work zones shall be maintained. At a minimum, this shall include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, bicycle lanes, and parking lanes. The Construction Impact Mitigation Plan shall include specific information regarding the project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions. Such plans shall be reviewed and approved by the Planning & Building and Public Works Departments prior to commencement of construction and implemented in accordance with this approval.
- Work within the public right-of-way, deliveries, haul trips, and construction employee trips shall be performed during off-peak vehicular traffic hours. No construction work would be permitted on Sundays and national holidays that City offices are closed. Construction work includes, but is not limited to dirt and demolition material hauling and construction material delivery. Work within the public right-of-way outside of these hours shall only be allowed after the issuance of an after-hours construction permit. Exceptions may be made for time sensitive construction activities (e.g., pouring concrete).
- "Flagger" construction personnel shall be required at construction site entrances.
- The closure of major arterials shall be limited to non-peak vehicular traffic hours only.
- Streets and equipment shall be cleaned in accordance with established Public Works requirements.



- Trucks shall only travel on a City-approved truck routes. Limited queuing may occur on the construction site itself.
- Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be on-site, with a minimum amount of materials within a work area in the public right-of-way, subject to a current Use of Public Property Permit.
- Any requests for work before or after normal construction hours within the public right-of-way shall be subject to review and approval through the After Hours Permit process administered by the Building and Safety Division.
- Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City.
- The Construction Impact Mitigation Plan shall ensure adequate emergency access is maintained throughout the duration of all construction activities. Consistent with the requirements and regulations of the MUTCD, adequate emergency access shall be ensured through measures such as coordination with local emergency services, training for flagmen for emergency vehicles traveling through the work zone, temporary lane separators that have sloping sides to facilitate crossover by emergency vehicles, and vehicle storage and staging areas for emergency vehicles.

Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction.

- The traveling public shall be advised of impending construction activities which may substantially affect key roadways or other facilities (e.g., information signs, portable message signs, media listing/notification, Hotline number, and implementation of an approved Construction Impact Mitigation Plan) in a manner appropriate to the scale and type of projects.
- A Use of Public Property Permit, Excavation Permit, Sewer Permit, or Oversize Load Permit, as well as any Caltrans permits required for any construction work requiring encroachment into public rights-of-way, detours, or any other work within the public right-of-way shall be obtained.
- Timely notification of construction schedules shall be provided to all affected agencies (e.g., Police Department, Fire Department, Public Works Department, and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 500 feet.
- Construction work shall be coordinated with affected agencies in advance of start of work. Approvals may take up to two weeks per each submittal.



- Planning & Building and Public Works Departments approval of any haul routes for earth, concrete, or construction materials and equipment hauling shall be obtained.

MM T-2a Amended Implementation and Funding/Financing Strategy for the Fountain Valley Crossings Specific Plan. The City shall amend Section 3.5 of the FVCSP Implementation and Funding/Financing Strategy prior to adoption of the Specific Plan. The Specific Plan shall require to include a subsequent fee justification study, identify costs for transportation improvements, apportion costs for improvements, and include fair share projected costs for each funded and unfunded improvement. Prior to approval of the first entitlements for a development within the Project area, the City must adopt the regular fee update schedule for identified intersection improvements. The City shall coordinate with neighboring jurisdictions to identify intersection improvements, apportion costs for improvements, and scheduling of proposed improvements.

The Amended Implementation and Funding/Financing Strategy shall:

- Identify the cost of improvements to all identified transportation improvements, within the Project area and surround vicinity, needed to serve the proposed Fountain Valley Crossings Specific Plan.
- Clearly apportion existing and projected demand on these facilities and costs between existing users, the City, and proposed future development projects.
- Identify development impact fees for all residential and non-residential projects to ensure that each project pays its fair share of public infrastructure costs.
- Include a regular fee update schedule, consistent with the City's Capital Improvement Program.

MM T-2b Intersection Improvements Impact Fee. At the intersection of Talbert Avenue & Mt. Washington Street (Intersection #12), a traffic signal shall be installed. In addition, the six point stop-controlled intersection, within the Costco parking lot, shall be reconfigured into a standard four leg intersection by removing the northern eastbound and westbound approaches. To further reduce impacts, it is recommended that the westbound approach be restriped to convert the existing right-turn lane into a shared through/right turn lane. Additional geometric improvement options such as signal phasing and green times shall be considered and reviewed prior to final design of this intersection. In accordance with MM T-2a, approved improvements shall be included in Implementation and Funding/Financial Strategy and development project applicants within the Project area shall pay a fair share contribution towards these improvements. The fair share fee shall be evaluated based on based on a metric approved by the City (e.g. dwelling units, acreage, square footage, ADT, etc.).



MM T-7 Intersection Modifications. At the intersection of Ellis Avenue & Ward Street, capacity improvements such as conversion to standard protected signal phasing, green times, and restriping of the northbound approach to include one left turn lane, one through lane, and two right turn lanes shall be considered and reviewed prior to final design on the intersection. In accordance with MM T-2a, the approved improvements shall be included in the Implementation and Funding/Financial Strategy and development project applicants within the Project area shall pay a fair share contribution towards these improvements based on a metric approved by the City (e.g. dwelling units, acreage, square footage, ADT, etc.).

4.17.4 Findings Related to Transportation/Traffic

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Transportation/Traffic, and there is not substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Transportation/Traffic that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant impact not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Transportation/Traffic requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. This Addendum has analyzed all available relevant information and has determined that there is no new information of substantial importance that was unknown and could not have been known with the exercise of reasonable diligence at the time the Fountain Valley Crossings Specific Plan EIR was certified indicating that: (1) mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project but the Project proponent declines to adopt the mitigation measures or alternatives; or (2) mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measures or alternatives.

As discussed above, the proposed Project would result in a potentially significant impact related to Transportation/Traffic. Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measure that is applicable to the proposed Project is listed in Section 4.17.3.1. The potential Project impact related to Transportation/Traffic would be reduced



below a level of significance with implementation of applicable the mitigation measure from the Specific Plan EIR. The proposed Project would not contribute to the significant unavoidable impacts identified in the Specific Plan EIR.



4.18 TRIBAL CULTURAL RESOURCES

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
Would the Project:			
a. 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:			
i. 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 checked="" type="checkbox"/>
ii. 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"/>

4.18.1 Existing Setting

The City is located in the Santa Ana Valley-Capistrano Valley Province, which is a lowland strip separating the coastal hills from the Santa Ana Mountains. This province dominates the inner portion of Orange County and includes the flood plain in the Santa Ana River in the northern segment near the City. The moderate climate, fertile soils, and abundant natural resources made southern California, including Orange County and the Fountain Valley area, ideal for human habitation, which may have begun in the area as much as 11,000 years ago. During the late prehistoric period, the Gabrieleño and the Juaneño groups occupied Orange County. The Gabrieleño inhabited a large area of the Los Angeles Basin including the watersheds of Los Angeles, San Gabriel, and Santa Ana Rivers, several streams in the Santa Monica and Santa Ana Mountains, the coast from Aliso Creek to Topanga Creek, and the islands of San Clemente, San Nicholas, and Santa Catalina. The Juaneño territory extended from Northern San Diego County to the San Joaquin Hills along Orange County's central coast, and inland from the Pacific Ocean into the Santa Ana Mountains. Both groups lived in residential villages along the County's rivers and traveled to seasonal camps for hunting, fishing, shellfish collecting, and hard seed processing. Initial Spanish settlement in the Orange County region came in the late 1500s, and the Mission San Juan Capistrano was established in Orange County in 1775. Prior to Spanish migration, the native population had been decimated by diseases, likely spread via coastal stopovers by early Spanish maritime explorers. Additionally, multiple epidemics took a great toll on Native American populations between approximately 1800 and the early 1860s, along with the cultural and political upheavals that came with European, Mexican, and American settlement. The mission period was followed by the Mexican period as colonists moved into California and occupied land granted to them by the Mexican government. By



the end of the Mexican period and as California moved towards statehood in 1850, the populations of Native Americans in California as a whole declined.

The Fountain Valley area was inundated by large areas of wetlands from the 1880s to the early 1900s. Early settlers constructed drainage canals to drain the land and make it usable for agriculture and other development. Agriculture dominated the area in the early 1900s. The City was incorporated in 1957. The large population growth that the City experienced in the 1960s took place within the framework of a Master Plan adopted before any developments had begun. The Project area was developed primarily in the 1970s with a range of public and private structures and industrial areas.

No known archaeological resources are within the boundaries of the Specific Plan area. However, the Specific Plan area has some potential for undiscovered Native American archaeological resources, as well as other known regional resources, to occur. There are four recorded archaeological sites within the vicinity of the Specific Plan area. The potential for such subsurface resources, which may not have been evaluated during original development of the Specific Plan area, may exist.

4.18.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan's potential Tribal Cultural Resources impacts on pages 3.14-1 through 3.14-8.

The Specific Plan EIR explained that seven unique groups and/or individuals were contacted under Senate Bill (SB) 18 and Assembly Bill (AB) 52 (including one tribe that was included on both AB 52 and SB 18 notification lists), and only one response was received. Mr. Andrew Salas of the Gabrieleño Band of Mission Indians-Kizh Nation responded via email on October 25, 2015. Mr. Salas did not request consultation with the City, or identify any tribal cultural resources in the Specific Plan area, but did request that a tribal monitor from the Gabrieleño Band of Mission Indians-Kizh Nation be present during ground-disturbing construction work. This request was considered, and protocols for inadvertent discovery, including the retention of a qualified Native American Monitor, were incorporated into Mitigation Measure MM TRC-1b. In addition to Native American consultation, the City submitted a request for review of the Native American Heritage Commission (NAHC) Sacred Lands Inventory File on November 12, 2015. The NAHC responded to the City's request on December 8, 2015, and identified four recorded archaeological sites within the United States Geological Survey (USGS) quadrangle in which the Specific Plan area is located. Review of these sites was conducted, and it was concluded that all known sites are located outside the City and, thus, are also outside of the Specific Plan area.

The Specific Plan EIR determined that there have been no previously identified tribal cultural resources within the boundaries of the Specific Plan area or in the immediate vicinity. Additionally, given the developed nature of the site and that development activities associated with the Specific Plan would occur in previously disturbed areas, it is unlikely that tribal cultural resources would be encountered within the Specific Plan area. Additionally, none of the Native American tribes contacted through the SB 18 and AB 52 processes described above identified any tribal cultural resources in the Specific Plan area. However, the Specific Plan area vicinity was a favorable



environment for Native American settlement. The Gabrieleño Band of Mission Indians-Kizh Nation noted in a response to the City's consultation process that the area is considered sensitive. Therefore, it is possible that the Specific Plan area contains buried tribal cultural resources, which could be preserved beneath the existing industrial warehouse buildings and paved surfaces. Effects on tribal cultural resources are highly dependent on the individual project site conditions and the characteristics of future projects that may be proposed with the Specific Plan area. If such resources were discovered, any activity that would cause a substantial adverse change in the significance of a tribal cultural resource would be a significant impact. However, with the implementation of Mitigation Measures MM TCR-1a, MM TCR-1b, and MM TCR-1c, which require procedures to be taken in the event unknown cultural resources are discovered during construction, impacts to tribal cultural resources would be less than significant. The mitigation measures are outlined in further detail at the end of Section 4.18.3, below.

4.18.3 Analysis of Project Impacts

- a. i. 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 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).**

Chapter 532, Statutes of 2014 (i.e., AB 52), requires that lead agencies evaluate a project's potential to impact "tribal cultural resources." Such resources include sites, 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 (PRC, Section 21074). AB 52 also gives lead agencies the discretion to determine, supported by substantial evidence, whether a resource falling outside of the definition stated above nonetheless qualifies as a "tribal cultural resource."

Also per AB 52 (specifically PRC Section 21080.3.1), OCSD must consult with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project and have previously requested that OCSD provide the tribe with notice of such projects.

In compliance with AB 52, letters were distributed on September 28, 2017, to local Native American tribes who have previously requested to be notified of future projects proposed by OCSD. The letters notified each tribe of the opportunity to consult with OCSD regarding the proposed Project, which included the Gabrieleño Band of Mission Indians – Kizh Nation, the Juaneño Band of Mission Indians/Acjachemen Nation, and the San Gabriel Band of Mission Indians. In compliance with AB 52, tribes have 30 days from the date of receipt of notification to request consultation on the proposed Project. No responses or requests for consultation were received from the Juaneño Band of Mission Indians/Acjachemen Nation or the San Gabriel Band of Mission Indians during the 30-day period. On October 5, 2017, Andrew Salas, Chairman of the Gabrieleño Band of Mission Indians – Kizh Nation, sent a letter to OCSD stating that the proposed Project lies within a sensitive area for tribal cultural resources. He requested to be



consulted on the Project. OCSD responded to the request via email on October 5, 2017, and October 24, 2017, to arrange a meeting with the Gabrieleño Band of Mission Indians – Kizh Nation, to which Mr. Salas has not responded. Due to the length of time since receiving any additional response from the Gabrieleño Band of Mission Indians – Kizh Nation, the AB 52 consultation process is considered closed.

The Project site is fully developed with five one- to two-story industrial warehouse buildings and surface parking lots. It is possible that the Project site contains unknown buried tribal cultural resources, which could be preserved beneath the existing buildings and paved surfaces. The proposed Project would involve the demolition of five existing on-site industrial warehouse buildings and the construction and operation of a new three-story administration building, surface parking lot, and pedestrian bridge connecting the Project site to the OCSD Plant No. 1 site south of Ellis Avenue. If any cultural resources were discovered during construction activities, any activity that would cause a substantial adverse change in the significance of a tribal cultural resource would be considered a significant impact.

However, with the implementation of Mitigation Measures MM TCR-1a, MM TCR-1b, and MM TCR-1c, which were included in the Specific Plan EIR, impacts to tribal cultural resources would be reduced to a less than significant level. Mitigation Measure MM TCR-1a would require pre-construction training prior to any grading or other development activities associated with Project implementation. In the event of inadvertent discovery of tribal cultural resources during Project construction, Mitigation Measure MM TCR-1b would require retention of a qualified registered professional archaeologist (RPA) and a qualified Native American Monitor to evaluate the significance of the discovery pursuant to the Cultural Resources Treatment Plan procedures, which are outlined in Mitigation Measure MM TCR-1c. **Therefore, implementation of Mitigation Measures MM TCR-1a, MM TCR-1b, and MM TCR-1c would require procedures to be taken in the event unknown tribal cultural resources are discovered during Project construction, and impacts to tribal cultural resources would be reduced to a less than significant level.**

The Specific Plan concluded that impacts related to tribal cultural resources would be less than significant with mitigation. Since the Project is located within the Specific Plan area and would incorporate the same mitigation to reduce impacts to tribal cultural resources. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no additional mitigation measures are required. Applicable mitigation measures are outlined at the end of Section 4.18.3, below.



- a. ii. **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 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.**

See Response 4.18.3 (a) (i), above. **With the implementation of Mitigation Measures MM TCR-1a, MM TCR-1b, and MM TCR-1c, included in the Specific Plan EIR, impacts to tribal cultural resources would be reduced to a less than significant level.**

The Specific Plan concluded that impacts related to tribal cultural resources would be less than significant with mitigation. Similarly, the Project is located within the Specific Plan area and would incorporate mitigation to reduce impacts to tribal cultural resources. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no additional mitigation measures are required. Applicable mitigation measures are outlined below.

4.18.3.1 Mitigation Measures

Based on the analysis and information above, Mitigation Measures MM TCR-1a, MM TCR-1b, and MM TCR-1c, included in the Specific Plan EIR, would be applicable to the proposed Project.

MM TRC-1a Pre-Construction Training. For individual discretionary development projects, pre-construction training for construction personnel shall be conducted prior to commencement of any grading or other development activities. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (2008) and approved by the City, shall conduct tribal cultural resources identification and protocol training prior to site disturbance activities. Construction personnel shall be informed of the types of archaeological or tribal cultural resources that may be encountered, and of the proper protocols for agency notification. Construction personnel shall attend the training and shall retain documentation demonstrating attendance.

MM TRC-1b Inadvertent Discovery. In the event of any inadvertent discovery of archaeological or tribal cultural resources during construction, ground-disturbing activities shall be suspended until an evaluation is performed. The Applicant shall retain a qualified registered professional archaeologist (RPA) and a qualified Native American Monitor selected by the City. The City's selection of a Native American Monitor will be based on cultural affiliation with the Project area, which may include consultation with the NAHC. In the event of discovery, construction personnel shall notify the City, the RPA, and Native American Monitor. The RPA and Native American Monitor shall



evaluate the significance of the discovery pursuant to the Treatment Plan procedures outlined in MM TCR-1c, below. Work shall not resume until authorization is received from the City. If human remains are found, in compliance with California Health and Safety Code Section 7050.5, all ground disturbances must cease and the County Coroner must be contacted to determine the nature of the remains. In the event the remains are determined to be Native American in origin by the Coroner, the Coroner is required to contact the NAHC within 24 hours to relinquish jurisdiction.

