

Public Review Draft

# EF EDUCATION FIRST: INTERNATIONAL LANGUAGE CAMPUS

Initial Study / Mitigated Negative Declaration

Prepared for  
City of Costa Mesa

October 2019





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Initial Study / Mitigated Negative Declaration

Prepared for  
City of Costa Mesa  
Development Services Department  
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October 2019

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# ENVIRONMENTAL CHECKLIST

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## Initial Study

1. **Project Title:** EF Education First: International Language Campus
2. **Lead Agency Name and Address:** City of Costa Mesa
3. **Contact Person and Phone Number:** Daniel Inloes (714) 754-5088
4. **Project Location:** 3150 Bear Street, Costa Mesa, CA 92626
5. **Project Sponsor's Name and Address:** 77 Fair Drive, 1<sup>st</sup> Floor, Costa Mesa, CA 92626
6. **General Plan Designation(s):** General Commercial
7. **Zoning:** AP – Administrative & Professional

**8. Description of Project:**

The project includes the development of an EF Education First: International Language Campus, which would include renovation of the existing three-story (approximately 44-foot tall), 68,000-square-foot building to create approximately 50 classrooms, a student services area, cafeteria, and faculty/staff offices; the development of up to three residential buildings; surface parking areas; and recreational facilities and landscaping. The project includes the addition of 87,000 square feet of new buildings on the project site. Therefore, the total existing and proposed building square footage on the project site would be 155,000 square feet.

**9. Surrounding Land Uses and Setting.**

Land uses surrounding the project site include Interstate 405 immediately north of the project site with the South Coast Plaza located just north of the freeway; low-rise residential uses located immediately east of the project site; low-rise residential uses and an office use located south of the project site; and park uses located immediately west of the project site, across Bear Street.

**10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)**

Potentially including, but not limited to, the South Coast Air Quality Management District, the Costa Mesa Sanitary District, and the Mesa Water District.

**11. 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, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**

*Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.*

The consultation process between the City of Costa Mesa and the Native American Tribes began with the City sending a letter to each of the tribes asking if the tribes request consultation. Each letter was sent on September 19, 2019. The consultation process is ongoing.

## Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

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

### **DETERMINATION: (To be completed by the Lead Agency)**

On the basis of this initial study:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have 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.

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# SECTION 1

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## Introduction

The City of Costa Mesa (City) has determined the proposed EF Education First: International Language Campus Project (project) is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study/Mitigated Negative Declaration (IS/MND) addresses the indirect, direct, and cumulative environmental impacts associated with the project. EF Education First (EF) (the project Applicant) is proposing to redevelop the former Trinity Broadcasting Network site located at 3150 Bear Street into an EF Education First: International Language Campus (project site). The project includes the renovation of the existing three-story (approximately 44 feet tall), 68,000-square-foot building to create approximately 50 classrooms, a student services area, cafeteria, and faculty/staff offices in order to accommodate a maximum of 1,347 students and 70 employees. The project would also include the construction of up to three student residential buildings, that would combine to total approximately 85,500 square feet, to accommodate up to 627 students living on site, of the maximum 1,347 students that would attend the school. In addition, the project may install a signalized pedestrian crossing which would extend across Bear Street from the proximity of the Project site entrance to the proximity of the Shiffer Park entrance.

### 1.1 Statutory Authority and Requirements

In accordance with CEQA (Public Resources Code Sections 21000–21177) and pursuant to Section 15063 of Title 14 of the California Code of Regulations (CCR), the City of Costa Mesa, acting in the capacity of Lead Agency, is required to undertake the preparation of an initial study to determine if the project would have a significant environmental impact. If the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the IS/MND, may cause a significant effect on the environment, the Lead Agency must find that the project would not have a significant effect on the environment and must prepare a Negative Declaration or Mitigated Negative Declaration (MND) for that project. Such determination can be made only if “there is no substantial evidence in light of the whole record before the Lead Agency” that such impacts may occur (Section 21080(c), Public Resources Code).

The environmental documentation is intended as a document undertaken to provide an environmental basis for discretionary actions taken upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required. The environmental documentation and supporting analysis is subject to a public review period. During this review, public agency comments on the document should be addressed to the City of Costa Mesa. Following review of any comments received, the City of Costa Mesa will consider these comments as part of the project’s environmental review

and include them with the IS/MND documentation for consideration by the Planning Commission and/or City Council of the City of Costa Mesa.

## 1.2 Purpose

The City of Costa Mesa has prepared this IS/MND to provide the public and responsible agencies with information about the potential environmental impacts associated with implementation of the EF Education First: International Language Campus Project. This IS/MND includes project-level analysis of the proposed campus.

This IS/MND was prepared in compliance with Sections 15070 to 15075 of the State CEQA Guidelines of 1970 (as amended) and California Code of Regulations, Title 14, Division, Chapter 3. In accordance with Section 15070, a mitigated negative declaration shall be prepared if an initial study identifies potentially significant effects, but revisions in the project plans would avoid or mitigate the effects to a point where clearly no significant effects would occur. As the CEQA lead agency, the City has determined that an IS/MND shall be prepared for the project.

## 1.3 Incorporation by Reference

Documents relating to this IS/MND have been cited and incorporated, in accordance with Sections 15148 and 15150 of the CEQA Guidelines. This incorporation eliminates the need for inclusion of voluminous engineering and technical reports within the IS/MND. The documents are available for review at the City of Costa Mesa Development Services Department located at 77 Fair Drive, Costa Mesa, California 92626, and online at [www.costamesaca.gov](http://www.costamesaca.gov).

- **City of Costa Mesa General Plan 2015-2035, adopted June 2016 (General Plan).** The General Plan is a policy document designed to provide long-range guidance for decision-making affecting the future character of Costa Mesa. It represents the official statement of the community's physical development, as well as its economic, social, and environmental goals. The General Plan was used throughout this Initial Study as the fundamental planning document governing development on the project site.
- **Final Environmental Impact Report for the City of Costa Mesa General Plan 2015-2035, June 2016 (State Clearinghouse No. 2015111053) (General Plan EIR).** The General Plan EIR was prepared in support of the General Plan and in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.) and CEQA Guidelines (California Administrative Code Section 15000 et seq.). The General Plan EIR identifies baseline conditions for the City, potential impacts associated with implementing the General Plan and mitigation measures necessary to reduce potential impacts to less than significant levels.
- **City of Costa Mesa Municipal Code.** The City of Costa Mesa Municipal Code (CMMC) consists of regulatory, penal, and administrative ordinances of the City of Costa Mesa. It is the method the City uses to implement control of land uses, in accordance with General Plan goals and policies. The City of Costa Mesa Zoning Code is found in CMMC Title 13, Planning, Zoning, and Development. The purpose of CMMC Title 13 is to promote the public health, safety, and general welfare, and preserve and enhance the aesthetic quality of the city by providing regulations to ensure that an appropriate mix of land uses occur in an orderly manner. The CMMC and CMMC Title 13 are referenced throughout this Initial Study for descriptions and requirements of the City's regulatory framework.

## SECTION 2

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### Project Description

#### 2.1 Project Location

The project site is located in the northern portion of the City of Costa Mesa, in Orange County (**Figure 1, Regional Location Map**). The project site is immediately south of Interstate 405 (I-405) and about 1 mile west of State Route 55 (SR-55). Specifically, the project site is located at 3150 Bear Street southeast of the Bear Street and I-405 overpass (**Figure 2, Location Map**).

#### 2.2 Environmental Setting

The project site is approximately 6.125 acres and is currently developed with an existing three-story (approximately 44-feet tall), 68,000-square-foot building, associated landscaping, walkways, and surface parking lot. Primary vehicular access to the project site is provided via Bear Street.

The project site is relatively flat with on-site elevation of approximately 37 feet above mean sea level (amsl). The project site was formerly occupied by the Trinity Broadcasting Network and is currently vacant. The project site was farmland from 1938 until the existing building was constructed in 1978 as a commercial office building. Based on a review of historic resources, the project site was primarily used for advertising operations (approximately 1980 to 2005), as headquarters for a businessmen fellowship (approximately 1980 to 1992), and for filming and studio production operations (approximately 1996 to 2017).

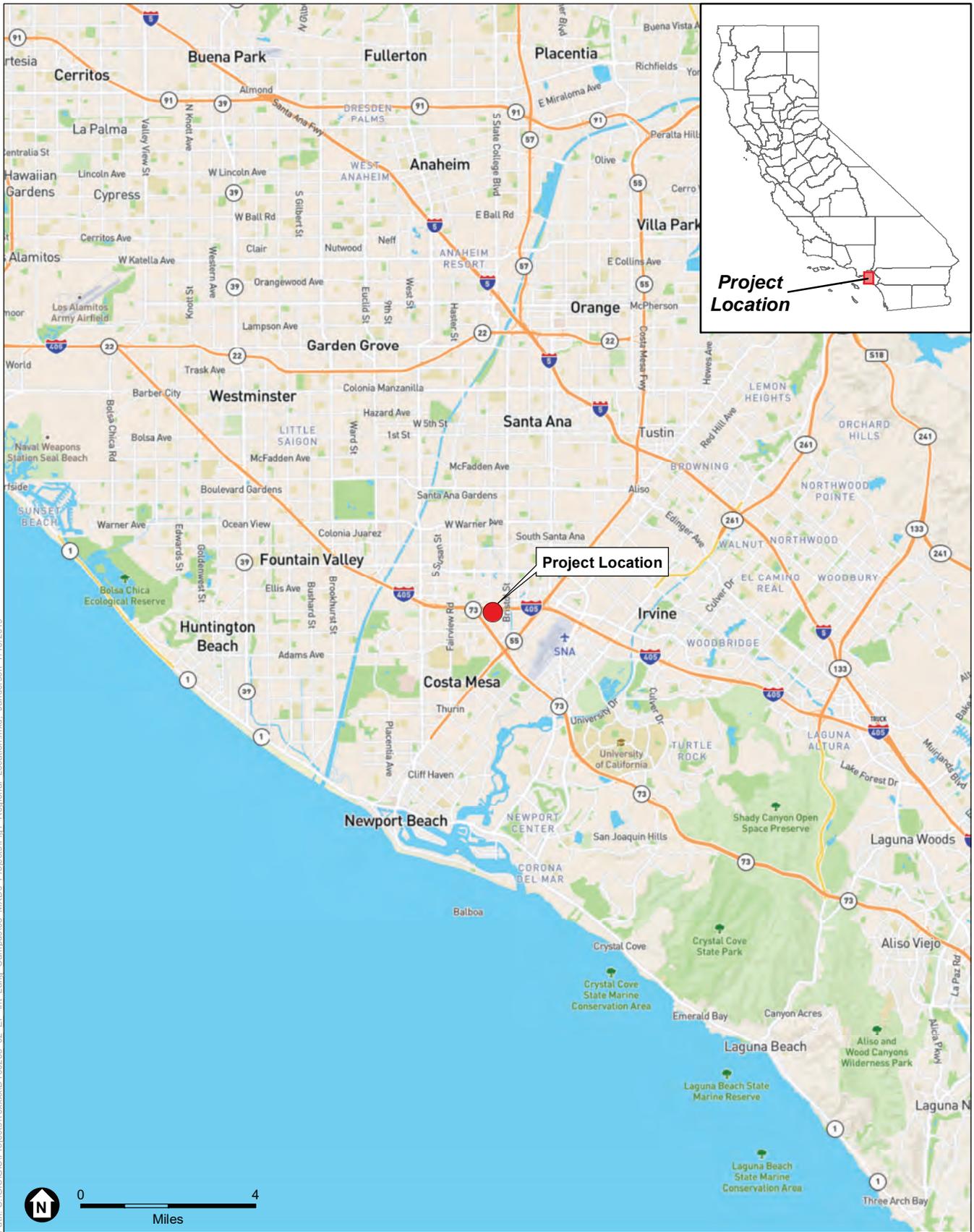
##### 2.2.1 General Plan and Zoning

###### ***General Plan***

According to the General Plan Land Use Map, the project site is designated as General Commercial. The General Commercial designation is intended to permit a wide range of commercial uses which serve both local and regional needs.

###### ***Zoning***

The project site is currently zoned AP – Administrative and Professional. As described in the CMMC, the Administrative and Professional zone is tended to establish areas within which public administrative, professional and business offices may be located.



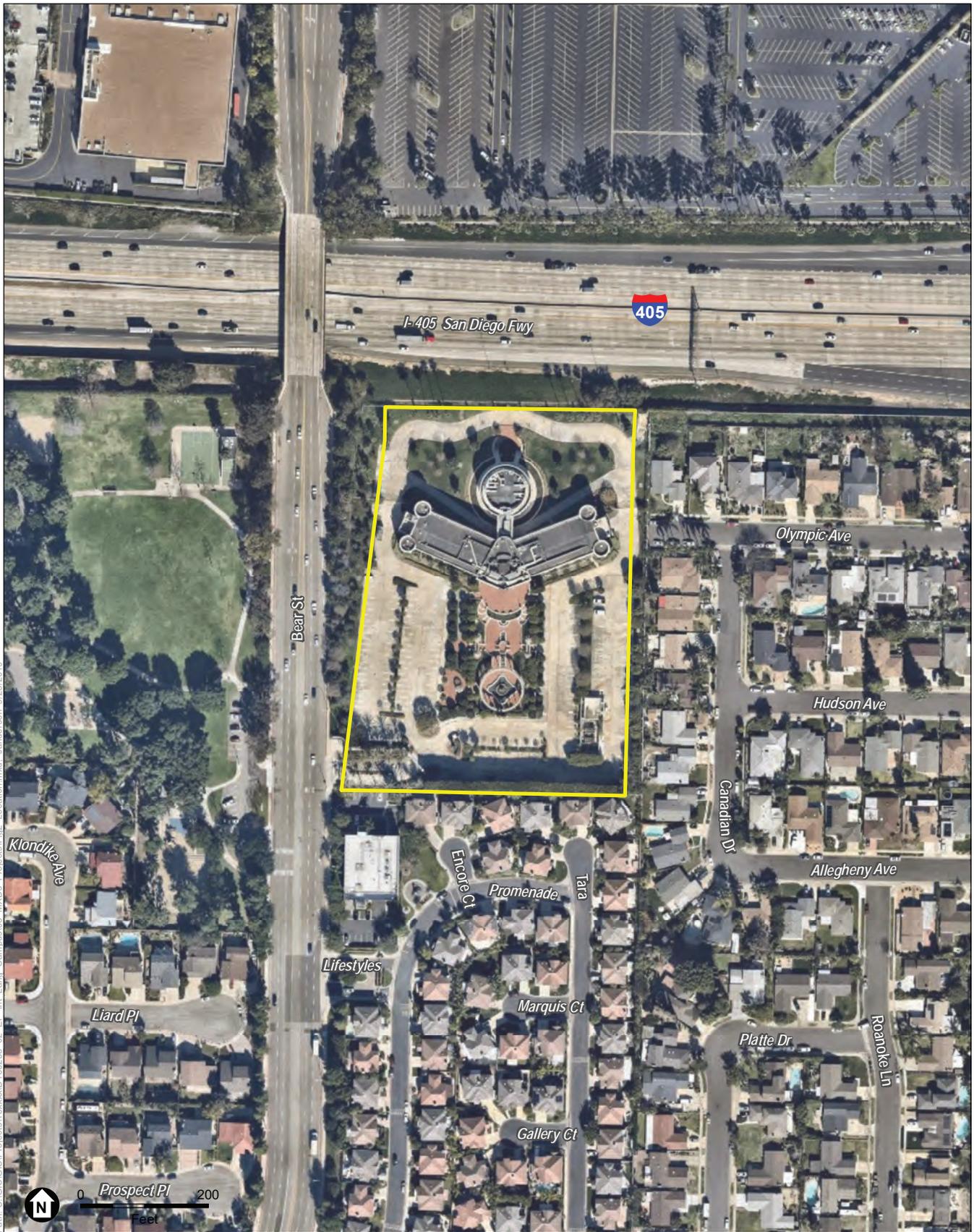
Path: U:\GIS\Projects\16xxxx\01\_Regional\_Location.mxd, Janderson, 7/15/2019

SOURCE: OpenStreetMap, 2018

EF International Language Campus

**Figure 1**  
Regional Location Map





SOURCE: ESRI, 2018

EF International Language Campus

**Figure 2**  
Location Map



## 2.2.2 Existing Surrounding Land Uses

Land uses surrounding the project site generally include commercial and residential. Land uses immediately adjacent to the project site consist of the following:

**North:** I-405 is located immediately north of the project site. South Coast Plaza shopping mall is located north of I-405.

**East:** A low-rise residential neighborhood is located immediately east of the project site.

**South:** A low-rise residential neighborhood and neighborhood commercial center with offices is located immediately south of the project site

**West:** Bear Street and Shiffer Park are located immediately west of the project site.

## 2.3 Project Features

The project requires City of Costa Mesa approval of the conditional use permit, minor conditional use permit, and variances for height and setbacks, and adoption/certification of appropriate CEQA documentation. The project components are further described and in the following pages.

The project includes the development of an EF Education First: International Language Campus at 3150 Bear Street (**Figure 3, Site Plan**) on a 6.125-acre (266,811-square-foot) site. The project includes the renovation of the existing three-story (approximately 44-feet tall), 68,000-square-foot building to create approximately 50 classrooms, a student services area, cafeteria, and faculty/staff offices in order to accommodate a maximum of 1,347 students and 70 employees. The project would also include the construction of up to three student residential buildings, that would combine to total approximately 85,500 square feet, to accommodate up to 627 students living on site, of the maximum 1,347 students that would be taught at the school. The three student residential buildings include two two-story buildings (approximately 28 feet tall and 23,000 square feet) and one three-story building (39 feet 4 inches tall and 39,500 square feet). The three-story building would connect to the existing building's 10,300-square-foot rotunda space. Table 1, below, provides a breakdown of the proposed square footages on the project site. As shown therein, the total proposed square footage on the project site, including existing and proposed buildings, would be 155,000 square feet, which represents a floor area ratio (FAR) of approximately 0.58, which is within the allowed FAR of 0.75, which would allow the development of 200,128 square feet of building space.

The project would provide up to 102 parking spaces and enhanced landscaping and greenspace. New recreational facilities, including a pool, half-court basketball, and volleyball court, would be constructed on site.

The project would provide students from more than 75 countries the opportunity to learn English through the EF program. The students would generally be between the ages of 18 to 26. A student's typical stay on campus would range from two weeks to several months. The academic year program runs from September to May.

# Site Plan

## Hardscape

- ① Concrete Paving\*  
Color: Natural gray  
Thickness: 4" thick (all pedestrian)
- ①b Enhanced Paving  
TBD - pavers, colored concrete, or scoreline pattern
- ② Asphalt
- ③ Decomposed Granite  
Color: California Gold; stabilized
- ④ Basketball Court Surfacing  
TBD
- ⑤ Volleyball Court  
Sand: TBD
- ⑥ Pool Deck

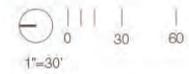
## Site Amenities

- ⑦ Pool
- ⑧ Multipurpose Lawn  
Natural turf
- ⑨ Half Court Basketball
- ⑩ Volleyball
- ⑪ Outdoor Dining Area
- ⑫ Casual Seating & Outdoor Study Areas  
Fixed and movable furniture and fixed fire tables
- ⑬ Fencing\*\*  
Various types: perimeter, pool fencing, soccer field fencing, etc.
- ⑭ Vehicular Gate\*\*  
Existing vehicular gate to be relocated and repurposed
- ⑮ Pool Equipment/Showers/Restrooms
- ⑯ Bike Parking
- ⑰ Auxiliary Dining
- ⑱ Security Booth
- ⑲ Uncovered Site Services Enclosure

\* = Note: Refer to Fire Lane Plans for location of Vehicular Paving  
 \*\* = Note: Refer to Fencing / Gate Diagram for further information



Note: Trees shown in this area are outside of the property line and are shown for illustrative purposes only.



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SOURCE: Gensler, 2019

EF International Language Campus

**Figure 3**  
Site Plan



**TABLE 1  
PROJECT SUMMARY**

| <b>Building</b>  | <b>Gross Area (approximate sf)</b> |
|--|------------------------------------|
| Existing Main Building (without the Rotunda) (to be renovated) | 57,700 sf <sup>1</sup>             |
| Existing Rotunda (to be renovated)                             | 10,300 sf <sup>1</sup>             |
| Building No. 1 – Dormitory                                     | 39,500 sf <sup>1</sup>             |
| Building No. 2 – Dormitory                                     | 23,000 sf                          |
| Building No. 3 – Dormitory                                     | 23,000 sf                          |
| Pool Equipment, Auxiliary Dining Area, Security Booth          | 1,500 sf                           |
| <b>Total Proposed Square Footages (Existing and Proposed)</b>  | <b>155,000 sf</b>                  |
| Overall Lot Area   | 266,811 sf (6.125 acres)           |
| Total Allowable Development Per 0.75 FAR                       | 200,128 sf                         |

Note:

<sup>1</sup> Due to design changes, the existing rotunda will be considered in the future as part of the proposed Building No. 1 – Dormitory and not part of the Existing Main Building.

### 2.3.1 Construction Design Features

Due to the noise sensitive land uses (i.e., residences) that are located adjacent to the project site, the project Applicant has incorporated project design features (PDF) within the project to reduce potential construction noise. The PDFs are as follows:

- **PDF-1:** All construction vehicles and equipment, fixed or mobile, shall be maintained in good operating condition and be equipped with all internal combustion, engine- driven equipment fitted with intake and exhaust muffles, air intake silencers, and engine shrouds no less effective than as originally equipped by the manufacturer.
- **PDF-2:** Where stationary equipment, such as generators, cranes, and air compressors, is located within 50 feet of a sensitive receptor, the equipment shall be equipped with appropriate noise reduction measures (e.g., silencers, shrouds, or other devices) to limit equipment noise.
- **PDF-3:** Equipment maintenance, vehicle parking, and material staging areas shall be located as far away from residences adjacent to the project site as feasible.
- **PDF-4:** Electrically powered equipment instead of pneumatic or internal combustion powered equipment shall be used to the extent possible.
- **PDF-5:** All internal combustion engine idling both on the site and at nearby queuing areas shall be limited to no more than five minutes for any given vehicle or machine. Signs shall be posted at the job site and along queueing lanes to reinforce the prohibition of unnecessary engine idling.
- **PDF-6:** The use of noise producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only. Use smart back-up alarms, which automatically adjust the alarm level based on the background noise level, or switch off back-up alarms and replace with human spotters shall be implemented during construction activities.

- **PDF-7:** Grading plans and specifications shall include temporary noise barriers along the southern and eastern property line for all grading, hauling, and other heavy equipment operations that would occur within 150 feet of sensitive receptors. The noise barriers shall be a minimum height of 12 feet high and reduce construction noise levels by at least 6.8 dBA. The barriers shall be continuous from the ground to the top of the barrier, and have a weight of at least 2.5 pounds per square foot, which is equivalent to ¾ inch thick plywood. The barrier design shall optimize the following requirements: (1) the barrier shall be located to maximize the interruption of line of sight between the equipment and the receptor; (2) the length and of the barrier shall be selected to block the line of sight between the construction area and the receptors; (3) the barrier shall be located as close as feasible to the receptor or as close as feasible to the construction area.

### 2.3.2 Architectural Features

The proposed buildings under the project would be designed as modern buildings that would complement both the contemporary low-rise residential and commercial buildings surrounding the project site and the existing buildings to be renovated (**Figure 4, Conceptual Rendering - Aerial View Looking North**). The 3-story, 39-foot, 4-inch structure (Building No. 1– Dormitory) would be located on the northern portion of the project site adjacent to the I-405 and would be slightly lower in height compared to the existing 44-foot high building. The 2-story structures (Buildings No. 2 and 3) would be developed one either side of the project site and south of the existing building, and these proposed structures would help to create a more intimate campus setting. The height of these buildings would be approximately 28 feet which is similar in height to the residential and commercial buildings immediately surrounding the project site.

Due to the proximity of the proposed Building No. 1– Dormitory to I-405, the following PDF has been incorporated to reduce potential glare effects on drivers along I-405.

- **PDF-8:** The glass windows of Building No.1 will be non-reflective.

Due to the noise sensitive land uses (i.e., dormitories) that are proposed to be located adjacent to the I-405, the project Applicant has incorporated a PDF within the project to reduce potential long-term freeway noise on the proposed sensitive residential uses. The PDF is as follows:

- **PDF-9:** To ensure compliance with the City’s 45 dBA interior noise standard, the 3-story dormitory building along the I-405 freeway will be designed to include sound-rated windows and entry doors on residential facades facing I-405. Receptor locations facing I-405 require a minimum Sound Transmission Class (STC) rating of 36.

### 2.3.3 Setbacks

While the Project is seeking two variances from setback requirements none of them relate to the distances buildings are from the property line. The setback encroachments on the north and west of the property line are an encroachment of a drive aisle within a setback required to be landscape and an encroachment of two enclosed utility areas with seating between them, respectively. The following discussion relates to the setbacks of the buildings on the project site to the project boundary.



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SOURCE: Gensler, 2019

EF International Language Campus

**Figure 4**  
Conceptual Rendering - Aerial View Looking North



Based on civil site plans provided by the project Applicant, the existing building would continue to have a side setback of approximately 56 feet from the northern property line. Building No. 1 – Dormitory would have a side setback of over 400 feet from the southern property line and a rear setback of approximately 78.91 feet from eastern property line; Building No. 2 – Dormitory would have a side setback of approximately 107 feet from the southern property line and a rear setback of approximately 65 feet from the eastern property line; Building No. 3 – Dormitory would have a side setback of approximately 104 feet from the southern property line and a rear setback of over 200 feet from the eastern property line.

### 2.3.4 Green Initiatives

The project includes energy efficient features and design elements aimed at reducing energy consumption to net zero and reducing water use. The project Applicant has incorporated these features as PDFs within the project and are as follows:

- **PDF-10:** All new buildings would include cool roofs to avoid heat gain.
- **PDF-11:** Fixed glazing would be provided throughout the new buildings.
- **PDF-12:** All Heating, ventilation, and air conditioning (HVAC) systems installed on the project site would be energy efficient.
- **PDF-13:** Energy efficient lighting, including low-energy light-emitting diode (LED) lighting and daylighting, would be installed throughout the project site.
- **PDF-14:** The project would use sustainable materials with recycled content for all newly constructed buildings.
- **PDF-15:** Native or climate appropriate, drought-tolerant landscaping would be installed throughout the project site.

### 2.3.5 Storm Drainage

Existing storm drain lines are provided throughout the project Site. In particular, 24-inch storm drain line is currently located parallel to the western project site boundary and a 12-inch storm drain line northern project site boundary would remain in place. Existing storm drain lines that vary between 12-inches, 18-inches, and 24-inches in size traverse portions of the project Site south of the existing building. These existing storm drain lines flow west into an existing 27-inch storm drain line, located west of the project site boundary and eventually flows to a larger existing 60-inch and 72-inch storm drain line and eventually to the Gisler Storm Channel. As part of the project, the storm drain lines located south of the existing building would be removed while the other existing storm drain lines located parallel to the western project site boundary and portions of the northern project site boundary. In addition, the project would also install new storm drain lines throughout the project site, including parallel to portions of the northern, western, eastern, and southern project site boundaries, parallel to portions of the existing building and proposed buildings, as well as the landscaped areas proposed south of the existing main building. Proposed storm drain lines would range in size between 12-inches and 18-inches in diameter.

### 2.3.6 Access and Parking

Primary vehicular and emergency vehicular access to the project site is provided via Bear Street. Emergency vehicular access could also be provided from Olympic Avenue. Pedestrians are able to access the project site from Bear Street via a pedestrian gate that would connect the sidewalk to a pedestrian path that would lead to the campus.

The project is seeking a minor conditional use permit to deviate from parking requirements due to unusual operating characteristics. The project would include 96 regular vehicle parking spaces, four Americans with Disabilities Act (ADA)-compliant vehicle parking spaces, and two ADA-compliant van parking spaces, for a total of 102 vehicle parking spaces. Bicycle parking would also be provided near the main entrance of the project site and would be accessed via Bear Street. To further facilitate the accessibility of the project site, the Project may include a signalized pedestrian crossing which would cross Bear Street at or near the entrance to the project site. Provision of the signalized pedestrian crossing would allow for students to more easily access the project site from the west side of Bear Street rather than crossing Bear Street from the Bear Street/Paularino Avenue intersection (approximately 0.2 miles south of the entrance of the project site) or crossing Bear Street from the Bear Street/South Coast Drive intersection (approximately 0.4 miles north of the entrance of the project site). This would further encourage walking or other alternative modes of transportation to and from the project site for those students living west of the project site.

### 2.3.7 Transportation

The project includes students and employees who will live on campus and additional students and employees who will live off campus. The project includes up to 627 students and 20 employees living on campus and 720 students and 50 employees living off campus. The project Applicant would require that off-site students be housed within a 45-minute commute via walking, biking, and/or public transportation. Students would not be permitted to drive, own or rent vehicles while enrolled at the school, with some exceptions such as health and safety reasons as described below in PDF-16. In addition, the project Applicant would provide a local shuttle bus for student use. The shuttle service will likely operate in a loop to connect the EF Costa Mesa campus to Orange County Transit Authority (OCTA) bus stops, the South Coast Plaza/Metro area, The Lab/The Camp area, and the beach. Shuttles with a 24-passenger capacity can be accommodated within the proposed shuttle stop/pick-up and drop-off area on-site. Shuttle routes may also be increase if actual average daily traffic (ADT) of the Project exceeds the ADT projected for the Project.

The project includes transportation features aimed at ensuring that the use on the project site remains an Extremely Low Traffic Use. These PDFs include:

- **PDF-16:** Students are not permitted to drive or have cars while attending the school. Exceptions for health and safety reasons are permitted, but if exceptions increase ADT above 455 ADT, the School must implement alternative means to decrease trips until the average daily trips are below this threshold.
- **PDF-17:** Students residing with host families will not be driven to and from the campus. Exceptions for health and safety reasons are permitted, but if exceptions increase ADT above

455 ADT, the School must implement alternative means to decrease trips until the average daily trips are below this threshold.

- **PDF-18:** A shuttle service will be provided by EF Education First to serve the employees and students as described in this IS/MND. This service is to ensure that the average daily trips on site remain below the 455 ADT. Additional shuttle trips, stops, and/or routes as approved by the City will be added to decrease trips if the average daily trips increase above this threshold.

## 2.4 Construction Activities and Grading

Construction is anticipated to begin in the last quarter of 2019 with an estimated completion date in the third quarter of 2020. Grading activities would include a gross cut of approximately 6,900 cubic yards (cy) and a gross fill of approximately 13,500 cy resulting in a net fill of approximately 6,600 cy. Construction hours would occur in accordance with the CMMC requirements, which limits construction activity to the hours of 7:00 a.m. and 7:00 p.m. on weekdays, and 9:00 a.m. and 6:00 p.m. on Saturdays. No construction activities may take place at any time on Sundays or federal holidays. Parking for construction workers would be provided on the project site.

## 2.5 Project Approvals

The City of Costa Mesa, as Lead Agency for the project, has discretionary authority over the project. In order to implement this project, the project Applicant would need to obtain, at a minimum, the following permits/approvals:

- Adoption of the Mitigated Negative Declaration
- Conditional Use Permit to allow for a college/university/post-secondary school including new classrooms and student dormitories
- Minor Conditional Use Permit to allow for outdoor recreational uses, including basketball, swimming and volleyball
- Minor Conditional Use Permit to deviate from parking requirements
- Height Variance to allow for one new three-story student residential building along the I-405 Freeway
- Front Setback Variance to allow for the construction of an equipment structures and seating along the property line adjacent to Bear Street
- Side Setback Variance to allow for a drive aisle within landscape setback along the I-405
- Any other discretionary approvals that may be required for the project

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# SECTION 3

## Analysis of Environmental Impacts

### 3.1 Aesthetics

| <i>Issues (and Supporting Information Sources):</i>   | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>         |
|---|---------------------------------------|---|-------------------------------------|--------------------------|
| <b>I. AESTHETICS</b> — Except as provided in Public Resources Code Section 21099, would the project:  |                                       |   |                                     |                          |
| a) Have a substantial adverse effect on a scenic vista?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input 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"/> | <input type="checkbox"/> |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Discussion

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

**Less Than Significant Impact.** Section 4.1 of the General Plan EIR identified scenic vistas within the City as the Pacific Ocean, Santa Ana River, and Santa Ana Mountains. The General Plan EIR found that these scenic vistas generally require large expanses of undeveloped land in close enough proximity so that a viewer can see the backdrop uninterrupted. Such locations include Fairview Park, Talbert Regional Park, and adjacent wildlife refuge, golf courses, and parks and ballfields in the City. The project site is a developed site currently developed with an existing three-story (approximately 44-foot tall), 68,000-square-foot building, associated landscaping, walkways, and surface parking lot. Surrounding uses include the I-405 to the north, low-rise residential and commercial uses to the east and south, and a park (Shiffer Park) located west of the project site.

As the Pacific Ocean and Santa Ana River are at sea level, they are located below the project site, which has an elevation of approximately 37 feet above mean sea level (amsl) at the highest point. In addition, the Pacific Ocean and Santa Ana River are located

several miles from the project site, to the south and west, respectively. As such, these scenic vistas are not visible from the site. While the Santa Ana Mountains rise as high as 5,689 feet amsl and are located approximately 12 miles northeast of the project site, only intermittent, pedestrian-level, long-range views of the Santa Ana Mountains are available from segments of some north-south roadways in the area (i.e., Bear Street).

In addition to renovating the existing structure on the project site, the project also includes development of a three-story structure on the northern portion of the project site and two two-story structures on the eastern and western portions of the project site. The heights of the proposed three-story building would be similar to the existing structure on the project site and the proposed two-story buildings would be similar to those of the surrounding residential and commercial uses. While the project site is located adjacent to Shiffer Park, this park would not be considered a large expanse of undeveloped land that would offer uninterrupted views of surrounding scenic vistas. As such, the project site is not within or adjacent to a large expanse of undeveloped land in close enough proximity so that a viewer can see the backdrop uninterrupted. Therefore, the project would not block views of a scenic vista and would not have an adverse effect on a scenic vista. Impacts would be less than significant.

**b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**Less Than Significant Impact.** Section 4.1 of the General Plan EIR identifies scenic resources as occurrences of aesthetically pleasing natural or human-made forms. Typical examples of natural scenic resources include rock outcroppings, trees, natural land, water bodies, and prominent ridgelines. Scenic resources can also be architecturally distinctive structures or historic buildings. The Santa Ana River and its natural areas constitute a scenic resource, as do the Santa Ana Mountains and Upper Newport Bay. The project site is located approximately 2.4 miles from the Santa Ana River and about 2.3 miles from Upper Newport Bay, neither of which are visible from the project site. In addition, as noted above, while the Santa Ana Mountains rise as high as 5,689 feet amsl, only intermittent, pedestrian-level, long-range views of the Santa Ana Mountains are available from segments of some north-south roadways in the area (i.e., Bear Street). Furthermore, there is not an adjacent large expanse of undeveloped land in close enough proximity so that a viewer can see the backdrop uninterrupted. Additionally, there are no scenic highways in the City. Consequently, development of the project would not impede views of the identified scenic resources within the City nor would it damage trees, outcroppings or historic buildings within a state scenic highway. Therefore, the project would not damage scenic resources or scenic highways. Impacts would be less than significant.

- c) **In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

**Less Than Significant Impact.** The project site is considered to be located in an urbanized area. The I-405 is located directly adjacent to the project site to the north and the South Coast Plaza is located just beyond the I-405 to the north. In addition, the project site is surrounded by low-rise residential and commercial uses. As such, the analysis provided below analyzes whether the project would conflict with applicable zoning and other regulations governing scenic quality. In addition, though the project is not located in a non-urbanized area, for informational purposes, the project's impacts to the existing visual character or quality of public views of the project site and its surroundings is also included below. In addition, an analysis of the project's shade/shadow impacts is also provided.

**Consistency with Zoning and Other Regulations Governing Scenic Quality:** The General Plan and the CMMC include goals, objectives, and policies that govern scenic quality.

As part of Chapter 2, Land Use Element, of the General Plan, Objective LU-1A establishes an objective to maintain a balance of land uses throughout the community to preserve the residential character of the City and Objective LU-2A established an objective to promote land use patterns and development that contribute to the community and neighborhood identity. The development of the school proposed under the project would be located on a site that previously included commercial uses and the heights of the proposed buildings would be similar to the surrounding residential uses. As such, the character and identity of the surrounding residential communities would continue to be preserved. Chapter 2, Land Use Element, of the General Plan, also includes Policy LU-3.12, which is a policy that would ensure a new development reflects the existing design standards, qualities and features that are in context with nearby development. Consistent with this policy, the project would adhere to the design standards provided by the allowed zoning on the project site and would be compatible with the nearby residential neighborhood and commercial uses. Chapter 2, Land Use Element, of the General Plan, also includes goals, objectives, and policies related to new development that is sensitive to the City's environmental resources. As the project site is not located in proximity to identified environmental resources, development of the project would not conflict with these goals, objectives, and policies.

As part of Chapter 9, Community Design Element, of the General Plan, the project would not conflict with any of the goals, objectives, or policies related to preservation and enhancement of City edges as the project site is not located near any City edges, as established in Objective CD-5A. In addition, Policy CD-8.1 of the Chapter 9, Community Design Element, of the General Plan, requires that new and remodeled commercial development be designed to reflect architectural diversity, yet be compatible with the

scale and character of the district. The design elements and design materials used for the proposed buildings would be appropriate for the proposed school and would evoke an intimate campus setting while also being compatible with the scale and character of the surrounding uses. Therefore, the project would be consistent with Policy CD-8.1. Additionally, Objective CD-11A of Chapter 9, Community Design Element, of the General Plan, was established to facilitate the installation of signs that contribute to a positive impact of the public realm. The project would be consistent with this objective as the signage proposed on the project site would be reviewed and approved by the City and would be designed to be compatible with the development on the project site and surrounding uses as well as consistent with the CMMC.

With regard to CMMC, Chapter 13.44 of the CMMC establishes development standards, including setbacks, for the AP zone, in which the project site is located. Setbacks within zoning districts are established to create adequate separations that provide for light and privacy between uses on neighboring properties. Setbacks can be most important adjacent to residential uses which typically desire sufficient light and privacy. The project would exceed the required setbacks of the AP zone from the residential uses. As such, proposed distances of the buildings from the residential uses would provide adequate separation, light, and privacy from the existing residential uses to the rear (east) and side (south). However, the project does require a variance from the landscape setback and front setback. As discussed above in Section 2.3, the drive aisle and fire lane, which wrap around the northern-most dormitory building, encroaches into the required twenty-foot landscape setback along the I-405 Freeway, which would require approval of a landscape setback variance. The uncovered enclosure for the generator and trash, a seating area, and parking space encroaches into the required front setback along Bear Street, which would require approval of a variance from the front setback.

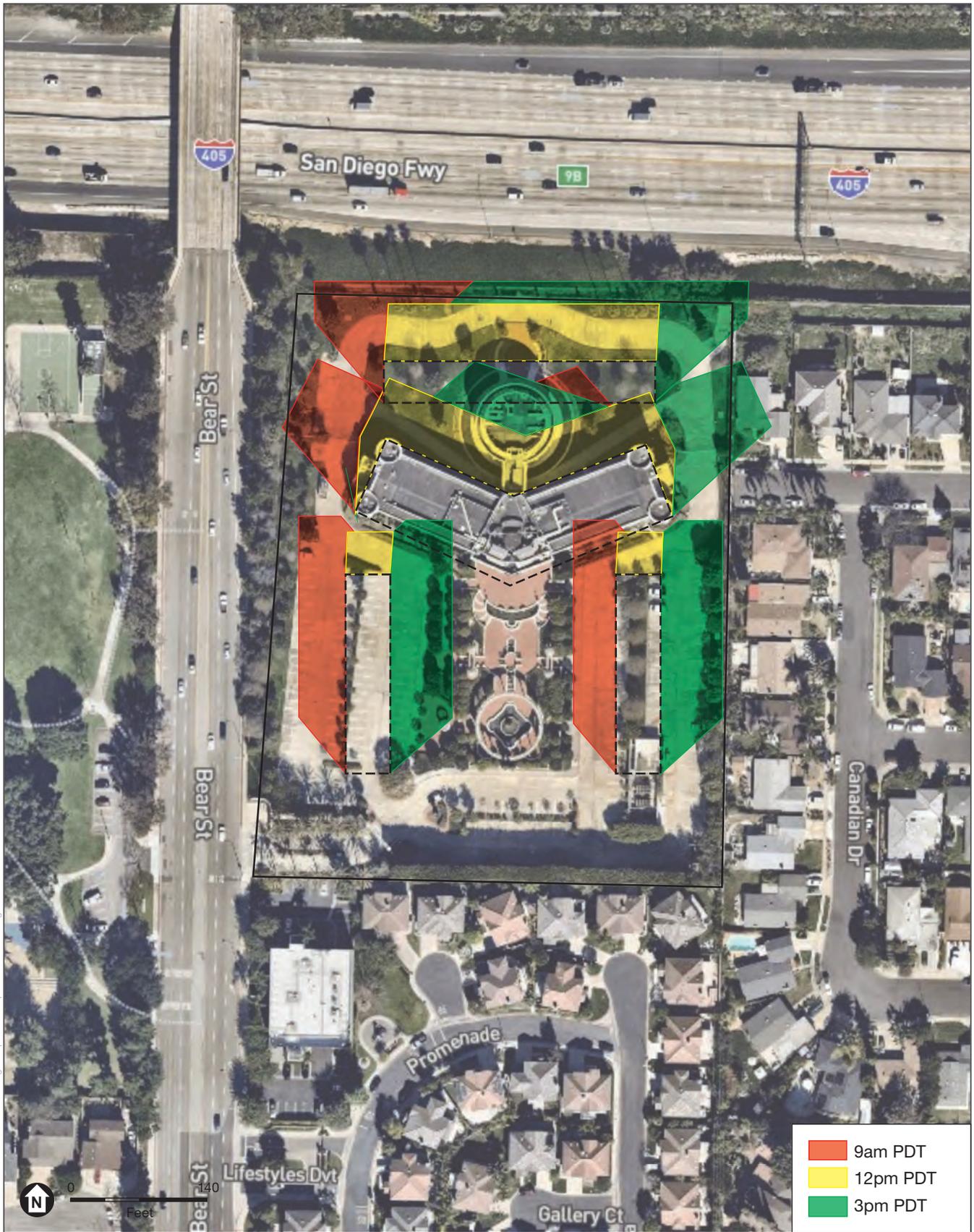
As part of the project approvals a development review is conducted. The City's review, conditions, and requirements completed during the development review process are intended to ensure the project has a consistent and aesthetic design that will enhance the project site and surrounding area. As such, the project would provide an aesthetically cohesive development that would be compatible with adjacent residential and commercial uses. Based on the analysis provided above, the project with conditions would not conflict with applicable zoning or other regulations governing scenic quality. Impacts would be less than significant.

**Existing visual character or quality:** Construction activities generally cause a temporary contrast to, and disruption in, the general order and aesthetic character of an area. Although temporary in nature, construction activities may cause a visually unappealing quality in a community. During construction activities for the project, the visual appearance of the project site would be altered due to the presence of construction equipment. Some of the activity would be visible from roadways, particularly Bear Street and the I-405 and adjacent properties. However, temporary fencing would be placed around the project boundaries. In addition, existing landscaping around the western and southern project boundaries would also serve to screen construction.

With regard to operation, the project would renovate the existing three-story (approximately 44-feet tall), 68,000-square-foot building as well as construct three student residential buildings, including two 2-story buildings (approximately 28 feet tall and 23,000 square feet) and one 3-story building (39 feet 4 inches tall and 39,000 square feet). As previously discussed under Section 2.3.1, Architectural Features, above, the proposed buildings would be designed as modern buildings that would complement both the contemporary low-rise residential and commercial buildings surrounding the project site and the existing building to be renovated. Once developed, the project would become a part of the existing urban fabric, and the project massing, height, and aesthetic character would be consistent with existing commercial and residential structures in the vicinity of the project site. As discussed above, the three story structure (Building No. 1–Dormitory) would be located on the northern portion of the project site adjacent to the I-405 and would be similar in height to the existing building to be renovated. The two-story structures (Buildings No. 2 and 3) would be developed one either side of the existing building and would help to create a more intimate campus setting. The height of these buildings would be similar in height to the residential and commercial buildings immediately surrounding the project site. With regard to proposed signage, project signage would include mounted project identity signage, building signage, and ground-level and wayfinding pedestrian signage. Proposed signage would be evaluated through a planning signing program, to be submitted later, and would be designed to be aesthetically compatible with the existing and proposed architecture and with the requirements of the CMMC.

Based on the analysis above, the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings during either construction or operation of the project. Impacts would be less than significant.

**Shading:** Shade and shadows from the project would extend from the existing and proposed buildings. Although shade and shadows are common and expected in urban areas and is considered a beneficial feature when it provides cover from excess sunlight and heat, it can have an adverse impact if it interferes with sun-dependent activities such as useable outdoor spaces associated with residential, recreational or institutional land uses, commercial with pedestrian-oriented outdoor spaces or restaurants with outdoor dining areas, and existing solar collectors. A significant impact would occur if a proposed building casts shade or shadows onto sensitive uses in adjacent off-site areas for more than three hours between 9 AM and 3 PM. An evaluation of shade and shadows was conducted for the project. Figures 5 through 8 illustrate the shade and shadows created during the Winter Solstice, Spring Equinox, Summer Solstice and Fall Equinox at 9 AM, noon and 3 PM. As shown in **Figure 5**, shade and shadows currently extend onto the residential property adjacent to the project Site on Olympic Avenue at 3 PM during the Winter Solstice from the existing 44-high building. In addition, shade and shadows from the proposed 2-story building along the northern property boundary would extend across the northeast corner of the residential property adjacent to the project Site on Olympic Avenue at 3 PM during the Winter Solstice. As illustrated in Figures 5 through 8, no other shade and shadows would extend to the adjacent residential uses between 9 AM and 3 PM. As such, shade and shadows from the proposed buildings would not be cast onto the adjacent residential uses for more than three hours.



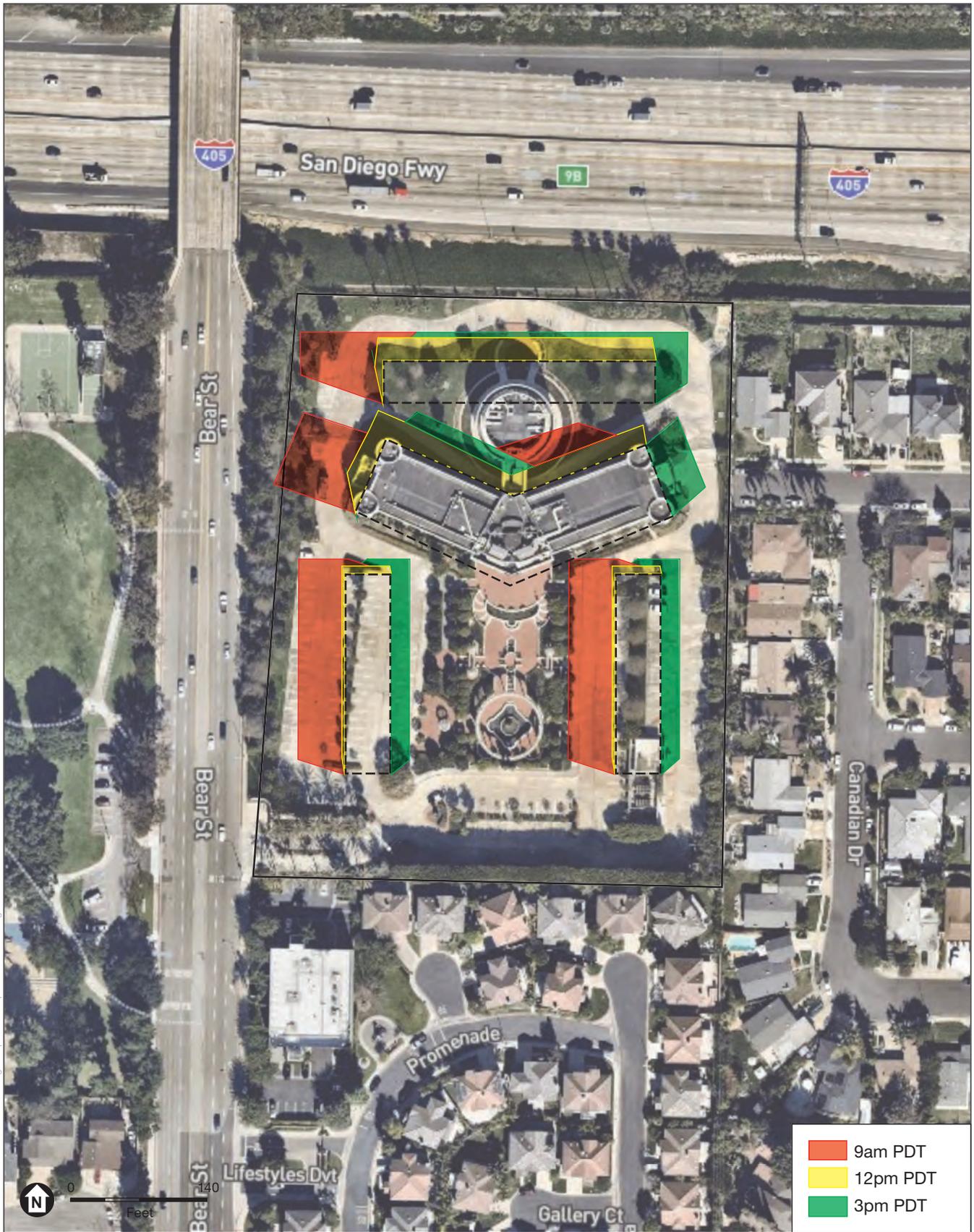
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SOURCE: ESA, 2019

EF International Language Campus

**Figure 5**  
Shade/Shadows During Winter Solstice





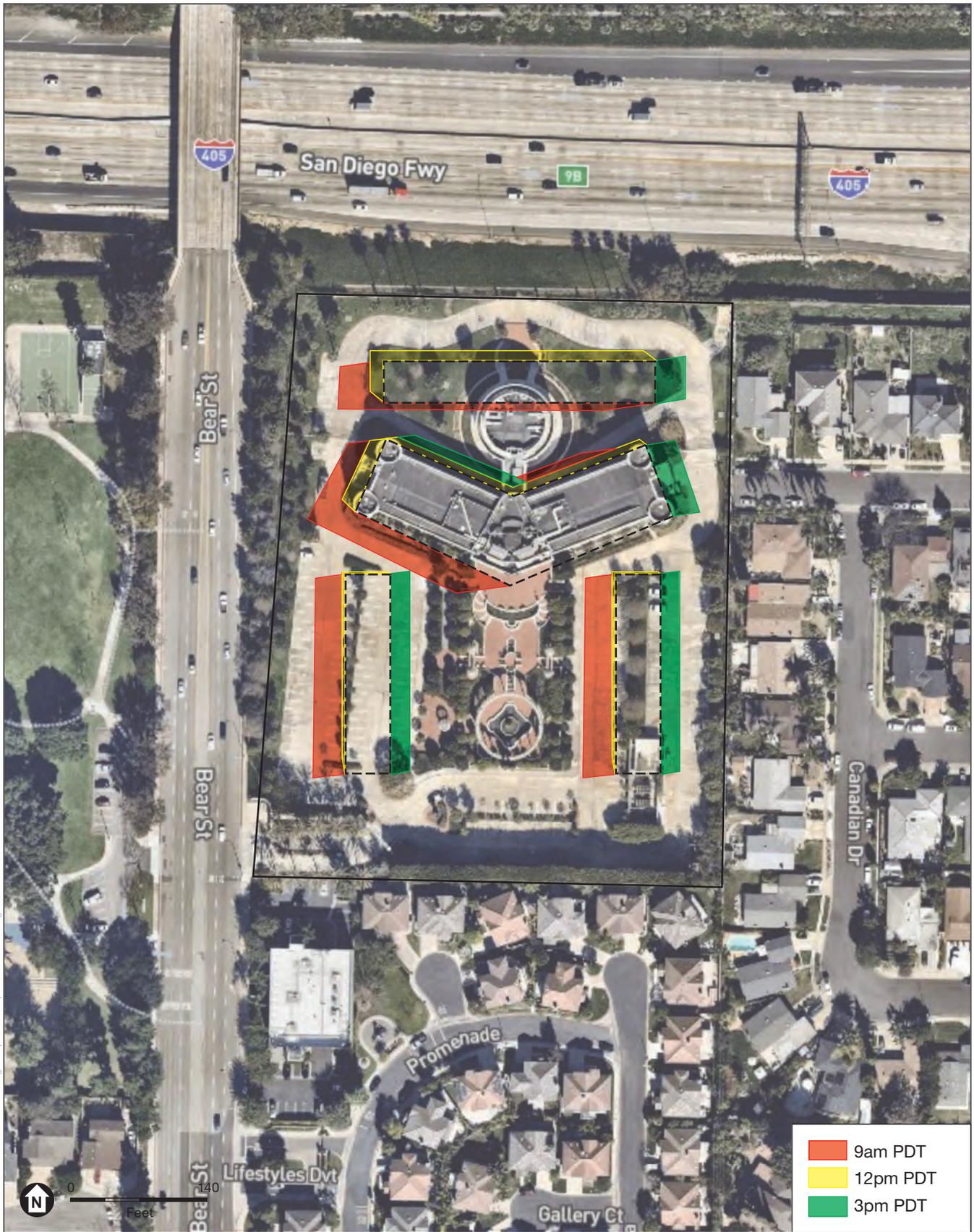
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SOURCE: ESA, 2019

EF International Language Campus

**Figure 6**  
Shade/Shadows During Spring Equinox





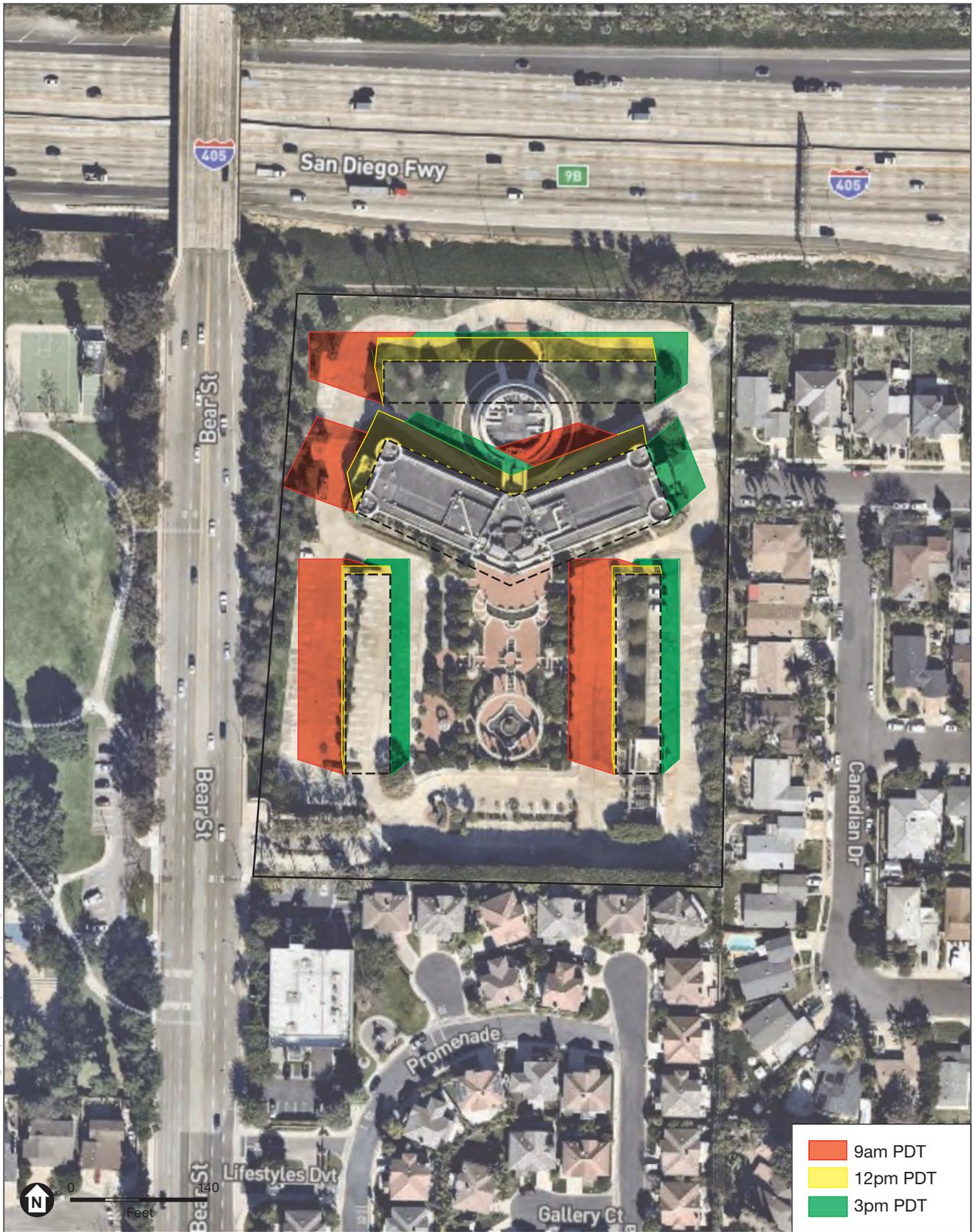
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SOURCE: ESA, 2019

EF International Language Campus

**Figure 7**  
Shade/Shadows During Summer Solstice





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SOURCE: ESA, 2019

EF International Language Campus

**Figure 8**  
Shade/Shadows During Fall Equinox



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

**Less Than Significant Impact.** Under the existing conditions, street lights and lighting from adjacent uses currently occur. Other existing light sources include headlights from vehicles travelling on Bear Street. While the existing building on the project site is currently vacant, based on a review of historic resources, the project site was primarily used for advertising operations (approximately 1980 to 2005), as headquarters for a businessmen fellowship (approximately 1980 to 1992), and for filming and studio production operations (approximately 1996 to 2017). Existing sources of glare include glass from the existing building.