MM TCR-1c Archaeological Data Recovery. If cultural resources are encountered during development activities, the City shall implement a Cultural Resources Treatment Plan to address resource identification, significance evaluation, and any necessary mitigation. The Treatment Plan shall be prepared by a City-approved RPA and a City-approved Native American Monitor, and at a minimum shall include:

- A review of historic maps, photographs, and other pertinent documents to predict the locations of former buildings, structures, and other historical features and sensitive locations within and adjacent to the specific development area;
- A context for evaluating resources that may be encountered during construction;
- A research design outlining important prehistoric and historic-period themes and research questions relevant to the known or anticipated sites in the study area;
- Specific and well-defined criteria for evaluating the significance of discovered remains; and
- Data requirements and the appropriate field and laboratory methods and procedures to be used to treat the effects of the Project on significant resources.

The City, in its discretion and supported by substantial evidence, may also determine that resource is significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. If the RPA determines that the find may qualify for listing in the California Register, the site shall be avoided or the resource preserved in place, or if avoidance or preservation in place is not determined feasible, a data recovery plan shall be developed. The preferred mitigation shall be to avoid the resource or preserve in place. Any required testing or data recovery shall be directed by a qualified RPA and Native American Monitor prior to construction being resumed in the affected area. The Treatment Plan shall also include submission of a final technical report, funded by the developer and approved by the City.



4.18.4 Findings Related to Tribal Cultural Resources

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Tribal Cultural Resources, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.

No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Tribal Cultural Resources that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Tribal Cultural Resources requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. This Addendum has analyzed all available relevant information and has determined that there is no new information of substantial importance that was unknown and could not have been known with the exercise of reasonable diligence at the time the Specific Plan EIR was certified indicating that: (1) mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project, but the Project proponent declines to adopt the mitigation measures or alternatives; or (2) mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the Project proponent declines to adopt the mitigation measures or alternatives.

As discussed above, the proposed Project would result in a potentially significant impact related to Tribal Cultural Resources. Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measures that are applicable to the proposed Project are listed in Section 4.18.3.1. Potential Project impacts related to Tribal Cultural Resources would be reduced below a level of significance with implementation of the applicable mitigation measures, none of which the Project proponent is declining to adopt.



4.19 UTILITIES AND SERVICE SYSTEMS

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
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"/>
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"/>
c. Require or result in the construction of new stormwater 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"/>
d. Have sufficient water supplies available to serve the Project from existing entitlements and resources, or require new or expanded entitlements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>
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"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.19.1 Existing Setting

The Project site served by a network of utility lines, including sewer lines, water mains, and storm drains that were generally constructed during the 1970s and 1980s; this infrastructure was sized and installed to accommodate development anticipated at that time.

The City receives its water from three main sources: (1) the Lower Santa Ana River Groundwater Basin (Orange County Groundwater Basin), which is managed by the Orange County Water District (OCWD); (2) imported Colorado River and State Water Project (SWP) water delivered by the Metropolitan Water District of Southern California (MWD) through the Municipal Water District of Orange County (MWDOC); and (3) recycled water from the OCWD's Green Acres Project (GAP). MWDOC is Orange County's wholesale supplier and is a member agency of the MWD. The City's water supply is comprised of 60 percent groundwater, 24 percent imported water, and 14 percent recycled water. Water distribution service within the Project area is provided by the Fountain Valley Water Utility, which operates as a division of the City Public Works Department.

Wastewater collection and treatment service on the Project site is provided by the OCSD. OCSD currently operates two wastewater treatment facilities that accommodate wastewater from residential, commercial, and industrial sources. The City owns, operates, and maintains the sewer collection system within the City limits and its sphere of influence. The sewer system comprises approximately 133 miles of collection and transmission pipe that sends City effluent to the OCSD for treatment and disposal. Wastewater generated within the Specific Plan area is conveyed to Plant



No. 1, located directly south of the Specific Plan area south of Ellis Avenue. Existing wastewater facilities servicing the Specific Plan area were constructed in the late 1960s and early 1970s. No known deficiencies exist with the system, and the existing wastewater collection system adequately services the Specific Plan area.

The City contracts Rainbow Environmental Services to collect solid waste generated throughout the City, including the Project site. Rainbow Environmental Services provides waste collection, recycling, and disposal services for residential customers with trash can service. Rainbow Environmental Services provides a Materials Recovery Facility (MRF) to ensure compliance with State laws regarding waste stream diversion and ensuring that a minimum of 75 percent of solid waste is diverted from landfills into reuse and recycling under AB 341. Solid waste generated from the City is transported to a MRF within the City of Huntington Beach, where solid waste is manually and mechanically separated into recyclable and non-recyclable materials. Non-recyclable materials and solid waste are then transported to Frank R. Bowerman Landfill, a 725-acre, non-hazardous, municipal solid waste landfill located within the City of Irvine, approximately 13.25 miles east of the Project site. The Frank R. Bowerman Landfill is permitted to receive 11,500 tons per day (tpd) of solid waste and receives a daily average of approximately 6,800 tpd; this landfill is scheduled to close in the year 2053. It is subject to regular inspection by State regulatory agencies such as the California Department of Resource Recycling and Recovery (CalRecycle), the California Regional Water Quality Control Board (RWQCB), and the South Coast Air Quality Management District (SCAQMD) to ensure compliance with applicable plans, policies, and regulations.

4.19.2 Impacts Identified in the Specific Plan EIR

The Specific Plan EIR analyzed the Specific Plan's potential Utilities impacts on pages 3.12-1 through 3.12-29.

According to the Specific Plan EIR, the RWQCB, in connection with the implementation of the National Pollutant Discharge Elimination System (NPDES) program, has imposed requirements on the treatment of wastewater and its discharge into local water bodies, including the Santa Ana River. Wastewater produced by new land uses and development in the Specific Plan area would meet these requirements through treatment at the OCSD Plant No. 1. In addition, the implementation of wastewater low impact development (LID) designs and best management practices (BMPs) required by the Specific Plan would also help meet wastewater quality treatment standards. Therefore, RWQCB wastewater treatment requirements would not be exceeded, and potential impacts are considered less than significant.

The Specific Plan area is currently fully developed and existing wastewater flows are treated within the capacity of OCSD. The Specific Plan EIR determined that implementation of the Specific Plan would result in an increase in current wastewater flows by approximately 0.13 percent, and increases in wastewater flows would be fully treatable by existing facilities. The OCSD Reclamation Plant No. 1 would have sufficient capacity to serve the Specific Plan area demand in addition to the provider's existing commitments. Therefore, impacts in regard to wastewater generation are considered less than significant.



The Specific Plan EIR concluded that wastewater collection and conveyance systems within the Specific Plan area are currently sufficient in terms of size and age to service existing Specific Plan area development. Due to existing available capacity to treat wastewater existing and future wastewater in the City, construction or expansion of wastewater treatment facilities would not be required. However, it is possible that new development within the Specific Plan area would require on-site upgrades to serve the proposed new uses. For future development, individual development projects occurring under the Specific Plan would be reviewed to determine whether site-specific infrastructure improvements would be required as part of Specific Plan approval. Further, implementation of the Specific Plan would generate increased sewage flows within the existing sewer system. Development of land uses under the Specific Plan would incrementally trigger the need for expansion or replacement of individual sewer line segments, resulting in potentially significant impacts. Implementation of MM UT-3 and compliance with existing local regulations would ensure the funding of necessary improvements to the wastewater system to serve future land uses anticipated to occur under the Specific Plan. With assurance of adequate funds to finance the capital improvements necessary as provided for in MM UT-3, impacts would be reduced to less than significant levels with mitigation. Therefore, potential impacts to wastewater infrastructure would be reduced to less than significant with mitigation.

According to the Specific Plan EIR, additional commercial, industrial, office, retail, and residential uses to be developed under the Specific Plan would increase water demand. Based on water demand factors for the City and other service areas within the County, water demand resulting from implementation of the Specific Plan is expected to increase by approximately 499,855 gallons per day (gpd) (560.3 acre-feet per year [acre-ft/yr]). The increased demand for water would have the potential to result in the need for additional water supply infrastructure. Currently, the Specific Plan area is largely developed and is served by an existing water supply system which provides sufficient service. Development under the Specific Plan would occur within the existing developed spaces of the Specific Plan area and is not expected to require substantial alterations to the existing water system given the incremental and limited increase in water demand from the Specific Plan. However, new land uses anticipated to occur under the Specific Plan could nonetheless result in the need for construction of new water facilities or expansion of existing infrastructure such as upsizing of certain pipeline segments. However, the individual development projects would be reviewed to determine any necessary alterations to existing infrastructure to serve the development site. As part of development review of individual projects, additional CEQA review may be required that would analyze potential effects including the alteration of existing systems or construction of additional infrastructure. The construction or implementation of necessary on-site infrastructure improvements would occur in conformance with applicable State and City development codes and regulations. Due to the limited increase in water demand associated with the Specific Plan, as well as conformance to mandated water supply infrastructure regulations and standards, and with assurance of adequate funds to finance the capital improvements necessary for the Specific Plan as described in MM UT-3, impacts to the environment due to potential construction or expansion of water supply facilities are considered less than significant with mitigation.

Implementation of the Specific Plan would result in partial redevelopment of the Specific Plan area for increased retail, commercial, industrial, warehouse, office, and residential uses. As the Specific Plan area is largely developed with impermeable surfaces, redevelopment under the Specific Plan



would primarily involve replacement rather than expansion of impermeable surfaces. Any potential increased development of impermeable surfaces and building square footage may result in increased stormwater and urban runoff that enters the City's storm drainage system. Storm drain infrastructure within the Specific Plan area presently accommodates and conveys stormwater flows adequately, and additional development under the Specific Plan is not expected to impede stormwater conveyance. However, it is possible that new development within the Specific Plan area would require on-site upgrades to serve the proposed new uses. Necessary improvements to site hydrology may be required to accommodate redevelopment and would be identified as part of review of proposed projects. While the location and extent of stormwater system improvements necessary to service individual development projects is presently undetermined, specific information regarding the improvement or construction of these facilities would be determined prior to approval of a proposed project. Any construction of necessary facilities would be subject to applicable State and City development codes and regulations. As part of the development review of individual projects, additional CEQA review may be required, which would analyze potential effects including the potential alteration of the existing system. The Specific Plan EIR concluded that build out of the Specific Plan would not have significant adverse effects to the environment resulting from the construction of additional storm drain infrastructure, and impacts are considered less than significant.

Commercial, industrial, and residential uses anticipated to occur under Specific Plan implementation would incrementally increase water demand throughout the development of the Specific Plan area. The Specific Plan EIR determined that the increased demand for water in the Specific Plan area would have the potential to result in the need for new or expanded water infrastructure and/or water supplies. While redevelopment of the Specific Plan area would result in a projected net increase in water demand by approximately 560.3 acre-ft/yr, the MWDOC and the City currently project an estimated 11,800 acre-ft/yr of potable water will be available at the time of build out of the Specific Plan, approximately 1,025 acre-feet more than current demands. Individual developments within the Specific Plan area would be required to obtain a Will Serve letter from the district prior to planning approval. As such, the MWD, MWDOC, and the City anticipate their ability to meet full-service demands through 2040 during both normal, dry, and multiple dry years. Further, increasing reliance on recycled water, City-mandated water efficiency requirements, water conservation measures, and implementation of higher efficiency systems would contribute to decreased water demands within the Specific Plan area. Therefore, while implementation of the Specific Plan would result in an increase in water demand, impacts to existing and projected City water supply are considered less than significant.

Under implementation of the Specific Plan, redevelopment of the Specific Plan area is expected to result in a net increase of approximately 258,010 sf of retail, industrial, commercial, warehouse, and office development and 491 residential units. This would result in an increase in solid waste generation and a subsequent need for waste disposal. According to the Specific Plan, the estimated potential net increase in solid waste generation in the Specific Plan area is 4,828.76 pounds (lbs) of solid waste per day, equating to 2.41 tpd. Assuming the required diversion rate of 75 percent is applied, this would result in up to an additional 1.81 tpd of non-recyclable waste that would need to be disposed in a landfill. It is not anticipated that an additional net 258,010 sf of development would substantially strain Rainbow Environmental Services' ability to service the Specific Plan area. In



addition, the MRF has available capacity to receive and process an additional 1,000 tpd of solid waste under their existing permit. As such, the MRF possesses adequate capacity to receive an estimated 2.41 tpd of additional waste, or approximately 0.006 percent of the facility's permitted daily capacity. Furthermore, disposal of approximately 1.81 tpd of non-recyclable solid waste at the Frank R. Bowerman Landfill would incrementally contribute to the facility's typical daily intake and would not result in exceedance of the facility's total daily capacity. Therefore, impacts resulting from additional solid waste generation under the Specific Plan are considered less than significant.

California State law AB 341 requires that at least 75 percent of solid waste be diverted from landfills. As previously discussed, solid waste generated by the Specific Plan area would be transported to an MRF that separates and sorts solid waste to ensure a minimum of 75 percent is diverted for recycling and reuse before being transported to the Frank R. Bowerman Landfill. In addition, development under the Specific Plan would be required to comply with all applicable City solid waste regulations, permitting processes, and policies in effect at the time of operation, including the policies and regulations described under the City's Municipal Code Chapter 6.08, Solid Waste. According to the Specific Plan EIR, as the City is in compliance with applicable State, federal, and local regulations and implementation of the Specific Plan would not conflict with regulations related to solid waste, no impact would occur.

4.19.3 Analysis of Project Impacts

a. **Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

OCSD would be the wastewater treatment provider for the proposed Project. The proposed Project would involve the operation of a new administration building, and as such, would result in the generation of wastewater. However, as discussed in Section 4.14.3, the Project would not represent a net increase in population or employees within the Specific Plan area. Since the number of employees would not increase, there would be no net difference in wastewater generation within the Specific Plan area compared to existing conditions. Wastewater produced by the Project would meet NPDES requirements through treatment at the OCSD Plant No. 1 site. In addition, the implementation of wastewater LID designs and BMPs required by the Specific Plan would help meet wastewater quality treatment standards. **Therefore, RWQCB wastewater treatment requirements would not be exceeded, and potential impacts related to the proposed Project are considered less than significant and no mitigation is required.**

The Specific Plan concluded that impacts related to exceedance of RWQCB wastewater treatment requirements would be less than significant. Similarly, the Project is located within the Specific Plan area and would not exceed RWQCB wastewater treatment requirements. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.



b. Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The proposed Project would involve the operation of a new administration building, and as such, would result in the generation of wastewater. However, as discussed in Section 4.14.3, the Project would not represent a net increase in population or employees within the Specific Plan area because the administrative use would relocate existing OCSD personnel from OCSD Plant No. 1 to the Project site. Since the number of employees would not increase, there would be no net difference in wastewater generation within the Specific Plan area compared to existing conditions. The Specific Plan EIR determined that build out of the Specific Plan, including the Project site, would result in an increase in current wastewater flows by approximately 0.13 percent, and increases in wastewater flows would be fully treatable by existing facilities. Since the Project would not increase regional wastewater flows and OCSD Reclamation Plant No. 1 would have sufficient capacity to serve the Specific Plan area and Project demand in addition to the provider's existing commitments, the Project would not require expansion of existing wastewater treatment facilities or construction of new facilities.

Although the project would not increase the total wastewater anticipated to be generated by implementation of the Specific Plan, the relocation of existing OCSD personnel from Plant No. 1 to the Project site would have a potential to increase wastewater generated on the Project site as compared to existing on-site uses. Therefore, implementation of the Project could generate increased sewage flows within the existing sewer system on and adjacent to the Project site. Further, development of land uses under the Specific Plan could incrementally trigger the need for expansion or replacement of individual sewer line segments, resulting in potentially significant impacts. Implementation of MM UT-3 and compliance with existing local regulations would ensure the funding of necessary improvements to the wastewater system to serve future land uses anticipated to occur under the Specific Plan. With assurance of adequate funds to finance the capital improvements necessary as provided for in MM U-3, impacts would be reduced to less than significant with mitigation. **Therefore, while implementation of the Project would result in an increase in wastewater generation, the Project would not necessitate new wastewater treatment facilities or expansion of existing facilities, and impacts are considered less than significant with mitigation.**

The proposed Project would involve the operation of a new administration building, and as such, would require water use. However, as discussed in Section 4.14.3, the Project would not represent a net increase in population or employees within the Specific Plan area because the administrative use would relocate existing OCSD personnel from OCSD Plant No. 1 to the Project site. Because the number of employees would not increase, there would be no net difference in water use within the Specific Plan area compared to existing conditions.