During construction of the project, it is expected that construction activities would occur primarily during daylight hours and that construction-related illumination in the nighttime would be used for safety and security purposes only. Construction lighting also would last only as long as needed during the finite construction process. Construction activities would not require the use of large, flat, and shiny surfaces that would reflect sunlight or cause other natural glare. Therefore, light and glare impacts during construction activities would be less than significant.

Project lighting would include low-level security lighting, low-level accent lighting on the proposed buildings to highlight architectural features and signage, wayfinding lighting, landscape lighting and interior lighting emanating from the proposed student housing and school buildings. New sources of glare would include building surfaces and vehicles on the project site. As an infill development, the light and glare generated from the project would be similar to that of the existing building on the project site as well to that of near-by surrounding residential and commercial uses. In addition, all glass on Building No. 1–Dormitory which is adjacent to I-405 would be non-reflective as identified in PDF-8.

The project would be required to comply with the CMMC lighting guidelines, which include the following:

- Chapter VI. Off-street Parking Standards, Article 3. Development Standards, Sec 13-93(d). General Standards: Lighting. All required parking areas and driveways shall be illuminated under the direction of the planning division. Lights used to illuminate parking areas shall be directed away from any adjoining premises located in any residential zone under direction of the Planning Division.
- Chapter V. Development Standards, Article 2. Residential Common Interest Developments, Section 13-41(b)(5). The City requires the installation of on-site lighting systems in all parking areas, vehicular access ways, and along major walkways. The lighting shall be directed onto driveways within the project and away from dwelling units and adjacent properties.

With the implementation of the above City lighting requirements and PDF-8, the project would not create a new source of substantial light or glare during operation of the project which would adversely affect day or nighttime views in the area. Light and glare impacts during operational activities would be less than significant.

## References

City of Costa Mesa, 2016. Final Environmental Impact Report for the 2015-2035 General Plan, June 2016.

City of Costa Mesa, 2016. 2015-2035 General Plan, June 2016. Available online at: <https://www.costamesaca.gov/city-hall/city-departments/development-services/approved-plans-for-city/2015-2035-general-plan>. Accessed on August 27, 2019.

City of Costa Mesa, 2019. Costa Mesa Municipal Code, July 2019.

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## 3.2 Agriculture and Forestry Resources

| <i>Issues (and Supporting Information Sources):</i>  | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>                    |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| <b>II. AGRICULTURE AND FORESTRY RESOURCES —</b>  |                                       |   |                                     |                                     |
| <p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p> |                                       |   |                                     |                                     |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### Discussion

- 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?**

**No Impact.** The project site does not contain agricultural uses and is designated by the State of California Department of Conservation as “urban and built-up land” (California Department of Conservation, 2016). Consequently, the project would not convert farmland to a non-agricultural use. No impacts to farmland would occur would occur.

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

**No Impact.** The Williamson Act allows county governments to enter into contracts with private landowners who agree to restrict parcels of land to agricultural uses or uses compatible with agriculture for at least 10 years. According to the General Plan EIR, there are no active Williamson Act contracts within the City (City of Costa Mesa, 2016). Similarly, there is no agricultural zoning in the City and no agricultural uses on the site.

Consequently, the project would not conflict with an agricultural use or Williamson Act contract. No impacts to an agricultural use zone or a Williamson Act contract would occur.

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

**No Impact.** The City, inclusive of the project site, is developed with urban land uses. There is no forest land, timberlands or forest zoning in the City. Consequently, the project would not conflict with zoning for forest land or timberland. No impacts to forest land, timberlands or forest zoning would occur.

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

**No Impact.** As discussed in Section 3.2.c, above, the City, inclusive of the project site, is developed with urban land uses. There is no forest land, timberlands or forest zoning in the City. Consequently, the project would not result in the loss or conversion of forest land. No impacts to forest land would occur.

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

**No Impact.** As discussed in Sections 3.2.a, b, and c, above, the City, inclusive of the project site, is developed with urban land uses. There are no farmlands or forest land in the City. Consequently, the project would not result in the loss or conversion of farmland or forest land. No impacts to farmland or forest land would occur.

## References

City of Costa Mesa, 2015. Costa Mesa General Plan Land Use Element. Page LU-18. Available at: <https://www.costamesaca.gov/home/showdocument?id=34692>. Accessed June 21, 2019.

California Department of Conservation, 2016. California Important Farmland Finder Map. Available at: <https://maps.conservation.ca.gov/dlrp/ciff/>. Accessed February 28, 2018.

City of Costa Mesa, 2016. Final Environmental Impact Report for the 2015-2035 General Plan. Page 2.4-5.

### 3.3 Air Quality

| <i>Issues (and Supporting Information Sources):</i>  | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>                    |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| <b>III. AIR QUALITY —</b>  |                                       |   |                                     |                                     |
| Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project: |                                       |   |                                     |                                     |
| a) Conflict with or obstruct implementation of the applicable air quality plan?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?                      | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Expose sensitive receptors to substantial pollutant concentrations?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

The following analysis is based, in part, on the *Air Quality Assessment for the proposed EF International Language Campus Costa Mesa Project City of Costa Mesa* (Air Quality Assessment), prepared for the project by Kimley-Horn and Associates, Inc., August 2019 (Kimley-Horn, 2019a). The Air Quality Assessment is included as Appendix A, of this IS/MND. The Air Quality Assessment was prepared for the project to evaluate the potential construction and operational emissions associated with the project and determine the level of impact the project would have on the environment. In addition, analysis related to the potential health risk associated with toxic air contaminants, including Diesel Particular Matter, resulting from the implementation of the project is based on the *Health Risk Assessment EF International Language Campus Costa Mesa Project City of Costa Mesa* (HRA), prepared for the project by Kimley-Horn and Associates, Inc., September 2019 (Kimley-Horn, 2019b). The HRA is included as Appendix B, of this IS/MND.

#### Discussion

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

**Less Than Significant Impact.** The City of Costa Mesa is within the South Coast Air Basin (SCAB), which is bounded by the Pacific Ocean to the south and west and mountains to the north and east. Air quality in the South Coast Air Basin is managed by the South Coast Air Quality Management District (SCAQMD). The SCAQMD and the Southern California Association of Governments (SCAG) are the agencies responsible for preparing the Air Quality Management Plan (AQMP) for the SCAB. Since 1979, a number of AQMPs have been prepared. The AQMP was designed to comply with State and federal requirements, reduce the high level of pollutant emissions in the SCAB, and ensure clean air for the region through various control measures.

The regional AQMP is updated periodically with the most recent SCAB AQMP adopted on March 3, 2017 and referred to as the 2016 AQMP. According to the 2016 AQMP, the most significant air quality challenge in the SCAB is to reduce nitrogen oxide (NO<sub>x</sub>) emissions sufficiently to meet the upcoming ozone standard deadlines. The 2016 AQMP suggests that total SCAB emissions of NO<sub>x</sub> must be reduced to approximately 141 tons per day (tpd) in 2023 and 96 tpd in 2031 to attain the 8-hour ozone standards. This represents an additional 45 percent reduction in NO<sub>x</sub> in 2023, and an additional 55 percent NO<sub>x</sub> reduction beyond 2031 levels.

In compliance with the 2016 AQMP, the SCAQMD establishes air quality emissions thresholds for criteria air pollutants for the purposes of determining whether a project may have a significant effect on the environment per Section 15002(g) of the Guidelines for implementing CEQA. By complying with the thresholds of significance, the project would be in compliance with the SCAQMD AQMP as well as federal and state air quality standards.

The project is subject to the SCAQMD's 2016 AQMP. Criteria for determining consistency with the 2016 AQMP are defined by the following:

- Consistency Criterion No. 1: The project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.
- Consistency Criterion No. 2: The project will not exceed the assumptions in the AQMP or increments based on the years of project build-out phase.

The violations to which Consistency Criterion No. 1 refers are California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). Table 2 lists the air quality significance thresholds for the six criteria air pollutants that are relevant to the project and analyzed in the Air Quality Study. As shown in Tables 3 and 4, below, the project would not exceed the short-term construction standards or long-term operational standards and would therefore not violate any air quality standards. Thus, a less than significant impact is expected, and the project would be consistent with Consistency Criterion No. 1.

**TABLE 2**  
**SCAQMD REGIONAL SIGNIFICANCE THRESHOLDS**

| Pollutant       | Construction (pounds/day) | Operation (pounds/day) |
|-----------------|---------------------------|------------------------|
| VOC             | 75                        | 55                     |
| NO <sub>x</sub> | 100                       | 55                     |
| CO              | 550                       | 550                    |
| SO <sub>x</sub> | 150                       | 150                    |
| PM10            | 150                       | 150                    |
| PM2.5           | 55                        | 55                     |

NOTE: VOC (volatile organic compounds); NO<sub>x</sub> (oxides of nitrogen); CO (carbon monoxide); SO<sub>x</sub> (oxides of sulfur); PM10 (respirable 10-micron diameter particulate matter); PM 2.5 (respirable 2.5-micron diameter particulate matter).

Concerning Consistency Criterion No. 2, the AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The project is consistent with the land use designation and development density presented in the General Plan. The allowable FAR for the project site is 0.75. The project would result in an FAR of approximately 0.58 with 155,000 square feet on approximately 6.2 acres. Therefore, the project would not exceed the population or job growth projections used by the SCAQMD to develop the 2016 AQMP. Thus, a less than significant impact would occur, as the project is also consistent with Consistency Criterion No. 2.

Based on the above, impacts would be less than significant.

**b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?**

**Less Than Significant Impact.** A violation of an air quality standard could occur over the short-term during construction, or over the long-term during its subsequent operation. Each is addressed below.

**Construction:** Project construction raises localized ambient pollutant concentrations. The criteria pollutants of primary concern within the project area include ozone-precursor pollutants (i.e., ROG and NO<sub>x</sub>), CO, SO<sub>x</sub>, PM10, and PM2.5. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance listed in Table 2, above.

During construction, air quality impacts may occur during demolition, site preparation, and building construction activities associated with the project. Major sources of emissions during construction include exhaust emissions, fugitive dust generated as a

result of soil and material disturbance during site preparation, and grading activities, and painting of the structures.

Table 3 presents the calculation of daily emissions projected for site construction. The calculations presented in Table 3 are the results of the California Emissions Estimator Model (CalEEMod) which applies typical construction equipment, labor, phasing and materials to the project, based on its size, location and proposed timing. CalEEMod is not intended as an exact accounting of what equipment will ultimately be used and what emissions are produced by a project. Rather, the model represents a “yard stick” by which projects may be compared on a one-to-one basis. The methodology applied by CalEEMod are based on studies performed by the SCAQMD for construction projects in the southern California. The SCAQMD recommends use of CalEEMod for typical construction projects.

As discussed in the Air Quality Assessment in Appendix A, the duration of construction activities associated with the project is estimated to be approximately 12 months, beginning in the 3<sup>rd</sup> quarter of 2019 and ending in the last quarter of 2020. Project construction would involve the demolition of the mechanical building and existing pavement as well as renovation of the existing structure and construction of the new dormitory structures. Appendix A includes the construction assumptions used in the analysis.

As shown in Table 3, all emissions are within their respective threshold values and the impact is less than significant. While impacts would be considered less than significant, the project would be subject to SCAQMD Rules 401, 402, 403, 431.2, and 1113, as described further in the Air Quality Assessment. Compliance with these standard conditions and requirements would further reduce specific construction-related emissions.

**TABLE 3**  
**COMPARISON OF PROJECTED CONSTRUCTION EMISSIONS AND DAILY CRITERIA VALUES (POUNDS/DAY)**

| Activity              | Maximum Daily Emissions (pounds/day) |                 |           |                 |                  |                   |
|-----------------------|--------------------------------------|-----------------|-----------|-----------------|------------------|-------------------|
|                       | VOC                                  | NO <sub>x</sub> | CO        | SO <sub>2</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| 2019                  | 4                                    | 46              | 25        | <1              | 7                | 4                 |
| 2020                  | 21                                   | 38              | 23        | <1              | 6                | 4                 |
| <b>Maximum</b>        | <b>21</b>                            | <b>46</b>       | <b>25</b> | <b>&lt;1</b>    | <b>7</b>         | <b>4</b>          |
| SCAQMD Threshold      | 75                                   | 100             | 550       | 150             | 150              | 55                |
| Exceeds Threshold (?) | <b>No</b>                            | <b>No</b>       | <b>No</b> | <b>No</b>       | <b>No</b>        | <b>No</b>         |

NOTE: SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No mitigation was applied to construction equipment. Refer to Appendix A: Air Quality Modeling Data in Appendix A of this IS/MND for further information.

Source: Kimley-Horn, 2019.

**Operation:** Project-generated emissions would be associated with motor vehicle use and area sources, such as the use of landscape maintenance equipment and architectural coatings.

**Existing Land Use Emissions:** The project site currently unoccupied. As such, no emissions are currently generation on the project site.

**Proposed Land Use Emissions:** The project is expected to complete the renovations to the existing structure and construct the proposed dormitory structures by 2020.

Area source emissions occur from architectural coatings, hearth, consumer products, and landscaping maintenance. Energy source emissions occur from electricity and natural gas usage associated with the project. Area source and energy source emissions were based on CalEEMod default factors.

The Air Quality Assessment based mobile source emissions on the Traffic Memorandum prepared for the project by Linscott, Law, & Greenspan, Engineers (LLG Engineers) as provided in Appendix M, of this IS/MND. As discussed further in the Air Quality Assessment, the project would generate 455 daily trips. The predominant number of students would not drive and many will live on campus, thereby reducing trips to and from the campus. The vehicle trips would be less than the trips associated with the previous land use. In addition, by the nature of this educational institution where students are paying for their time on-site rather than by course credit and no degrees are issued from this schools, there is no inherent incentive for students to stay for a long period of time.

As shown in Table 4, operational project emissions are all below their respective criteria values and project operational impacts are less than significant.

**TABLE 4  
COMPARISON OF PROJECTED DAILY OPERATIONAL EMISSIONS AND DAILY CRITERIA (POUNDS/DAY)**

| Source             | ROG      | NOx      | CO        | SO <sub>2</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
|--------------------|----------|----------|-----------|-----------------|------------------|-------------------|
| Area Sources       | 4        | <1       | 8         | <1              | <1               | <1                |
| Energy Sources     | <1       | <1       | <1        | <1              | <1               | <1                |
| Mobile Sources     | 1        | 3        | 10        | <1              | 3                | 1                 |
| <b>Total</b>       | <b>4</b> | <b>4</b> | <b>17</b> | <b>&lt;1</b>    | <b>3</b>         | <b>1</b>          |
| Threshold          | 55       | 55       | 550       | 150             | 150              | 55                |
| Exceeds Threshold? | No       | No       | No        | No              | No               | No                |

NOTES: The CalEEMod model projects summer and winter emissions. These can differ for mobile sources and the higher of the two values were included in the table.

Source: Kimley-Horn, 2019.

In accordance with SCAQMD methodology, projects that do not exceed or can be mitigated to less than the daily threshold values do not add significantly to a cumulative impact. As shown in Tables 3 and 4, neither the construction nor the operation of the project would exceed the recommended SCAQMD threshold levels. Impacts would be less than significant.

c) **Expose sensitive receptors to substantial pollutant concentrations?**

**Less Than Significant Impact.** To identify impacts to sensitive receptors, the SCAQMD recommends addressing localized significance thresholds (LSTs). LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific emissions. The appropriate sensitive receptor area (SRA) for the localized significance thresholds is the North Coastal Orange County area (SRA 18) since this area includes the project site. LSTs apply to NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>.

The SCAQMD produced look-up tables for projects that disturb areas less than or equal to 5 acres in size. Project construction is anticipated to disturb a maximum of 2.5 acres in a single day. In addition, for project operations, the two-acre threshold was conservatively utilized, as the project site is approximately 6.0 acres.

The nearest sensitive receptors are the single-family residences located less than 50 feet (15 meters) south and east of the project site. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. For receptors located closer than 25 meters, the SCAQMD guidance states that the 25-meter thresholds should be used. Therefore, LSTs for receptors located at 25 meters were utilized in this analysis. As a note, under the operational analysis, the 25-meter receptor utilized in this analysis would be conservative as operational emission sources would be farther from receptors than emissions sources during construction.

Impacts to the nearest sensitive receptors during construction and operation are discussed further below.

**Construction:** Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, Table 10 in Appendix A, is used to determine the maximum daily disturbed acreage for comparison to LSTs. The SCAQMD's methodology states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

As shown in Table 5 below, emissions of NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> during project construction would not result in significant concentrations of pollutants to nearby sensitive receptors. Therefore, significant impacts related to LSTs would not occur during construction of the project.

**TABLE 5**  
**LOCALIZED SIGNIFICANCE OF CONSTRUCTION EMISSIONS (MAXIMUM POUNDS/DAY)**

| Source  | NO <sub>x</sub> | CO    | PM <sub>10</sub> | PM <sub>2.5</sub> |
|---|-----------------|-------|------------------|-------------------|
| Demolition (2019)   | 35.78           | 22.06 | 4.57             | 2.09              |
| Site Preparation (2019)                                     | 33.50           | 17.78 | 6.26             | 4.11              |
| Site Preparation (2020)                                     | 31.09           | 17.38 | 6.10             | 3.96              |
| Grading (2020)  | 26.39           | 16.05 | 3.72             | 2.42              |
| Paving (2020)   | 11.80           | 12.28 | 0.65             | 0.60              |
| Building Construction (2020)                                | 19.19           | 16.85 | 1.12             | 1.05              |
| Architectural Coating (2020)                                | 1.68            | 1.83  | 0.11             | 0.11              |
| SCAQMD Localized Screening Threshold (2 acres at 25 meters) | 131             | 945   | 7                | 5                 |
| Exceeds Threshold?  | No              | No    | No               | No                |

Source: Kimley-Horn, 2019.

**Operation:** As with construction, for purposes of the operational LST analysis, only on-site sources of emissions were considered. As shown in Table 6, emissions of NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> during project operation would not result in significant concentrations of pollutants nearby sensitive receptors. Therefore, significant impacts related to LSTs would not occur during operation of the project.

**TABLE 6**  
**LOCALIZED SIGNIFICANCE OF OPERATIONAL EMISSIONS (MAXIMUM POUNDS/DAY)**

| Source  | NO <sub>x</sub> | CO   | PM <sub>10</sub> | PM <sub>2.5</sub> |
|---|-----------------|------|------------------|-------------------|
| On-Site Emissions   | 0.61            | 8.40 | 0.08             | 0.08              |
| SCAQMD Localized Screening Threshold (2 acres at 25 meters) | 131             | 945  | 2                | 2                 |
| Exceeds Threshold?  | No              | No   | No               | No                |

Source: Kimley-Horn, 2019.

**Criteria Pollutant Health Impacts:** As shown in Table 5 and Table 6, above, localized effects of on-site project emissions on nearby receptors during construction and operation were found to be less than significant. The LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. The LSTs were developed by the SCAQMD based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. The ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect public health, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. As shown above, project-related emissions would not exceed the LSTs, and therefore would not exceed the ambient air quality standards or cause an increase in the frequency or severity of existing violations of air quality standards. Therefore, sensitive receptors would not be exposed to criteria pollutant levels in excess of the health-based ambient air quality standards.

**Carbon Monoxide (CO) Hotspots:** An analysis of CO “hotspots” is needed to determine whether the change in the level of service of an intersection resulting from the project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined.

Accordingly, with the steady decreasing of CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. The 2003 AQMP is the most recent version that addresses CO concentrations. As part of the SCAQMD CO Hotspot Analysis, the Wilshire Boulevard/Veteran Avenue intersection, one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day, was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 ppm, which is well below the 35-ppm Federal standard. The project would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD’s *CO Hotspot Analysis*. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection even as it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any vicinity intersections resulting from 455 additional vehicle trips attributable to the project. Additionally, it should be noted that the previous use on the project site generated 543 daily vehicle trips in 2017, which is 88 trips more than what would occur with the project. Therefore, impacts would be less than significant.

**Construction-Related Diesel Particulate Matter (DPM):** Construction would result in the generation of DPM emissions from the use of off-road diesel equipment required. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to toxic air contaminant emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. The California Office of Environmental Health Hazard Assessment (OEHHA) has not identified short-term health effects from DPM. Construction would be transient throughout the project site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time. Construction would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than five minutes to further reduce nearby sensitive receptors’ exposure to temporary and variable DPM emissions. For these reasons, DPM

generated by construction activities, in and of itself, would not be expected to expose off-site sensitive receptors to substantial amounts of air toxics and the project would have a less than significant impact.

**Health Risk Assessment for On-site Sensitive Receptors:** As provided in the HRA in Appendix B, sensitive receptors for purposes of the HRA included on-site dormitory residents, students, faculty, and staff that would be located within the project site. Project health risks are determined by examining the types and levels of air toxics generated and the associated impacts on factors that affect air quality. In particular, the thresholds for air toxic emissions include exceeding the maximum individual cancer risk of 10 in one million and emitting toxic contaminants that exceed the maximum hazard quotient of 1 in one million. Calculations as provided in the HRA in Appendix B are based on the OEHHA methodology.

With regard to carcinogenic risk, vehicle DPM emissions were estimated using emission factors for coarse particulate matter less than 10 microns in diameter (PM<sub>10</sub>) generated with the 2017 version of the Emission FACTor model (EMFAC) developed by CARB. Based on the AERMOD outputs, the highest expected hourly average diesel PM<sub>10</sub> emission concentrations from diesel truck traffic on the project site would be 0.16 µg/m<sup>3</sup>. The highest expected annual average diesel PM<sub>10</sub> emission concentrations at the project site would be 0.05 µg/m<sup>3</sup>. The calculations conservatively assume no cleaner technology with lower emissions in future years. Cancer risk calculations are based on 70-, 30-, and 9-year exposure periods. As shown in Table 7, the highest calculated carcinogenic risk as a result of the project is 4.44 per million for faculty/staff, 2.92 per million for students younger than 16 years of age, 0.44 per million for students older than 16 years of age. As shown, impacts related to cancer risk for on-site sensitive receptors would be less than significant.

The significance thresholds for toxic air contaminant exposure also require an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the Reference Exposure Level (REL) for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts.

An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The highest maximum chronic and acute hazard index associated with both DPM and acrolein emissions from the project would be 0.001 and 0.065, respectively. Therefore, non-carcinogenic hazards are calculated to be within acceptable limits, and a less than significant impact would occur.

**TABLE 7**  
**RISK ASSESSMENT RESULTS**

| Exposure Scenario         | Maximum<br>Cancer<br>Risk (Risk<br>Per<br>Million) <sup>1,2</sup> | Significance<br>Threshold<br>(Risk Per<br>Million) | Exceeds<br>Significance<br>Threshold? |
|---------------------------|---|--|---------------------------------------|
| Faculty/Staff             | 4.44  | 10   | No                                    |
| Student < 16 Years of Age | 2.92  | 10   | No                                    |
| Student > 16 Years of Age | 0.44  | 10   | No                                    |

<sup>1</sup> Refer to Appendix A.

<sup>2</sup> The maximum cancer risk would be experienced along the northern property line and based on worst-case exposure durations for the project (1 to 10 years), 95th percentile breathing rates, and a 30-year averaging time. Note that students would typically reside on the project site for six weeks but are conservatively assumed to reside on-site for one year. Resident Assistants (RAs) are typically located at a school for a period of one- or two-years but are conservatively assumed to reside on-site for 10 years. Other staff, including teachers and faculty would not live on-site.

Source: Kimley-Horn, 2019.

**d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

**No Impact.** Potential odors could arise from the diesel construction equipment used on-site, as well as from architectural coatings and asphalt off-gassing. Odors generated from the referenced sources are common in an urban environment and are not known to be substantially offensive to adjacent receptors. Additionally, odors generated during construction activities would be temporary and would disperse rapidly.

The SCAQMD CEQA Air Quality Handbook identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, the project would not result in other emissions adversely affecting a substantial number of people. No impact would occur.

## References

Kimley-Horn and Associates, Inc., 2019. Air Quality Assessment EF International Language Campus Costa Mesa Project City of Costa Mesa. August 2019.

Kimley-Horn and Associates, Inc., 2019. Health Risk Assessment EF International Language Campus Costa Mesa Project City of Costa Mesa. September 2019.

South Coast Air Quality Management District, 1993. 1993 CEQA Air Quality Handbook. April 1993.

South Coast Air Quality Management District, 2017. Final 2016 Air Quality Management Plan. March 2017.

South Coast Air Quality Management District, 2008. Final Localized Significance Threshold Methodology. June 2003, revised July 2008.

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## 3.4 Biological Resources

| <i>Issues (and Supporting Information Sources):</i>  | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>                    |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| <b>IV. BIOLOGICAL RESOURCES</b> — Would the project:   |                                       |   |                                     |                                     |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?   | <input type="checkbox"/>              | <input checked="" type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/>            |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

The following analysis is based, in part, on the Memorandum that was prepared that characterizes the project site and the existing biological resources based on a biological site visit conducted on September 12, 2019 by ESA. The Biological Site Visit is included as Appendix C, of this IS/MND.

### Discussion

- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

**No Impact.** Based on the Biological Site Visit conducted on September 12, 2019, no species identified as candidate, sensitive, or special-status species were observed within the project site. Suitable nesting or foraging for any candidate, sensitive, or special status species was not observed within the project boundaries. The project would not have an adverse effect on any species deemed as candidate, sensitive, or special status. No impact would occur.

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

**No Impact.** The project site is located in an urbanized setting and is fully developed with an existing three-story (approximately 44-foot tall), 68,000-square-foot building, associated landscaping, walkways, and surface parking lot. The project site does not have any drainage channels to the Santa Ana River (located approximately 2.4 miles to the west of the project site), riparian habitat, or other sensitive natural communities. Therefore, the project would not have an adverse effect on any riparian habitat or other sensitive natural community. No impact would occur.

- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**No Impact.** Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, streams, lakes, and bogs. According to the USFWS National Wetlands Mapper, there no wetlands in the vicinity of the project site. This finding is further supported by the findings during the Biological Site Visit. Therefore, the project would not cause a substantial adverse effect on federally protected wetlands. No impact would occur.

- 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?**

**Less Than Significant with Mitigation Incorporated.** The project site is located within a heavily urbanized setting and is fully developed. No wetlands or waterways, wildlife corridors, or nursery sites exist on site. According to a tree disposition plan there are a total of 224 trees on the project site. Of these trees, 87 trees would remain, 15 would be removed due to poor health, and 122 would be removed due to construction. A majority of the trees on the northern project boundary would be removed, while a majority of the trees on the eastern and southern boundary would remain, with the exception of a few trees that would be removed due to poor health. As the ornamental trees/shrubs to be removed on site may provide suitable nesting and foraging habitat for several native species of birds, project construction activities could result in significant impacts.

### ***Mitigation Measure***

**BIO-1:** Proposed project activities (including disturbances to native and non-native vegetation, structures, and substrates) should take place outside of the breeding bird season which generally runs from March 1-August 31 (as early as February 1 for raptors) to avoid take (including disturbance which would cause abandonment of active nests containing eggs and/or young). Take means to hunt, pursue, catch, capture, or kill, or

attempt to hunt, pursue, catch, capture or kill (Fish and Game Code Section 86). If project activities cannot feasibly avoid the breeding bird season, beginning thirty days prior to the disturbance of suitable nesting habitat, the project Applicant shall:

- a) Arrange for weekly bird surveys to detect any protected native birds in the habitat to be removed and any other such habitat within properties adjacent to the project site, as access to adjacent areas allows. The surveys shall be conducted by a qualified biologist with experience in conducting breeding bird surveys. The surveys shall continue on a weekly basis with the last survey being conducted no more than 3 days prior to the initiation of clearance/construction work.
- b) If a protected native bird is found, the applicant shall delay all clearance/construction disturbance activities within 300 feet of suitable nesting habitat for the observed protected bird species until August 31.
- c) Alternatively, the Qualified Biologist could continue the surveys in order to locate any nests. If an active nest is located, clearing and construction within 300 feet of the nest or as determined by a qualified biological monitor, shall be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting. The buffer zone from the nest shall be established in the field with flagging and stakes. Construction personnel shall be instructed on the sensitivity of the area.
- d) The applicant shall record the results of the recommended protective measures described above to document compliance with applicable State and Federal laws pertaining to the protection of native birds. Such record shall be submitted to the City of Costa Mesa.

### ***Significance Determination After Mitigation***

After the implementation of Mitigation Measure BIO-1, potential impacts on nesting bird species would be reduced to less than significant.

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

**No Impact.** Title 15, Chapter V of the Costa Mesa Municipal Code pertains to trees located within city medians, parkways, tree easement's, or any public property. No trees along Bear Street to the west, Interstate 405 to the north, or Olympic Avenue to the east will be impacted as a result of the project.

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

**No Impact.** The City is not part of a habitat conservation plan. Therefore, the project would not conflict with provisions of an adopted Habitat Conservation Plan or Natural Community Conservation Plan. No impact would occur.

## References

ESA, 2019. *Biological Site Visit – EF Education First: International Language Campus*.  
September 2019.

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## 3.5 Cultural Resources

| <i>Issues (and Supporting Information Sources):</i>   | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>         |
|---|---------------------------------------|---|-------------------------------------|--------------------------|
| <b>V. CULTURAL RESOURCES</b> — Would the project:   |                                       |   |                                     |                          |
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?      | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/>              | <input checked="" type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/> |
| c) Disturb any human remains, including those interred outside of formal cemeteries?                          | <input type="checkbox"/>              | <input checked="" type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/> |

Data presented in this Cultural Resources analyses were obtained from the Sacred Lands File Search and the records search conducted at the South Central Coastal Information Center (SCCIC) on July 24, 2019. The Sacred Lands File Search data is provided in Appendix D, of this IS/MND. The results of the records search conducted at the SCCIC is confidential and not provided in this IS/MND.

### Discussion

#### a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

**Less Than Significant Impact.** The CEQA Guidelines, Section 15064.5, define “historic resources” as resources listed in the California Register of Historical Resources, or determined to be eligible by the California Historical Resources Commission for listing in the California Register of Historic Resources. The criteria for eligibility are generally set by the Historic Sites Act of 1935, which established the National Register which recognizes properties that are significant at the national, state and local levels. To be eligible for listing in the National Register, a structure must demonstrate at least one of the following criteria:

1. It is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. It is associated with the lives of persons important to local, California, or national history; or
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, unless the property possesses exceptional significance, it must be at least 45 years old to be eligible.

The existing structure on the project site was constructed in 1979, making the building at 40 years old. As such, the building would not meet the National Register qualification of at least 45 year olds. In addition, the building does not possess any known cultural or historical characteristics that meet the National Register qualifications for a historic resource. As part of the project, the existing building would be renovated to create approximately 50 classrooms, a student services area, cafeteria, and faculty/staff offices.

Chapter 11, Historic and Cultural Resources Element, of the City of Costa Mesa General Plan identifies 31 historical properties, built environments, and landmarks that have been determined eligible for listing in the City's Local Register of Historic Places. Five of these historical properties have been determined eligible for listing in the National Register of Historic Places and in the California Register of Historical Resources:

- Methodist Church: 420 West 19th Street
- Diego Sepulveda Adobe: 1900 Adams Avenue
- Segerstrom House: 3315 Fairview Road
- Segerstrom Barn: 3315 Fairview Road
- Station Master's House: 2150 Newport Boulevard.

None of the above eligible resources are within the vicinity of the project site, with the closest being the Segerstrom House and Barn, both located one mile away from the project site. The General Plan also identifies sites eligible for Local Register Listing, but none of the listed sites are within the vicinity of the project site with the closest being a residential Spanish Colonial building built in 1928 and located one mile southwest of the project site.

The SCCIC records search indicates that eight previous cultural resources investigations have occurred within a 1-mile radius of the project site, although none have covered the project site itself. The records search for built architectural resources used a ¼-mile buffer and shows that seven built resources occur within the buffer. All are single family residences located to the east of the project site, and all seven have been determined ineligible for the California Register and National Register.

The buildings on the project site are not designated historic resources, and there are no designated resources in the immediate vicinity of the site. In addition, the buildings on the project site are not old enough to evaluate for inclusion in the CRHR. Therefore, the project would not cause a substantial adverse change in the significance of a historical resource. Impacts would be less than significant.

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

**Less Than Significant with Mitigation Incorporated.** California Public Resources Code § 21080.3.1 and Assembly Bill (AB) 52 require formal consultation with the Native

American tribal representatives. This consultation process is presented in Section 3.18 of this IS/MND. This section discusses potential impacts to other “unique archaeological resources” which are defined by §15067.5 of the CEQA Guidelines as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A NAHC Sacred Lands File (SLF) check of the site was conducted on behalf of the City (see Appendix D). As noted in an August 28, 2019 letter from the NAHC, the search of the SLF was positive,<sup>1</sup> and the NAHC recommended that the tribes on a contact list provided with the letter should be contacted for more information. The City contacted appropriate tribes as required by California Public Resources Code § 21080.3.1, and results of that consultation are discussed in Section 3.18 Tribal Cultural Resources.

The SCCIC records search for archaeological resources used a 1-mile buffer and indicates that four archaeological resources occur within the buffer, including two prehistoric archaeological sites and two historic-period isolated artifacts. However, all four resources occur more than ¾-mile from the project site, and no archaeological resources are documented within the project site itself. Because the project site is fully developed or paved, with no exposed ground surface, an archaeological field survey was not conducted.

As described in previous sections, the project site and its immediate surroundings consists of developed land that has been permanently disturbed by the construction of below ground and aboveground improvements (buildings, parking lots, streets, hardscapes, and utilities). Given the highly disturbed condition of the site, the likelihood of impacting unidentified archeological resources is considered low. However, while the sensitivity of the project site for buried archaeological resources is low, there is the potential for the discovery of such resources within the project boundaries. Agricultural remains, foundations, trails, hearths, trash dumps, privies, changes in soil colorations, human or animal bone, pottery, chipped or shaped stone, etc. are all potential indications of an archaeological site. During the construction phase of the project, ground-disturbing activities such as grading or excavation could disturb previously unidentified subsurface archaeological resources. If archaeological resources are encountered, significant impacts could occur.

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<sup>1</sup> Correspondence from Steve Quinn of the Native American Heritage Commission to ESA, dated August 29, 2019 (see Appendix D).

### ***Mitigation Measures***

**CUL-1: Worker Sensitivity Training.** Prior to the start of ground disturbing activities, all construction personnel shall be trained to identify the types of cultural resources that may be encountered during project implementation. These include both prehistoric and historic period archaeological resources. In addition to cultural resources recognition, the training shall convey procedures to follow in the event of a potential cultural resources discovery, including notification procedures. The training shall be provided by a Qualified Archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards, or an archaeologist working under their supervision.

**CUL-2: Unanticipated Discovery of Archaeological Resources.** If cultural resources are encountered during project implementation, all activity within 50 feet of the find shall cease until the find can be evaluated by the Qualified Archaeologist. If the Qualified Archaeologist determines that the resources may be significant, he or she shall notify the City and develop an appropriate treatment plan for the resource. The City shall consult with appropriate Native American representatives, as identified through consultation conducted for the project, in determining appropriate treatment for unearthened cultural resources if the resources are prehistoric or Native American in nature. Under CEQA, preservation in place is the preferred manner of mitigating impacts to archaeological sites. In considering any suggested measures proposed by the archaeologist to mitigate impacts to archaeological resources, the City shall determine whether avoidance is feasible in light of factors such as the nature of the find, project design, and other considerations. If avoidance is infeasible, other appropriate measures will be instituted, which could include, among other options, detailed documentation, or data recovery excavation. Work may proceed on other parts of the project area while mitigation for cultural resources is being carried out.

### ***Significance Determination After Mitigation***

After the implementation of Mitigation Measures CUL-1 and CUL-2, potential impacts to archaeological resources would be reduced to less than significant.

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

**Less Than Significant with Mitigation Incorporated.** As previously discussed, the project site has been significantly disturbed and developed. Therefore, the potential for the disturbance of any human remains is considered low. However, in the event that human remains are encountered during earth removal or disturbance activities, California Health and Safety Code Section 7050.5 requires that all activities cease immediately and a qualified archaeologist and Native American monitor be contacted immediately. The Coroner would also be contacted pursuant to Sections 5097.98 and 5097.99 of the Public Resources Code relative to Native American remains. If the Coroner determines the human remains are of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC would then be required to contact the most likely descendant of the deceased Native American, who would then serve as consultant on how to proceed with the remains. If human remains are discovered, potential significant impact could occur.

### ***Mitigation Measure***

**CUL-3: Unanticipated Discovery of Human Remains.** The discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

### ***Significance Determination After Mitigation***

After the implementation of Mitigation Measure CUL-3 as well as compliance with the established regulatory framework (California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98), potential impacts involving the disturbance of human remains would be reduced to less than significant.

## **References**

City of Costa Mesa, 2016. 2015-2035 General Plan, June 2016. Available online at: <https://www.costamesaca.gov/city-hall/city-departments/development-services/approved-plans-for-city/2015-2035-general-plan>. Accessed on August 27, 2019.

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### 3.6 Energy

| <i>Issues (and Supporting Information Sources):</i>   | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>         |
|---|---------------------------------------|---|-------------------------------------|--------------------------|
| <b>VI. ENERGY</b> — Would the project:  |                                       |   |                                     |                          |
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Discussion

The following analysis estimates the project’s electricity, natural gas usage, and transportation fuel usage based on the Air Quality Assessment, provided in Appendix A, of this IS/MND, and evaluates the projected supplies and capacity of existing infrastructure to serve the project’s estimated demand. In accordance with Appendix F of the CEQA Guidelines, the analysis provided below includes relevant information and analysis that address the energy implications of the project. Supporting energy calculations are included in Appendix E, of this IS/MND.

**a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

**Less Than Significant Impact.** The project would consume energy during construction activities primarily from on- and off-road vehicle fuel consumption in the form of diesel, gasoline, and electricity from water conveyance for dust control. Project operations would consume energy in the form of electricity for lighting, and water conveyance, natural gas for heating, and fossil fuels for employee and student trips.

Electricity transmission to the project site is provided and maintained by Southern California Edison (SCE) through a network of utility poles and underground utility lines. Natural gas service is provided to the project site by the Southern California Gas Company (SoCalGas).

**Construction:** The project would consume energy during construction activities, primarily from on- and off-road vehicle fuel consumption in the form of diesel, gasoline, and electricity from water conveyance for dust control. The analysis below includes the project’s energy requirements and energy use efficiencies by energy type for each stage of the project.

The estimated fuel usage for off-road equipment is based on the number and type of equipment that would be used during construction activities, hour usage estimates, the total duration of construction activities, and hourly equipment fuel consumption factors. On-road vehicles would include vendor trucks to deliver supplies necessary for project construction, and fuel used for employee commute trips. Electricity used from water conveyance for dust control was calculated using assumptions for gallons used per acre

per day and CalEEMod water conveyance intensity factors were applied to calculate total construction electricity consumption. Electricity for a small portable construction office was calculated using CalEEMod emission factors. Construction activities typically do not involve the consumption of natural gas. Table 8 summarizes the project's total fuel and electricity consumption from construction activities.

**TABLE 8**  
**SUMMARY OF ENERGY CONSUMPTION DURING PROJECT CONSTRUCTION**

| <b>Energy Source</b>                             | <b>Unit</b>   |
|--|---------------|
| <b>Transportation Fuel (Gasoline in gallons)</b> |               |
| On-Road Construction Equipment                   | 12,464        |
| Off-Road Construction Equipment                  | 0             |
| <i>Total Gasoline</i>                            | <i>12,464</i> |
| <b>Transportation Fuel (Diesel in gallons)</b>   |               |
| On-Road Construction Equipment                   | 49,414        |
| Off-Road Construction Equipment                  | 20,126        |
| <i>Total Diesel</i>                              | <i>69,540</i> |
| <b>Electricity (in kilowatt hours)</b>           |               |
| Water Conveyance for Dust Control                | 31,121        |
| Construction Trailers                            | 12,990        |
| <i>Total Electricity</i>                         | <i>44,111</i> |
| Source: ESA, 2019.                               |               |

The energy use summary provided above in Table 8 represents the amount of energy that could potentially be consumed during project construction based on a conservative set of assumptions, included in the Air Quality Assessment, provided in Appendix A, of this IS/MND. As shown, on- and off-road vehicles would consume an estimated 12,464 gallons of gasoline, approximately 69,540 gallons of diesel fuel, and approximately 44,111 kilowatt hour (kWh) of electricity throughout the project's construction. For comparison purposes, the fuel usage during project construction would represent approximately 0.0009 percent of the 2018 annual on-road gasoline-related energy consumption and 0.1 percent of the 2018 annual diesel fuel-related energy consumption in Orange County. Electricity would represent approximately 0.0001 percent of SCE total electricity sales for 2018. Detailed calculations are shown in Appendix E, of this IS/MND.

The project construction contractors would comply with applicable CARB regulations governing the accelerated retrofitting, repowering, or replacement of heavy duty diesel on- and off-road equipment. CARB adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling time in order to reduce public exposure to diesel particulate matter and other toxic air contaminants. CARB approved the Truck and Bus regulation to reduce NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from existing diesel vehicles operating in California. In addition to limiting exhaust from idling trucks, CARB recently

promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower to reduce emissions by requiring the installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models.

While intended to reduce construction criteria pollutant emissions, compliance with the above anti-idling and emissions regulations would also result in efficient use of construction-related energy and the minimization or elimination of wasteful and unnecessary consumption of energy. According to the CARB staff report that was prepared at the time the anti-idling ATCM was being proposed for adoption in late 2004/early 2005, the regulation was estimated to reduce non-essential idling and associated emissions of diesel particulate matter and NO<sub>x</sub> emissions by 64 percent and 78 percent, respectively, in analysis year 2009.

These reductions in emissions are directly attributable to overall reduced idling times and fuel combustion as a result of compliance with the regulation. Table 8, above, accounts for the project's compliance with CARB anti-idling regulations in the diesel fuel totals. Heavy-duty engines continue to become more efficient and reduction amounts may lessen in the future due to this. Although the energy savings cannot be accurately quantified, the project would still reduce consumption of diesel fuel under the anti-idling measure. Construction electricity use would be temporary, sporadic, and would cease upon completion of the project. Electricity for water conveyance would only be used when necessary to prevent fugitive dust and would decrease after completion of excavation and paving phases when the site is paved and has less fugitive dust. Thus, construction of the project would use energy necessary to build the project, but would not result in the wasteful, inefficient, and unnecessary use of energy and impacts would be less than significant.

**Operation:** During operation of the project, energy would be consumed for multiple purposes, including, but not limited to, refrigeration, lighting, the use of electronics, equipment, and appliances, and HVAC. Energy would also be consumed during project operations related to water usage, solid waste disposal, and vehicle trips. Table 9, below, summarizes the project's operational energy consumption.

As shown in Table 9, the project would result in a projected consumption of electricity totaling approximately 1.33 gigawatt hours (GWh) per year. The SCE forecasts that its total energy sales in 2020 would be approximately 95,000 GWh of electricity. The project's electricity demand would represent 0.001 percent of SCE's total sales in 2020. The project would increase demand for electricity including what is needed to support building operations and would be subject to regulations under the California Green Building Standards Code (CALGreen). CALGreen code establishes mandatory standards that require new residential and non-residential uses to reduce electricity, water, and waste to a certain percentage beyond an established baseline level. For example, the project would be required to reduce indoor water use by 20 percent below baseline levels under CALGreen code. Therefore, compliance with CALGreen code would ensure the project would not result in wasteful, inefficient, or unnecessary use of electricity.

**TABLE 9**  
**SUMMARY OF ANNUAL ENERGY CONSUMPTION DURING PROJECT OPERATION**

| Energy Source                        | Unit          |
|--------------------------------------|---------------|
| <b>Electricity (GWh/year)</b>        |               |
| Building                             | 1.11          |
| Water                                | 0.21          |
| <i>Total Electricity</i>             | <i>1.33</i>   |
| <b>Natural Gas (million cf/year)</b> |               |
| Building                             | 1.93          |
| <i>Total Natural Gas</i>             | <i>1.93</i>   |
| <b>Transportation (gallons/year)</b> |               |
| Gasoline                             | 52,516        |
| Diesel                               | 4,745         |
| <i>Total Transportation</i>          | <i>57,261</i> |
| GWh = Gigawatt Hours                 |               |
| cf = cubic feet                      |               |
| Source: ESA, 2019.                   |               |

The project would increase the demand for natural gas resources. As shown in Table 9, the project is estimated to annually consume approximately 1.93 million cubic feet of natural gas per year. The natural gas supply within SoCalGas's service area is estimated to be approximately 936,590 million cubic feet per year in 2020. The project's natural gas demand would represent 0.0002 percent of SoCalGas's forecasted natural gas supply in 2020. As would be the case with electricity, the project would comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance to minimize natural gas demand. As such, the project would minimize energy demand. Therefore, with the incorporation of these features, operation of the project would not result in the wasteful, inefficient, and unnecessary consumption of natural gas, and impacts would be less than significant.

In addition, the project includes PDFs that are aimed at reducing energy consumption, including electricity and natural gas, to net zero and reducing water use, which also requires electricity use for pumping water. The PDFs are provided in Section 2.3.4 in this IS/MND and listed below:

- **PDF-10:** All new buildings would include cool roofs to avoid heat gain.
- **PDF-11:** Fixed glazing would be provided throughout the new buildings.
- **PDF-12:** All Heating, ventilation, and air conditioning (HVAC) systems installed on the project site would be energy efficient.
- **PDF-13:** Energy efficient lighting, including low-energy light-emitting diode (LED) lighting and daylighting, would be installed throughout the project site.

- **PDF-14:** The project would use sustainable materials with recycled content for all newly constructed buildings.
- **PDF-15:** Native, drought-tolerant landscaping would be installed throughout the project site.

The project would increase the demand for fuel resources. The project's estimated operational gasoline and diesel fuel use is provided in Table 9; the project is projected to generate an annual demand for gasoline totaling approximately 52,516 gallons per year and generate annual demand for diesel totaling approximately 4,745 gallons. The fuel consumption generated by the project represents 0.004 percent of Orange County's total gasoline use and 0.004 percent of Orange County's diesel use in 2018. The project is located a half-mile from the nearest bus station at Bear Street and Baker Street with connections to regional shopping centers, dining, and other amenities. The project is also located within walking distance to the South Coast Plaza. Furthermore, the project Applicant would provide an EF shuttle service that would connect to OCTA bus stops. The project's location near public transit and commercial uses as well as the provision of a shuttle would help reduce vehicle trips to and from the site and reduce the amount of fossil fuel used by the project. Furthermore, the project would provide bicycle parking which would encourage reduced fossil fuel use and alternative methods of transportation to and from the site. Therefore, the project characteristics would minimize fossil fuel consumption and not result in wasteful, inefficient, or unnecessary consumption of fuel resources. As a result, energy impacts associated with the operation of the project would be less than significant.

**b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

**Less Than Significant Impact.** Project construction equipment would comply with federal, State, and regional requirements where applicable. With respect to truck fleet operators, the U.S. Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration (NHTSA) have adopted fuel efficiency standards for medium- and heavy-duty trucks. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018 and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type. U.S. EPA and NHTSA also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type. The energy modeling for trucks does not take into account specific fuel reductions from these regulations, since they would apply to fleets as they incorporate newer trucks meeting the regulatory standards; however, these regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards.

In addition, construction equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of five minutes at a location and the phase-in of off-road emission standards that result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy.

Electricity and natural gas usage during project operations would be minimized through incorporation of applicable 2016 Title 24 standards and applicable 2016 CALGreen requirements. With respect to operational transportation-related fuel usage, the project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles by complying with CAFE fuel economy standards and the Pavley and Low Carbon Fuel standards, which are designed to result in more efficient use of transportation fuels. As mentioned above, the project would be located near public transit and commercial uses and would provide a shuttle to assist students living on the project site with accessing commercial and recreational uses off site. This would encourage alternative transportation options that would reduce fossil fuel usage and/or use fuel more efficiently.

As discussed in detail in Section 3.8, Greenhouse Gas Emissions, the most applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions are AB 32 and SB 32, which codified the state's GHG emissions reduction targets for the future. Consistent with recent judicial and legislative action, this analysis also considers the long-range (2050) reduction target outlined in Executive Order (EO) S-3-05. GHG reduction plans consider strategies that result in energy savings such as increasing renewable electricity use, reducing water use, and improving overall energy efficiency of buildings and mobile sources. Therefore, since the project is consistent with AB32, SB32, Title 24, and CALGreen standards, it does not obstruct any applicable renewable energy or energy efficiency plan, and impacts would be less than significant.

## References

California Energy Commission, California Energy Demand 2018-2030 Revised Forecast, 2018.

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## 3.7 Geology and Soils

| <u>Issues (and Supporting Information Sources):</u>  | <b>Potentially Significant Impact</b> | <b>Less Than Significant with Mitigation Incorporated</b> | <b>Less Than Significant Impact</b> | <b>No Impact</b>                    |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| <b>VII. GEOLOGY AND SOILS — Would the project:</b>   |                                       |   |                                     |                                     |
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:   |                                       |   |                                     |                                     |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| ii) Strong seismic ground shaking?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| iii) Seismic-related ground failure, including liquefaction?   | <input type="checkbox"/>              | <input checked="" type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/>            |
| iv) Landslides?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?  | <input type="checkbox"/>              | <input checked="" type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/>            |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?  | <input type="checkbox"/>              | <input checked="" type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/>            |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?  | <input type="checkbox"/>              | <input checked="" type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/>            |

## Discussion

The following analysis is based, in part, on the *Geotechnical Foundation Investigation, EF International Language Campus – New Dormitory Buildings and Site Improvements, 3150 Bear Street City of Costa Mesa, California* (Geotechnical Report), prepared for the project by GMU Geotechnical, Inc., March 1, 2019 (GMU Geotechnical, Inc., 2019). The Geotechnical Report is included as Appendix F, of this IS/MND. The evaluation included the following:

- Review of geotechnical information pertaining to the subject site, including review of site geology, groundwater data, seismic hazard maps, historic aerial photographs, and topographic maps.
- Site reconnaissance to identify the existing site conditions and mark the boring locations.
- Staked eleven (11) hollow-stem-auger, truck-mounted drill holes and four (4) cone penetration testing (CPT) soundings locations.

- Notification of and coordination with EFEKTA Group, Inc. and Underground Service Alert (USA/Dig Alert) in order to provide advance notification of the subsurface drill holes and CPTs planned within the project site.
- Advanced eight (8) Health and Safety Authority (has) drill holes to a maximum depth of approximately 31.5 feet and four (4) CPTs to depths of approximately 50 feet within the footprints of the new dormitory buildings in order to obtain shear wave velocities, to verify the current groundwater level and perform a liquefaction analysis.
- Performed an additional three (3) HSA drill holes to a depth of approximately 5 feet below the existing ground surface to perform preliminary percolation testing
- Performed laboratory testing on soil samples obtained from the drill holes. Testing included moisture and density, gradation, Atterberg limits, maximum density, expansion index, shear strength characteristics, consolidation, R-value, and full chemical analysis.
- Interpreted and evaluated the field and laboratory data collected from this investigation, and performed geotechnical engineering design analyses which included; bearing capacity and settlement analysis, liquefaction analysis, seismic analysis in accordance with the 2016 California Building Code (CBC) standards, and pavement analysis.
- Supported the schematic design “SD” processes by providing geotechnical design memos/e-mails with geotechnical design conclusions and recommendations, which included the following:
  - Foundation design and anticipated settlement of the dormitory buildings;
  - Site preparation, building foundation over-excavation, and precise grading requirements;
  - Acceptability of the site soils for use as fill and backfill;
  - Infiltration results;
  - Shrinkage and subsidence figures relative to earthwork;
  - Site seismicity and seismic design parameters;
  - Lateral earth pressures and temporary slopes;
  - Liquefaction potential and seismic settlement of the site soils;
  - Installation of underground utilities;
  - Flatwork design; and
  - Asphalt pavement and concrete pavement designs
- Prepared and distributed this formal geotechnical foundation report for the project, containing final geotechnical conclusions and recommendations to support the main project submittal and permitting processes.

The assessment of potential impacts to paleontological resources is based primarily on a fossil records search and sensitivity analysis conducted by the Natural History Museum of Los Angeles County, dated August 7, 2019 (McLeod, 2019). The records results are included in Appendix G, of this IS/MND.

Would the project result in:

- a) i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Map issued by the State Geologist for the area or base on other substantial evidence of a known fault?**

**No Impact.** The project site is not within an Alquist-Priolo Earthquake Fault Zone, and no geologic maps exhibit active faults crossing the project site. The nearest known active faults are the San Joaquin Hills Blind Thrust, at approximately 0.4 miles from the project site and the Newport-Inglewood Fault Zone, which is located about 5.0 miles from the site, respectively. (GMU Geotechnical, Inc., 2019)

According to the General Plan Safety Element, the City is within the seismically active Southern California region that includes five nearby faults, including the Newport-Inglewood, San Joaquin Hills, Whittier, San Andreas, and San Jacinto. Of these faults, only the Newport-Inglewood traverses Costa Mesa. This fault extends over 40 miles from the Santa Monica Mountains to Newport Beach, where it extends offshore for an unknown distance. The fault is seismically active, with numerous recorded earthquakes. The largest and most completely documented was the Long Beach earthquake of 1933 (magnitude 6.3M), which resulted in strong shaking in Costa Mesa and throughout Southern California. The fault traverses the southern portion of the City; however, the fault's main trace line, classified on the basis of seismic activity, lies 0.3-mile south of the City limits. (City of Costa Mesa, 2015)

The Newport-Inglewood fault is not delineated on the most recent Alquist-Priolo Earthquake Fault Map, and the City is not affected by any Alquist-Priolo Earthquake Fault Zone. As previously mentioned, the nearest potentially active fault is the Newport-Inglewood Fault located by the coast, approximately five miles southwest of the project site (CGS, 2015). Therefore, the project would not directly or indirectly cause potential substantial adverse impacts associated with the rupture of a known earthquake fault. No impact would occur.

- ii) **Strong seismic ground shaking?**

**Less than Significant Impact.** The City, as with all of Southern California, is subject to strong ground shaking. As such the project site is located in a seismically active region. As discussed above, there are five nearby faults in the City, with the Newport-Inglewood Fault traversing the southern portion of the City. Active faults of most concern to the City's planning area are the Newport-Inglewood, Whittier, San Andreas, and San Jacinto faults. The closest fault to the project site is the Newport-Inglewood fault, which is located approximately 5 miles southwest of the project site. Earthquakes are unavoidable hazards although the resultant damage can be minimized through appropriate seismic design and engineering.

The City requires that all construction meet the latest standards of the CBC for construction which considers proximity to potential seismic sources and the maximum

anticipated groundshaking possible. The proposed improvements associated with the project includes construction of one 3-story dormitory building and two 2-story dormitory buildings as well as associated drives; parking stalls; flatwork; swimming pool; basketball; volleyball court; basketball court; multipurpose field; landscape; and pertinent structures. The aforementioned improvements would be implemented in accordance with applicable City ordinances and policies and consistent with the most recent version of the CBC, which requires structural design that can accommodate ground accelerations expected from known active faults. In addition, the geotechnical investigation for the project includes recommendations for final design parameters for the proposed 3 and 2-story buildings, foundation, walls and utilities (GMU Geotechnical, Inc., 2019). Compliance with these building safety design standards would ensure impacts associated with groundshaking effects are less than significant. Therefore, the project would not directly or indirectly cause potential substantial adverse impacts associated with strong seismic ground shaking. Impacts would be less than significant.