Although the Project would not increase the total water demand anticipated by build out of the Specific Plan, the relocation of existing OCSD personnel from Plant No. 1 to the Project site would have a potential to increase water demand on the Project site as compared to the existing on-site uses. The new administration building proposed as part of the Project would have the potential to increase water demand as compared to warehouse uses due to the



greater number of people working at the Project site, as well as the general increase in land use intensity that would occur. The increased demand for water would have the potential to result in the need for additional water supply infrastructure on and adjacent to the Project site. The Project could result in the need for construction of new water facilities or the expansion of existing infrastructure such as upsizing of certain pipeline segments. Due to the limited increase in water demand associated with the Project, as well as conformance to mandated water supply infrastructure regulations and standards, and with assurance of adequate funds to finance the capital improvements necessary for the Project as described in MM UT-3, impacts to the environment due to potential construction or expansion of water supply facilities are considered less than significant with mitigation. **Therefore, while implementation of the Project would result in an increase in water demand, the Project would not necessitate new water treatment facilities or expansion of existing facilities, and impacts are considered less than significant with mitigation.**

The Specific Plan concluded that impacts related to construction of new water or wastewater treatment facilities or expansion of existing facilities would be less than significant with mitigation. Similarly, the Project would incorporate the same Specific Plan mitigation to reduce potential impacts related to the construction or expansion of water supply infrastructure. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no additional mitigation measures are required. Applicable mitigation measures are outlined at the end of Section 4.19.3, below.

c. Would the Project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The proposed Project would decrease impervious surface area on the Project site, which can provide more opportunities for infiltration on the Project site. However, because the infiltration potential of on-site soils is low, any increase in infiltration would be minimal. Additionally, the Project would include drainage features that would continue to convey stormwater runoff to the existing municipal storm drain system. In addition, the County MS4 Permit requires the installation of landscaped areas or other pervious surfaces and implementation of LID and stormwater BMPs to minimize and treat stormwater runoff. The proposed Project includes bioretention basins in compliance with this requirement. **Therefore, because the Project would decrease stormwater runoff from the project site by reducing impervious surface area and including BMPs, the Project would not necessitate new stormwater drainage facilities or expansion of existing facilities, and impacts are considered less than significant and no mitigation is required.**

The Specific Plan concluded that impacts related to exceedance of the capacity of stormwater drainage facilities would be less than significant. Similarly, the Project is located within the Specific Plan area and would not exceed the capacity of stormwater drainage facilities. The proposed Project requires implementation of drainage features and BMPs to minimize runoff and flooding and would, therefore, not result in new significant impacts beyond those identified



in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation measures are required.

d. Would the Project have sufficient water supplies available to serve the Project from existing entitlements and resources, or require new or expanded entitlements?

Refer to Response 4.19.3 (b), above. The proposed Project would require water use related to the operation of a new administration building. As discussed previously, new development proposed as part of the Project would not represent a net increase in population because the administrative use would provide work space for existing OCSD personnel. Consequently, the Project would not increase water demand in the Specific Plan area compared to existing conditions. Therefore, the Project would not result in the need for expanded or new water supplies. As discussed in the Specific Plan EIR, the MWD, the MWDOC, and the City anticipate their abilities to meet full-service demands through 2040 during both normal, dry, and multiple dry years. Further, increasing reliance on recycled water, City-mandated water efficiency requirements, water conservation measures, and implementation of higher efficiency systems would contribute to decreased water demands within the Specific Plan area. In addition, the Project would be required to obtain a Will Serve letter from OCWD prior to planning approval. **Therefore, while the Project would result in an increase in water demand, impacts to existing and projected City water supply are considered less than significant and no mitigation is required.**

The Specific Plan concluded that impacts related to water supply would be less than significant. Similarly, the Project is located within the Specific Plan area and sufficient water supplies are available to serve the Project from existing entitlements and resources. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

e. Would the Project result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

Refer to Response 4.19.3 (b), above. OCSD Reclamation Plant No. 1 would have sufficient capacity to serve the Specific Plan area and Project demand in addition to the provider's existing commitments. As discussed previously, new development proposed as part of the Project would not represent a net increase in population because the administrative use would provide work space for existing OCSD personnel. Since the number of employees would not increase, there would be no net difference in wastewater generation within the Specific Plan area compared to existing conditions. **Therefore, because implementation of the Project would not result in an increase in wastewater generation, the Project would not exceed the capacity of wastewater treatment facilities, and impacts are considered less than significant and no mitigation is required.**

The Specific Plan concluded that impacts related to wastewater treatment providers would be less than significant with mitigation. The Project is located within the Specific Plan area, and



wastewater flows from the Project site can be accommodated by the existing wastewater plant. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no additional mitigation measures are required. Applicable mitigation measures are outlined in at the end of Section 4.19.3, below.

f. Would the Project be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?

Refer to Response 4.19.3 (a), above. The operation of a new administration building as part of the proposed Project would result in the generation of solid waste. During construction, waste generation would increase as a result of the Project. As discussed previously, new development proposed as part of the Project would not represent a net increase in population because the administrative use would provide work space for existing OCSD personnel. Consequently, during operation, waste generation would not be anticipated to increase compared to existing conditions. Although construction of the Project would result in an increase in solid waste generation and a subsequent need for waste disposal, the Specific Plan EIR concluded that Rainbow Environmental Services would be able to adequately serve the Specific Plan area's waste disposal needs. Thus, it is not anticipated that waste disposal required for the administration building, one development within the Specific Plan area, would substantially strain Rainbow Environmental Services' ability to service the Project. **Therefore, impacts resulting from additional solid waste generation under the Project are considered less than significant and no mitigation is required.**

The Specific Plan concluded that impacts related to landfills would be less than significant. Similarly, the Project is located within the Specific Plan area and would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

g. Would the Project comply with federal, state, and local statutes and regulations related to solid waste?

Refer to Response 4.19.3 (a), above. The operation of a new administration building as part of the proposed Project would result in the generation of solid waste. The Project would comply with all applicable City solid waste regulations, permitting processes, and policies in effect at the time of operation, including the policies and regulations described under the City's Municipal Code Chapter 6.08, Solid Waste. According to the Specific Plan EIR, as the City is in compliance with applicable State, federal, and local regulations. Therefore, the Project would not conflict with regulations related to solid waste, and no impact would occur. No mitigation is required.

The Specific Plan concluded that impacts related to solid waste would be less than significant. Similarly, the Project is located within the Specific Plan area and would not conflict with federal, State, and local statutes and regulations related to solid waste. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a



substantial increase in the severity of previously identified significant impacts, and no new mitigation measures are required.

4.19.3.1 Mitigation Measures

Based on the analysis and information above, Mitigation Measure MM UT-3, included in the Specific Plan EIR, would be applicable to the proposed Project.

MM UT-3 FVCSP Utility Infrastructure Financing Program: The City shall ensure adequate financing for funding of infrastructure improvements to serve the FVCSP through implementation of the FVCSP Utility Infrastructure Financing Program, including preparation of an AB 1600 fee justification study, for the FVCSP area. The Financing Program shall be developed prior to the approval of the first entitlements for a development within the Project area, following adoption of the Project. All new development within the FVCSP shall be conditioned to be subject to payment of its fair share of any impact fees identified under this program. The City shall determine the costs of and establish a funding program for the following capital improvements to upgrade water and wastewater delivery as needed to serve the demands of new land uses anticipated to occur under the FVCSP.

The Program shall also:

- a. Identify the cost of improvements to or replacement of undersized water and wastewater lines within the FVCSP area needed to serve the Project.
- b. Clearly apportion existing and projected demand on these facilities and costs between existing users, the City, and proposed future development.
- c. Identify potential funding mechanisms for sewer and water line construction, including the equitable sharing of costs between new development, the City and existing users, including development impact fees, grants, assessments, etc.
- d. Identify development impact fees for all residential and non-residential development to ensure that development pays its fair share of public infrastructure costs.
- e. Include a regular fee update schedule, consistent with the City's Capital Improvement Program.

4.19.4 Findings Related to Utilities and Service Systems

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Utilities and Service Systems, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.



No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Utilities and Service Systems that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Utilities and Service Systems requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. This Addendum has analyzed all available relevant information and has determined that there is no new information of substantial importance that was unknown and could not have been known with the exercise of reasonable diligence at the time the Specific Plan EIR was certified indicating that: (1) mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project, but the Project proponent declines to adopt the mitigation measures or alternatives; or (2) mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the Project proponent declines to adopt the mitigation measures or alternatives.

As discussed above, the proposed Project would result in a potentially significant impact related to Utilities and Service Systems. Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measure that is applicable to the proposed Project is listed in Section 4.19.3.1. Potential Project impacts related to Utilities and Service Systems would be reduced below a level of significance with implementation of the applicable mitigation measures, none of which the Project proponent is declining to adopt.



4.20 MANDATORY FINDINGS OF SIGNIFICANCE

	New Significant Impact	More Severe Impact	No Substantial Change from Previous Analysis
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 type="checkbox"/>	<input checked="" 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"/>
c. Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.20.1 Analysis of Project Impacts

- 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?**

As discussed in Section 4.4 Biological Resources, of this Initial Study/Addendum, the Project site is fully developed and is located in an urban area. The proposed Project would redevelop the Project site by replacing the five existing industrial warehouse buildings with an administration building, associated parking, and landscaping.

The Project site does not contain an open body of water that could serve as natural habitat in which fish could exist. The Project site does not support any special-status wildlife or plant species or their habitats because the site is currently developed and lacks natural habitat. The existing landscaping trees on the Project site may, however, provide suitable habitat for nesting migratory birds. The removal of trees on the Project site has the potential to impact active bird nests if vegetation and trees are removed during the nesting season. However, Project construction would comply with the requirements of the Migratory Bird Treaty Act (MBTA) to avoid impacts to active nests during the breeding season. With compliance with the MBTA, impacts to nesting birds would be less than significant. For these reasons, the Project does not 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal.



The Specific Plan EIR concluded that implementation of the Specific Plan would result in less than significant impacts to biological resources because the Specific Plan area is fully urbanized and does not contain potential natural habitats for sensitive species and other natural communities. Similarly, the proposed Project would result in less than significant impacts to biological resources because the Project site is located within the Specific Plan area and is fully urbanized and developed. Neither the Specific Plan nor the proposed Project has 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. As such, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR, and no new mitigation is required.

As discussed in Section 4.5, Cultural Resources, of this Initial Study/Addendum, the Project site has been previously disturbed and significantly altered as a result of past construction activities on the site. Due to the developed nature of the site and surrounding area, it is likely that any unknown archaeological or paleontological resources would have been unearthed at the time of previous activities on the Project site. However, in the event that previously unknown cultural resources are encountered, Project construction would comply with standard conditions required by the City of Fountain Valley, detailed in Section 4.5, to ensure proper handling and recovery of these resources. With compliance with standard conditions regulating the handling and treatment of cultural resources, the proposed Project would not have the potential to eliminate important examples of the major periods of California history or prehistory.

The Specific Plan EIR concluded that, based on the limited potential for undiscovered cultural resources to exist within the Specific Plan area and existing procedures and requirements regulating the discovery of buried resources, impacts on cultural resources would be less than significant. The Project site is located within the Specific Plan area and has limited potential for cultural resources to exist on-site. In the event that unknown resources are discovered, Project construction would comply with standard conditions required by the City of Fountain Valley regulating the discovery of buried resources that would ensure impacts would be less than significant. Neither the Specific Plan nor the proposed Project has the potential to eliminate important examples of the major periods of California history or prehistory. As such, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation is required.

As discussed in Section 4.18, Tribal Cultural Resources, of this Initial Study/Addendum, the Project site has been previously disturbed and significantly altered as a result of past construction activities on the site. Due to the developed nature of the site and surrounding area, it is likely that any unknown tribal cultural resources would have been unearthed at the time of previous activities on the Project site. However, implementation of the proposed Project would require incorporation of Mitigation Measures TCR-1a through TCR-1c as identified in the Specific Plan EIR. With the incorporation of mitigation measures requiring pre-construction training for construction personnel, as well as the suspension of ground-disturbing activities in the event of an



this impact would be infeasible due to the location within another jurisdiction. Cumulatively considerable impacts to the intersection of Euclid Street and Newhope Street/Northbound I-405 Ramps could be addressed through implementation of standard Caltrans' intersection monitoring and periodic signal timing updates and would reduce impacts to this intersection to less than significant levels once implemented. However, because the City has no control over the timing and implementation of such improvements, the Specific Plan EIR concluded that impacts to this intersection would be cumulatively considered temporarily significant and unavoidable. Traffic impacts at all other intersections were concluded to be less than significant or would be reduced to less than significant with mitigation.

As stated above, impacts related to the proposed Project are less than significant or can be reduced to less than significant levels with incorporation of mitigation measures, and the Project contribution to any significant cumulative impacts would be less than cumulatively considerable. As detailed in the preceding sections, the proposed Project would not increase the severity of impacts or result in new impacts beyond those analyzed in the Specific Plan EIR. Therefore, the proposed Project would not result in new significant cumulative impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation is required.

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

The Project site is currently developed and is located in an urban area. The proposed Project would redevelop the Project site to replace the five existing industrial warehouse buildings with an administration building, associated parking and additional landscaping. The design of the proposed Project would be consistent with the existing City zoning and General Plan designations for the site and the development standards of the Specific Plan. Based on the Project Description and the preceding responses, development of the proposed Project would not cause substantial adverse effects on human beings related to air quality, greenhouse gas emissions, hazardous materials, and noise, because all potentially significant impacts of the proposed Project can be mitigated to a less than significant level. Therefore, the proposed Project would not result in new significant impacts beyond those identified in the Specific Plan EIR or a substantial increase in the severity of previously identified significant impacts. No new mitigation is required.

4.20.1.1 Mitigation Measures

No mitigation is required beyond those specified in Sections 4.1 through 4.19.

4.20.2 Findings Related to Mandatory Findings of Significance

No New Significant Effects Requiring Major Revisions to the Specific Plan EIR. Based on the foregoing analysis and information, there is no evidence that the proposed Project requires a major change to the Specific Plan EIR. The Project will not result in new significant environmental impacts related to Mandatory Findings of Significance, and there is no substantial increase in the severity of impacts described in the Specific Plan EIR.



No Substantial Change in Circumstances Requiring Revisions to the Specific Plan EIR. There is no information in the record or otherwise available that indicates that there are substantial changes in circumstances pertaining to Mandatory Findings of Significance that would require major changes to the Specific Plan EIR.

No New Information Showing Greater Significant Effects than the Specific Plan EIR. This Initial Study/Addendum has analyzed all available relevant information to determine whether there is new information that was not available at the time the Specific Plan EIR was adopted, which would indicate that a new significant effect not reported in that document might occur. Based on the information and analyses above, there is no substantial new information indicating that there would be a new significant impact related to Mandatory Findings of Significance requiring major revisions to the Specific Plan EIR.

No New Information Showing Ability to Reduce Significant Effects in the Specific Plan EIR. This Addendum has analyzed all available relevant information and has determined that there is no new information of substantial importance that was unknown and could not have been known with the exercise of reasonable diligence at the time the Specific Plan EIR was certified indicating that: (1) mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project, but the Project proponent declines to adopt the mitigation measures or alternatives; or (2) mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the Project proponent declines to adopt the mitigation measures or alternatives.

As discussed above, the proposed Project would result in a potentially significant impact related to Mandatory Findings of Significance. Mitigation was included in the Specific Plan EIR and adopted at the time the EIR was certified. The mitigation measures that are applicable to the proposed Project are listed in Sections 4.13.3.1 and 4.17.3.1. Potential Project impacts related to Mandatory Findings of Significance would be reduced below a level of significance with implementation of the applicable mitigation measures, none of which the Project proponent is declining to adopt.



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APPENDIX A

CALEEMOD OUTPUT SHEETS



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OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

**OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program
South Coast AQMD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	109.91	1000sqft	2.50	109,914.00	0
Parking Lot	262.00	Space	2.50	104,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

Project Characteristics - Construction is anticipated to begin in January 2021 and be completed in May 2023.

Land Use - Project site is approximately 5.0 acres

Construction Phase - Construction is anticipated to begin in January 2021 and be completed in May 2023.

Demolition - The project includes demolition of five industrial warehouse buildings on site.

Vehicle Trips - Project would not increase vehicle trips

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403

Mobile Land Use Mitigation -

Energy Mitigation - The building will be designed to achieve United States Green Building Council Leadership in Energy and Environmental Design (LEED) Platinum Certification.

Water Mitigation -

Waste Mitigation - The CalRecycle Waste Diversion and Recycling Mandate will reduce solid waste production by 25 percent.

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	5
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	8.00	20.00
tblConstructionPhase	NumDays	230.00	460.00
tblConstructionPhase	NumDays	18.00	36.00
tblConstructionPhase	NumDays	18.00	36.00
tblConstructionPhase	PhaseEndDate	1/29/2021	2/26/2021
tblConstructionPhase	PhaseEndDate	2/5/2021	3/12/2021
tblConstructionPhase	PhaseEndDate	2/17/2021	4/9/2021
tblConstructionPhase	PhaseEndDate	1/5/2022	1/13/2023
tblConstructionPhase	PhaseEndDate	2/24/2022	5/1/2023
tblConstructionPhase	PhaseEndDate	1/31/2022	3/6/2023
tblConstructionPhase	PhaseStartDate	1/30/2021	3/1/2021
tblConstructionPhase	PhaseStartDate	2/6/2021	3/15/2021
tblConstructionPhase	PhaseStartDate	2/18/2021	4/12/2021
tblConstructionPhase	PhaseStartDate	2/1/2022	3/13/2023
tblConstructionPhase	PhaseStartDate	1/6/2022	1/16/2023
tblGrading	AcresOfGrading	10.00	4.00
tblLandUse	LandUseSquareFeet	109,910.00	109,914.00
tblLandUse	LotAcreage	2.52	2.50
tblLandUse	LotAcreage	2.36	2.50
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	11.03	0.00

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

2.0 Emissions Summary

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3311	3.1486	2.6447	5.7100e-003	0.3223	0.1454	0.4678	0.1222	0.1359	0.2581	0.0000	508.1923	508.1923	0.0946	0.0000	510.5568
2022	0.2742	2.4761	2.5609	5.6800e-003	0.1414	0.1068	0.2481	0.0382	0.1004	0.1386	0.0000	505.9789	505.9789	0.0813	0.0000	508.0116
2023	0.5611	0.2933	0.4082	7.3000e-004	0.0116	0.0140	0.0256	3.1000e-003	0.0131	0.0162	0.0000	64.7952	64.7952	0.0151	0.0000	65.1731
Maximum	0.5611	3.1486	2.6447	5.7100e-003	0.3223	0.1454	0.4678	0.1222	0.1359	0.2581	0.0000	508.1923	508.1923	0.0946	0.0000	510.5568

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.3311	3.1486	2.6447	5.7100e-003	0.1950	0.1454	0.3405	0.0664	0.1359	0.2023	0.0000	508.1919	508.1919	0.0946	0.0000	510.5564
2022	0.2742	2.4761	2.5609	5.6800e-003	0.1414	0.1068	0.2481	0.0382	0.1004	0.1386	0.0000	505.9785	505.9785	0.0813	0.0000	508.0112
2023	0.5611	0.2933	0.4082	7.3000e-004	0.0116	0.0140	0.0256	3.1000e-003	0.0131	0.0162	0.0000	64.7951	64.7951	0.0151	0.0000	65.1730
Maximum	0.5611	3.1486	2.6447	5.7100e-003	0.1950	0.1454	0.3405	0.0664	0.1359	0.2023	0.0000	508.1919	508.1919	0.0946	0.0000	510.5564

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	26.78	0.00	17.17	34.13	0.00	13.51	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-4-2021	4-3-2021	1.1199	1.1199
2	4-4-2021	7-3-2021	0.7494	0.7494
3	7-4-2021	10-3-2021	0.7662	0.7662
4	10-4-2021	1-3-2022	0.7653	0.7653
5	1-4-2022	4-3-2022	0.6792	0.6792
6	4-4-2022	7-3-2022	0.6854	0.6854
7	7-4-2022	10-3-2022	0.6930	0.6930
8	10-4-2022	1-3-2023	0.6919	0.6919
9	1-4-2023	4-3-2023	0.5143	0.5143
10	4-4-2023	7-3-2023	0.3070	0.3070
		Highest	1.1199	1.1199

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4568	4.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.2300e-003	9.2300e-003	2.0000e-005	0.0000	9.8400e-003
Energy	5.4200e-003	0.0493	0.0414	3.0000e-004		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	555.2402	555.2402	0.0217	5.2700e-003	557.3534
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	20.7497	0.0000	20.7497	1.2263	0.0000	51.4066
Water						0.0000	0.0000		0.0000	0.0000	6.1975	123.4277	129.6251	0.6416	0.0161	150.4592
Total	0.4622	0.0493	0.0461	3.0000e-004	0.0000	3.7600e-003	3.7600e-003	0.0000	3.7600e-003	3.7600e-003	26.9472	678.6771	705.6243	1.8897	0.0214	759.2290

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4568	4.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.2300e-003	9.2300e-003	2.0000e-005	0.0000	9.8400e-003
Energy	4.9100e-003	0.0446	0.0375	2.7000e-004		3.3900e-003	3.3900e-003		3.3900e-003	3.3900e-003	0.0000	515.3430	515.3430	0.0202	4.8800e-003	517.3015
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	15.5623	0.0000	15.5623	0.9197	0.0000	38.5549
Water						0.0000	0.0000		0.0000	0.0000	5.2307	110.7847	116.0153	0.5418	0.0136	133.6229
Total	0.4617	0.0447	0.0422	2.7000e-004	0.0000	3.4100e-003	3.4100e-003	0.0000	3.4100e-003	3.4100e-003	20.7930	626.1368	646.9298	1.4817	0.0185	689.4891

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.11	9.39	8.43	10.00	0.00	9.31	9.31	0.00	9.31	9.31	22.84	7.74	8.32	21.59	13.30	9.19

3.0 Construction Detail

Construction Phase

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/4/2021	2/26/2021	5	40	
2	Site Preparation	Site Preparation	3/1/2021	3/12/2021	5	10	
3	Grading	Grading	3/15/2021	4/9/2021	5	20	
4	Building Construction	Building Construction	4/12/2021	1/13/2023	5	460	
5	Paving	Paving	1/16/2023	3/6/2023	5	36	
6	Architectural Coating	Architectural Coating	3/13/2023	5/1/2023	5	36	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 164,871; Non-Residential Outdoor: 54,957; Striped Parking Area: 6,288 (Architectural Coating – sqft)

OffRoad Equipment

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	517.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	79.00	35.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0560	0.0000	0.0560	8.4800e-003	0.0000	8.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0633	0.6288	0.4313	7.8000e-004		0.0310	0.0310		0.0288	0.0288	0.0000	68.0016	68.0016	0.0191	0.0000	68.4801
Total	0.0633	0.6288	0.4313	7.8000e-004	0.0560	0.0310	0.0870	8.4800e-003	0.0288	0.0373	0.0000	68.0016	68.0016	0.0191	0.0000	68.4801

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9000e-003	0.0674	0.0143	2.0000e-004	4.4400e-003	2.0000e-004	4.6500e-003	1.2200e-003	2.0000e-004	1.4200e-003	0.0000	19.3022	19.3022	1.3200e-003	0.0000	19.3352
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2500e-003	9.2000e-004	0.0105	3.0000e-005	3.2900e-003	2.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.8670	2.8670	8.0000e-005	0.0000	2.8689
Total	3.1500e-003	0.0683	0.0247	2.3000e-004	7.7300e-003	2.2000e-004	7.9700e-003	2.0900e-003	2.2000e-004	2.3200e-003	0.0000	22.1692	22.1692	1.4000e-003	0.0000	22.2041

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0218	0.0000	0.0218	3.3100e-003	0.0000	3.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0633	0.6288	0.4313	7.8000e-004		0.0310	0.0310		0.0288	0.0288	0.0000	68.0015	68.0015	0.0191	0.0000	68.4800
Total	0.0633	0.6288	0.4313	7.8000e-004	0.0218	0.0310	0.0529	3.3100e-003	0.0288	0.0321	0.0000	68.0015	68.0015	0.0191	0.0000	68.4800

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9000e-003	0.0674	0.0143	2.0000e-004	4.4400e-003	2.0000e-004	4.6500e-003	1.2200e-003	2.0000e-004	1.4200e-003	0.0000	19.3022	19.3022	1.3200e-003	0.0000	19.3352
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2500e-003	9.2000e-004	0.0105	3.0000e-005	3.2900e-003	2.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.8670	2.8670	8.0000e-005	0.0000	2.8689
Total	3.1500e-003	0.0683	0.0247	2.3000e-004	7.7300e-003	2.2000e-004	7.9700e-003	2.0900e-003	2.2000e-004	2.3200e-003	0.0000	22.1692	22.1692	1.4000e-003	0.0000	22.2041

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0903	0.0102	0.1006	0.0497	9.4000e-003	0.0591	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.8000e-004	3.1400e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8601	0.8601	2.0000e-005	0.0000	0.8607
Total	3.8000e-004	2.8000e-004	3.1400e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8601	0.8601	2.0000e-005	0.0000	0.8607

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	0.0194	0.2025	0.1058	1.9000e-004	0.0352	0.0102	0.0455	0.0194	9.4000e-003	0.0288	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.8000e-004	3.1400e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8601	0.8601	2.0000e-005	0.0000	0.8607
Total	3.8000e-004	2.8000e-004	3.1400e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8601	0.8601	2.0000e-005	0.0000	0.8607

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0623	0.0000	0.0623	0.0333	0.0000	0.0333	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644
Total	0.0229	0.2474	0.1586	3.0000e-004	0.0623	0.0116	0.0739	0.0333	0.0107	0.0440	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	4.6000e-004	5.2300e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4335	1.4335	4.0000e-005	0.0000	1.4345
Total	6.3000e-004	4.6000e-004	5.2300e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4335	1.4335	4.0000e-005	0.0000	1.4345

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0243	0.0000	0.0243	0.0130	0.0000	0.0130	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643
Total	0.0229	0.2474	0.1586	3.0000e-004	0.0243	0.0116	0.0359	0.0130	0.0107	0.0237	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	4.6000e-004	5.2300e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4335	1.4335	4.0000e-005	0.0000	1.4345
Total	6.3000e-004	4.6000e-004	5.2300e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4335	1.4335	4.0000e-005	0.0000	1.4345

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1806	1.6561	1.5746	2.5600e-003		0.0911	0.0911		0.0856	0.0856	0.0000	220.0554	220.0554	0.0531	0.0000	221.3827
Total	0.1806	1.6561	1.5746	2.5600e-003		0.0911	0.0911		0.0856	0.0856	0.0000	220.0554	220.0554	0.0531	0.0000	221.3827

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3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.4600e-003	0.3217	0.0798	8.4000e-004	0.0210	6.5000e-004	0.0216	6.0500e-003	6.2000e-004	6.6700e-003	0.0000	81.1787	81.1787	5.1300e-003	0.0000	81.3071
Worker	0.0313	0.0231	0.2615	7.9000e-004	0.0823	6.2000e-004	0.0830	0.0219	5.7000e-004	0.0224	0.0000	71.7223	71.7223	1.9200e-003	0.0000	71.7704
Total	0.0407	0.3448	0.3413	1.6300e-003	0.1033	1.2700e-003	0.1046	0.0279	1.1900e-003	0.0291	0.0000	152.9010	152.9010	7.0500e-003	0.0000	153.0774

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1806	1.6561	1.5746	2.5600e-003		0.0911	0.0911		0.0856	0.0856	0.0000	220.0552	220.0552	0.0531	0.0000	221.3824
Total	0.1806	1.6561	1.5746	2.5600e-003		0.0911	0.0911		0.0856	0.0856	0.0000	220.0552	220.0552	0.0531	0.0000	221.3824

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3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.4600e-003	0.3217	0.0798	8.4000e-004	0.0210	6.5000e-004	0.0216	6.0500e-003	6.2000e-004	6.6700e-003	0.0000	81.1787	81.1787	5.1300e-003	0.0000	81.3071
Worker	0.0313	0.0231	0.2615	7.9000e-004	0.0823	6.2000e-004	0.0830	0.0219	5.7000e-004	0.0224	0.0000	71.7223	71.7223	1.9200e-003	0.0000	71.7704
Total	0.0407	0.3448	0.3413	1.6300e-003	0.1033	1.2700e-003	0.1046	0.0279	1.1900e-003	0.0291	0.0000	152.9010	152.9010	7.0500e-003	0.0000	153.0774

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
Total	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471

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3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0121	0.4175	0.1032	1.1400e-003	0.0287	7.7000e-004	0.0295	8.2800e-003	7.3000e-004	9.0100e-003	0.0000	110.1086	110.1086	6.7600e-003	0.0000	110.2776
Worker	0.0402	0.0286	0.3305	1.0500e-003	0.1127	8.2000e-004	0.1135	0.0299	7.6000e-004	0.0307	0.0000	94.6275	94.6275	2.3800e-003	0.0000	94.6869
Total	0.0523	0.4460	0.4336	2.1900e-003	0.1414	1.5900e-003	0.1430	0.0382	1.4900e-003	0.0397	0.0000	204.7361	204.7361	9.1400e-003	0.0000	204.9645

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467
Total	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467

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3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0121	0.4175	0.1032	1.1400e-003	0.0287	7.7000e-004	0.0295	8.2800e-003	7.3000e-004	9.0100e-003	0.0000	110.1086	110.1086	6.7600e-003	0.0000	110.2776
Worker	0.0402	0.0286	0.3305	1.0500e-003	0.1127	8.2000e-004	0.1135	0.0299	7.6000e-004	0.0307	0.0000	94.6275	94.6275	2.3800e-003	0.0000	94.6869
Total	0.0523	0.4460	0.4336	2.1900e-003	0.1414	1.5900e-003	0.1430	0.0382	1.4900e-003	0.0397	0.0000	204.7361	204.7361	9.1400e-003	0.0000	204.9645

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8600e-003	0.0719	0.0812	1.3000e-004		3.5000e-003	3.5000e-003		3.2900e-003	3.2900e-003	0.0000	11.5902	11.5902	2.7600e-003	0.0000	11.6592
Total	7.8600e-003	0.0719	0.0812	1.3000e-004		3.5000e-003	3.5000e-003		3.2900e-003	3.2900e-003	0.0000	11.5902	11.5902	2.7600e-003	0.0000	11.6592

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-004	0.0121	3.5500e-003	4.0000e-005	1.1000e-003	1.0000e-005	1.1200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	4.1073	4.1073	2.3000e-004	0.0000	4.1130
Worker	1.4600e-003	9.9000e-004	0.0117	4.0000e-005	4.3300e-003	3.0000e-005	4.3600e-003	1.1500e-003	3.0000e-005	1.1800e-003	0.0000	3.5038	3.5038	8.0000e-005	0.0000	3.5058
Total	1.8100e-003	0.0131	0.0153	8.0000e-005	5.4300e-003	4.0000e-005	5.4800e-003	1.4700e-003	4.0000e-005	1.5100e-003	0.0000	7.6111	7.6111	3.1000e-004	0.0000	7.6188

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8600e-003	0.0719	0.0812	1.3000e-004		3.5000e-003	3.5000e-003		3.2900e-003	3.2900e-003	0.0000	11.5902	11.5902	2.7600e-003	0.0000	11.6592
Total	7.8600e-003	0.0719	0.0812	1.3000e-004		3.5000e-003	3.5000e-003		3.2900e-003	3.2900e-003	0.0000	11.5902	11.5902	2.7600e-003	0.0000	11.6592

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5000e-004	0.0121	3.5500e-003	4.0000e-005	1.1000e-003	1.0000e-005	1.1200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	4.1073	4.1073	2.3000e-004	0.0000	4.1130
Worker	1.4600e-003	9.9000e-004	0.0117	4.0000e-005	4.3300e-003	3.0000e-005	4.3600e-003	1.1500e-003	3.0000e-005	1.1800e-003	0.0000	3.5038	3.5038	8.0000e-005	0.0000	3.5058
Total	1.8100e-003	0.0131	0.0153	8.0000e-005	5.4300e-003	4.0000e-005	5.4800e-003	1.4700e-003	4.0000e-005	1.5100e-003	0.0000	7.6111	7.6111	3.1000e-004	0.0000	7.6188

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0186	0.1835	0.2625	4.1000e-004		9.1800e-003	9.1800e-003		8.4500e-003	8.4500e-003	0.0000	36.0484	36.0484	0.0117	0.0000	36.3398
Paving	3.2800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0219	0.1835	0.2625	4.1000e-004		9.1800e-003	9.1800e-003		8.4500e-003	8.4500e-003	0.0000	36.0484	36.0484	0.0117	0.0000	36.3398

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3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	6.8000e-004	8.0100e-003	3.0000e-005	2.9600e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.3950	2.3950	6.0000e-005	0.0000	2.3964
Total	9.9000e-004	6.8000e-004	8.0100e-003	3.0000e-005	2.9600e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.3950	2.3950	6.0000e-005	0.0000	2.3964

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0186	0.1835	0.2625	4.1000e-004		9.1800e-003	9.1800e-003		8.4500e-003	8.4500e-003	0.0000	36.0483	36.0483	0.0117	0.0000	36.3398
Paving	3.2800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0219	0.1835	0.2625	4.1000e-004		9.1800e-003	9.1800e-003		8.4500e-003	8.4500e-003	0.0000	36.0483	36.0483	0.0117	0.0000	36.3398

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3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	6.8000e-004	8.0100e-003	3.0000e-005	2.9600e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.3950	2.3950	6.0000e-005	0.0000	2.3964
Total	9.9000e-004	6.8000e-004	8.0100e-003	3.0000e-005	2.9600e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.3950	2.3950	6.0000e-005	0.0000	2.3964

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5240					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4500e-003	0.0235	0.0326	5.0000e-005		1.2700e-003	1.2700e-003		1.2700e-003	1.2700e-003	0.0000	4.5959	4.5959	2.7000e-004	0.0000	4.6027
Total	0.5275	0.0235	0.0326	5.0000e-005		1.2700e-003	1.2700e-003		1.2700e-003	1.2700e-003	0.0000	4.5959	4.5959	2.7000e-004	0.0000	4.6027