### **iii) Seismic-related ground failure, including liquefaction?**

**Less Than Significant with Mitigation Incorporated.** Liquefaction can be defined as the loss of soil strength or stiffness due to a buildup of pore-water pressure during a seismic event and is associated primarily with relatively loose, saturated fine- to medium-grained unconsolidated soils. Seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause the soils to liquefy and temporarily behave as a dense fluid. According to the California Geological Survey, Seismic Hazard Zone Map (CGS, 2019) and the City of Costa Mesa General Plan EIR, Figure 4.6-6 Geologic Hazards Map (City of Costa Mesa, 2016), the project site is located in an area with the potential for liquefaction. Thus, in the event of a large earthquake with a high acceleration of seismic shaking, the potential for liquefaction exists. Given this potential, if liquefiable soils are not taken into consideration in the design of proposed structure and during construction site preparation activities, liquefiable soils could have the potential to impact the structural components of the project. The liquefaction evaluation prepared for the project was based on the 2016 CBC and American Society of Civil Engineers (ASCE) 7-10 criteria. Results of the evaluation indicated liquefaction does occur in discrete zones below a depth of 24 feet. Seismic settlement related to liquefaction along with dry sand seismic settlement was also calculated for the site, which indicated seismic settlements of 1.5 inches below Building No.1 and 0.5 inches beneath Buildings No. 2 and 3 (GMU Geotechnical Inc., 2019). The potential for on-site seismic settlement is considered a significant impact.

### ***Mitigation Measure***

**GEO-1:** Prior to issuance of a building permit, the project Applicant shall demonstrate to the City of Costa Mesa that the proposed structures would be supported by mat foundation systems to reduce the potential for liquefaction. A mat foundation system is a continuous slab resting on the soil that extends over the entire footprint of the building, thereby supporting the building and transferring its weight to the ground, reducing the stress on the soil. Building No. 1 shall be supported on a mat foundation system, while

Buildings No. 2 and 3 shall be supported on either a mat foundation or shallow spread footing foundation system supported on rammed aggregate piers. The mat slab shall be designed by the project structural engineer. If there is a need to modify the design of the foundation system of any of the proposed on-site buildings, the revised foundation shall be as effective as the currently proposed design, and the potential for liquefaction impacts is required to be less than significant to the satisfaction of the City of Costa Mesa.

Additionally, the following measures designed to reduce the potential for liquefaction hazards would include, but not be limited to:

- Clearing – All significant organic material such as weeds, brush, tree branches, roots, construction debris, old irrigation lines, or other decomposable material shall be removed from areas to be graded;
- Corrective Grading (Within Building Areas) – Removal and re-compaction of soils within building areas will be required to provide a stable platform for construction of proposed foundations and to limit static settlement. Buildings No. 1 and 2 is to be supported on mat foundation of 5 feet of cement treated soil. Building No. 3 is to be supported on mat foundation of 3 feet of cement treated soil;

### ***Significance Determination After Mitigation***

After the implementation of Mitigation Measure GEO-1, which would require that the proposed structures developed under the project are support by mat foundation systems, potential liquefaction impacts would be reduced to less than significant.

#### **iv) Landslides?**

**No Impact.** The City of Costa Mesa General Plan EIR Figure 4.6-6 Geologic Hazards Map identifies areas in the west of the City as susceptible to landslides (City of Costa Mesa, 2016). Within the balance of the City, that includes the project site, no landslide potential is identified. Therefore, the project would not directly or indirectly cause potential substantial adverse impacts associated landslides. No impact would occur.

#### **b) Would the project cause substantial soil erosion or the loss of topsoil?**

**Less Than Significant Impact.** Soil erosion or loss of top soil could occur during construction activities. However, the project site is currently developed with buildings and paving. According to the project-specific geotechnical study, top soils were encountered in all of the exploratory drill holes that were approximately one foot in thickness. As construction activities occur on site, the contractor is required to comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit. This permit would involve the development of Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would include erosion control best management practices (BMPs) such as sandbags and fiber rolls to trap sediment. Although the SWPPP is intended to primarily prevent sedimentation from entering runoff from the site, it has been proven effective in preventing soil erosion and loss of topsoil occurring at a construction site. Thus, with adherence to the required BMPs, potential construction-related erosion would be minimized. With the implementation of the required SWPPP,

soil erosion impacts would be less than significant. Following completion of construction activities, disturbed areas would either be revegetated or covered by impervious surfaces such as asphalt or concrete which limits the potential for erosion. Thus operation of the project would result in less than significant soil erosion impacts.

- c) **Would the project be located on a geologic unit or a 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?**

**Less Than Significant with Mitigation Incorporated.** Refer to response a.iii) above for discussions of potential impacts related to liquefaction. The project is located in an area defined as having liquefaction or collapse (GMU Geotechnical, Inc., 2019; CGS, 2019). Therefore, potential impacts associated with liquefaction or collapse could be significant.

As discussed in a.iv) above, the project site is not susceptible to landslides as identified by the City and California Geologic Service (CGS) (City of Costa Mesa, 2016; CGS, 2019). Additionally, young alluvial deposits were found present on the project site. Young alluvial deposits consist of moist to wet, firm to stiff clay and silt material, and moist to very moist, medium dense to very dense sand materials, which may not be suitable for support of the planned improvements. Therefore, potential impacts associated with unstable soils would be significant.

#### ***Mitigation Measure***

Implementation of Mitigation Measure GEO-1 is required.

#### ***Significance Determination After Mitigation***

With implementation of Mitigation Measure GEO-1, City requirements, and adherence to the 2016 CBC, project implementation would not expose people or structures to potential substantial adverse effects involving unstable geologic units or soils. Impacts would be reduced to less than significant.

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

**Less Than Significant with Mitigation Incorporated.** Expansive soils are defined as soils possessing clay particles that react to moisture changes by shrinking (when dry) or swelling (when wet). Impacts associated with expansive soils are generally structurally related, including cracked walls and foundations. Based on the expansion index testing results, the near-surface materials of the project site have a high to very high expansion potential (GMU Geotechnical Inc., 2019). Although portions of the alluvial soils encountered were relatively coarse-grained, the majority of alluvial soils encountered were fine-grained and expansive. Therefore, the implementation of the project could experience significant impacts from expansive soils.

### **Mitigation Measure**

**GEO-2:** Prior to issuance of a building permit, the project Applicant shall demonstrate to the City of Costa Mesa that adequate grading, removal, and re-compaction of soils has been performed to reduce the potential of expansive soils hazards. The following measures designed to reduce the potential for expansive soils hazards would include, but not be limited to:

- Corrective Grading (Outside Building Areas) – Removal and re-compaction of areas to receive new improvements that are outside the buildings areas will be required for adequate performance relative to expansive soil uplift. Grading recommendations will be implemented to vehicular pavement, retaining walls, flatwork/hardscape/sports court/pool shell and deck;
- Subgrade soil improvement and stabilization, such as by removal and replacement of soil, compaction, drying or mixing; and
- Special expansive soil mitigation slab design for both expansion and settlement of proposed buildings.

### **Significance Determination After Mitigation**

With implementation of Mitigation Measure GEO-2, impacts related to expansive soils would be reduced to less than significant.

- e) **Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

**No Impact.** The project site is located in a highly urbanized area, where wastewater infrastructure is currently in place. The project would connect to existing sewer lines that serve the project site and would not use septic tanks or alternative waste disposal systems. Therefore, the project would not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems. No impact would occur.

- f) **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less Than Significant with Mitigation Incorporated.** The Natural History Museum of Los Angeles County records search did not identify any vertebrate fossil localities that lie directly within the immediate vicinity of the project site. However, fossils have been found nearby, from within the same sedimentary deposits that occur within the project site. The closest vertebrate fossil locality lies to the south-southwest near the SR-55 Freeway and Santa Isabel Avenue. This locality produced fossil sea turtle (*Cheloniidae*) and camel (*Camelidae*) bones approximately 30 feet below the grade of the roadway. Further to the southwest, near the intersection of 19<sup>th</sup> Street and Anaheim Avenue, was found a fossil specimen of an undetermined elephant (*Proboscidea*). West-southwest of the project site, another locality produced specimens of mammoth (*Mammuthus*) and camel (*Camelidae*) approximately 15 feet below the ground surface. Additionally, a large

number of fossil localities have been found in marine and terrestrial late Pleistocene terrace deposits on the upper east side of Newport Bay.

According to the geologic mapping conducted by the Natural History Museum of Los Angeles County, the entire project site has surface deposits composed of younger Quaternary Alluvium. These deposits typically do not contain significant vertebrate fossils. However, these deposits are usually underlain by older Quaternary deposits that frequently contain significant vertebrate fossils. Depth to the older Quaternary deposits on the project site is unknown, although geotechnical boring conducted for the project found only younger Quaternary Alluvium to the basal depth of the cores at 31.5 feet below surface (GMU Geotechnical Inc., 2019). That said, nearby fossils have been found as shallow as 15 feet below surface.

The Natural History Museum of Los Angeles County states that surface grading or shallow excavation in the younger Quaternary Alluvium probably will not uncover significant vertebrate fossils, but deeper excavation that penetrates the older Quaternary Alluvium could encounter fossils, and should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. The geotechnical investigation, which only found younger Quaternary Alluvium within the project site to depths of over 30 feet, shows that this transition to older Quaternary Alluvium is very deep within the project site. The Natural History Museum of Los Angeles County further recommends that, should fossils be encountered, sediment samples should be collected and processed to determine the small fossil potential in the site, and any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

Development of the project would require excavation and grading to lay out utility lines and flatten pads, and to install various subsurface project components. However, it is not anticipated that excavations will exceed the greater than 30-foot depth of the younger Quaternary Alluvium as identified through the geotechnical investigation. Regardless, given the recovery of significant vertebrate fossils from as shallow as 15 feet at nearby localities, there is potential, while low, to encounter higher sensitivity older Quaternary Alluvium.

### ***Mitigation Measures***

**GEO-3: Worker Sensitivity Training.** Prior to ground disturbing activities, a qualified paleontologist meeting the Society of Vertebrate Paleontology (SVP) Standards (SVP 2010) shall conduct construction worker paleontological resources sensitivity training prior to the start of ground disturbing activities (including vegetation removal, pavement removal, etc.). This can occur in coordination with Cultural Resources Worker Sensitivity Training (Mitigation Measure CUL-1). In the event construction crews are phased, additional trainings shall be conducted for new construction personnel. The training session shall focus on the recognition of the types of paleontological resources that could be encountered within the project site and the procedures to be followed if they are found. Documentation shall be retained demonstrating that all construction personnel attended the training.

**GEO-4: Fossil Discovery.** During ground disturbing activities, if personnel or workers discover any potential fossils, regardless of the depth of work or location, ground disturbance work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery, consulted with the City of Costa Mesa, and made recommendations as to the appropriate treatment. If the find is deemed significant, it shall be salvaged following the standards of the SVP (2010), and in accordance with the recommendations of the Natural History Museum of Los Angeles County (McLeod, 2019), and curated with a certified repository.

### ***Significance Determination After Mitigation***

With implementation of Mitigation Measures GEO-2 and GEO-3, impacts related to paleontological resources would be reduced to less than significant.

## **References**

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### 3.8 Greenhouse Gas Emissions

| <u>Issues (and Supporting Information Sources):</u>  | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>         |
|--|---------------------------------------|---|-------------------------------------|--------------------------|
| <b>VIII. GREENHOUSE GAS EMISSIONS —</b>  |                                       |   |                                     |                          |
| Would the project:   |                                       |   |                                     |                          |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?      | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

#### Discussion

The following analysis is based, in part, on the *Greenhouse Gas Emissions Assessment EF International Language Campus Costa Mesa Project City of Costa Mesa* (GHG Emissions Assessment), prepared for the project by Kimley-Horn and Associates, Inc., August 2019 (Kimley-Horn, 2019). The GHG Emissions Assessment is included as Appendix H, of this IS/MND. The GHG Emissions Assessment was prepared for the project to evaluate the potential construction and operational emissions associated with the project and determine the level of impact the project would have on the environment.

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

**Less Than Significant Impact.** To provide guidance to local lead agencies on determining significance for greenhouse gas (GHG) emissions in their CEQA documents, the SCAQMD has convened a GHG CEQA Significance Threshold Working Group. The SCAQMD is in the process of establishing a threshold for GHG emissions to determine a project’s regional contribution toward global climate change impacts for California. However, the SCAQMD has not announced when staff is expecting to present a finalized version of its GHG thresholds to the governing board.

On September 28, 2010, the SCAQMD GHG CEQA Significance Threshold Working Group recommended an interim screening level numeric “bright-line” thresholds and efficiency metric thresholds. This working group was formed to assist SCAQMD’s efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research, CARB, the Attorney General’s Office, a variety of city and county planning departments in the Air Basin, various utilities such as sanitation and power companies throughout the Air Basin, industry groups, and environmental and professional organizations. The screening level thresholds consist of 10,000 metric tons per year of CO<sub>2</sub>e (MTCO<sub>2</sub>e) for industrial land uses and 3,000 MTCO<sub>2</sub>e for non-industrial land uses. This threshold was developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provides guidance to CEQA practitioners in determining whether GHG emissions from a proposed project are significant. The Working Group’s efficiency-based thresholds

consist of 4.6 MTCO<sub>2</sub>e per service population per year (SP/yr) to meet 2020 reduction targets and 3.0 MTCO<sub>2</sub>e/SP/yr to meet 2035 reduction targets.

**Construction:** As discussed in the GHG Emissions Assessment, as provided in Appendix H, of this IS/MND, construction emissions were calculated using CalEEMod. CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. The project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. See Appendix H for more information regard the construction assumptions used in the analysis.

As shown in Table 10, project construction would result in the generation of approximately 603 MTCO<sub>2</sub>e over the course of construction. Construction GHG emissions are typically summed and amortized over the lifetime of the project (assumed to be 30 years), then added to the operational emissions (SCAQMD, 2009). The amortized construction emissions would be 20 MTCO<sub>2</sub>e per year. Once construction is complete, the generation of these GHG emissions would cease.

**TABLE 10**  
**CONSTRUCTION RELATED GHG EMISSIONS**

|                                | MTCO <sub>2</sub> e |
|--------------------------------|---------------------|
| Total Construction Emission    | 603                 |
| 30-Year Amortized Construction | 20                  |

Source: Kimley-Horn, 2019.

**Operation:** As discussed in the GHG Emissions Assessment, as provided in Appendix H, of this IS/MND, operational emissions were calculated using CalEEMod. Operational or long-term emissions occur over the life of the project. GHG emissions would result from direct emissions such as project generated vehicular traffic, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, the energy required to convey water to, and wastewater from the project site, the emissions associated with solid waste generated from the project site, and any fugitive refrigerants from air conditioning or refrigerators.

Total GHG emissions associated with the project, including construction and operational emissions, are summarized in Table 11. As shown therein, the project would generate approximately 1,055 MTCO<sub>2</sub>e annually from both construction and operations and the project would not exceed the SCAQMD GHG threshold of 3,000 MTCO<sub>2</sub>e per year. Additionally, the project would not exceed the SCAQMD post-2020 efficiency target of 3.0 MTCO<sub>2</sub>e/SP/yr.

In addition, the project includes PDFs that are aimed at reducing energy consumption, including electricity and natural gas, to net zero and reducing water use, which also requires electricity use for pumping water. Reduction of energy usage would in turn reduce GHGs emitted by the project during operation. The PDFs are provided in Section 2.3.4 in this IS/MND and listed below:

- **PDF-10:** All new buildings would include cool roofs to avoid heat gain.
- **PDF-11:** Fixed glazing would be provided throughout the new buildings.
- **PDF-12:** All Heating, ventilation, and air conditioning (HVAC) systems installed on the project site would be energy efficient.
- **PDF-13:** Energy efficient lighting, including low-energy light-emitting diode (LED) lighting and daylighting, would be installed throughout the project site.
- **PDF-14:** The project would use sustainable materials with recycled content for all newly constructed buildings.
- **PDF-15:** Native, drought-tolerant landscaping would be installed throughout the project site.

Therefore, project-related GHG emissions would not have a significant impact on the environment. Impacts would be less than significant.

**TABLE 11  
PROJECT GHG EMISSIONS**

| Emissions Source                                     | MTCO <sub>2</sub> e |
|--|---------------------|
| GHG Emissions  |                     |
| Area   | 2                   |
| Energy   | 384                 |
| Mobile   | 553                 |
| Solid Waste  | 30                  |
| Water/Wastewater                                     | 66                  |
| Operational Total                                    | 1,035               |
| Construction Total (Amortized over 30 Years)         | 20                  |
| Project Total  | 1,055               |
| Bright Line Threshold                                | 3,000               |
| Service Population                                   |                     |
| Project Population <sup>a</sup>                      | 697                 |
| Project GHG Efficiency (MTCO <sub>2</sub> e/SP/year) | 1.5                 |
| GHG Efficiency Target (MTCO <sub>2</sub> e/SP/year)  | 3.0                 |
| Exceeds SCAQMD Threshold?                            | No                  |

<sup>a</sup> Conservatively based on a maximum of 627 student residents and 70 staff, resident assistants, faculty, etc.  
Source: Kimley-Horn, 2019.

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

**Less Than Significant Impact.** The project is required to comply with the local, regional and State established GHG reduction plans. Locally, the City of Costa Mesa does not currently have formal GHG emissions reduction plans or recommended emissions thresholds for determining significance associated with GHG emissions from development projects. However, relevant state and regional GHG reduction plans include AB 32, CARB’s Climate Change Scoping Plan (Scoping Plan), and Executive Order S-3-05 and S-30-15.

The SCAQMD is in the process of preparing recommended significance thresholds for GHGs for local lead agency consideration. In addition, the Scoping Plan states, “The 2020 goal was established to be an aggressive, but achievable, mid-term target, and the 2050 GHG emissions reduction goal represents the level scientists believe is necessary to reach levels that would stabilize climate” (CARB, 2008). The year 2020 GHG emission reduction goal of AB 32 corresponds with the mid-term target established by Executive Order S-3-05, which aims to reduce California’s fair-share contribution of GHGs in 2050 to levels that would stabilize the climate.

Because the project is limited to the development of an educational institution, the Scoping Plan’s recommended measures are not directly applicable. In other words, there are no specific actions or measures to incorporate into the project in order to comply with the Scoping Plan. However, the project would be indirectly reduced through the implementation of various Scoping Plan measures, such as the low carbon fuel standard, vehicle emissions standards, building energy efficiency standards, market-based mechanisms (such as the cap-and-trade program) and the Renewable Portfolio Standard. Therefore, the project would not conflict with the Scoping Plan’s recommended measures and, as such, would not impede implementation of the Scoping Plan.

The 2017 Scoping Plan, the most recent Scoping Plan, identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan in 2013. Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. As such, impacts related to consistency with the Scoping Plan would be less than significant.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed. However, it can be anticipated that operation of the project would benefit from the implementation of current and potential future regulations (e.g., improvements in vehicle emissions, SB 100/renewable electricity portfolio improvements, etc.) enacted to meet an 80 percent reduction below 1990 levels by 2050.

In addition to the project's consistency with relevant state and regional GHG reduction plans, as shown above in Table 11, the project would result in total construction and operational GHG emissions that are below the 3,000 MTCO<sub>2</sub>e per year threshold as well as the 3.0 MTCO<sub>2</sub>e/SP/yr efficiency threshold.

Based on the above, the project would not conflict with any applicable plan, policy, or regulation of an agency adopted for reducing the emissions of GHGs because the project would not impede implementation of the Scoping Plan, or conflict with the policies of the Scoping Plan and the project would also generate low levels of GHGs. Impacts would be less than significant.

## References

California Air Resources Board, 2017. California's 2017 Climate Change Scoping Plan, November 2017.

California Air Resources Board, 2008. Climate Change Scoping Plan: A Framework for Change, December 2008.

Kimley-Horn and Associates, Inc., 2019. Greenhouse Gas Emissions Assessment EF International Language Campus Costa Mesa Project City of Costa Mesa. August 2019.

South Coast Air Quality Management District, 2010. Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15, September 2010.

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### 3.9 Hazards and Hazardous Materials

| Issues (and Supporting Information Sources):  | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>IX. HAZARDS AND HAZARDOUS MATERIALS —</b><br>Would the project:  |                                |  |                                     |                                     |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input 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"/> | <input type="checkbox"/>            |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### Discussion

The following analysis is based, in part, on the *Phase I Environmental Site Assessment* (Phase I ESA), prepared for the project by Ramboll, February 2019 (Ramboll, 2019). The Phase I ESA is included as Appendix I, of this IS/MND. The Phase I ESA was prepared for the project to identify recognized environmental conditions and certain potential environmental conditions on the project site.

**a) Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

**Less Than Significant Impact.** The proposed construction activities would involve transport, use, and disposal of hazardous materials such as solvents, oils, grease, and cleaning fluids. In addition, hazardous materials may be needed for fueling and servicing construction equipment on the site. During construction of the project, material safety data sheets for all applicable materials present at the project site would be made readily available to on-site personnel. All transport, handling, use and disposal of substances

such as petroleum products related to construction would comply with all federal, state and local laws regulating the management and use of hazardous materials. BMPs would be in place to ensure the lawful and proper storage and use of these materials.

The project would result in the construction of one 3-story dormitory building and two 3-story dormitory buildings as well as; associated drives; parking stalls; flatwork; swimming pool; basketball; volleyball court; basketball court; multipurpose field; landscape; and pertinent structures. Operation and maintenance activities associated with the proposed development would require limited use of hazardous materials. Such materials would involve cleaning and degreasing solvents, fertilizers, pesticides, and other materials used for the maintenance of buildings and associated landscaping. Those that would be used would be stored on-site, and in designated areas. Hazardous materials would not be stored in the self-storage units. Therefore, operation of the project would result in a less than significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous materials during operation of the project. Impacts would be less than significant.

**b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

**Less than Significant Impact.** A Phase I ESA prepared for the project, provided in Appendix I, of this IS/MND, consisted of analyzing the potential for asbestos-containing materials (ACMs), water intrusion/mold, lead-based paint, and radon contamination associated with past and current uses. Past uses included farmland that was developed into a commercial office building that was then turned into a giftshop, Full Gospel Business Men's Fellowship, Remodeler's Plus, Omega Advertising, and Trinity Christian Center. The project site is currently a vacant maintenance building. The ACM survey conducted concluded that the maintenance building did not indicate ACMs within the 205 materials sampled. Facility personnel informed Ramboll that the site has not experienced issues with water intrusion. Based on the construction date of the existing site building in 1978, it would be possible that lead-based paint was used historically on facility structures. However, Ramboll observed the paint to be in good condition. The project site is located in an area categorized as Zone 3, which has average indoor basement radon levels below 2 picoCuries per liter (pCi/L), which is lower than the USEPA's continuous exposure limit (the limit at which further testing or remedial action is suggested) of 4.0 pCi/L. As a result, no significant assumptions were made as part of the Phase I ESA.

As discussed above, operation and maintenance activities associated with proposed dormitory buildings as well as; associated drives; parking stalls; flatwork; swimming pool; basketball; volleyball court; basketball court; multipurpose field; landscape; and pertinent structures would require limited use of hazardous materials. Such materials would involve cleaning and degreasing solvents, fertilizers, pesticides, and other materials used for the maintenance of buildings and associated landscaping. Those that would be used would be stored on-site, and in designated areas. Hazardous materials

would not be stored in the self-storage units. Therefore, operation of the project would result in a less than significant hazard to the public or to the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts would be less than significant.

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

**No Impact.** There are no existing or proposed schools within 0.25 mile of the project site. The closest school is Poularino Elementary School, which is located 0.55 miles west of the project site. The Mariners Christian School is located approximately one mile southeast from the project site, and Calvary Chapel High School is located approximately 1.23 miles northwest from the project site. Therefore, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of a school. No impact would occur.

**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?**

**Less than Significant Impact.** A review of the Department of Toxic Substances Control's (DTSC) Hazardous Waste and Substances List – Site Cleanup (Cortese List) indicates that identified hazardous material sites are not located within the project site (DTSC, 2019). In addition, a review of the DTSC EnviroStor and the State Water Resources Control Board (SWRCB) GeoTracker online databases did not indicate any open cleanup sites or hazardous waste facilities within the vicinity of the project area (SWRCB, 2019). Therefore, since the project is not located on a list associated with hazardous materials, impacts would be less than significant.

**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 or excessive noise for people residing or working in the project area?**

**Less than Significant Impact.** The Airport Environs Land Use Plan (AELUP) is the comprehensive land use plan adopted and administered by the Airport Land Use Commission (ALUC) for Orange County, as required by Section 21675 of the California Public Utilities Code. The AELUP establishes land use guidelines based on noise and safety impacts for areas surrounding airports. The most current AELUP for John Wayne Airport (JWA) was approved in April 2008. The project is located 1.37 miles west of JWA, and thus is within the Airport Planning Area of JWA according to the ALUC. Land uses within the planning area boundaries of the AELUP must conform to the following safety and height restriction standards.

*Height Restriction Zone.* The project site is located more than 7,000 feet west of the John Wayne Airport runways. In accordance with Federal Regulation Part 77, any construction

or alteration occurring within 20,000 feet of a public airport (i.e., an airport with a runway of more than 3,200 feet in length such as the John Wayne Airport) which exceeds a 100 feet horizontally by 1 foot in vertical height must notify the FAA. Because the proposed buildings would be located more than 7,000 feet from the runway, buildings greater than 70 feet must notify the FAA. Because the proposed buildings would not exceed 43 feet in height, the project would be consistent with the height restriction standards.

*Airspace/Airport Inconsistency.* In reviewing projects, the Commission will find any structure, either within or outside of the planning areas, inconsistent with this AELUP if it:

1. Is determined to be a "Hazard" by the FAA;
2. Would raise the ceiling or visibility minimums at an airport for an existing or planned instrument procedure (i.e., a procedure consistent with the FAA approved airport layout plan or a proposed procedure formally on file with the FAA);
3. Would result in a loss in airport utility, e.g. in a diminution of the established operational efficiency and capacity of the airport, such as by causing the usable length of the runway (s) to be reduced; or
4. Would conflict with the VFR air space used for the airport traffic pattern or enroute navigation to and from the airport. (ALUC, 2008)

Since the project is located within the vicinity of John Wayne Airport's Airport Planning Area, it is subject to the safety restrictions listed above. The building height of the dormitory buildings and additional structures would not "interfere with the established, or planned, airport flight procedures, patterns, or navigational systems" since it meets the development standards specified in the Costa Mesa General Plan. In addition, the project would not threaten, endanger, or interfere with aeronautical operations due to the project's exterior lighting, where it would be clearly visible during hours of twilight or darkness. Additionally, although the project is within the vicinity of John Wayne Airport's Airport Planning Area, it is not within the vicinity of the JWA Safety Zone (JWA, 2007). Therefore, the project would not result in a safety hazard or excessive noise for people residing or working in the project area. Impacts would be less than significant.

**f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Less than Significant Impact.** The Costa Mesa Disaster Plan serves as the community's Emergency Operations Plan (EOP), which provides guidance during emergency situations. The EOP analyzes potential large scale disasters that require a coordinated and immediate response. The City's emergency evacuation routes are shown in the City General Plan Safety Element, Figure S-9: Public Safety Facilities and Emergency *Evacuation Routes* (City of Costa Mesa, 2015). Evacuation operations would be conducted by law enforcement agencies, highway/road/street departments, and public and private transportation providers. The project site is located along a designated emergency evacuation route along Bear Street.

The project would be constructed completely within the project site and construction equipment would access the project site via Bear Street, which is the main access point to the project site. There will be no road closures or alterations to Bear Street during construction and all construction equipment would be stored in active grading areas and/or the proposed staging areas within the project area. Once constructed, the project does not include any uses or design features that would result in interference with any adopted emergency response plan or emergency evacuation plan. The design of the project would provide adequate emergency access consistent with City requirements, including the required number and design of access points and safety features. Therefore, the project would not result in significant impacts to emergency access during construction and/or operation. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

**g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?**

**No Impact.** According to the Costa Mesa General Plan Safety Element, no part of Costa Mesa is listed as a State Responsibility Area or located within the Very High Fire Hazard Severity Zone (City of Costa Mesa, 2015). The project site is not located in an area classified as a “Wildland Area That May Contain Substantial Forest Fire Risks and Hazards” or a “Very High Fire Hazard Severity Zone” by the California Department of Forestry and Fire Protection (CAL FIRE, 2007; CAL FIRE, 2008). Therefore, the risk for wildland fire is low and project implementation would not expose people or structures to a significant risk involving wild land fires. No impact would occur.

## References

- Airport Land Use Commission (ALUC), 2008. Land Use Plan for John Wayne Airport, Amended: April 17, 2008. Available online at: [https://www.ocair.com/commissions/aluc/docs/JWA\\_AELUP-April-17-2008.pdf](https://www.ocair.com/commissions/aluc/docs/JWA_AELUP-April-17-2008.pdf). Accessed on July 2, 2019.
- California Department of Forestry and Fire Protection (CAL FIRE), 2007. Fire Hazard Severity Zones in SRA for Orange County. Adopted by CAL FIRE on November 7, 2007. Accessed on July 2, 2019.
- CAL FIRE, 2011. Very High Fire Hazard Severity Zones in LRA as Recommended by CAL FIRE. October 2011. Accessed on July 2, 2019.
- City of Costa Mesa, 2015. 2015-2035 General Plan Safety Element. p. S-21. Available online at: <https://www.costamesaca.gov/home/showdocument?id=34702>. Accessed on June 20, 2019.
- Department of Toxic Substances Control (DTSC), 2019. DTSC EnviroStor, 3150 Bear Street, Costa Mesa, CA 92626, USA. Available online at: [https://www.envirostor.dtsc.ca.gov/public/map/?global\\_id=60001550](https://www.envirostor.dtsc.ca.gov/public/map/?global_id=60001550). Accessed on July 2, 2019.

John Wayne Airport (JWA), 2007. John Wayne Airport Safety Zone Reference Map.

Ramboll, 2019. Phase 1 Environmental Site Assessment, 3150 Bear Street, Costa Mesa, California. February 2019.

State Water Resources Control Board (SWRCB), 2019. SWRCB GeoTracker, 3150 Bear Street, Costa Mesa, CA 92626, USA. Available online at: <https://geotracker.waterboards.ca.gov/>. Accessed on July 2, 2019.

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## 3.10 Hydrology and Water Quality

| <i>Issues (and Supporting Information Sources):</i>  | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>                    |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| <b>X. HYDROLOGY AND WATER QUALITY —</b><br>Would the project:  |                                       |   |                                     |                                     |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?                                  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: |                                       |   |                                     |                                     |
| i) result in substantial erosion or siltation on or off site;  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| ii) 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 type="checkbox"/>            | <input checked="" type="checkbox"/> |
| iii) 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; or                             | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| iv) impede or redirect flood flows?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Result in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

The following analysis is based, in part, on the *Preliminary Hydrology Report – EF International Language Campus Costa Mesa 3150 Bear Street, Costa Mesa, CA* (Hydrology Report), prepared for the project by Fuscoe Engineering, August 2019 (Fuscoe Engineering, 2019a). The Hydrology Report is included in Appendix J of this IS/MND. The analysis is also based on the *Preliminary Water Quality Management Plan – EF Costa Mesa Campus 3150 Bear Street, Costa Mesa, County of Orange* (Project WQMP) prepared for the project by Fuscoe Engineering, April 2019 (Fuscoe Engineering, 2019b). The Project WQMP is included in Appendix K of this IS/MND.

### Discussion

- a) **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

**Less Than Significant Impact.** Pursuant to the federal Water Pollution Control Act (also known as the Clean Water Act [CWA]) and the National Pollution Discharge Elimination System (NPDES), new developments in the City are required to include the development

and implementation of a Storm Water Pollution Prevention Plan (SWPPP) for the construction phase of a project, and a Water Quality Management Plan (WQMP) for the operation phase of a project.<sup>2</sup>

The City of Costa Mesa is in the jurisdictional area of the Santa Ana Regional Water Quality Control Board (RWQCB). WQMP requirements within the RWQCB were further clarified by the County of Orange Drainage Area Management Plan (DAMP) which requires the preparation and implementation of WQMPs for development projects. Consistent with the DAMP, the project Applicant would be required to submit a SWPPP prior to project grading and construction and has submitted for City review and approval a Preliminary Project Water Quality Management Plan (Project WQMP) and Hydrology Report for the project.

As described in the Project WQMP, under existing conditions, runoff typically flows west and enters an area drain system. Flows traveling via the area drain system will make its way to a city infrastructure located on Bear Street.

Under proposed conditions, runoff will be conveyed in a similar manner to existing drainage conditions. New area drain and storm drain systems will be constructed to convey low flows to one of eight modular wetland systems for water quality treatment. The project would also include proprietary vegetated biotreatment systems as a biotreatment BMPs and BMPs to ensure that the ongoing operation and maintenance of the project is consistent with the DAMP.

Compliance with these regulations would ensure that impacts to water quality during construction and operation of the project would be less than significant. In addition, as described in the Hydrology Report, runoff from the project site is directed to the Modular Wetland Systems (MWS) unit or to a bio swale for water quality treatment. Therefore, the project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Impacts would be less than significant.

**b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

**Less Than Significant Impact.** As discussed in the Geotechnical Report, provided in Appendix F, of this IS/MND. Groundwater was encountered at depths ranging from 18 to 20 feet below ground surface and the historic high depth to groundwater is reportedly 10 to 30 feet below the existing grade at the project site. The project site has been developed with impervious surfaces for over 40 years and has not functioned as a ground water recharge location. As impervious surfaces under the project would be similar to those under the existing condition, development of the project would not interfere with

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<sup>2</sup> General Plan EIR Section 5.8.

groundwater recharge. Therefore, the project would not impede sustainable groundwater management of the basin. Impacts would be less than significant.

**c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:**

**i) result in substantial erosion or siltation on or off site;**

**No Impact.** There are no streams or rivers in the vicinity of the project site. The project site is relatively flat and currently developed with an existing building and associated landscaping, walkways, and surface parking lot. As described in the Geotechnical Report, provided in Appendix F, of this IS/MND, the project site is relatively flat with gentle sloping from south to north. As previously discussed, impervious surfaces under the project would be similar to those under the existing condition. In addition, as described in the Hydrology Report, development of the project would maintain the general historic drainage patterns. As discussed above, runoff from the project site would be directed to the MWS unit or to a bioswale for water quality treatment. Therefore, the project would not substantially alter the existing drainage pattern of the project site or area in a manner which would result in substantial erosion or siltation on- or off-site. No impact would occur.

**ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;**

**No Impact.** As previously discussed, development of the project would maintain the general historic drainage patterns. Runoff from the project site would be directed to the MWS unit or to a bioswale for water quality treatment. As described in the Hydrology Report, total surface runoff would decrease compared to the existing condition. In addition, impervious surfaces under the project would be similar to those under the existing condition. Therefore, the project would not substantially alter the existing drainage pattern of the project site or area in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. No impact would occur.

**iii) 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; or**

**No Impact.** Impervious surfaces under the project would be similar to those under the existing condition. In addition, runoff from the project site would be directed to the MWS unit or to a bioswale for water quality treatment. Total surface runoff would decrease compared to the existing condition. As such, the existing off-site drainage system would not need to be modified because proposed flows would not exceed existing flows, which are currently within the capacity of the stormwater drainage system. Therefore, the project would not substantially alter the existing drainage pattern of the project site or

area in a manner which would create or contribute to runoff water that in excess of the capacity of the stormwater drainage systems or the substantial addition of polluted runoff. No impact would occur.

**iv) impede or redirect flood flows?**

**No Impact.** Impervious surfaces under the project would be similar to those under the existing condition. In addition, runoff from the project site would be directed to existing drainage facilities. Total surface runoff would decrease compared to the existing condition. Therefore, the project would not alter the existing drainage pattern of the project site or area in a manner which would impede or redirect flood flows. No impact would occur.

**d) Result in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

**No Impact.** A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant disturbance undersea, such as a tectonic displacement of sea floor associated with large, shallow earthquakes. Mudflows occur as a result of downslope movement of soil and/or rock under the influence of gravity.

The project is located in an area of relatively flat topography and urban development, with no enclosed bodies of water upstream of the project site, and as such, there is no potential for inundation resulting from a seiche or mudflows. Although the Santa Ana River is located approximately 2.4 miles northwest of the project, the river in this area is located within a sunken concrete-lined channel at several feet below the ground elevation of the project site, and any seiches that could potentially develop within this stretch of the river during an earthquake would not have the potential to inundate the project site. With respect to tsunami hazards, the project site is located approximately 5.4 miles inland (northeast) from the Pacific Ocean, and therefore would not be subject to a tsunami. Therefore, the project would not risk the release of pollutants due to project inundation. No impact would occur.

**e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**Less Than Significant Impact.** The project site is within the Santa Ana River watershed and the Water Quality Control Plan for Santa Ana River Basin (Basin Plan) would be applicable to the project. The Basin Plan was first adopted in 1995, and subsequent updates occurred February 2008, June 2011, and February 2016. The Basin Plan includes an implementation plan describing the actions by the Regional Water Quality Control Board and others that are necessary to achieve and maintain the water quality standards as well as water quality goals and policies that govern the Santa Ana River Basin. The project would be required to comply with the goals and policies outlined in the Basin

Plan. Therefore, the project would not conflict with or obstruct implementation of a water quality control plan. Impacts would be less than significant.

The project site is also located within the Orange County Water District, which includes a Groundwater Management Plan that was last updated in June 2015. As discussed in the Groundwater Management Plan, groundwater basin management goals include (1) to protect and enhance groundwater quality, (2) to protect and increase the sustainable yield of the groundwater basin in a cost-effective manner, and (3) to increase the efficiency of Orange County Water District operations. As discussed above, the project Applicant would be required to submit a SWPPP prior to project grading and construction. Compliance with these regulations would ensure that impacts to water quality during construction and operation of the project would be less than significant. In addition, as described in the Hydrology Report, runoff from the project site is directed to the MWS unit or to a bioswale for water quality treatment. Therefore, the project would not conflict with or obstruct implementation of a sustainable groundwater management plan. Impacts would be less than significant.

## References

- California Water Boards, 2019. Water Quality Control Plan – Santa Ana River Basin 1995, Updated 2019. June 2019.
- Fusco Engineering, 2019. Preliminary Hydrology Report – EF International Language Campus Costa Mesa 3150 Bear Street, Costa Mesa, CA. August 2019.
- Fusco Engineering, 2019. Preliminary Water Quality Management Plan – EF Costa Mesa Campus 3150 Bear Street, Costa Mesa, County of Orange. April 2019.
- GMU Geotechnical, Inc. (GMU), 2019. Report of Geotechnical Foundation Investigation, EF International Language Campus – New Dormitory Buildings and Site Improvements, 3150 Bear Street City of Costa Mesa, California. March 1, 2019.
- Orange County Water District, 2015. Orange County Water District Groundwater Management Plan 2015 Update. June 2015.
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### 3.11 Land Use and Planning

| <i>Issues (and Supporting Information Sources):</i>  | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>                    |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| <b>XI. LAND USE AND PLANNING</b> — Would the project:  |                                       |   |                                     |                                     |
| a) Physically divide an established community?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

#### Discussion

**a) Physically divide an established community?**

**No Impact.** The project site is currently developed with an existing three-story (approximately 44-foot tall), 68,000-square-foot building, associated landscaping, walkways, and surface parking lot. Surrounding uses include commercial and residential uses. Land uses surrounding the project site include Interstate 405 freeway immediately north of the project site with the South Coast Plaza located just north of the freeway; low-density residential uses located immediately east and south of the project site; office uses located south of the project site; and park uses located immediately west of the project site, across Bear Street.

The project includes renovation of the existing building and construction of three 2- and 3-story dormitory buildings. The project would be contained within the existing developed project site and would not encroach into adjacent streets or require vacations of streets or changes in the City’s circulation system. The Project may also include the installation of a signalized pedestrian crossing which would extend across Bear Street from the proximity of the Project site entrance to the proximity of the Shiffer Park entrance. Based on the above, the project would not physically divide an established community.

**b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?**

**Less Than Significant Impact.** According to the Costa Mesa General Plan Land Use Map, the project site is designated as General Commercial. The General Commercial designation is intended to permit a wide range of commercial uses which serve both local and regional needs. As discussed further in the General Plan, in areas designated General Commercial, development typically will result in combinations of one- and two-story commercial buildings. Buildings in excess of two stories would be permitted in select zoning areas. In addition, complementary uses, such as residential and other noncommercial uses may be allowed. The proposed school and dormitory uses would be allowed under this General Plan land use designation, with approval of a Conditional Use

Permit. The proposed outdoor amenities and proposed number of parking spaces would be allowed under this General Plan land use designation, with approval of a Minor Conditional Use Permit. In addition, this project requires variances from height, landscape setback, and front setback. One of the proposed new buildings would be three stories and reach a height of up to 39 feet and 4 inches exceeding the 30-foot maximum height development standard within the Administrative Professional Zoning District, which would require approval of a height variance. The drive aisle and fire lane, which wrap around the northern-most dormitory building (Building No. 1–Dormitory), encroaches into the required twenty-foot landscape setback along the I-405 Freeway, which would require approval of a landscape setback variance. The uncovered enclosure for the generator and trash, a seating area, and parking space encroaches into the required front setback along Bear Street, which would require approval of a variance from the front setback. As such, the project would be a compatible use subject to a Conditional Use Permit, Minor Conditional Use Permit, and approval of variances from height, landscaping, and front setback development standards.

Overall, based on the above, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigation an environmental effect.

## References

City of Costa Mesa, 2016. 2015-2035 General Plan, June 2016. Available online at: <https://www.costamesaca.gov/city-hall/city-departments/development-services/approved-plans-for-city/2015-2035-general-plan>. Accessed on August 27, 2019.

### 3.12 Mineral Resources

| <i>Issues (and Supporting Information Sources):</i>  | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>                    |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| <b>XII. MINERAL RESOURCES</b> — Would the project:   |                                       |   |                                     |                                     |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                 | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

#### Discussion

**a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

**No Impact.** The Costa Mesa General Plan Safety Element Figure S-1, Geologic Map, identifies portions of the City that overlay the West Newport Oil Field, which is south of 17th Street between Pomona and Westminster Avenues, approximately 4.5 miles southwest of the project site. Currently, the only active oil wells in Costa Mesa operate west of Whittier Avenue between 17th and 19th Streets. Out of the 15 active oil wells identified in the General Plan Safety Element Figure S-1, Geologic Map, the active well on Baker Street and Harbor Boulevard is approximately 1.67 miles southwest from the project. Peat deposits are located adjacent to the Santa Ana River and in the vicinity of the Upper Newport Bay (City of Costa Mesa, 2015). No oil, peat or other mineral resources are within the vicinity of the project site. Therefore, the project would not result in the loss of a known mineral resource. No impact would occur.

**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?**

**No Impact.** No oil, peat or other mineral resources are within the vicinity of the project site. Therefore, the project would not result in the loss of a locally important mineral resource recovery site. No impact would occur.

#### References

City of Costa Mesa, 2015. Costa Mesa General Plan Safety Element. Page S-4. Available at: <https://www.costamesaca.gov/home/showdocument?id=34702>. Accessed June 21, 2019.

### 3.13 Noise

| <u>Issues (and Supporting Information Sources):</u>   | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>         |
|---|---------------------------------------|---|-------------------------------------|--------------------------|
| <b>XIII. NOISE</b> — Would the project result in:   |                                       |   |                                     |                          |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project 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"/> | <input type="checkbox"/> |
| b) Generation of excessive groundborne vibration or groundborne noise levels?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Discussion

The following analysis is based, in part, on the *Acoustical Assessment EF International Language Campus Costa Mesa Project City of Costa Mesa* (Acoustical Assessment), prepared for the project by Kimley-Horn and Associates, Inc., August 2019 (Kimley-Horn, 2019). The Acoustical Assessment is included as Appendix L, of this IS/MND. The Acoustical Assessment was prepared for the project to evaluate the potential construction and operational noise and vibration levels associated with the project and determine the level of impact the project would have on the environment.

- a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

**Less Than Significant Impact.** Impacts related to noise generation could occur during construction or operation. Each is addressed below.

**Construction:** Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. During construction, exterior noise levels could affect the residential neighborhoods near the construction site. Proposed construction activities would occur approximately 50 feet from existing single-family residences. However, it is acknowledged that construction activities would occur throughout the project site and would not be concentrated at the point closest to the sensitive receptors.

Construction activities would include site preparation, grading, building construction, paving, and architectural coating. Such activities would require graders, scrapers, and tractors during site preparation; graders, dozers, and tractors during grading; cranes,

forklifts, generators, tractors, and welders during building construction; pavers, rollers, mixers, tractors, and paving equipment during paving; and air compressors during architectural coating. Noise levels would be higher during the demolition, site preparation, and excavation activities, where the use of heavy construction equipment is more frequent, but also during other portions of the overall (building) construction process. While the City's Noise Ordinance does not establish quantitative construction noise standards, the following noise analysis conservatively uses the Federal Transit Administration (FTA)'s threshold of 80 A-weighted sound level (dBA) to evaluate construction noise impacts.

Table 12 shows the estimated exterior construction noise accounting for attenuation from the existing masonry walls along the south and east property lines. Noise levels provided in Table 12 would not exceed the Federal Transit Authority (FTA) threshold of 80 dBA.

**TABLE 12**  
**PROJECT CONSTRUCTION NOISE LEVELS**

| Construction Phase    | Receptor Location |           |                              | Worst Case Modeled Exterior Noise Level (dBA) <sup>b</sup> | Noise Level with Temporary Barrier (dBA) <sup>c</sup> | Noise Threshold <sup>d</sup> | Exceeded? |
|-----------------------|-------------------|-----------|------------------------------|--|---|------------------------------|-----------|
|                       | Land Use          | Direction | Distance (feet) <sup>a</sup> |  |   |                              |           |
| Demolition            | Residential       | East      | 65                           | 79.3   | 79.3  | 80                           | No        |
|                       |                   | South     | 70                           | 86.7   | 66.7  | 80                           | No        |
| Site Preparation      | Residential       | East      | 50                           | 76.0   | 76.0  | 80                           | No        |
|                       |                   | South     | 50                           | 84.0   | 64.0  | 80                           | No        |
| Grading               | Residential       | East      | 50                           | 75.0   | 75.0  | 80                           | No        |
|                       |                   | South     | 50                           | 84.0   | 64.0  | 80                           | No        |
| Building Construction | Residential       | East      | 75                           | 75.4   | 75.4  | 80                           | No        |
|                       |                   | South     | 100                          | 83.4   | 63.4  | 80                           | No        |
| Paving                | Residential       | East      | 50                           | 77.0   | 77.0  | 80                           | No        |
|                       |                   | South     | 50                           | 85.0   | 65.0  | 80                           | No        |
| Architectural Coating | Residential       | East      | 75                           | 67.4   | 67.4  | 80                           | No        |
|                       |                   | South     | 100                          | 66.7   | 46.7  | 80                           | No        |

<sup>a</sup> Distance is from the nearest receptor to the main construction activity area on the project site. The modeling assumes that not all equipment would operate at the closest distance to the receptor.

<sup>b</sup> Modeled noise levels include shielding from the existing wall along the eastern property line (approximately eight feet). The wall along the southern property line is one to two feet shorter (depending on location) and conservatively no shielding was assumed.

<sup>c</sup> Temporary barriers would be located along the southern property boundary. The results in this table indicate that a maximum 6.8 dBA reduction is needed to comply with the threshold. However, noise barriers or enclosures can provide a sound reduction of 20 dBA or greater per Federal Highway Administration, Effective Noise Control During Nighttime Construction, [https://ops.fhwa.dot.gov/wz/workshops/accessible/Schexnayder\\_paper.htm](https://ops.fhwa.dot.gov/wz/workshops/accessible/Schexnayder_paper.htm), updated February 2017, accessed on May 20, 2019.

<sup>d</sup> Threshold from Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, Table 7-3, 2018.

Source: Kimley-Horn, 2019.

Although construction noise levels would not exceed the FTA threshold of 80 dBA, the project would include several design features to reduce construction noise impacts or minimize the severity of the impacts through a variety of noise abatement methods and best practices. Due to the noise sensitive land uses (i.e., residences) that are located adjacent to the project site, the project Applicant has incorporated PDFs within the project to reduce potential construction noise. The project design features are provided in Section 2.3.1 in this IS/MND and listed below:

- **PDF-1:** All construction vehicles and equipment, fixed or mobile, shall be maintained in good operating condition and be equipped with all internal combustion, engine- driven equipment fitted with intake and exhaust muffles, air intake silencers, and engine shrouds no less effective than as originally equipped by the manufacturer.
- **PDF-2:** Where stationary equipment, such as generators, cranes, and air compressors, is located within 50 feet of a sensitive receptor, the equipment shall be equipped with appropriate noise reduction measures (e.g., silencers, shrouds, or other devices) to limit equipment noise.
- **PDF-3:** Equipment maintenance, vehicle parking, and material staging areas shall be located as far away from residences adjacent to the project site as feasible.
- **PDF-4:** Electrically powered equipment instead of pneumatic or internal combustion powered equipment shall be used to the extent possible.
- **PDF-5:** All internal combustion engine idling both on the site and at nearby queuing areas shall be limited to no more than five minutes for any given vehicle or machine. Signs shall be posted at the job site and along queuing lanes to reinforce the prohibition of unnecessary engine idling.
- **PDF-6:** The use of noise producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only. Use smart back-up alarms, which automatically adjust the alarm level based on the background noise level, or switch off back-up alarms and replace with human spotters shall be implemented during construction activities.
- **PDF-7:** Grading plans and specifications shall include temporary noise barriers along the southern and eastern property line for all grading, hauling, and other heavy equipment operations that would occur within 150 feet of sensitive receptors. The noise barriers shall be a minimum height of 12 feet high and reduce construction noise levels by at least 6.8 dBA. The barriers shall be continuous from the ground to the top of the barrier, and have a weight of at least 2.5 pounds per square foot, which is equivalent to ¾ inch thick plywood. The barrier design shall optimize the following requirements: (1) the barrier shall be located to maximize the interruption of line of sight between the equipment and the receptor; (2) the length and of the barrier shall be selected to block the line of sight between the construction area and the receptors; (3) the barrier shall be located as close as feasible to the receptor or as close as feasible to the construction area.

In addition to the implementation of PDF-1 through PDF-7, project construction activities would comply with the Costa Mesa Municipal Code's (CMMC) limitation on hours and days as described in Section 2.4 in this IS/MND as discussed below.

- Project construction hours would occur in accordance with the CMMC requirements, which limits construction activity to the hours of 7:00 a.m. and 7:00 p.m. on weekdays, and 9:00 a.m. and 6:00 p.m. on Saturdays. No construction activities may take place at any time on Sundays or federal holidays.

Implementation of the proposed construction activities would result in less than significant noise impacts. The implementation of PDF-1 through PDF-7 would further reduce potential construction noise levels on adjacent noise sensitive residential uses.

**Operation:** Implementation of the project would create new sources of noise in the project vicinity. The major noise sources associated with the project that would potentially impact existing and future nearby residences include recreational activities, mechanical equipment (i.e., heating, ventilation, and air conditioners [HVAC], etc.); parking areas (i.e., car door slamming, car radios, engine start-up, and car pass-by); and off-site traffic noise.

Recreational Activities. The outdoor recreational areas proposed for the project would include a multipurpose field, one half-court basketball court, an outdoor volleyball court and a swimming pool. The recreational uses would not include bleachers, designated spectator areas, or a public-address system. With regard to multipurpose field and volleyball noise, noise was conservatively estimated to generate 66 dBA at 50 feet. This is conservative as the proposed multipurpose field would be a relatively small (approximately 27 yards by 23 yards in dimension) field compared to a regulation size soccer field which has a dimension of 100 yards by 60 yards. The multipurpose field would host casual recreational activities, not competitive organized events, and the volleyball court would be utilized for pick-up games and not organized events. In addition, typical noise levels from basketball courts range from 59 to 62 dBA at 50 feet from the center of activity. The proposed outdoor half-court would be for recreational play and would not include spectator or crowd noise. Furthermore, noise levels associated with swimming pools are typically 57 dBA at 75 feet from the edge of the pool for lap swim activities and 56 to 67 dBA for community swim activities. As provided in Appendix L, of this IS/MND, noise levels calculated for recreational activities would range from 49.2 dBA to 51.3 dBA, depending on the location of the noise receiver. Thus, the project's noise generation from recreational activities would not exceed the City's 55 dBA noise standard. Therefore, the project would result in a less than significant impact related to recreational noise levels.

Mechanical Equipment. The project is adjacent to residential uses on the east and south. The closest residences are located approximately 150 feet from the closest proposed structure. Potential stationary noise sources related to long-term operations within the project site would include mechanical equipment. Mechanical equipment (e.g., heating ventilation and air conditioning [HVAC] equipment) typically generates noise levels of

approximately 50 to 60 dBA at 50 feet. HVAC equipment is expected to be roof-mounted at a minimum distance of approximately 150 feet from receptors to the south. Typical noise levels from HVAC equipment at 150 feet would be approximately 50.5 dBA, which is below the City's 55 dBA standard and less than a perceptible difference in noise level when compared to existing noise measurements at the closest receptor. Additionally, roof-mounted HVAC equipment is anticipated to be installed closer to the middle of the building and the distance to sensitive receptors would be farther, which would reduce noise levels. Furthermore, equipment would be located behind a parapet for additional noise attenuation. Operation of mechanical equipment would not increase ambient noise levels beyond the acceptable compatible land use noise levels. Therefore, the project would result in a less than significant impact related to stationary noise levels.

Parking. Parking lot noise would occur within the surface parking lot on-site. Traffic associated with parking lots is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the community equivalent noise level (CNEL) scale. The instantaneous maximum sound levels generated by a car door slamming, engine starting up, and car pass-bys range from 60 to 63 dBA and may be an annoyance to adjacent noise-sensitive receptors. Conversations in parking areas may also be an annoyance to adjacent sensitive receptors. Sound levels of speech typically range from 33 dBA at 50 feet for normal speech to 50 dBA at 50 feet for very loud speech. Parking lot noise would be consistent with the existing noise in the vicinity and would be partially masked by background noise from vehicle traffic along I-405 to the north and Bear Street to the west. As provided in Appendix L, of this IS/MND, noise levels over time resulting from parking lot activities is anticipated to be below the City's noise standards. Therefore, noise impacts from parking lots would be less than significant.

Off-Site Traffic. Implementation of the project would generate increased traffic volumes along nearby roadway segments. According to the Traffic Memorandum prepared for the project by LLG Engineers as provided in Appendix M, of this IS/MND, the project would result in 455 daily vehicle trips. The project's increase in traffic would result in noise increases on project area roadways. In general, a traffic noise increase of 3 dBA is barely perceptible to people, while a 5-dBA increase is readily noticeable. Traffic volumes on project area roadways would have to approximately double for the resulting traffic noise levels to increase by 3 dBA. According to the Costa Mesa General Plan EIR, the daily average daily traffic along Bear Street (north of Paularino Avenue) is 27,000 vehicles (General Plan EIR, 2016) Therefore, the project would not generate enough traffic to result in a permanent 3-dBA increase in ambient noise levels. Impacts would be less than significant.

Traffic Noise Impacts at the Project Site. The project would locate a dormitory building along the northern portion of the project site within 100 feet of the I-405. Noise measurements were taken at this portion of the project site during a free-flow traffic period when noise levels are often highest due to vehicle speeds. As indicated in Table 6 of the Acoustical Assessment, provided in Appendix L, of this IS/MND, freeway traffic

noise along the northern portion of the project site (immediately adjacent to the freeway) are 75.4 dBA. The 3-story dormitory building proposed along the northern property line (parallel to the I-405) would shield on-site outdoor areas of frequent use from freeway noise. According to FHWA, a 2-story building can reduce noise levels on the side of the building away from the noise source by about 13 dBA. On-site noise levels would be reduced to approximately 62.4 dBA, and the project would comply with the City's 65 dBA exterior noise level standard identified in General Plan Policy N-1.1. Furthermore, it should be noted that General Plan Policy N-2.6 allows a higher exterior noise level standard for infill projects as long as the interior standard of 45 dBA is met.

As noted above, typical building construction can reduce noise levels by 24 dBA with the windows closed. The project would include sealed/non-operable windows and closed ventilation systems. Therefore, interior noise levels at the part of the residential building facing I-405 could reach 51 dBA, which would exceed the City's 45 dBA interior noise standard. However, the project includes PDF-9 as discussed in Section 2.3.2 in this IS/MND and provided below.