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3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	7.2000e-004	8.5400e-003	3.0000e-005	3.1600e-003	2.0000e-005	3.1800e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.5547	2.5547	6.0000e-005	0.0000	2.5562
Total	1.0600e-003	7.2000e-004	8.5400e-003	3.0000e-005	3.1600e-003	2.0000e-005	3.1800e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.5547	2.5547	6.0000e-005	0.0000	2.5562

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5240					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4500e-003	0.0235	0.0326	5.0000e-005		1.2700e-003	1.2700e-003		1.2700e-003	1.2700e-003	0.0000	4.5959	4.5959	2.7000e-004	0.0000	4.6027
Total	0.5275	0.0235	0.0326	5.0000e-005		1.2700e-003	1.2700e-003		1.2700e-003	1.2700e-003	0.0000	4.5959	4.5959	2.7000e-004	0.0000	4.6027

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3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	7.2000e-004	8.5400e-003	3.0000e-005	3.1600e-003	2.0000e-005	3.1800e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.5547	2.5547	6.0000e-005	0.0000	2.5562
Total	1.0600e-003	7.2000e-004	8.5400e-003	3.0000e-005	3.1600e-003	2.0000e-005	3.1800e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.5547	2.5547	6.0000e-005	0.0000	2.5562

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Parking Lot	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	466.7713	466.7713	0.0193	3.9900e-003	468.4412
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	501.6302	501.6302	0.0207	4.2800e-003	503.4248
NaturalGas Mitigated	4.9100e-003	0.0446	0.0375	2.7000e-004		3.3900e-003	3.3900e-003		3.3900e-003	3.3900e-003	0.0000	48.5716	48.5716	9.3000e-004	8.9000e-004	48.8603
NaturalGas Unmitigated	5.4200e-003	0.0493	0.0414	3.0000e-004		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	53.6100	53.6100	1.0300e-003	9.8000e-004	53.9286

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	1.00461e+006	5.4200e-003	0.0493	0.0414	3.0000e-004		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	53.6100	53.6100	1.0300e-003	9.8000e-004	53.9286
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		5.4200e-003	0.0493	0.0414	3.0000e-004		3.7400e-003	3.7400e-003		3.7400e-003	3.7400e-003	0.0000	53.6100	53.6100	1.0300e-003	9.8000e-004	53.9286

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	910198	4.9100e-003	0.0446	0.0375	2.7000e-004		3.3900e-003	3.3900e-003		3.3900e-003	3.3900e-003	0.0000	48.5716	48.5716	9.3000e-004	8.9000e-004	48.8603
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.9100e-003	0.0446	0.0375	2.7000e-004		3.3900e-003	3.3900e-003		3.3900e-003	3.3900e-003	0.0000	48.5716	48.5716	9.3000e-004	8.9000e-004	48.8603

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.5377e+006	489.9432	0.0202	4.1800e-003	491.6960
Parking Lot	36680	11.6870	4.8000e-004	1.0000e-004	11.7288
Total		501.6302	0.0207	4.2800e-003	503.4248

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	1.43196e+006	456.2530	0.0188	3.9000e-003	457.8853
Parking Lot	33012	10.5183	4.3000e-004	9.0000e-005	10.5560
Total		466.7713	0.0193	3.9900e-003	468.4412

6.0 Area Detail

6.1 Mitigation Measures Area

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4568	4.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.2300e-003	9.2300e-003	2.0000e-005	0.0000	9.8400e-003
Unmitigated	0.4568	4.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.2300e-003	9.2300e-003	2.0000e-005	0.0000	9.8400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0524					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4040					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.4000e-004	4.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.2300e-003	9.2300e-003	2.0000e-005	0.0000	9.8400e-003
Total	0.4568	4.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.2300e-003	9.2300e-003	2.0000e-005	0.0000	9.8400e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0524					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4040					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.4000e-004	4.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.2300e-003	9.2300e-003	2.0000e-005	0.0000	9.8400e-003
Total	0.4568	4.0000e-005	4.7500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.2300e-003	9.2300e-003	2.0000e-005	0.0000	9.8400e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	116.0153	0.5418	0.0136	133.6229
Unmitigated	129.6251	0.6416	0.0161	150.4592

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	19.5347 / 11.9729	129.6251	0.6416	0.0161	150.4592
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		129.6251	0.6416	0.0161	150.4592

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	16.4873 / 11.9729	116.0153	0.5418	0.0136	133.6229
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		116.0153	0.5418	0.0136	133.6229

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.5623	0.9197	0.0000	38.5549
Unmitigated	20.7497	1.2263	0.0000	51.4066

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	102.22	20.7497	1.2263	0.0000	51.4066
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		20.7497	1.2263	0.0000	51.4066

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	76.665	15.5623	0.9197	0.0000	38.5549
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		15.5623	0.9197	0.0000	38.5549

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Annual

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

**OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program
South Coast AQMD Air District, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	109.91	1000sqft	2.50	109,914.00	0
Parking Lot	262.00	Space	2.50	104,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

Project Characteristics - Construction is anticipated to begin in January 2021 and be completed in May 2023.

Land Use - Project site is approximately 5.0 acres

Construction Phase - Construction is anticipated to begin in January 2021 and be completed in May 2023.

Demolition - The project includes demolition of five industrial warehouse buildings on site.

Vehicle Trips - Project would not increase vehicle trips

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403

Mobile Land Use Mitigation -

Energy Mitigation - The building will be designed to achieve United States Green Building Council Leadership in Energy and Environmental Design (LEED) Platinum Certification.

Water Mitigation -

Waste Mitigation - The CalRecycle Waste Diversion and Recycling Mandate will reduce solid waste production by 25 percent.

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	5
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	8.00	20.00
tblConstructionPhase	NumDays	230.00	460.00
tblConstructionPhase	NumDays	18.00	36.00
tblConstructionPhase	NumDays	18.00	36.00
tblConstructionPhase	PhaseEndDate	1/29/2021	2/26/2021
tblConstructionPhase	PhaseEndDate	2/5/2021	3/12/2021
tblConstructionPhase	PhaseEndDate	2/17/2021	4/9/2021
tblConstructionPhase	PhaseEndDate	1/5/2022	1/13/2023
tblConstructionPhase	PhaseEndDate	2/24/2022	5/1/2023
tblConstructionPhase	PhaseEndDate	1/31/2022	3/6/2023
tblConstructionPhase	PhaseStartDate	1/30/2021	3/1/2021
tblConstructionPhase	PhaseStartDate	2/6/2021	3/15/2021
tblConstructionPhase	PhaseStartDate	2/18/2021	4/12/2021
tblConstructionPhase	PhaseStartDate	2/1/2022	3/13/2023
tblConstructionPhase	PhaseStartDate	1/6/2022	1/16/2023
tblGrading	AcresOfGrading	10.00	4.00
tblLandUse	LandUseSquareFeet	109,910.00	109,914.00
tblLandUse	LotAcreage	2.52	2.50
tblLandUse	LotAcreage	2.36	2.50
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	11.03	0.00

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

2.0 Emissions Summary

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9642	40.5464	22.8223	0.0504	18.2675	2.0459	20.3134	9.9840	1.8823	11.8663	0.0000	4,986.2353	4,986.2353	1.1974	0.0000	5,014.5077
2022	2.1104	18.9797	19.8640	0.0442	1.1070	0.8212	1.9282	0.2987	0.7725	1.0712	0.0000	4,343.0424	4,343.0424	0.6887	0.0000	4,360.2608
2023	29.3637	16.9572	19.4599	0.0437	1.1070	0.7086	1.8156	0.2987	0.6667	0.9653	0.0000	4,283.8118	4,283.8118	0.7176	0.0000	4,300.6978
Maximum	29.3637	40.5464	22.8223	0.0504	18.2675	2.0459	20.3134	9.9840	1.8823	11.8663	0.0000	4,986.2353	4,986.2353	1.1974	0.0000	5,014.5077

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9642	40.5464	22.8223	0.0504	7.2470	2.0459	9.2930	3.9263	1.8823	5.8086	0.0000	4,986.2353	4,986.2353	1.1974	0.0000	5,014.5077
2022	2.1104	18.9797	19.8640	0.0442	1.1070	0.8212	1.9282	0.2987	0.7725	1.0712	0.0000	4,343.0424	4,343.0424	0.6887	0.0000	4,360.2608
2023	29.3637	16.9572	19.4599	0.0437	1.1070	0.7086	1.8156	0.2987	0.6667	0.9653	0.0000	4,283.8118	4,283.8118	0.7176	0.0000	4,300.6978
Maximum	29.3637	40.5464	22.8223	0.0504	7.2470	2.0459	9.2930	3.9263	1.8823	5.8086	0.0000	4,986.2353	4,986.2353	1.1974	0.0000	5,014.5077

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	53.81	0.00	45.81	57.25	0.00	43.57	0.00	0.00	0.00	0.00	0.00	0.00

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5041	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867
Energy	0.0297	0.2698	0.2267	1.6200e-003		0.0205	0.0205		0.0205	0.0205		323.8079	323.8079	6.2100e-003	5.9400e-003	325.7321
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.5338	0.2702	0.2646	1.6200e-003	0.0000	0.0207	0.0207	0.0000	0.0207	0.0207		323.8893	323.8893	6.4200e-003	5.9400e-003	325.8188

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5041	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867
Energy	0.0269	0.2445	0.2054	1.4700e-003		0.0186	0.0186		0.0186	0.0186		293.3756	293.3756	5.6200e-003	5.3800e-003	295.1190
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.5310	0.2448	0.2433	1.4700e-003	0.0000	0.0187	0.0187	0.0000	0.0187	0.0187		293.4570	293.4570	5.8300e-003	5.3800e-003	295.2057

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.11	9.39	8.05	9.26	0.00	9.35	9.35	0.00	9.35	9.35	0.00	9.40	9.40	9.19	9.43	9.40

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/4/2021	2/26/2021	5	40	
2	Site Preparation	Site Preparation	3/1/2021	3/12/2021	5	10	
3	Grading	Grading	3/15/2021	4/9/2021	5	20	
4	Building Construction	Building Construction	4/12/2021	1/13/2023	5	460	
5	Paving	Paving	1/16/2023	3/6/2023	5	36	
6	Architectural Coating	Architectural Coating	3/13/2023	5/1/2023	5	36	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 164,871; Non-Residential Outdoor: 54,957; Striped Parking Area: 6,288 (Architectural Coating – sqft)

OffRoad Equipment

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	517.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	79.00	35.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7992	0.0000	2.7992	0.4238	0.0000	0.4238			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	2.7992	1.5513	4.3506	0.4238	1.4411	1.8649		3,747.9449	3,747.9449	1.0549		3,774.3174

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0938	3.2699	0.6922	9.9100e-003	0.2259	0.0101	0.2360	0.0619	9.7000e-003	0.0716		1,072.1799	1,072.1799	0.0715		1,073.9681
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222
Total	0.1571	3.3110	1.2573	0.0116	0.3935	0.0114	0.4049	0.1064	0.0108	0.1172		1,238.2904	1,238.2904	0.0760		1,240.1903

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0917	0.0000	1.0917	0.1653	0.0000	0.1653			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	1.0917	1.5513	2.6430	0.1653	1.4411	1.6064	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0938	3.2699	0.6922	9.9100e-003	0.2259	0.0101	0.2360	0.0619	9.7000e-003	0.0716		1,072.1799	1,072.1799	0.0715		1,073.9681
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222
Total	0.1571	3.3110	1.2573	0.0116	0.3935	0.0114	0.4049	0.1064	0.0108	0.1172		1,238.2904	1,238.2904	0.0760		1,240.1903

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0760	0.0493	0.6781	2.0000e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		199.3326	199.3326	5.3600e-003		199.4666
Total	0.0760	0.0493	0.6781	2.0000e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		199.3326	199.3326	5.3600e-003		199.4666

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	7.0458	2.0445	9.0903	3.8730	1.8809	5.7539	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0760	0.0493	0.6781	2.0000e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		199.3326	199.3326	5.3600e-003		199.4666
Total	0.0760	0.0493	0.6781	2.0000e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		199.3326	199.3326	5.3600e-003		199.4666

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2342	0.0000	6.2342	3.3331	0.0000	3.3331			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895,1495
Total	2.2903	24.7367	15.8575	0.0296	6.2342	1.1599	7.3941	3.3331	1.0671	4.4003		2,871.9285	2,871.9285	0.9288		2,895,1495

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222
Total	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4313	0.0000	2.4313	1.2999	0.0000	1.2999			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	2.2903	24.7367	15.8575	0.0296	2.4313	1.1599	3.5912	1.2999	1.0671	2.3670	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222
Total	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0974	3.3381	0.7921	8.9300e-003	0.2240	6.7200e-003	0.2307	0.0645	6.4300e-003	0.0709		953.5346	953.5346	0.0577		954.9766
Worker	0.3335	0.2163	2.9761	8.7800e-003	0.8830	6.5000e-003	0.8895	0.2342	5.9900e-003	0.2402		874.8486	874.8486	0.0235		875.4368
Total	0.4309	3.5544	3.7683	0.0177	1.1070	0.0132	1.1203	0.2987	0.0124	0.3111		1,828.3833	1,828.3833	0.0812		1,830.4134

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0974	3.3381	0.7921	8.9300e-003	0.2240	6.7200e-003	0.2307	0.0645	6.4300e-003	0.0709		953.5346	953.5346	0.0577		954.9766
Worker	0.3335	0.2163	2.9761	8.7800e-003	0.8830	6.5000e-003	0.8895	0.2342	5.9900e-003	0.2402		874.8486	874.8486	0.0235		875.4368
Total	0.4309	3.5544	3.7683	0.0177	1.1070	0.0132	1.1203	0.2987	0.0124	0.3111		1,828.3833	1,828.3833	0.0812		1,830.4134

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0913	3.1687	0.7486	8.8500e-003	0.2240	5.8200e-003	0.2298	0.0645	5.5700e-003	0.0701		945.2069	945.2069	0.0555		946.5951
Worker	0.3128	0.1954	2.7520	8.4600e-003	0.8830	6.3100e-003	0.8894	0.2342	5.8100e-003	0.2400		843.5019	843.5019	0.0213		844.0335
Total	0.4041	3.3640	3.5006	0.0173	1.1070	0.0121	1.1192	0.2987	0.0114	0.3101		1,788.7088	1,788.7088	0.0768		1,790.6286

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0913	3.1687	0.7486	8.8500e-003	0.2240	5.8200e-003	0.2298	0.0645	5.5700e-003	0.0701		945.2069	945.2069	0.0555		946.5951
Worker	0.3128	0.1954	2.7520	8.4600e-003	0.8830	6.3100e-003	0.8894	0.2342	5.8100e-003	0.2400		843.5019	843.5019	0.0213		844.0335
Total	0.4041	3.3640	3.5006	0.0173	1.1070	0.0121	1.1192	0.2987	0.0114	0.3101		1,788.7088	1,788.7088	0.0768		1,790.6286

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0681	2.3955	0.6745	8.5700e-003	0.2240	2.6900e-003	0.2267	0.0645	2.5700e-003	0.0671		916.5370	916.5370	0.0484		917.7475
Worker	0.2941	0.1768	2.5414	8.1500e-003	0.8830	6.1500e-003	0.8892	0.2342	5.6600e-003	0.2399		812.0648	812.0648	0.0192		812.5442
Total	0.3623	2.5723	3.2159	0.0167	1.1070	8.8400e-003	1.1159	0.2987	8.2300e-003	0.3069		1,728.6018	1,728.6018	0.0676		1,730.2917

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0681	2.3955	0.6745	8.5700e-003	0.2240	2.6900e-003	0.2267	0.0645	2.5700e-003	0.0671		916.5370	916.5370	0.0484		917.7475
Worker	0.2941	0.1768	2.5414	8.1500e-003	0.8830	6.1500e-003	0.8892	0.2342	5.6600e-003	0.2399		812.0648	812.0648	0.0192		812.5442
Total	0.3623	2.5723	3.2159	0.0167	1.1070	8.8400e-003	1.1159	0.2987	8.2300e-003	0.3069		1,728.6018	1,728.6018	0.0676		1,730.2917

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.1819					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2147	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0558	0.0336	0.4825	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		154.1895	154.1895	3.6400e-003		154.2806
Total	0.0558	0.0336	0.4825	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		154.1895	154.1895	3.6400e-003		154.2806

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.1819					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2147	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0558	0.0336	0.4825	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		154.1895	154.1895	3.6400e-003		154.2806
Total	0.0558	0.0336	0.4825	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		154.1895	154.1895	3.6400e-003		154.2806

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.1124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	29.3041	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0358	0.5147	1.6500e-003	0.1788	1.2500e-003	0.1801	0.0474	1.1500e-003	0.0486		164.4688	164.4688	3.8800e-003		164.5659
Total	0.0596	0.0358	0.5147	1.6500e-003	0.1788	1.2500e-003	0.1801	0.0474	1.1500e-003	0.0486		164.4688	164.4688	3.8800e-003		164.5659

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.1124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	29.3041	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0358	0.5147	1.6500e-003	0.1788	1.2500e-003	0.1801	0.0474	1.1500e-003	0.0486		164.4688	164.4688	3.8800e-003		164.5659
Total	0.0596	0.0358	0.5147	1.6500e-003	0.1788	1.2500e-003	0.1801	0.0474	1.1500e-003	0.0486		164.4688	164.4688	3.8800e-003		164.5659

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Parking Lot	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0269	0.2445	0.2054	1.4700e-003		0.0186	0.0186		0.0186	0.0186		293.3756	293.3756	5.6200e-003	5.3800e-003	295.1190
NaturalGas Unmitigated	0.0297	0.2698	0.2267	1.6200e-003		0.0205	0.0205		0.0205	0.0205		323.8079	323.8079	6.2100e-003	5.9400e-003	325.7321

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	2752.37	0.0297	0.2698	0.2267	1.6200e-003		0.0205	0.0205		0.0205	0.0205		323.8079	323.8079	6.2100e-003	5.9400e-003	325.7321
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0297	0.2698	0.2267	1.6200e-003		0.0205	0.0205		0.0205	0.0205		323.8079	323.8079	6.2100e-003	5.9400e-003	325.7321

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	2.49369	0.0269	0.2445	0.2054	1.4700e-003		0.0186	0.0186		0.0186	0.0186		293.3756	293.3756	5.6200e-003	5.3800e-003	295.1190
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0269	0.2445	0.2054	1.4700e-003		0.0186	0.0186		0.0186	0.0186		293.3756	293.3756	5.6200e-003	5.3800e-003	295.1190

6.0 Area Detail

6.1 Mitigation Measures Area

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5041	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867
Unmitigated	2.5041	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2871					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.2134					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5200e-003	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867
Total	2.5041	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2871					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.2134					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5200e-003	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867
Total	2.5041	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Summer

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	109.91	1000sqft	2.50	109,914.00	0
Parking Lot	262.00	Space	2.50	104,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

Project Characteristics - Construction is anticipated to begin in January 2021 and be completed in May 2023.