- **PDF-9:** To ensure compliance with the City's 45 dBA interior noise standard, the 3-story dormitory building along the I-405 freeway will be designed to include sound-rated windows and entry doors on residential facades facing I-405. Receptor locations facing I-405 require a minimum Sound Transmission Class (STC) rating of 36.

The implementation of the project would result in less than significant noise impacts associated with recreational activities, mechanical equipment, parking, and off-site traffic. The implementation of PDF-9 would reduce potential impacts to the proposed sensitive dormitory uses within the structure proposed along the I-405 would reduce potential impacts to less than significant.

#### b) **Generation of excessive groundborne vibration or groundborne noise levels?**

**Less Than Significant Impact.** Construction on the project site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. However, with regard to operation, the project would not be a source of groundborne vibration. The following analysis is specific to potential impacts from groundborne vibration generated during construction of the project.

The FTA has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.2 in/sec) appears to be conservative. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated

by construction equipment. For example, for a building that is constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.20 in/sec is considered safe and would not result in any construction vibration damage.

Table 12 in the Acoustical Assessment, as provided in Appendix L, of this IS/MND, lists vibration levels at 25 feet for typical construction equipment. Based on FTA data provided in this table, vibration velocities from typical heavy construction equipment operations that would be used during project construction range from 0.003 to 0.089 in/sec peak particle velocity (PPV) at 25 feet from the source of activity. Using the calculation shown in Table 12, at 50 feet the vibration velocities from construction equipment would not exceed 0.032 in/sec PPV, which is well below the FTA's 0.20 PPV threshold. It can be assumed that at a greater distance this vibration velocity would be even less. It is also acknowledged that construction activities would occur throughout the project site and would not be concentrated at the point closest to the nearest residential structure. Therefore, the project would not generate excessive groundborne vibration or groundborne noise levels. Impacts would be less than significant.

- c) **For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

**Less Than Significant Impact.** The John Wayne Airport is the nearest airport in the immediate area, located approximately 1.3 miles southwest of the project site. A review of the John Wayne Airport Land Use Plan shows the project site is not located within any noise impact zones. Additionally, the project site is not located within the vicinity of a private airstrip or related facilities. Therefore, the project would not expose people residing or working in the project area to excessive noise levels. Impacts would be less than significant.

## References

Federal Highway Administration, Roadway Construction Noise Model, 2006.

Federal Highway Administration, Roadway Construction Noise Model User's Guide Final Report, 2006.

Kimley-Horn and Associates, Inc., 2019. Acoustical Assessment EF International Language Campus Costa Mesa Project City of Costa Mesa. August 2019.

### 3.14 Population and Housing

| <i>Issues (and Supporting Information Sources):</i>   | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>         |
|---|---------------------------------------|---|-------------------------------------|--------------------------|
| <b>XIV. POPULATION AND HOUSING</b> — Would the project:   |                                       |   |                                     |                          |
| a) Induce substantial unplanned 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"/> | <input type="checkbox"/> |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

#### Discussion

- a) **Induce substantial unplanned 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)?**

**Less Than Significant Impact.** The project includes the renovation of the existing 3-story building to create approximately 50 classrooms, a student services area, cafeteria, and faculty/staff offices in addition to the development of three dormitories. The proposed school would include 70 employees and teach up to 1,347 students. Of these 1,347 students, the dormitories would accommodate up to 627 students living on-site.

The project would provide students from more than 75 countries the opportunity to learn English through the EF program. A student’s typical stay on campus would range from a week to several months. As such, the 1,347 students who would either live in the surrounding community or live on the project site would be international students that would not contribute to the overall permanent population growth of the area. Because the proposed project does not require a General Plan amendment, the increase in population on the site is generally consistent with the potential population under the current General Plan designation for the site. As a result, the proposed project would not induce unplanned population growth in the project vicinity. Therefore, growth inducement impacts would be less than significant.

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

**Less Than Significant Impact.** The project site is currently developed with an existing 3-story, 68,000-square-foot building, associated landscaping, walkways, and surface parking lot. As no people or housing are located on the project site, the project would not displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere. Impacts would be less than significant.

## References

California Department of Finance, 2019. Report E-5: Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2019, with 2010 Benchmark. May 2019. Available at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>. Accessed August 27, 2019.

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### 3.15 Public Services

| <i>Issues (and Supporting Information Sources):</i>   | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>         |
|---|---------------------------------------|---|-------------------------------------|--------------------------|
| <b>XV. PUBLIC SERVICES —</b>  |                                       |   |                                     |                          |
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services: |                                       |   |                                     |                          |
| i) Fire protection?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ii) Police protection?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iii) Schools?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iv) Parks?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| v) Other public facilities?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Discussion

**a) i) Fire protection?**

**Less Than Significant Impact.** The Costa Mesa Fire Department (CMFD) provides fire protection and emergency response services to the City, including the project site. The CMFD is responsible for fire prevention, enforcement of fire protection laws and ordinances, fire suppression, emergency medical services, hazardous materials response, and weed abatement. In addition to providing response services, CMFD practices fire prevention and emergency preparation through use of built-in fire protection such as early warning and detection systems, automatic fire sprinklers, fire resistive design of structures and materials, fire prevention inspections, and public education. The CMFD is currently budgeted for 90 full-time staff members, including 84 sworn positions, such as the fire chief, battalion chiefs, fire captains, engineers, and firefighter/paramedics, and six non-sworn positions. Part-time staffing consists of four full-time equivalent employees. The CMFD staffs six fire stations, 24-hours a day, 7 days a week. Fire Station 2, located at 800 Baker Street, is the closest to the project site, located approximately 0.3 miles south of the project site, and would likely service the project site.

The transition of the project site from an unoccupied land use to a new school, with a total of 1,347 students, of which 627 students would live on-site, and 70 employees could put new demands on CMFD. However, the project would comply with all applicable provisions of in the City Building and Fire codes. Prior to the issuance of a building permit, the project would submit plan to CMFD for review and approval of the project’s design and to assess compliance with the California Building Code and California Fire Code requirements. The project would also install smoke detectors, provide fire extinguishers, install a fire alarm system, and install a fire sprinkler system in the new

dormitory buildings and as necessary in the existing building that would be renovated. The provision of new water lines and fire hydrants, as required by the CMFD, would also reduce fire risks at the project site. Therefore, while the project would create new demands on fire protection services, the demand would not require the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts. Impacts would be less than significant.

#### ii) Police protection?

**Less Than Significant Impact.** The Costa Mesa Police Department (CMPD) provides police protection services to the City, including the project site. The CMPD operates out of their headquarters, located at 99 Fair Drive, which is located approximately 1.65 miles southwest of the project site. The CMPD is comprised currently of 212 full-time positions, of which 136 are sworn and 76 are civilian positions. Based on an existing population of 115,830 and 136 sworn officers, the CMPD has a service ratio of 1.17 officers per 1,000 residences.

The transition of the project site from an unoccupied land use to a new school, with a total of 1,347 students, of which 627 students would live on-site, and 70 employees could put new demands on CMPD. However, the project would be designed with contemporary lighting and place residents on a project site which currently has very little day or night-time activity, which would serve to improve safety and visibility. The project would also be designed to include security features, such as a gated vehicular entry with 24/7 security on site, including a staffed security booth and roaming security staff which would serve to reduce the project's vulnerability to criminal activity. Project plans would be reviewed by the Costa Mesa Building Department and CMPD to ensure that adequate safety and crime prevention measures are provided. Therefore, while the project would create new demands on police protection services, the demand would not require the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts. Impacts would be less than significant.

#### iii) Schools?

**Less Than Significant Impact.** As previously discussed, the project includes the renovation of the existing 3-story building to create approximately 50 classrooms, a student services area, cafeteria, and faculty/staff offices in addition to the development of three student residential buildings that would combine to accommodate up to 627 students living on-site. The project would provide students from more than 75 countries the opportunity to learn English through the EF program. The students would generally be between the ages of 18 to 26. A student's typical stay on campus would range from a week to several months. As the proposed development is a school that would provide housing for international students 18 to 26 years of age, who are not of primary or secondary school age, the project would not generate a corresponding demand for school services in the vicinity of the project site. As such, the development of the project would not increase the number of students within the service area of the Newport Mesa Unified

School District, which provides public education to the City of Costa Mesa. Therefore, while the project would create new demands on school services, the demand would not require the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts. Impacts would be less than significant.

#### **iv) Parks?**

**Less Than Significant Impact.** According to the Costa Mesa General Plan EIR (Page 4.14-19), Costa Mesa has approximately 3.66 acres of parkland for every 1,000 residents. However, the City's goal is to attain and maintain a park standard of 4.26 acres of parkland for every 1,000 residents. The nearest park to the project site is Shiffer Park located directly west of the project site, across Bear Street.

The transition of the project site from an unoccupied land use to a new school, with a total of 1,347 students, of which 627 students would live on-site, and 70 employees could put new demands on park services. In addition, the project would provide amenities to both the students and employees who would live off site and on site. As discussed in Section 2.3, Project Features, above, the project would provide enhanced landscaping and greenspace. The project would also provide recreational facilities, including a pool, half-court basketball, volleyball court, and multipurpose field. These amenities would serve to reduce the demand on park services. While the project may include the installation of a signalized pedestrian crossing, which would provide greater access to Shiffer Park, located directly west of the project site, across Bear Street, the amenities provided on the project site for students would offset increased usage of this park and surrounding parks in the area. Therefore, while the project would create new demands on park services, the demand would not require the need for new or physically altered park facilities, the construction of which could cause significant environmental impacts. Impacts would be less than significant.

#### **v) Other public facilities?**

**Less Than Significant Impact.** Other public facilities include library and general municipal services. There are two public libraries within the City of Costa Mesa. The nearest public library to the project site is the Costa Mesa – Mesa Verde Library which is located approximately 2.08 miles west at 2969 Mesa Verde Drive. As discussed above, the project would include 70 employees and 1,347 students, of which 627 students would live on the project site. In addition, the potential increase in temporary residents in the City from the 1,347 students and 70 employees who would either live off site or on site is not anticipated to result in significant adverse impacts on the existing library services and facilities and/or other public services provided by the City due to the availability and accessibility of electronic library services, which reduce the need and demand for library facilities. Furthermore, the project would provide internet capabilities that would make access to facilitate electronic library services for the 1,347 students and 70 employees that would be accommodated by development of the project. Other municipal services are

typically funded through user fees, property tax or sales tax revenues to which the future temporary student residents may contribute.

The Project's employees and visitors would utilize and, to some extent, impact the maintenance of public facilities, including roads. However, implementation of the Project would result in a net decrease in the number of trips travelling to and from the project site. Therefore, development of the Project would not significantly increase the use of government services beyond current levels. Construction activities would result in a temporary increased use of the surrounding roads. However, the use of such facilities would not require maintenance beyond normal requirements.

Based on the above, while the project would create new demands on other public facilities, such as libraries and roads, the project would not require the need for new or physically altered library facilities, the construction of which could cause significant environmental impacts. Impacts would be less than significant.

## References

Costa Mesa, 2019. Fire & Rescue – About. Available at: <https://www.costamesaca.gov/city-hall/city-departments/fire-rescue/about>. Accessed August 27, 2019.

Costa Mesa, 2019. Costa Mesa Police Department. Available at: <https://www.costamesaca.gov/city-hall/city-departments/police><https://www.costamesaca.gov/city-hall/city-departments/fire-rescue/about>. Accessed August 27, 2019.

City of Costa Mesa, 2016. Final Environmental Impact Report for the 2015-2035 General Plan, June 2016.

### 3.16 Recreation

| <i>Issues (and Supporting Information Sources):</i>  | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>         |
|--|---------------------------------------|---|-------------------------------------|--------------------------|
| <b>XVI. RECREATION —</b>   |                                       |   |                                     |                          |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?                        | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Discussion

- 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?**

**Less Than Significant Impact.** The transition of the project site from an unoccupied land use to a new school, with a total of 1,347 students, of which 627 students would live on-site, and 70 employees could put new demands on recreational services. However, as discussed in Section 2.3, Project Features, above, the project would provide enhanced landscaping and greenspace. The project would also provide recreational facilities, including a pool, half-court basketball, and volleyball court. These amenities would serve to reduce the demand on park amenities. Therefore, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Impacts would be less than significant.

- b) **Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

**Less Than Significant Impact.** As discussed in Section 2.3, Project Features, above, the project would provide enhanced landscaping and greenspace. The project would also provide recreational facilities, including a pool, half-court basketball, and volleyball court. The construction of the on-site recreational facilities has been adequately analyzed throughout this IS/MND. Therefore, the development of the project’s recreational facilities would not have a significant physical effect on the environment, and the project would not require the construction or expansion of recreational facilities. Impacts would be less than significant.

## References

City of Costa Mesa, 2019. Costa Mesa Municipal Code. Title 13, Chapter XI, Article 5, Section 13-256. Available at: <http://qcode.us/codes/costamesa/?view=desktop>. Accessed on September 27, 2019.

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## 3.17 Transportation

| <i>Issues (and Supporting Information Sources):</i>  | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>                    |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| <b>XVII. TRANSPORTATION</b> — Would the project:   |                                       |   |                                     |                                     |
| a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?          | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) Substantially increase hazards due to a geometric 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"/> | <input type="checkbox"/>            |
| d) Result in inadequate emergency access?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

The following analysis is based, in part, on the *EF Costa Mesa: Focused Traffic Evaluation* (Traffic Memorandum), prepared for the project by Linscott Law & Greenspan, Engineers, August 2019 (LLG, 2019). The Traffic Memorandum is included as Appendix M, of this IS/MND. The Traffic Memorandum provides an explanation for the methodology taken to calculate project trip generation and assessed the project's traffic impacts.

### Discussion

**a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

**Less Than Significant Impact.** As discussed in the Traffic Memorandum, and above in Section 2.3.6, Transportation, buildout of the project could generate project trips of 455 daily trips, 88 AM peak hour trips, and 78 PM peak hour trips. The project trips were based on operational characteristics (i.e, programming, student enrollment, student dormitories, employee pool) and empirical data collected from existing EF campuses. Based on Section 13-275 (a): Development Project Review Procedures of the City's Municipal Code, a traffic impact study is required for all development projects generating 100 or more peak hour trips either in the AM or PM peak hour. According to the City's criteria, a traffic impact study would not be required for the project as both the 88 AM peak hour trips and 78 PM peak hour trips generated by the project fall below the threshold of 100 or more peak hour trips. As such, the project would not generate a significant impact on the transportation system. In addition, PDFs provided in Section 2.3.7 in this IS/MND and listed below would ensure that the use on the project site remains an Extremely Low Traffic Use:

- **PDF-16:** Students are not permitted to drive or have cars while attending the school. Exceptions for health and safety reasons are permitted, but if exceptions increase ADT above 455 ADT, the School must implement alternative means to decrease trips until the average daily trips are below this threshold.
- **PDF-17:** Students residing with host families will not be driven to and from the campus. Exceptions for health and safety reasons are permitted, but if exceptions

increase ADT above 455 ADT the School must implement alternative means to decrease trips until the average daily trips are below this threshold.

- **PDF-18:** A shuttle service will be provided by EF Education First to serve the employees and students as described in this IS/MND. This service is to ensure that the average daily trips on site remain below the 455 ADT. Additional shuttle trips, stops, and/or routes as approved by the City will be added to decrease trips if the average daily trips increase above this threshold.

The Traffic Memorandum provides an analysis for the project driveway level and queuing. As discussed therein, the project driveway is forecast to operate at LOS E during the PM peak hour under Year 2021 traffic conditions. It is not uncommon for the minor street approach of unsignalized driveway intersections, such as that of the project, to experience a longer delay due to impedance from the relatively heavier volumes on the major streets, such as Bear Street. In addition, the expected 95<sup>th</sup> percentile vehicular queue experienced for the driveway would not exceed 2-vehicles during any time period, further validating that the forecasted adverse LOS at this driveway may be adverse, but not significant. Furthermore, a traffic signal is not warranted for the project's driveway.

As for other modes of transportation, the project would support program, plans, ordinances and policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. In particular, as discussed in the General Plan Circulation Element, Objective C-4B promotes the regional and local transit services as an alternative to automobile travel. The project Applicant would provide a local shuttle bus for student use in support of this policy. The shuttle service will likely operate in a loop to connect the EF Costa Mesa campus to Orange County Transit Authority (OCTA) bus stops, the South Coast Plaza/Metro area, The Lab/The Camp area, and the beach. The project would also provide bicycle parking spaces and amenities on the project site which would support the use of bicycle facilities, including the Class II bike lanes proposed along Bear Street between the I-405 Freeway and Baker Street within the City's June 2018 Active Transportation Plan.

To further facilitate the accessibility of the project site, the project Applicant may include the installation of a signalized pedestrian crossing which would extend across Bear Street from the proximity of the Project site entrance to the proximity of the Shiffer Park entrance. Provision of the signalized pedestrian crossing would allow for students to more easily access the project site from the west side of Bear Street rather than crossing Bear Street from the Bear Street/Paularino Avenue intersection (approximately 0.2 miles south of the entrance of the project site) or crossing Bear Street from the Bear Street/South Coast Drive intersection (approximately 0.4 miles north of the entrance of the project site). This would further encourage walking or other alternative modes of transportation to and from the project site for those students living west of the of the project site. As such, the project would be consistent with policies that encourage the use of alternatives modes of transportation.

Based on the above, the project would not conflict with a program, plan, ordinance or policy addressing the circulation system. Impacts would be less than significant.

**b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

**No Impact.** CEQA Guidelines section 15064.3 describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled (or "VMT") is identified as the most appropriate measure of transportation impacts. For the purposes of this CEQA section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Lead agencies are required to approve a VMT significance threshold by July 1, 2020. Because the City of Costa Mesa does not have an approved VMT significance threshold at this time, a VMT evaluation will not be conducted for the project and a level of service (LOS) evaluation has instead been conducted to determine potential impacts to the existing transportation system (see Response to Checklist Question 3.17.a, above).

**c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**Less Than Significant Impact.** No geometric design features or incompatible land uses would be introduced under the project that would create significant hazards to the surrounding roadways. Vehicular and emergency access would only be available from Bear Street, similar to the existing condition, with emergency access potentially available from Olympic Avenue. The project also includes land uses that complement the surrounding urban development and utilizes the existing roadway network. While the project may include the installation of a crosswalk across Bear Street, the crosswalk would be signalized, which would reduce the potential hazard of adding a crosswalk across Bear Street. Therefore, the project would not substantially increase hazards due to a geometric design feature or incompatible uses. Impacts would be less than significant.

**d) Result in inadequate emergency access?**

**Less Than Significant Impact.** As part of the City review, the project site plan would be reviewed and approved by the City Public Works Director and CMFD staff to ensure adequate emergency access. The project would provide vehicle and emergency access from the main entrance off of Bear Street and only emergency access would be from Olympic Avenue. The project would also include fire lanes around the entire perimeter of the project site. Therefore, the project would not result in inadequate emergency access. Impacts would be less than significant.

## References

City of Costa Mesa, 2015. Costa Mesa General Plan Circulation Element. Page LU-18. Available at: [http://ftp.costamesaca.gov/costamesaca/generalplan2015-2035/adopted/03\\_FinalDraft\\_CirculationElement.pdf](http://ftp.costamesaca.gov/costamesaca/generalplan2015-2035/adopted/03_FinalDraft_CirculationElement.pdf). Accessed September 26, 2019.

Linscott Law & Greenspan, engineers, 2019. EF Costa Mesa: Focused Traffic Evaluation. August 27, 2019.

## 3.18 Tribal Cultural Resources

| <i>Issues (and Supporting Information Sources):</i>   | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>         |
|---|---------------------------------------|---|-------------------------------------|--------------------------|
| <b>XVIII. TRIBAL CULTURAL RESOURCES —</b>   |                                       |   |                                     |                          |
| a) 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:                            |                                       |   |                                     |                          |
| 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), or  | <input type="checkbox"/>              | <input checked="" type="checkbox"/>                       | <input type="checkbox"/>            | <input 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/>              | <input checked="" type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/> |

### Discussion

- a) 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), or**

**Less Than Significant with Mitigation Incorporated.** The City has gathered a Historical Resources Inventory that can be found within the City's General Plan EIR on page 4.5-4, Table CUL-1. The table outlines 31 historical resources that are either eligible for the National, State, or Local Register Listings. The project site is not located on or within the close vicinity of any site listed on that table. A records search conducted at the SCCIC did not indicate that any recorded archaeological sites are located on or adjacent to the project. Moreover, in compliance with Assembly Bill (AB) 52, which require lead agency consultation with California Native American tribes for projects that involve CEQA review, the NAHC has provided the City a list of tribes that could be consulted. The City has sent out correspondence to the Native American tribes to inquire if the tribes request consultation as described below in Section 3.18.a.ii (refer to Appendix N, which includes the letter sent to the list of tribes requesting consultation). Although consultation with the Native American tribes has not been completed, the City has determined that the project could result in significant impacts to tribal cultural resources that could be eligible for local or state listing. As such, potential impacts could be significant.

### ***Mitigation Measures***

**TCR-1:** Prior to grading, the applicant shall retain a Native American monitor who is traditionally and culturally affiliated with the project vicinity to perform Native American monitoring of all ground disturbance. In addition to the Native American monitor, the project applicant shall retain a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology. The frequency of the monitoring shall be determined by the qualified archaeologist in coordination with the Native American monitor and the City. In the event that tribal cultural resources are unearthed during ground-disturbing activities, the archaeological monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of the discovery (approximately 100 feet) until the City, the Native American monitor and the qualified archaeologist have evaluated the discovery and determined appropriate treatment. Construction within 100 feet of the tribal cultural resource shall not resume until the qualified archaeologist and the Native American representative have conferred with the City on the significance of the resource. In the event that preservation in place is determined to be infeasible and data recovery through excavation is the only feasible mitigation available, a Tribal Cultural Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the City that provides for the adequate recovery of the scientifically consequential information contained in the tribal cultural resource. The archaeological monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist shall prepare a report that details the results of monitoring for submittal to the City, the South Central Coastal Information Center, and any Native American tribe that requests a copy.

### ***Significance Determination After Mitigation***

With implementation of Mitigation Measure TCR-1, impacts related to tribal cultural resources would be reduced to less than significant.

- 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

**Less Than Significant with Mitigation Incorporated.** California Public Resources Code § 21080.3.1, as amended by Assembly Bill (AB) 52, requires formal consultation with Native American tribal representatives who have previously requested consultation for projects within the City's jurisdiction. Pursuant to these requirements, the City sent correspondence dated September 19, 2019 to the known tribal representatives with potential cultural linkages to the Costa Mesa area, informing them of the project and inviting consultation. The City sent correspondence to 20 tribal representatives from 16 tribes (refer to Appendix N). The tribes that were contacted include: Ewiiapaayp Tribal Office, Campo Band of Mission Indians, Gabrieleno Band of Mission Indians – Kizh Nation, Gabrieleno/Tongva San Gabriel Band of Mission Indians, Gabrieleno/Tongva Nation, Gabrieleno Tongva Indians of California Tribal Council, Gabrieleno-Tongva Tribe, Jamul Indian Village, Juaneno Band of Mission Indians, Juaneno Band of Mission

Indians Acjachemen Nation - Belardes, La Posta Band of Mission Indians, Manzanita Band of Kumeyaay Nation, San Fernando Band of Mission Indians, San Pasqual Band of Mission Indians, Soboba Band of Luiseno Indians, Sycuan Band of Kumeyaay Nation, and Viejas band of Kumeyaay Indians. Although consultation with the Native American tribes has not been completed, the City has determined that the proposed project could result in significant impacts to tribal cultural resources that could be eligible for local or state listing. Therefore, potential impacts could be significant.

***Mitigation Measures***

Implementation of Mitigation Measure TCR-1 is required.

***Significance Determination After Mitigation***

With implementation of Mitigation Measure TCR-1, impacts related to tribal cultural resources would be reduced to less than significant.

**References**

None.

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### 3.19 Utilities and Service Systems

| <i>Issues (and Supporting Information Sources):</i>  | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>         |
|--|---------------------------------------|---|-------------------------------------|--------------------------|
| <b>XIX. UTILITIES AND SERVICE SYSTEMS —</b>  |                                       |   |                                     |                          |
| Would the project:   |                                       |   |                                     |                          |
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

#### Discussion

- a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

**Less Than Significant Impact.** An analysis of the project’s impacts to the water, wastewater treatment, stormwater drainage, electric power, natural gas, and telecommunication facilities is provided below.

**Water:** Water service to the project site would be supplied by the Mesa Water District (Mesa Water) for domestic and fire protection uses. Mesa Water owns and maintains 317 miles of mainlines, 5,139 mainline valves, 3,383 fire hydrants, 2 booster pump stations, 3 storage reservoirs, and 7 groundwater wells. Mesa Water receives its water from two main sources, the Lower Santa Ana River Groundwater Basin, which is managed by the Orange County Water District, and a backup source of imported water from the Municipal Water District of Orange County. There are 6- to 8-inch domestic water mains exist along the perimeter of the project site boundaries. The project would require domestic water lines to be installed to hook up to the existing domestic water mains and installation of a water line parallel to the main driveway. In addition, 6- to 8-inch fire water mains would be installed in the western portion of the project site that would

continue parallel to the southern perimeter of the existing building and run around the perimeter of the central lawn area just south of the existing building. Several fire hydrants would also be installed on the project site. The location of the proposed fire hydrants and water mains will require approval from the Mesa Water District as well as the CMFD. The project Applicant would be required to pay all associated costs resulting from the necessary improvements for the project.

Based on the above, the project would not require or result in the relocation or construction of new or expanded water facilities off of the project site, the construction or relocation of which could cause significant environmental effects. Impacts would be less than significant.

**Wastewater:** Wastewater services are provided to the region by the Orange County Sanitation District (OCSD). OCSD is a public agency that provides wastewater collection, treatment, and disposal services for approximately 2.6 million people in central and northwest Orange County. Wastewater is sent to two reclamation plants: Reclamation Plant No. 1 in Fountain Valley and Reclamation Plant No. 2 in Huntington Beach. According to the 2018-2019 Estimated Average Daily Flow of Wastewater Received in MGD, Reclamation Plant No. 1 in Fountain Valley received 120 million gallons per day (mgd) and Reclamation Plant No. 2 in Huntington Beach received 65 mgd, for a total of 185 mgd of wastewater received.

Relative to the project, wastewater collection services are provided to the project site by the Costa Mesa Sanitary District (CMSD). CMSD is responsible for sewer collection services and transmission to the OCSD for treatment and disposal and provides service to all of Costa Mesa. CMSD maintains 224.2 miles of gravity sewer mains and approximately 4,707 sewer manholes within the system. There are 20 sewer pumping stations located within the collection system.

Sanitary sewer lines exist along the southern, eastern, and northern portions of the project site. Development of the project includes installation of connections to the existing sanitary sewer lines from the pool area to the existing sanitary sewer line in the southern project boundary and from the area between the existing building and proposed Building No. 1– Dormitory to the existing sanitary sewer line in the eastern project boundary. These sanitary sewer lines ultimately connect and flow to the existing sanitary sewer line in Olympic Avenue, east of the project site. Sanitary sewer connections and on-site infrastructure would be designed and constructed in accordance with applicable CMSD and California Plumbing Code standards. The project Applicant would coordinate with the City to ensure that adequate sewer infrastructure is available to meet the anticipated wastewater generation of the project. Should the City determine that additional sewer connections and sewer infrastructure capacity is needed to meet the demand of the project, the project Applicant would implement such improvements in consultation with the City.

Therefore, based on the above, the project would not require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be less than significant.

**Stormwater Drainage:** As described in the Hydrology Report provided in Appendix J of this IS/MND, total surface runoff would decrease compared to the existing condition. In addition, impervious surfaces under the project would be similar to those under the existing condition. As such, stormwater flows from the project site would not increase with implementation of the project, and the existing public stormwater system has sufficient capacity to accommodate the project. Therefore, the project would not require or result in the relocation or construction of new or stormwater facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be less than significant.

**Electricity and Natural Gas:** The project site is located in a developed and urbanized area in the City that is served by existing electrical power and natural gas services. Electricity would be provided by Southern California Edison, which currently obtains 32 percent of its energy from renewable resources. In addition, natural gas would be supplied by SoCalGas. As part of the project, the buildings developed on the project site would incorporate energy efficient features and design elements aimed at reducing energy consumption, as detailed further in Section 2.3.4, Green Initiatives, above. As discussed above in Section 3.6.a, Southern California Edison and SoCalGas both would have sufficient capacity to serve the project's operational electricity and natural gas demand. Existing off-site electricity and natural gas infrastructure would not have to be expanded and new infrastructure would not be required to provide electrical or natural gas service to the project during construction or operation of the project.