Land Use - Project site is approximately 5.0 acres

Construction Phase - Construction is anticipated to begin in January 2021 and be completed in May 2023.

Demolition - The project includes demolition of five industrial warehouse buildings on site.

Vehicle Trips - Project would not increase vehicle trips

Energy Use -

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403

Mobile Land Use Mitigation -

Energy Mitigation - The building will be designed to achieve United States Green Building Council Leadership in Energy and Environmental Design (LEED) Platinum Certification.

Water Mitigation -

Waste Mitigation - The CalRecycle Waste Diversion and Recycling Mandate will reduce solid waste production by 25 percent.

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	5
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	8.00	20.00
tblConstructionPhase	NumDays	230.00	460.00
tblConstructionPhase	NumDays	18.00	36.00
tblConstructionPhase	NumDays	18.00	36.00
tblConstructionPhase	PhaseEndDate	1/29/2021	2/26/2021
tblConstructionPhase	PhaseEndDate	2/5/2021	3/12/2021
tblConstructionPhase	PhaseEndDate	2/17/2021	4/9/2021
tblConstructionPhase	PhaseEndDate	1/5/2022	1/13/2023
tblConstructionPhase	PhaseEndDate	2/24/2022	5/1/2023
tblConstructionPhase	PhaseEndDate	1/31/2022	3/6/2023
tblConstructionPhase	PhaseStartDate	1/30/2021	3/1/2021
tblConstructionPhase	PhaseStartDate	2/6/2021	3/15/2021
tblConstructionPhase	PhaseStartDate	2/18/2021	4/12/2021
tblConstructionPhase	PhaseStartDate	2/1/2022	3/13/2023
tblConstructionPhase	PhaseStartDate	1/6/2022	1/16/2023
tblGrading	AcresOfGrading	10.00	4.00
tblLandUse	LandUseSquareFeet	109,910.00	109,914.00
tblLandUse	LotAcreage	2.52	2.50
tblLandUse	LotAcreage	2.36	2.50
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	11.03	0.00

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

2.0 Emissions Summary

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9712	40.5510	22.8159	0.0501	18.2675	2.0459	20.3134	9.9840	1.8823	11.8663	0.0000	4,955.6426	4,955.6426	1.1970	0.0000	4,983.9829
2022	2.1451	18.9854	19.6702	0.0434	1.1070	0.8213	1.9284	0.2987	0.7727	1.0714	0.0000	4,260.8572	4,260.8572	0.6914	0.0000	4,278.1408
2023	29.3695	16.9584	19.2604	0.0429	1.1070	0.7087	1.8157	0.2987	0.6668	0.9655	0.0000	4,204.8999	4,204.8999	0.7174	0.0000	4,221.8320
Maximum	29.3695	40.5510	22.8159	0.0501	18.2675	2.0459	20.3134	9.9840	1.8823	11.8663	0.0000	4,955.6426	4,955.6426	1.1970	0.0000	4,983.9829

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9712	40.5510	22.8159	0.0501	7.2470	2.0459	9.2930	3.9263	1.8823	5.8086	0.0000	4,955.6426	4,955.6426	1.1970	0.0000	4,983.9829
2022	2.1451	18.9854	19.6702	0.0434	1.1070	0.8213	1.9284	0.2987	0.7727	1.0714	0.0000	4,260.8572	4,260.8572	0.6914	0.0000	4,278.1408
2023	29.3695	16.9584	19.2604	0.0429	1.1070	0.7087	1.8157	0.2987	0.6668	0.9655	0.0000	4,204.8999	4,204.8999	0.7174	0.0000	4,221.8320
Maximum	29.3695	40.5510	22.8159	0.0501	7.2470	2.0459	9.2930	3.9263	1.8823	5.8086	0.0000	4,955.6426	4,955.6426	1.1970	0.0000	4,983.9829

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	53.81	0.00	45.81	57.25	0.00	43.57	0.00	0.00	0.00	0.00	0.00	0.00

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5041	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867
Energy	0.0297	0.2698	0.2267	1.6200e-003		0.0205	0.0205		0.0205	0.0205		323.8079	323.8079	6.2100e-003	5.9400e-003	325.7321
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.5338	0.2702	0.2646	1.6200e-003	0.0000	0.0207	0.0207	0.0000	0.0207	0.0207		323.8893	323.8893	6.4200e-003	5.9400e-003	325.8188

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5041	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867
Energy	0.0269	0.2445	0.2054	1.4700e-003		0.0186	0.0186		0.0186	0.0186		293.3756	293.3756	5.6200e-003	5.3800e-003	295.1190
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.5310	0.2448	0.2433	1.4700e-003	0.0000	0.0187	0.0187	0.0000	0.0187	0.0187		293.4570	293.4570	5.8300e-003	5.3800e-003	295.2057

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.11	9.39	8.05	9.26	0.00	9.35	9.35	0.00	9.35	9.35	0.00	9.40	9.40	9.19	9.43	9.40

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/4/2021	2/26/2021	5	40	
2	Site Preparation	Site Preparation	3/1/2021	3/12/2021	5	10	
3	Grading	Grading	3/15/2021	4/9/2021	5	20	
4	Building Construction	Building Construction	4/12/2021	1/13/2023	5	460	
5	Paving	Paving	1/16/2023	3/6/2023	5	36	
6	Architectural Coating	Architectural Coating	3/13/2023	5/1/2023	5	36	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 164,871; Non-Residential Outdoor: 54,957; Striped Parking Area: 6,288 (Architectural Coating – sqft)

OffRoad Equipment

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	517.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	79.00	35.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7992	0.0000	2.7992	0.4238	0.0000	0.4238			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	2.7992	1.5513	4.3506	0.4238	1.4411	1.8649		3,747.9449	3,747.9449	1.0549		3,774.3174

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0965	3.3088	0.7431	9.7200e-003	0.2259	0.0103	0.2361	0.0619	9.8400e-003	0.0717		1,052.3475	1,052.3475	0.0746		1,054.2112
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0692	0.0450	0.5078	1.5600e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		155.3502	155.3502	4.1600e-003		155.4543
Total	0.1656	3.3537	1.2509	0.0113	0.3935	0.0115	0.4050	0.1064	0.0110	0.1173		1,207.6976	1,207.6976	0.0787		1,209.6655

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0917	0.0000	1.0917	0.1653	0.0000	0.1653			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	1.0917	1.5513	2.6430	0.1653	1.4411	1.6064	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0965	3.3088	0.7431	9.7200e-003	0.2259	0.0103	0.2361	0.0619	9.8400e-003	0.0717		1,052.3475	1,052.3475	0.0746		1,054.2112
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0692	0.0450	0.5078	1.5600e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		155.3502	155.3502	4.1600e-003		155.4543
Total	0.1656	3.3537	1.2509	0.0113	0.3935	0.0115	0.4050	0.1064	0.0110	0.1173		1,207.6976	1,207.6976	0.0787		1,209.6655

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0830	0.0539	0.6094	1.8700e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		186.4202	186.4202	5.0000e-003		186.5451
Total	0.0830	0.0539	0.6094	1.8700e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		186.4202	186.4202	5.0000e-003		186.5451

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	7.0458	2.0445	9.0903	3.8730	1.8809	5.7539	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0830	0.0539	0.6094	1.8700e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		186.4202	186.4202	5.0000e-003		186.5451
Total	0.0830	0.0539	0.6094	1.8700e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		186.4202	186.4202	5.0000e-003		186.5451

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2342	0.0000	6.2342	3.3331	0.0000	3.3331			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	2.2903	24.7367	15.8575	0.0296	6.2342	1.1599	7.3941	3.3331	1.0671	4.4003		2,871.9285	2,871.9285	0.9288		2,895.1495

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0692	0.0450	0.5078	1.5600e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		155.3502	155.3502	4.1600e-003		155.4543
Total	0.0692	0.0450	0.5078	1.5600e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		155.3502	155.3502	4.1600e-003		155.4543

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4313	0.0000	2.4313	1.2999	0.0000	1.2999			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	2.2903	24.7367	15.8575	0.0296	2.4313	1.1599	3.5912	1.2999	1.0671	2.3670	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0692	0.0450	0.5078	1.5600e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		155.3502	155.3502	4.1600e-003		155.4543
Total	0.0692	0.0450	0.5078	1.5600e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		155.3502	155.3502	4.1600e-003		155.4543

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1025	3.3276	0.8864	8.6800e-003	0.2240	6.9400e-003	0.2309	0.0645	6.6300e-003	0.0711		925.9257	925.9257	0.0620		927.4745
Worker	0.3643	0.2368	2.6745	8.2100e-003	0.8830	6.5000e-003	0.8895	0.2342	5.9900e-003	0.2402		818.1776	818.1776	0.0219		818.7258
Total	0.4669	3.5643	3.5609	0.0169	1.1070	0.0134	1.1205	0.2987	0.0126	0.3113		1,744.1033	1,744.1033	0.0839		1,746.2003

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1025	3.3276	0.8864	8.6800e-003	0.2240	6.9400e-003	0.2309	0.0645	6.6300e-003	0.0711		925.9257	925.9257	0.0620		927.4745
Worker	0.3643	0.2368	2.6745	8.2100e-003	0.8830	6.5000e-003	0.8895	0.2342	5.9900e-003	0.2402		818.1776	818.1776	0.0219		818.7258
Total	0.4669	3.5643	3.5609	0.0169	1.1070	0.0134	1.1205	0.2987	0.0126	0.3113		1,744.1033	1,744.1033	0.0839		1,746.2003

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0962	3.1560	0.8382	8.5900e-003	0.2240	6.0200e-003	0.2300	0.0645	5.7500e-003	0.0702		917.6798	917.6798	0.0596		919.1697
Worker	0.3427	0.2138	2.4685	7.9100e-003	0.8830	6.3100e-003	0.8894	0.2342	5.8100e-003	0.2400		788.8439	788.8439	0.0198		789.3389
Total	0.4388	3.3698	3.3068	0.0165	1.1070	0.0123	1.1194	0.2987	0.0116	0.3102		1,706.5236	1,706.5236	0.0794		1,708.5086

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0962	3.1560	0.8382	8.5900e-003	0.2240	6.0200e-003	0.2300	0.0645	5.7500e-003	0.0702		917.6798	917.6798	0.0596		919.1697
Worker	0.3427	0.2138	2.4685	7.9100e-003	0.8830	6.3100e-003	0.8894	0.2342	5.8100e-003	0.2400		788.8439	788.8439	0.0198		789.3389
Total	0.4388	3.3698	3.3068	0.0165	1.1070	0.0123	1.1194	0.2987	0.0116	0.3102		1,706.5236	1,706.5236	0.0794		1,708.5086

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0718	2.3802	0.7412	8.3200e-003	0.2240	2.8200e-003	0.2268	0.0645	2.7000e-003	0.0672		890.2658	890.2658	0.0516		891.5558
Worker	0.3232	0.1934	2.2752	7.6200e-003	0.8830	6.1500e-003	0.8892	0.2342	5.6600e-003	0.2399		759.4242	759.4242	0.0178		759.8702
Total	0.3949	2.5735	3.0164	0.0159	1.1070	8.9700e-003	1.1160	0.2987	8.3600e-003	0.3070		1,649.6900	1,649.6900	0.0694		1,651.4260

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0718	2.3802	0.7412	8.3200e-003	0.2240	2.8200e-003	0.2268	0.0645	2.7000e-003	0.0672		890.2658	890.2658	0.0516		891.5558
Worker	0.3232	0.1934	2.2752	7.6200e-003	0.8830	6.1500e-003	0.8892	0.2342	5.6600e-003	0.2399		759.4242	759.4242	0.0178		759.8702
Total	0.3949	2.5735	3.0164	0.0159	1.1070	8.9700e-003	1.1160	0.2987	8.3600e-003	0.3070		1,649.6900	1,649.6900	0.0694		1,651.4260

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.1819					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2147	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0367	0.4320	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		144.1945	144.1945	3.3900e-003		144.2792
Total	0.0614	0.0367	0.4320	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		144.1945	144.1945	3.3900e-003		144.2792

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.1819					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2147	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0367	0.4320	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		144.1945	144.1945	3.3900e-003		144.2792
Total	0.0614	0.0367	0.4320	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0455		144.1945	144.1945	3.3900e-003		144.2792

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.1124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	29.3041	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0655	0.0392	0.4608	1.5400e-003	0.1788	1.2500e-003	0.1801	0.0474	1.1500e-003	0.0486		153.8074	153.8074	3.6100e-003		153.8978
Total	0.0655	0.0392	0.4608	1.5400e-003	0.1788	1.2500e-003	0.1801	0.0474	1.1500e-003	0.0486		153.8074	153.8074	3.6100e-003		153.8978

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.1124					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	29.3041	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0655	0.0392	0.4608	1.5400e-003	0.1788	1.2500e-003	0.1801	0.0474	1.1500e-003	0.0486		153.8074	153.8074	3.6100e-003		153.8978
Total	0.0655	0.0392	0.4608	1.5400e-003	0.1788	1.2500e-003	0.1801	0.0474	1.1500e-003	0.0486		153.8074	153.8074	3.6100e-003		153.8978

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868
Parking Lot	0.550151	0.042593	0.202457	0.116946	0.015037	0.005825	0.021699	0.034933	0.002123	0.001780	0.004876	0.000710	0.000868

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0269	0.2445	0.2054	1.4700e-003		0.0186	0.0186		0.0186	0.0186		293.3756	293.3756	5.6200e-003	5.3800e-003	295.1190
NaturalGas Unmitigated	0.0297	0.2698	0.2267	1.6200e-003		0.0205	0.0205		0.0205	0.0205		323.8079	323.8079	6.2100e-003	5.9400e-003	325.7321

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	2752.37	0.0297	0.2698	0.2267	1.6200e-003		0.0205	0.0205		0.0205	0.0205		323.8079	323.8079	6.2100e-003	5.9400e-003	325.7321
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0297	0.2698	0.2267	1.6200e-003		0.0205	0.0205		0.0205	0.0205		323.8079	323.8079	6.2100e-003	5.9400e-003	325.7321

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	2.49369	0.0269	0.2445	0.2054	1.4700e-003		0.0186	0.0186		0.0186	0.0186		293.3756	293.3756	5.6200e-003	5.3800e-003	295.1190
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0269	0.2445	0.2054	1.4700e-003		0.0186	0.0186		0.0186	0.0186		293.3756	293.3756	5.6200e-003	5.3800e-003	295.1190

6.0 Area Detail

6.1 Mitigation Measures Area

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5041	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867
Unmitigated	2.5041	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2871					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.2134					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5200e-003	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867
Total	2.5041	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2871					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.2134					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5200e-003	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867
Total	2.5041	3.5000e-004	0.0380	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0814	0.0814	2.1000e-004		0.0867

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet

8.0 Waste Detail

8.1 Mitigation Measures Waste

- Institute Recycling and Composting Services

9.0 Operational Offroad

OCSD Headquarters Complex, Site and Security, and Entrance Realignment Program - South Coast AQMD Air District, Winter

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation



APPENDIX B

SUMMARY OF MITIGATION MEASURES



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B.1 AESTHETICS

The Specific Plan EIR does not include mitigation related to aesthetics. No mitigation would be required for the proposed Project.