With regard to existing electrical distribution lines, the project would be required to coordinate electrical infrastructure removals or relocations with SCE and comply with site-specific requirements set forth by SCE, which would ensure that service disruptions and potential impacts associated with grading, construction, and development within SCE easements would be minimized.

Project construction would involve installation of new natural gas connections to serve the project site. Since the project site is located in an area already served by existing natural gas infrastructure, it is anticipated that extensive off-site infrastructure improvements would not be needed to serve the project site. Construction impacts associated with the installation of natural gas connections are expected to be limited to shallow grading/trenching activities in order to place the lines below surface. In addition, prior to ground disturbance, project contractors would be required to notify and coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service to other properties.

Therefore, based on the above, the project would not require or result in the relocation or construction of new or expanded electric power or natural gas facilities, the construction

or relocation of which could cause significant environmental effects. Impacts would be less than significant.

**Telecommunications:** The project site is located in a developed and urbanized area in the City that is served by existing telecommunication services. The project would require installation of new underground telecommunication lines (for internet, telephone, and other services) to serve the school and dormitory uses proposed on the project site. Construction impacts associated with the installation of new telecommunication infrastructure would primarily involve trenching in order to place the lines below ground surface. When considering impacts resulting from the installation of any required telecommunications infrastructure, all impacts are of a relatively short duration and would cease to occur when installation is complete. Installation of new telecommunications infrastructure would be limited to on-site telecommunications distribution and minor off-site work associated with connections to the public system. As telecommunication providers already deliver their services to a large number of homes in the vicinity of the project site, it is anticipated that existing telecommunications facilities would be sufficient to support the project's needs for telecommunication services. As such, no upgrades to off-site telecommunications facilities are anticipated. Therefore, the project would not require or result in the relocation or construction of new or expanded telecommunication facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be less than significant.

**b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

**Less Than Significant Impact.** The project would generate a demand for water for the proposed school and dormitory uses on the project site that would accommodate a total of 70 employees and 1,347 students, of which 627 students and 20 employees would live on the project site. Water services would be provided by the Mesa Water. The project would result in a water demand of approximately 0.064 mgd.<sup>3</sup> According to the Mesa Water 2015 UWMP that evaluates growth in accordance with the existing General Plan, Mesa Water has full capacity to meet water demand during normal, dry, and multiple dry years through the year 2040 in part due to the diversified supply and conservation measures in place by the Mesa Water. Because the project is consistent with the General Plan, there would be sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be less than significant.

<sup>3</sup> As the City of Costa Mesa does not have any water or wastewater generation rates, the Los Angeles CEQA Thresholds Guide Sewer Generation Factors were relied upon to conservatively provide water and wastewater generation estimates for the project. Based on the CEQA Thresholds Guide Sewer Generation Factors, the school uses would generate approximately 17,004 gallons per day (gpd) of water/wastewater (1,417 students/employees \* 12 gpd/student/employee) and the dormitory uses would generate 47,025 gpd of water/wastewater (627 students/resident employees \* 75 gpd/student). This would result in a total of 64,029 gpd or 0.064 mgd. Actual water/wastewater generation would be lower than this total as 627 students/employees of 1,417 students/employees would live on the project site and some water/wastewater generation would be double counted.

- c) **Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

**Less Than Significant Impact.** Wastewater services would be provided by the OCSD, which currently processes over 185 mgd of wastewater (as of the 2018-2019 year) at its treatment plants in Fountain Valley and Huntington Beach. OCSD supplies the Orange County Water District with more than 130 mgd of treated wastewater which is then reclaimed and reused for treatment processes, landscaping, injected into the seawater intrusion barrier to protect groundwater, or used for the Groundwater Replenishment System. As discussed above in Section 3.19.b, the project is estimated to generate 0.0655 mgd of wastewater. This amount of wastewater would constitute a small increase in the 185 mgd of wastewater that is currently processed by the OCSD. Therefore, OCSD would have adequate capacity to serve the project's projected demand in addition to the existing commitments. Impacts would be less than significant.

- d) **Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

**Less Than Significant Impact.** The project would include renovation of the existing building as well as construction of three dormitory buildings on the project site. Solid waste services would be provided by the CMSD. The City, including the project site, would be served by the following solid waste facilities and landfills: Olinda Alpha Sanitary Landfill, Frank R. Bowerman Sanitary Landfill, and Prima Deshecha Sanitary Landfill. The Olinda Alpha Sanitary Landfill includes 565 total acres, of which 453 acres is permitted for refuse disposal. The Olinda Alpha Sanitary Landfill has enough projected capacity to serve residents and businesses until 2030. In addition, the Olinda Alpha Sanitary Landfill has an average disposal rate of 7,000 tons per day (TPD), although it is permitted 8,000 TPD. The Frank R. Bowerman Sanitary Landfill includes 725 acres of Irvine hillside, with 534 acres allocated for waste disposal. It is permitted for 11,500 TPD maximum with an 8,500 TPD annual average. The landfill has enough projected capacity to serve residents and businesses until approximately 2053. The Prima Deshecha Sanitary Landfill includes 1,530 total acres, with 697 acres for waste disposal. The site averages approximately 1,400 tons per day, with a daily maximum permitted tonnage of 4,000. The Prima Deshecha site has a projected capacity to serve residents and businesses until approximately 2102. The Frank R. Bowerman Sanitary Landfill is the nearest to the project site, located approximately 10.55 miles northeast of the project site.

The transition of the project site to school and dormitory uses would add nominally to total landfill demand and consequently would not add significantly to the capacity of the three landfills that serve the City. In particular, using estimated solid waste generation rates provided by the California Department of Resources Recycling and Recovery (CalRecycle), the proposed school use on the project site would generate an estimated

1,417 pounds/day (0.71 tons/day) of solid waste<sup>4</sup> and the dormitory uses on the project site would generate an estimated 7,524 pounds/day (3.76 tons/day)<sup>5</sup> for a total of 8,941 pounds/day (4.47 tons/day).<sup>6</sup> The Frank R. Bowerman Sanitary Landfill, which would likely service the project site given its proximity to the project site, is permitted 11,500 TPD maximum with an 8,500 TPD annual average. The estimated solid waste generated by the project would account for a small fraction of the maximum solid waste allowed to be disposed Frank R. Bowerman Sanitary Landfill as well as the annual average solid waste currently disposed of at the Frank R. Bowerman Sanitary Landfill.

Based on the above, the project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Impacts would be less than significant.

**e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

**Less Than Significant Impact.** AB 939 requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. SB 2202 clarified that local governments shall continue to divert 50 percent of all solid waste on and after January 1, 2000. SB 1016 introduced a per capita disposal measurement system that measures the 50 percent diversion requirement using a disposal measurement equivalent. At the local level, the City implements these diversion requirements through the City's Source Reduction and Recycling Element (SRRE) for diverting solid waste. Compliance with the SRRE would reduce the volume of solid waste ultimately disposed of at a landfill. Therefore, the project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Impacts would be less than significant.

## References

- CalRecycle, 2019. Estimated Solid Waste Generation Rates. Available at: <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>. Accessed August 28, 2019.
- City of Los Angeles. 2006. Los Angeles CEQA Thresholds Guidelines. Sewage Generation Factors. Available at: <http://planning.lacity.org/Documents/MajorProjects/CEQAThresholdsGuide.pdf>. Accessed August 28, 2019.

<sup>4</sup> 1,417 total students and employees \* 1 pound/student/day = 1,417 pounds/day = 0.71 tons/day

<sup>5</sup> 627 persons (students and employees) living in the on-site dormitories \* 12 pounds/person/day = 7,524 pounds/day = 3.76 tons/day

<sup>6</sup> This analysis conservatively looks at both the generation of the school uses on the project site as well as the dormitory uses. Actual solid waste generation would be lower than this total as 627 students/employees of 1,417 students/employees would live on the project site and some solid waste generation would be double counted.

Costa Mesa Sanitary District, 2019. Sewer System Facts & Statistics. Available at: <http://www.cmsdca.gov/index.php/wastewater/sewer-system-facts>. Accessed August 29, 2019.

County of Orange, 2019. Waste & Recycling – Active Landfills. Available at: <http://www.oclandfills.com/landfill/active/>. Accessed August 28, 2019.

Fusco Engineering, 2019. Preliminary Hydrology Report – EF International Language Campus Costa Mesa 3150 Bear Street, Costa Mesa, CA. August 2019.

Mesa Water District, 2016. 2015 Urban Water Management Plan. Available at: <https://www.mesawater.org/save-water/urban-water-management-plan>. Accessed August 28, 2019.

Orange County Sanitation District, 2019. Regional Sewer Service – Facts and Key Statistics. Available at: <https://www.ocsd.com/services/regional-sewer-service>. Accessed August 28, 2019.

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## 3.20 Wildfire

| <i>Issues (and Supporting Information Sources):</i>  | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>                    |
|--|---------------------------------------|---|-------------------------------------|-------------------------------------|
| <b>XX. WILDFIRE</b> — If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:   |                                       |   |                                     |                                     |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?   | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### Discussion

- a) **Substantially impair an adopted emergency response plan or emergency evacuation plan?**
- b) **Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**
- c) **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**
- d) **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

**No Impact (a-d).** The project site is located in an urbanized area with no natural vegetation. The project site is presently developed with an existing 3-story (approximately 44-foot tall), 68,000-square-foot building, associated landscaping, walkways, and surface parking lot. According to the General Plan Safety Element, no part of Costa Mesa is listed as a State Responsibility Area or located within the Very High Fire Hazard Severity Zone (City of Costa Mesa, 2015). The project site is not located in an area classified as a “Wildland Area That May Contain Substantial Forest Fire Risks and Hazards” or a “Very High Fire Hazard Severity Zone” by the California

Department of Forestry and Fire Protection (CAL FIRE, 2007; CAL FIRE, 2008).  
Therefore, no impact would occur.

## References

CAL FIRE, 2007. Fire Hazard Severity Zones in SRA for Orange County. Adopted by CAL FIRE on November 7, 2007. Accessed on July 2, 2019.

CAL FIRE, 2011. Very High Fire Hazard Severity Zones in LRA as Recommended by CAL FIRE. October 2011. Accessed on July 2, 2019.

City of Costa Mesa, 2016. 2015-2035 General Plan Safety Element. p. S-21. Available online at: <https://www.costamesaca.gov/home/showdocument?id=34702>. Accessed on June 20, 2019.

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## 3.21 Mandatory Findings of Significance

| <i>Issues (and Supporting Information Sources):</i>  | <i>Potentially Significant Impact</i> | <i>Less Than Significant with Mitigation Incorporated</i> | <i>Less Than Significant Impact</i> | <i>No Impact</i>         |
|--|---------------------------------------|---|-------------------------------------|--------------------------|
| <b>XXI. MANDATORY FINDINGS OF SIGNIFICANCE —</b>   |                                       |   |                                     |                          |
| a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/>              | <input checked="" type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?   | <input type="checkbox"/>              | <input checked="" type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/> |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Discussion

- a) **Does the project have the potential to substantially 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?**

**Less Than Significant with Mitigation Incorporated.** The project would not have substantial impacts on special status species, stream habitat, and wildlife dispersal and migration. Furthermore, the project would not affect the local, regional, or national populations or ranges of any plant or animal species and would not threaten any plant communities. However, because there are trees on the site, the project could cause potential significant impacts on nesting birds. There also is potential for prehistoric cultural resources and tribal cultural resources to exist and if resources are encountered during grading activities, significant impacts could occur.

#### ***Mitigation Measure***

Implementation of Mitigation Measures BIO-1, CUL-1, CUL-2, and TCR-1 is required.

#### ***Significance Determination After Mitigation***

After the implementation of Mitigation Measure BIO-1, potential impacts on nesting bird species would be reduced to less than significant. After the implementation of Mitigation Measures CUL-1 and CUL-2, potential impacts to potential prehistoric archaeological

resources would be reduced to less than significant. After the implementation of Mitigation Measure TCR-1, potential impacts to tribal cultural resources would be reduced to less than significant.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

**Less Than Significant with Mitigation Incorporated.** The potential for cumulative impacts occurs when the impacts of a project are combined with impacts from related development projects and result in impacts that are greater than the impacts of a project alone. The City of Costa Mesa has a number of individual projects that are currently being processed at the City or has received approval and have not yet been constructed. Cumulative projects in the immediate vicinity of the project site are located within previously developed site and include One Metro West, Symphony Apartments, and Starwood Tribute Hotel. The One Metro West is located on the north side of I-405 on Sunflower Avenue. This project includes 1,057 dwelling units, 25,000 square feet of commercial office, and 6,000 square feet of retail uses. The Symphony Apartments include 393 residential units, 4,104 square feet of retail and parking structures southeast of the Anton Boulevard and Avenue of the Arts intersection. The Starwood Tribute Hotel is located on Avenue of the Arts north of Anton Boulevard and includes 150 rooms and a parking structure. The project’s incremental contribution to potential cumulative impacts are discussed below.

- **Aesthetics** – The analysis above determined that the project would not result in significant adverse aesthetic impacts. Views of scenic vistas, including the Pacific Ocean, Santa Ana River, and Santa Ana Mountains, as well as scenic resources, including the Santa Ana River, Upper Newport Bay, and Santa Ana Mountains, are not generally available from the project site as the project site is development and does not include a large expanse of undeveloped land. Given the locations of the nearest related projects (i.e., ranging from 0.6 mile to the northeast to 2 miles to the west) and their development within existing developed sites, the project and related projects would not block existing views of a scenic vista. Similarly, based on the distance of related projects, the location of the project site, and compliance with the CMMC lighting guidelines, the project and related projects would not create a new source of substantial light and glare. With regard to scenic quality, as related projects are located in an urban area, consistency with applicable zoning and other regulations governing scenic quality would be assessed on a project specific basis. Because the project would result in less than significant aesthetic impacts, the project’s contribution to cumulative aesthetic impacts would be less than cumulatively considerable.
- **Agricultural and Forestry Resources** –As discussed above, the project site does not contain agricultural uses and is designated by the state of California Department of Conservation areas as “urban and built-up land”, there are no Williamson Act contracts on the project site, and it is not developed with forest land or timberlands. The project site and surrounding area are located in an urbanized area in the City of

Costa Mesa. Related projects in the vicinity of the project site are also not zoned for agricultural, forest, or timberland uses. As such, implementation of the project and related projects would not convert farmland, forest land, or timberland. Therefore, the project would not contribute to cumulative impacts on agricultural and forestry resources.

- **Air Quality** – As discussed above, in accordance with SCAQMD methodology, projects that do not exceed or can be mitigated to less than the daily threshold values do not add significantly to a cumulative impact. Neither the construction nor the operation of the project would exceed the recommended SCAQMD threshold levels. Therefore, the project’s contribution to cumulative air quality impacts would be less than cumulatively considerable.
- **Biological Resources** – Due to their site-specific nature, impacts on biological resources are typically assessed on a project-by-project basis. As analyzed above, urbanized setting and is fully developed with an existing three-story (approximately 44-foot tall), 68,000-square-foot building, associated landscaping, walkways, and surface parking lot. No species identified as candidate, sensitive, or special-status species were observed within the project site and no wetlands are located within the City of Costa Mesa. In addition, the project, and related projects, would be required to comply with Title 15, Chapter V of the Costa Mesa Municipal Code regarding trees and with those concerning migratory birds. Compliance with regulatory requirements would reduce any impacts associated with trees species. As identified above, the project has the potential to impact nesting birds. Therefore, the project’s contribution to cumulative impacts on nesting birds would be considered cumulatively considerable.
- **Cultural Resources** – As analyzed above, the project would not result in any significant impacts to historic resources. Therefore, the project would not contribute to any cumulative impacts associated with historic resources. The impacts related to archaeological resources and human remains are generally site specific. The project site is already disturbed and no archaeological resources have been identified on or immediately adjacent to the site. In addition, the potential for the disturbance of any human remains is considered low. However, because the potential for these cultural resources exist, the project’s contribution to cumulative impacts to archaeological resources and human remains are cumulatively considerable.
- **Energy** – Development of the project and related projects would increase the use of electricity, natural gas, and petroleum-based fuels. As discussed above, construction and operation of the project would generate a demand for electricity, natural gas, and transportation fuel that would be nominal in comparison to existing and projected electricity, natural gas, and transportation fuel usage. As such, the project would not result in wasteful, inefficient, or unnecessary consumption of fuel resources. Related projects would similarly not be anticipated to generate a substantial increase in the demand for electricity and natural gas. In addition, as with the project, related projects would be expected to incorporate applicable 2016 Title 24 standards and 2016 CalGreen requirements. Furthermore, as with the project, the related projects are also expected to complying with CAFE fuel economy standards and the Pavley and Low Carbon Fuel standards, which are designed to result in more efficient use of transportation fuels. Therefore, although the project and related project development would result in the use of electricity and natural gas resources during construction

and operation of the project, the use of electricity and natural gas would be on a relatively small scale and would be consistent with the SCE and SoCalGas service areas. With regard to transportation fuel, according to the U.S. Energy Information Administration's International Energy Outlook 2017, the global supply of crude oil, other liquid hydrocarbons, and biofuels is expected to be adequate to meet the world's demand for liquid fuels through 2040, including those of the project and related projects. Therefore, the project's contribution to cumulative impacts associated with energy would be less than cumulatively considerable.

- **Geology and Soils** – The potential cumulative impacts related to geology and soils are site specific and are typically assessed on a project-by-project basis for a particular localized area. As such, similar to the project, related projects would address site-specific geologic hazards through the implementation of site-specific geotechnical recommendations and/or mitigation measures. Based on the analysis of project impacts associated with geology and soils, the project would result in significant impacts associated with liquefaction, unstable soils, expansive soils and paleontological resources. Because the project could result in significant geology and soils impacts, the project's contribution to cumulative geology and soils impacts would be cumulatively considerable.
- **Greenhouse Gas Emissions** – Based on the methodology for determining project-related GHG impacts, the analysis of GHG emissions is already cumulative in nature. As analyzed above, the project would not result in significant impacts associated with GHG emissions. Therefore, the project's contribution to cumulative GHG emissions impacts would be less than cumulatively considerable.
- **Hazards and Hazardous Materials** – The potential cumulative impacts related to hazards and hazardous materials are site specific and are typically assessed on a project-by-project basis for a particular localized area. As such, similar to the project, related projects would address site-specific hazards and hazardous materials through the implementation of site-specific recommendations and/or mitigation measures. In addition, as with the project, all related projects would be subject to local, state, and regulations pertaining to hazards and hazardous materials. With adherence to these standard regulations, cumulative impacts associated with hazards and hazardous materials would be less than significant. Therefore, the project's contribution to cumulative hazards and hazardous materials impacts would be less than cumulatively considerable.
- **Hydrology and Water Quality** – Related projects could potentially result in an increase in surface water runoff and contribute point and non-point source pollutants to nearby water bodies. However, as with the project, related projects would be required to prepare and implement a SWPPP and WQMP to reduce impacts to water quality. As analyzed above, development of the project would result in less than significant impacts. Therefore, the project's contribution to cumulative impacts associated with hydrology and water quality would be less than cumulatively considerable.
- **Land Use and Planning** – As with the project, related projects would be reviewed on a case-by-case basis to ensure consistency with existing land use policies and regulations. Where inconsistencies occur, it is anticipated that appropriate actions would be undertaken to ensure that land use impacts would be less than significant.

For example, each proposed General Plan Land Use Map and Zoning Map amendment would be subject to its own review including review under CEQA. In addition, the related projects are a minimum of 0.6 mile from the project site and separated by the I-405. Because the = project would result in less than significant land use and planning impacts, the project's contribution to cumulative land use and planning impacts would be less than cumulatively considerable.

- **Mineral Resources** – As previously discussed, no oil, peat or other mineral resources are within the vicinity of the project site. As such, the project would not result in the loss of a known mineral resources or the loss of availability of locally-important miner resources recovery site. Therefore, the project would not contribute to cumulative mineral resource impacts.
- **Noise** – Potential construction noise impacts to adjacent sensitive receptors would be reduced by compliance with the CMMC that limits the days and times of construction. Similar to the project, related projects would also be required to comply with the CMMC. Notwithstanding, given the location of the nearest related project relative to the project site (i.e., approximately 0.6 mile to the northeast) and intervening development, the project would not combine with related projects to generate cumulative noise impacts. Therefore, the project would not contribute to cumulative impacts associated with noise.
- **Population and Housing** – As discussed above, the project proposes the development of a school that would include 70 employees and teach up to 1,347 students. Of these 1,347 students, the dormitories would accommodate up to 627 students/employees living on-site. The 1,347 students who would either live in the surrounding community or live on the project site would be international students that would not contribute to the overall permanent population growth of the area. In addition, employment positions on the project site would be typically filled by persons already residing in the vicinity of the project site or those who would live on site, but would not relocate their households due to this employment opportunity. As such, the project would not result in a notable increase in demand for new housing, and any new demand, should it occur, would be minor in the context of forecasted growth for the City. Therefore, the project would not induce a substantial unplanned population. As such, the project's incremental contribution to potential cumulative impacts to population and housing would not be cumulatively considerable.
- **Public Services and Recreation** – As discussed above, the project involves development of a school, which would teach 1,347 students and of those students would provide dorm rooms on-site for up to 627 students/employees. As it related to fire protection, as with the project, related projects would comply with all applicable provisions of the City Building and Fire codes. In addition, related projects would submit a plan to CMFD for review and approval of the project's design and to assess compliance with the California Building Code and California Fire Code requirement and would include fire prevention features that would further reduce demand of fire protection services. With regard to police protection, as with the project, related projects would incorporate project specific security features to reduce the need for police protection services. These features would be reviewed by the Cosa Mesa Building Department of CMPD to ensure adequate safety and crime prevention measures are provided. The project is a proposed school which would teach students 18 to 26 years of age, who are not of primary or secondary school age. As such, the

project would not generate a corresponding demand for school services in the vicinity of the project site. Related projects would be required to pay a school developer impact fee, which would offset any potential impact to schools associated with the related projects. With regard to parks and recreation, related projects would be required to provide open space and recreational amenities and would be required to pay Quimby fees, as required, both of which would offset the demand for public parks and recreational facilities. Library and other municipal services are typically funded through user fees, property tax or sales tax revenues to which the future residents from related projects may contribute. Overall the project would not be cumulative considerable and related projects would comply with regulations that would serve to minimize impacts related to fire protection, police protection, schools, parks, other public facilities and libraries. Thus, the project's contribution to potential cumulative impacts associated with public services would be less than cumulatively considerable.

- **Transportation** – As discussed above, the project would not generate more than 100 AM or PM peak hour trips, as such, this would be below the 100 peak-hour-trip threshold that would warrant the preparation of a transportation study. Therefore, the project would not generate a significant impact on the transportation system. The project would also not conflict with a program plan, ordinance, or policy addressing the circulation system, substantially increase hazards, or result in inadequate emergency access. Therefore, the project's contribution to cumulative traffic impacts would be less than cumulatively considerable.
- **Tribal Cultural Resources** – As with cultural resources, discussed above, impacts related to tribal cultural resources are generally site specific. As analyzed above, although consultation with the Native American tribes has not been completed, the City has determined that the project could result in significant impacts to tribal cultural resources that could be eligible for local or state listing, or considered significant by the City. Therefore, the project's contribution to cumulative impacts to tribal cultural resources is cumulatively considerable.
- **Utilities and Service Systems** – Due to the shared urban infrastructure, the project and related projects would cumulatively increase water consumption, wastewater generation, and stormwater discharge.

According to the Mesa Water 2015 UWMP, Mesa Water has full capacity to meet water demand during normal, dry, and multiple dry years through the year 2040 in part due to the diversified supply and conservation measures in place by the Mesa Water. Therefore, Mesa Water would be able to supply the demands of the project and future growth through 2040 and beyond. As with the project, related projects would be required to pay all associated costs resulting from the necessary improvements required by the related project.

The project, which is estimated to generate 0.0655 mgd of wastewater, in combination with the related projects, are assumed to cumulatively constitute a small increase in the 185 mgd of wastewater that is currently processed by the OCSA. As such, OCSA would have adequate capacity to serve the project and related projects projected wastewater demand in addition to existing commitments. As with the project, related projects would coordinate with the City to ensure that adequate sewer infrastructure is available to meet the anticipated wastewater generation of the related

project. Should the City determine that additional sewer connections and sewer infrastructure capacity is needed to meet the demand of the related project, the related project applicant would implement such improvements in consultation with the City.

As with the project, as it relates to electricity, natural gas, and telecommunications facilities, related projects would coordinate with the appropriate service provider for any infrastructure tie-ins, removals, or relocations, and would comply with all requirements set forth by the service provider (e.g., SCE, SoCalGas, and internet and telephone providers). It is anticipated that existing electricity, natural gas, and telecommunications facilities would be sufficient to support the needs from the project in combination with related projects.

The project, in conjunction with related projects, would increase the needs for solid waste disposal. As discussed above, the estimated solid waste generated by the project would account for a small fraction of the maximum solid waste allowed to be disposed Frank R. Bowerman Sanitary Landfill as well as the annual average solid waste currently disposed of at the Frank R. Bowerman Sanitary Landfill. It is anticipated that related projects would also account for a small fraction of the maximum solid waste allowed to be disposed Frank R. Bowerman Sanitary Landfill. Similar to the project, related projects would also comply with regulations related to solid waste that would serve to reduce the volume of solid waste ultimately disposed of at a landfill.

Based on the above, the project's contribution to potential cumulative impacts associated with utilities and service systems would be less than cumulatively considerable.

- **Wildfire** – As previously discussed, the project site is located in an urbanized area with no natural vegetation. The project site is not located in an area classified as a “Wildland Area That May Contain Substantial Forest Fire Risks and Hazards” or a “Very High Fire Hazard Severity Zone”. Related projects in the vicinity of the project site are also not located in areas classified as a “Wildland Area That May Contain Substantial Forest Fire Risks and Hazards” or a “Very High Fire Hazard Severity Zone”. In addition, no part of Costa Mesa is listed as a State Responsibility Area or located within the Very High Fire Hazard Severity Zone (City of Costa Mesa, 2015). Therefore, cumulative impacts related to wildfire would be less than significant. As a result, the project would not contribute to cumulative wildfire impacts.
- **Summary** - As discussed above, the project's contribution to cumulative impacts associated with nesting birds, prehistoric archaeological resources, human remains, liquefaction, unstable soils, expansive soils, paleontological resources, and tribal cultural resources would be cumulatively considerable. The project's contribution to cumulative impacts associated with all other impacts would either be none or less than cumulatively considerable.

### ***Mitigation Measure***

Implementation of Mitigation Measures BIO-1, CUL-1, CUL-2, CUL-3, GEO-1, GEO-2, GEO-3 GEO-4, and TCR-1 is required.

### **Significance Determination After Mitigation**

After the implementation of Mitigation Measure BIO-1, the project's contribution to cumulative impacts on nesting bird species would be reduced to less than cumulatively considerable. After the implementation of Mitigation Measures CUL-1 and CUL-2, the project's contribution to cumulative impacts to potential prehistoric archaeological resources would be reduced to less than cumulatively considerable. Mitigation Measure CUL-3 would reduce the project's contribution to cumulative impacts on human remains, if discovered, to less than cumulatively considerable. The implementation of Mitigation Measures GEO-1 and GEO-2 would reduce the project's contribution to geologic impacts from liquefaction, unstable soils, and expansive soil to less than cumulatively considerable. The implementation of Mitigation Measures GEO-3 and GEO-4 would reduce the project's contribution to cumulative impacts on paleontological resources to less than cumulatively considerable. Finally, the implementation of Mitigation Measure TCR-1 would reduce the project's contribution to tribal cultural resources to less than cumulatively considerable. Therefore, with the implementation of the mitigation measures identified above, the project would result in less than cumulative impacts.

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

**Less Than Significant Impact.** Implementation of the project would not cause substantial adverse effects on human beings. Issues associated with effects on human beings include hazards and hazardous materials and noise. As discussed above, the project would result in less than significant impacts associated with hazards and hazardous materials as well as noise. Therefore, the project would result in less than significant impacts associated with impacts to human beings.

### **References**

US Energy Information Administration (USEIA), 2017. International Energy Outlook 2017. September 14, 2017. Available at: <https://www.eia.gov/outlooks/ieo/pdf/0484%282017%29.pdf>. Accessed on September 26, 2019.

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