B.2 AGRICULTURE AND FORESTRY RESOURCES

The Specific Plan EIR does not include mitigation related to agricultural and forestry resources. No mitigation would be required for the proposed Project.

B.3 AIR QUALITY

Based on the analysis and information contained in the Initial Study/Addendum, Mitigation Measures MM AQ-5a, MM AQ-5b, and MM AQ-5d through MM AQ-5f included in the Specific Plan EIR would not be applicable to the proposed Project because the proposed Project would not include new sensitive receptors within 500 ft of the I-405 freeway, would not include any distribution center, rail yard, refinery, chrome plater, dry cleaning operation, or gas station uses, and would not impact any existing off-site sensitive receptors to TACs associated with the proposed Project.

Based on the analysis contained in the Initial Study/Addendum, Mitigation Measure MM AQ-5c, included in the Specific Plan EIR, would be applicable to the proposed Project. No additional mitigation measures related to air quality beyond those identified in the Specific Plan EIR are required.

MM AQ-5c **Placement of Air System Intake.** When considering placement and direction of air intakes, the direction of prevailing winds shall be considered and the most logical decision shall be made. Design of the proposed development shall face air systems intakes appropriately, so as to reduce highly concentrated air pollution intake, considering placement on the opposite side of the building from the pollutant source. Development and HVAC system design shall be reviewed and approved by the City Planning and Building Department prior to issuance of a building permit. Monitoring and maintenance of HVAC systems and air intakes shall be conducted by the Applicant on a semiannual basis to ensure efficiency of the systems for development permits involving land uses that include or potentially affect sensitive populations.

B.4 BIOLOGICAL RESOURCES

The Specific Plan EIR does not include mitigation related to biological resources. No mitigation would be required for the proposed Project.

B.5 CULTURAL RESOURCES

The Specific Plan EIR does not include mitigation related to cultural resources. No mitigation would be required for the proposed Project.



B.6 ENERGY CONSERVATION

The Specific Plan EIR does not include mitigation related to energy conservation. No mitigation would be required for the proposed Project.

B.7 GEOLOGY AND SOILS

The Specific Plan EIR does not include mitigation related to geology and soils. No mitigation would be required for the proposed Project.

B.8 GREENHOUSE GAS EMISSIONS

The Specific Plan EIR does not include mitigation related to GHG emissions. No mitigation would be required for the proposed Project.

B.9 HAZARDS AND HAZARDOUS MATERIALS

Based on the analysis contained in the Initial Study/Addendum, Mitigation Measure MM HAZ-1 included in the Specific Plan EIR, would be applicable to the proposed Project. No additional mitigation measures related to hazards and hazardous materials beyond those identified in the Specific Plan EIR are required.

- MM HAZ-1** **Phase I ESA.** Prior to demolition of a building or structure and/or excavation of subsurface improvements, project applicants of site specific development projects in the Project area shall prepare a Phase I ESA. Consistent with local, state and federal regulations, the Phase I ESA shall be subject to City review and address the following:
- **ACM, LBP, and PCBs.** Prior to the issuance of any demolition or excavation permit, the Applicant shall conduct a comprehensive survey of ACM, LBP, and PCBs. If such hazardous materials are found to be present, the Applicant shall follow all applicable local, state, and federal codes and regulations, as well as applicable best management practices, related to the treatment, handling, and disposal of ACM, LBP, and PCBs to ensure public safety.
 - **Potential On-Site Hazardous Materials or Conditions.** A visual survey and reconnaissance-level investigation of the existing site shall be conducted to determine if there are any structures or features within or near the buildings that are used to store, contain, or dispose of hazardous materials or waste. For any development within the Project area that has not been subject to a Phase I ESA or successful remediation efforts in the past, a Phase I ESA shall be performed to determine the likelihood of contaminants in areas beyond what has already been assessed in accordance with USEPA ASTM Practice E 1527-05 as may be amended. If the Phase I ESA finds that contaminated soil or other hazardous materials or waste are suspected to be present within the area, the Applicant shall follow all applicable local, state and federal codes and



regulations, as well as applicable best management practices, related to the treatment, handling, and disposal of each hazardous material or waste.

B.10 HYDROLOGY AND WATER QUALITY

The Specific Plan EIR does not include mitigation related to hydrology and water quality. No mitigation would be required for the proposed Project.

B.11 LAND USE AND PLANNING

Based on the analysis and information contained in the Initial Study/Addendum, Specific Plan EIR Mitigation Measures MM N-1, MM T-1, MM T-2a through b, and MM T-7a (refer to Noise and Transportation/Traffic, below) would be applicable to the proposed Project.

B.12 MINERAL RESOURCES

The Specific Plan EIR does not include mitigation related to mineral resources. No mitigation would be required for the proposed Project.

B.13 NOISE

Based on the analysis and information contained in the Initial Study/Addendum, Mitigation Measure MM N-1 included in the Specific Plan EIR would be applicable to the proposed Project.

MM N-1 Construction Noise Management Plan. A Construction Noise Management Plan shall be prepared by the Applicant and approved by the City prior to Grading Permit issuance. The Plan would address noise and vibration impacts and outline measures that would be used to reduce impacts. Measures would include but not be limited to:

- To the extent that they exceed the applicable construction noise limits, excavation, foundation-laying, and conditioning activities shall be restricted to between the hours of 7:00 a.m. and 8:00 p.m. Monday through Friday, and 9:00 a.m. and 8:00 p.m. Saturdays, in accordance with Section 6.28.070 of the Fountain Valley Municipal Code.
- The Applicant's construction contracts shall require implementation of the following construction best management practices (BMPs) by all construction contractors and subcontractors working in or around the Project area to reduce construction noise levels:
 - The Applicant and its contractors and subcontractors shall ensure that all construction equipment, fixed or mobile, is properly muffled according to manufacturer's specifications or as required by the City's Building and Safety Division, whichever is the more stringent.
 - The Applicant and its contractors and subcontractors shall place noise-generating construction equipment and locate construction staging areas



away from sensitive uses, where feasible, to the satisfaction of the Building and Safety Division.

- The Applicant and its contractors and subcontractors shall implement noise attenuation measures which may include, but are not limited to, noise barriers or noise blankets to the satisfaction of the City's Building and Safety Division.
- The Applicant's contracts with its construction contractors and subcontractors shall include the requirement that construction staging areas, construction worker parking, and the operation of earthmoving equipment within the Project area, are located as far away from vibration- and noise-sensitive sites as possible. Contract provisions incorporating the above requirements shall be included as part of the Project's construction documents, which shall be reviewed and approved by the City.
- The Applicant shall require by contract specifications that heavily loaded trucks used during construction shall be routed away from residential streets to the extent possible. Contract specifications shall be included in the proposed Project's construction documents, which shall be reviewed by the City prior to issuance of a grading permit.
- Property owners and occupants located within 500 feet of the boundary of a construction project occurring under the Specific Plan shall be sent a notice, at least 15 days prior to commencement of construction of each phase, regarding the construction schedule of the Project. A sign, legible at a distance of 50 feet, shall be posted at the construction site. All notices and signs shall be reviewed and approved by the City prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number where residents can inquire about the construction process and register complaints.

B.14 POPULATION AND HOUSING

The Specific Plan EIR does not include mitigation related to population and housing. No mitigation would be required for the proposed Project.

B.15 PUBLIC SERVICES

The Specific Plan EIR does not include mitigation related to public services. No mitigation would be required for the proposed Project.

B.16 RECREATION

The Specific Plan EIR does not include mitigation related to recreation. No mitigation would be required for the proposed Project.



B.17 TRANSPORTATION/TRAFFIC

Based on the analysis and information contained in the Initial Study/Addendum, Mitigation Measure MM T-1 would be applicable to the proposed Project. No additional mitigation measures related to transportation/traffic beyond those identified in the Specific Plan EIR are required.

MM T-1 Construction Impact Mitigation Plan. Future development occurring under the proposed Fountain Valley Crossings Specific Plan shall be required to prepare a Construction Impact Mitigation Plan for review and approval prior to issuance of a grading or building permit to address and manage traffic during construction and shall be designed to:

- Prevent traffic impacts on the surrounding roadway network;
- Minimize parking impacts both to public parking and access to private parking to the greatest extent practicable;
- Ensure safety for both those constructing the project and the surrounding community; and
- Prevent substantial truck traffic through residential neighborhoods.

The Construction Impact Mitigation Plan shall be subject to review and approval by the following City departments: Planning & Building, Public Works, and Police to ensure that the Construction Impact Mitigation Plan has been designed in accordance with this mitigation measure. Additionally, the plan shall be prepared and implemented in coordination with any affected agencies such as OCTA and Caltrans. The review of the plan shall occur prior to issuance of grading or building permits. It shall, at a minimum, include the following:

Ongoing Requirements throughout the Duration of Construction

- A detailed Construction Impact Mitigation Plan for work zones shall be maintained. At a minimum, this shall include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, bicycle lanes, and parking lanes. The Construction Impact Mitigation Plan shall include specific information regarding the project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions. Such plans shall be reviewed and approved by the Planning & Building and Public Works Departments prior to commencement of construction and implemented in accordance with this approval.
- Work within the public right-of-way, deliveries, haul trips, and construction employee trips shall be performed during off-peak vehicular traffic hours. No construction work would be permitted on Sundays and national holidays that City offices are closed. Construction work includes, but is not limited to dirt and



demolition material hauling and construction material delivery. Work within the public right-of-way outside of these hours shall only be allowed after the issuance of an after-hours construction permit. Exceptions may be made for time sensitive construction activities (e.g., pouring concrete).

- “Flagger” construction personnel shall be required at construction site entrances.
- The closure of major arterials shall be limited to non-peak vehicular traffic hours only.
- Streets and equipment shall be cleaned in accordance with established Public Works requirements.
- Trucks shall only travel on a City-approved truck routes. Limited queuing may occur on the construction site itself.
- Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be on-site, with a minimum amount of materials within a work area in the public right-of-way, subject to a current Use of Public Property Permit.
- Any requests for work before or after normal construction hours within the public right-of-way shall be subject to review and approval through the After Hours Permit process administered by the Building and Safety Division.
- Provision of off-street parking for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City.
- The Construction Impact Mitigation Plan shall ensure adequate emergency access is maintained throughout the duration of all construction activities. Consistent with the requirements and regulations of the MUTCD, adequate emergency access shall be ensured through measures such as coordination with local emergency services, training for flagmen for emergency vehicles traveling through the work zone, temporary lane separators that have sloping sides to facilitate crossover by emergency vehicles, and vehicle storage and staging areas for emergency vehicles.

Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction

- The traveling public shall be advised of impending construction activities which may substantially affect key roadways or other facilities (e.g., information signs, portable message signs, media listing/notification, Hotline number, and



implementation of an approved Construction Impact Mitigation Plan) in a manner appropriate to the scale and type of projects.

- A Use of Public Property Permit, Excavation Permit, Sewer Permit, or Oversize Load Permit, as well as any Caltrans permits required for any construction work requiring encroachment into public rights-of-way, detours, or any other work within the public right-of-way shall be obtained.
- Timely notification of construction schedules shall be provided to all affected agencies (e.g., Police Department, Fire Department, Public Works Department, and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 500 feet.
- Construction work shall be coordinated with affected agencies in advance of start of work. Approvals may take up to two weeks per each submittal.
- Planning & Building and Public Works Departments approval of any haul routes for earth, concrete, or construction materials and equipment hauling shall be obtained.

B.18 TRIBAL CULTURAL RESOURCES

Based on the analysis and information contained in the Initial Study/Addendum, Mitigation Measures MM TCR-1a, MM TCR-1b, and MM TCR-1c, included in the Specific Plan EIR, would be applicable to the proposed Project.

MM TCR-1a Pre-Construction Training. For individual discretionary development projects, pre-construction training for construction personnel shall be conducted prior to commencement of any grading or other development activities. A qualified archaeologist, meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (2008) and approved by the City, shall conduct tribal cultural resources identification and protocol training prior to site disturbance activities. Construction personnel shall be informed of the types of archaeological or tribal cultural resources that may be encountered, and of the proper protocols for agency notification. Construction personnel shall attend the training and shall retain documentation demonstrating attendance.

MM TCR-1b Inadvertent Discovery. In the event of any inadvertent discovery of archaeological or tribal cultural resources during construction, ground-disturbing activities shall be suspended until an evaluation is performed. The Applicant shall retain a qualified registered professional archaeologist (RPA) and a qualified Native American Monitor selected by the City. The City's selection of a Native American Monitor will be based on cultural affiliation with the Project area, which may include consultation with the NAHC. In the event of discovery, construction personnel shall notify the City, the RPA, and Native American Monitor. The RPA and Native American Monitor shall evaluate the significance of the discovery pursuant to the Treatment Plan



procedures outlined in MM TCR-1c, below. Work shall not resume until authorization is received from the City. If human remains are found, in compliance with California Health and Safety Code Section 7050.5, all ground disturbances must cease and the County Coroner must be contacted to determine the nature of the remains. In the event the remains are determined to be Native American in origin by the Coroner, the Coroner is required to contact the NAHC within 24 hours to relinquish jurisdiction.

MM TCR-1c Archaeological Data Recovery. If cultural resources are encountered during development activities, the City shall implement a Cultural Resources Treatment Plan to address resource identification, significance evaluation, and any necessary mitigation. The Treatment Plan shall be prepared by a City-approved RPA and a City-approved Native American Monitor, and at a minimum shall include:

- A review of historic maps, photographs, and other pertinent documents to predict the locations of former buildings, structures, and other historical features and sensitive locations within and adjacent to the specific development area;
- A context for evaluating resources that may be encountered during construction;
- A research design outlining important prehistoric and historic-period themes and research questions relevant to the known or anticipated sites in the study area;
- Specific and well-defined criteria for evaluating the significance of discovered remains; and
- Data requirements and the appropriate field and laboratory methods and procedures to be used to treat the effects of the Project on significant resources.

The City, in its discretion and supported by substantial evidence, may also determine that resource is significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. If the RPA determines that the find may qualify for listing in the California Register, the site shall be avoided or the resource preserved in place, or if avoidance or preservation in place is not determined feasible, a data recovery plan shall be developed. The preferred mitigation shall be to avoid the resource or preserve in place. Any required testing or data recovery shall be directed by a qualified RPA and Native American Monitor prior to construction being resumed in the affected area. The Treatment Plan shall also include submission of a final technical report, funded by the developer and approved by the City.



B.19 UTILITIES AND SERVICE SYSTEMS

Based on the analysis and information contained in the Initial Study/Addendum, Mitigation Measure MM UT-3, included in the Specific Plan EIR, would be applicable to the proposed Project.

MM UT-3 FVCSP Utility Infrastructure Financing Program. The City shall ensure adequate financing for funding of infrastructure improvements to serve the FVCSP through implementation of the FVCSP Utility Infrastructure Financing Program, including preparation of an AB 1600 fee justification study, for the FVCSP area. The Financing Program shall be developed prior to the approval of the first entitlements for a development within the Project area, following adoption of the Project. All new development within the FVCSP shall be conditioned to be subject to payment of its fair share of any impact fees identified under this program. The City shall determine the costs of and establish a funding program for the following capital improvements to upgrade water and wastewater delivery as needed to serve the demands of new land uses anticipated to occur under the FVCSP.

The Program shall also:

- a. Identify the cost of improvements to or replacement of undersized water and wastewater lines within the FVCSP area needed to serve the Project.
- b. Clearly apportion existing and projected demand on these facilities and costs between existing users, the City, and proposed future development.
- c. Identify potential funding mechanisms for sewer and water line construction, including the equitable sharing of costs between new development, the City and existing users, including development impact fees, grants, assessments, etc.
- d. Identify development impact fees for all residential and non-residential development to ensure that development pays its fair share of public infrastructure costs.
- e. Include a regular fee update schedule, consistent with the City's Capital Improvement Program.

B.20 MANDATORY FINDINGS OF SIGNIFICANCE

No mitigation is required beyond measures specified above.



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ATTACHMENT 5

CONDITIONS OF APPROVAL

Development Plan Review 20-01 and
Deviations to Fountain Valley Crossings Specific Plan (FVCSP)

Orange County Sanitation District Headquarters Building
An approximate 5.2 acre property located East of Bandilier Circle, North of Ellis Avenue,
and West of Pacific Street in the City of Fountain Valley, CA comprised of the following
current properties:

18484 Bandilier Circle – APN 156-163-06
18475 Pacific Street – APN 156-163-08
18410 Bandilier Circle – APN 156-163-10
18368 Bandilier Circle – APN 156-163-11
18429 Pacific Street – APN 156-163-09

The following Conditions of Approval [COA] apply to this project. The COA's are specific conditions applicable to the proposed project. The property owner is responsible for the fulfillment of all conditions and standard development requirements, unless specifically stated otherwise.

In addition to complying with all applicable City, County, State and Federal Statutes, Codes, Ordinances, Resolutions and Regulations, permittee expressly accepts and agrees to comply with the following Conditions of Approval of this Permit:

Planning Department Conditions Unique to this Project

1. The site plans, landscape plans, floor plans, elevation plans, and sight lighting plans dated submitted 9/4/2020, (attached as Attachment # 1 to the staff report for this project) have been reviewed and approved by the Planning Director on October 14, 2020.
2. The property owner shall install signage near the trash dumpster prohibiting trash dumping during the hours of 10:00 p.m. – 7:00 a.m. compliant with FVMC 6.28.050. Said signage shall be installed prior to certificate of occupancy of the building.
3. Install security cameras around the premises. These cameras should include, but are not limited to, visual coverage of the areas available to the public on the inside of the building, as well as the parking area behind the building. These cameras will have high resolution and low-light capability. Video from all cameras will be recorded and made available to the Police Department upon request. A video camera plan shall be included in the applicant's plan check submittal to the Building Department and security cameras shall be installed prior to issuance of certificate of occupancy of the building.

Applicant's Initials _____

4. Development Plan Review 20-01 and Deviations to the FVCSP shall adhere to all Mitigation Measures outlined in the Mitigation Monitoring and Reporting Program for the FVCSP EIR.
5. The approval of Development Plan Review 20-01 and Deviations to the FVCSP shall be contingent upon approval of the following entitlements:

- a. Variance 332 – Approval authority from Planning Commission
- b. Vacation of Easement – Approval authority from City Council
- c. Code Amendment 20-09 – Approval authority from City Council
- d. Development Agreement and Pedestrian Bridge – Approval authority from City Council

Planning Department Standard Conditions

6. Development Plan Review 20-01 and Deviations to the FVCSP shall be approved and in effect for a period of 12 months from the original date of approval by the City Council, and/or Planning Commission. If no development has commenced at the end of this 12-month time period, project approval shall expire and be determined void. A one-year extension may be granted at the discretion of the Planning Director. A request for an extension of time should be made in writing by the applicant forty (40) days prior to the expiration date. The site plan, floor plans, elevations, and landscape plans submitted shall be marked "Exhibit A" and made part of this application approval and cannot be modified without prior approval by either the Planning Commission or the Planning Director.

Date of Project Approval: October 14, 2020

Date of Project Expiration: October 14, 2021

7. This Conditions of Approval is not effective unless it is signed by the applicant indicating and acknowledging his/her understanding of the conditions imposed herein. The failure of the applicant to sign this permit in no way shall be deemed to confer any greater rights than are contained in this permit.
8. By signing and accepting the Conditions of Approval, the applicant accepts the benefits conferred by the permit subject to the conditions imposed therein. By accepting the right to operate pursuant to the permit, the applicant waives all rights to challenge any condition imposed as unfair or unreasonable.
9. The applicant agrees to indemnify, hold harmless, and defend the City, its officers, agents and employees, from any and all liability or claims that may be brought against the City arising out of its approval of this permit, save and except that caused by City's active negligence. The applicant shall provide a copy of conditions of approval to each manager and to all employees.
10. The applicant shall comply with all federal, state, and local laws. Violations of any of those laws in connection with the use will be cause for revocation of this permit.
11. The number of persons shall not exceed the maximum occupancy load as determined by the Fire Department. If required by the Fire Department, signs indicating the occupant load shall be posted in a conspicuous place near the main entrance and must be posted prior to final inspection and prior to issuance of a certificate of occupancy.
12. Signs for the business shall comply with the sign regulations of the Crossings Specific Plan.
13. The windows of the business shall be free of any obstruction, tinting, or painting, except for window signage as permitted by the Crossings Specific Plan and Fountain Valley Sign Code.
14. To prevent scavenging, illegal dumping, and to contribute to the general cleanliness of the property, the project shall provide a refuse containment area with a screened and

- securable gate. Also, exterior signage shall be provided outside of the trash enclosure prohibiting the scavenging of any material from the trash dumpster. Any refuse containment area and signage shall be included in the applicant's plan check submittal to the Building Department and shall be installed prior to issuance of certificate of occupancy of the building.
15. To maintain the cleanliness of the property, the property owner shall be responsible for maintaining their property and grounds free of litter.
 16. Violation of any condition of approval shall be a misdemeanor.
 17. Signs for this facility shall comply with the Crossings Specific Plan.
 18. No satellite dishes greater than 2.2 meters shall be installed on the subject property without approval of the Planning Commission.
 19. All roof-mounted equipment shall be screened from the view of adjacent properties and rights-of-way as specifically approved by the Planning/Building Director. Roof treatment shall be common and extended to all four (4) building elevations.
 20. The colors, materials and facades of the building shall be as approved by the Planning Commission. No changes to the colors or materials shall occur without approval by the Planning Director. Changes that the Planning Director deems to vary significantly from the originally approved design shall be forwarded to the Planning Commission for its review and determination.
 21. All vents, gutters, downspouts, flashings, electrical conduits, etc. shall be painted to match the color of the adjacent surface.
 22. Refuse containment areas shall be provided with a screened and securable gate compliant with the Crossings Specific Plan, Fountain Valley Municipal Code, and Development Code and Rainbow Disposal specs.
 23. Street and unit numbers are to be maintained in such a manner as to be plainly visible, shall not be hidden from view by trees, shrubs, bushes, etc., and other obstructions on the property. Street numbers shall be located and be a minimum size so that they are clearly visible from the street and be maintained on the front and rear doors. All numbers shall not be less than 6 in. in height and 2 in. in stroke and be of contrasting color from the background.
 24. There shall be no storage of boats, trailers, campers, construction equipment, construction materials, or the like on the premises.
 25. Complete landscape plans shall be submitted to the Planning and Building Department. The landscape plans shall comply with the Fountain Valley Water Efficient Landscape Ordinance.
 26. All public telephones shall be located on the interior of the premises.
 27. An alarm system shall be installed and be of a type that sounds a signal when it is activated.
 28. The petitioner shall be responsible for maintaining the premises free of graffiti.
 29. The conditions herein contained shall run with the property and shall be binding on the applicant, and all heirs, executors, administrators, and successors in interest to the real property that is the subject of this approval.

Building Department

30. All plans must be submitted as "read only" tiff file on a CD prior to final. CD must be

- accompanied by a statement from each design professional stating that this is true and accurate depiction of the as-built conditions for the project. Statements must be in hard copy form with a dated wet stamp from each architect, engineer or consultant of record.
31. Prior to the approval of grading plans, complete landscaping plans must be submitted and approved by the Planning Director and the Public Works Director. Landscaping plans must be signed by a California licensed Landscape Architect and be consistent with grading plans.
 32. All projects as identified in the Public Resources Code Section 2693, Section 2621.6 and California Code of Regulations, Section 3601 are required to submit soils review for approval. All submittals require third party review for which fees the applicant is responsible.
 33. Install, maintain and provide for all California Disabled Access compliance per the California Building Code and the Division of State Architect. No encroachment into the disabled path of travel is allowed under any condition with the exception of emergency vehicles and personnel.
 34. Projects must comply with the California Code of Regulations, Title 24; Fountain Valley Ordinances, and California law in effect at the time of plan submittal.

Public Works Department

35. All public improvements, including but not limited to, streets, sewer, water, storm drain, traffic systems, traffic control, and street repairs shall be constructed in accordance with the most recent edition of the City of Fountain Valley Public Works Standard plans.
36. Provide improvement plans as prepared by a Registered Civil Engineer for all improvements. The plans shall be 24 in. by 36 in. mylar with an appropriate engineering scale (1"=10', 1"=20', 1"=40'). The plans shall include, but not be limited to, paving, sidewalk, curb, gutter, street lighting and all underground utilities. Underground utilities shall include, but not be limited to: electrical, communications, street lighting, gas, sewer, water and appropriate storm drain facilities. The design, layout and location of the gas, electrical, communications and street lighting shall be in accordance with the requirements of the respective utility company.
37. The developer shall provide complete "as-built" plans on 24"x36" of the appropriate scale mylar and electronic format AutoCad, latest version, in accordance with City standards prior to Public Works approval to release utilities and certificate of occupancy.
38. Prior to securing permits, complete landscaping plans prepared and signed by a California licensed landscape architect shall be approved by the Public Works and Planning Directors. The plans shall be on 24"x36" mylar with a scale to be consistent with the site plans.
 - a. Prior to the issuance of the Certificate of Occupancy, developer shall provide a certificate of substantial completion signed and sealed by the licensed landscape architect of record confirming the landscaping and irrigation system have been installed per approved plans.
39. Without credit, provide for street improvements including, but not limited to, curbs, gutters, street paving, traffic control devices, ADA accessible driveway approaches, ADA curb ramps, and sidewalks within the public right-of-way.
40. Provide street lighting facilities as recommended by the City Engineer and in accordance

with City standards.

41. Furnish a comprehensive run-off study based upon a storm of a 10-year frequency. This study is to show existing and proposed facilities and the method of draining this area and tributary areas without exceeding the capacity of any on-site or off-site facilities. The study shall show peak run-off flows that will occur from the existing undeveloped and proposed developed property. Hydraulic calculations must be approved by the City staff and/or the Orange County Flood Control District. Storm drain facilities shall be constructed as required by the City Engineer in accordance with the City's Orange County Master Plan and NPDES requirements.
42. Furnish a comprehensive sewer study to determine the capacity of the existing sewer line in Bandilier, Pacific, and Ellis and the required line sizing for this site development.
43. Provide sanitary sewer facilities as required with the City's Sewer Master Plan and to the satisfaction of the City Engineer.
44. Dedicate a 15 ft. waterline easement to the City of Fountain Valley for the full length of all public waterline facilities located within private property.
45. Install a reduced pressure principle device on the domestic water supply line to the buildings as required by the City Engineer.
46. Install approved backflow devices for irrigation systems as required by the City Engineer.
47. When building is required to be fire sprinklered, the developer shall install a double check detector check valve assembly as required by the Fire Marshal and City Engineer.
48. All vehicular access shall conform to the City of Fountain Valley standard plans and specifications and shall be subject to final approval of the City Engineer.
49. Design and install modifications of the traffic delineation on the adjacent arterial highways.
50. Developer shall prepare for City a preliminary Water Quality Management Plan for new development and significant redevelopment projects that meet one or more of the following criteria:
 - a. All significant redevelopment projects, where significant redevelopment is defined as projects that include the addition or replacement of 5,000 square feet or more of impervious surface on a developed site. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of the facility, or emergency redevelopment activity required to protect public health and safety. Where redevelopment results in the addition or replacement of less than fifty percent of the impervious surfaces of a previously existing developed site, and the existing development was not subject to WQMP requirements, the numeric sizing criteria discussed below applies only to the addition or replacement, and not to the entire developed site. Where redevelopment results in the addition or replacement of more than fifty percent of the impervious surfaces of a previously existing developed site, the numeric sizing criteria applies to the entire development.
 - b. New development projects that create 10,000 square feet or more of impervious surface (collectively over the entire project site) including commercial, industrial, residential housing subdivisions (i.e., detached single family home subdivisions, multi-family attached subdivisions (town homes), condominiums, apartments, etc.), mixed-use, and public projects. This category includes development projects on public or private land, which fall under the planning and building authority of the

permittees.

- c. Automotive repair shops (with SIC codes 5013, 5014, 5541, 7532-7534, 7536-7539).
 - d. Restaurants where the land area of development is 5,000 square feet or more.
 - e. All hillside developments on 5,000 square feet or more, which are located on areas with known erosive soil conditions or where the natural slope is twenty-five percent or more.
 - f. Developments of 2,500 square feet of impervious surface or more, adjacent to (within 200 feet) or discharging directly⁵¹ into environmentally sensitive areas, such as areas designated in the Ocean Plan as Areas of Special Biological Significance or waterbodies listed on the CWA Section 303(d) list of impaired waters.
 - g. Parking lots of 5,000 square feet or more of impervious surface exposed to storm water.
Parking lot is defined as a land area or facility for the temporary storage of motor vehicles.
 - h. Streets, roads, highways and freeways of 5,000 square feet or more of paved surface shall incorporate USEPA guidance, "Managing Wet Weather with Green Infrastructure: Green Streets" in a manner consistent with the maximum extent practicable standard. This category includes any paved surface used for the transportation of automobiles, trucks, motorcycles and other vehicles and excludes any routine road maintenance activities where the footprint is not changed.
 - i. Retail gasoline outlets of 5,000 or more square feet with a projected average daily traffic of 100 or more vehicles per day.
 - j. Emergency and public safety projects in any of the above-listed categories may be excluded if the delay caused due the requirement for a WQMP compromises public safety, public health and/or environmental protection.
51. An approved WQMP is required prior to the City issuing a grading or building permit. Each successor of the business or property is responsible for compliance with the WQMP.
 52. Pay a Traffic Impact Fee in the amount of \$59 per net increase in vehicle trips ends generated by subject development as determined by City Engineer. The developer may, at its cost, contract the services of a Registered Traffic Engineer to prepare a trip generation analysis study for purposes of identifying the net increase in vehicle trip ends. The results of such study shall be subject to the approval of the City Engineer. No reduction for linked trips is allowed.
 53. Pay a Drainage Annexation Fee in the amount of \$3,195.86 per gross acre of new development in accordance with Title 13 of the FVMC. In the event that this fee has not been paid with previous development activity, the developer shall be responsible for payment of the fee applied to the gross acreage of the entire property.
 54. Pay a Sewer Connection Fee in accordance with the City's Sewer Master Plan and Title 14 the FVMC. In the event that this fee has not been paid with previous development activity, the developer shall be responsible for payment of the fee applied to the gross acreage of the entire property.
 55. Pay \$4.65 per front foot for the existing sewer line in Bandilier, Pacific, Ellis in accordance with Title 14 of the Fountain Valley Municipal Code.
 56. Pay \$4.65 per front foot for the existing waterline in Bandilier, Pacific, Ellis in accordance with Title 14 of the FVMC.

Fire Department

57. Code. Group B, S-1, and A occupancies shall comply with 2016 California Fire Code (CFC), 2016 California Building Code (CBC), and current Fountain Valley Municipal Code (FVMC).
58. Automatic Fire Sprinkler Systems. An automatic fire sprinkler system shall be provided in accordance with the 2016 California Building Code and for the following:
 - (a) Notwithstanding any provision in Section 903.2 of the CFC and Section 903.2 of the CBC, approved automatic fire sprinklers shall be installed and maintained in accordance with N.F.P.A., Standard 13, when total square footage equals three thousand five hundred (3,500) square feet or more throughout all buildings as set forth.
 - (b) Any existing building shall retrofit with automatic fire sprinklers when one of the following occurs:
 1. When a structure exceeds three thousand five hundred square feet or additions or tenant improvements are made which exceed thirty percent of the original building square footage.
59. Premise Identification. Approved numbers or addresses shall be provided for all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. CFC 505.1
60. Portable Fire Extinguishers. Provide one 2A10BC State Fire Marshal tagged fire extinguisher for every 3000 square feet of floor area. Travel distance not to exceed 75 feet. CFC 906.3
61. Knox Box. Where access to or within a structure or area is restricted because of secured openings or where immediate access is necessary for life-saving or firefighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type and shall contain keys to gain necessary access as required by the fire code official. CFC 506.1
62. Permits. Secure a permit to operate a Public Assembly from the Fire Department. CFC 105
63. Exits or exit access doorways. Where two exits or exit access doorways are required from any portion of the exit access, the exit doors or exit access doorways shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measuring a straight line between exit doors or exit access doorways. CFC [B] 1015.2.1
64. Panic and fire exit hardware. Doors serving rooms or spaces with an occupant load of 50 or more in a Group A occupancy, shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware listed in accordance with UL 305. CFC [B] 1008.1.
65. Hazardous Materials. All businesses storing or handling hazardous materials in quantities exceeding 55 gallons, 200 cu. Ft. or 500 lbs. shall file a hazardous materials Business Emergency plan with the Fire Department. Health and Safety Code, Chapter 6.95, Sections 25500 through 25545, and Title 19, Division 2, Chapter 4.
66. General. Fire Safety during construction shall comply with Chapter 33 of the 2016 California Fire Code as well as the following:
67. Access for Fire Fighting. Provide Fire Department access roads prior to the start of combustible construction. Roads shall be installed to Fire Department and Public Works standards. CFC 3310

68. Fire Hydrants. Hydrants shall be installed in accordance with The Fire Code official approval and City Engineer prior to start of any combustibile construction. CFC 3310
69. Portable Fire Extinguishers. Structures under construction, alteration or demolition shall be provided with not less than one approved portable fire extinguisher in accordance with Section 906 and sized for not less than ordinary hazard as follows:
 1. At each stairway on all floor levels where combustibile materials have accumulated.
 2. In every storage and construction shed.
 3. Additional portable fire extinguishers shall be provided where special hazards exist including, but not limited to, the storage and use of flammable and combustibile liquids. CFC 3315.1
70. Hazardous Materials. There shall be no hazardous storage where the aggregate quantity exceeds the exempt amounts set forth in the California Fire Code. All storage, dispensing, use and handling of hazardous materials shall be in accordance with Chapter 50 of the 2016 California Fire Code.