

Winter 2020 | Addendum

# Fourth Addendum to the LAHC Facilities Master Plan EIR

Los Angeles Community College District

*Prepared for:*

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# 1. Introduction

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## 1.1 BACKGROUND, PURPOSE, AND SCOPE

This Addendum to the Los Angeles Community College District's (LACCD or District) certified Los Angeles Harbor College Facilities Master Plan Environmental Impact Report (2003 EIR), State Clearinghouse No. 2003091037, prepared for the 2003 Los Angeles Harbor College Facilities Master Plan (LAHC FMP), has been prepared in accordance with section 21166 of the California Environmental Quality Act (CEQA) and sections 15162 and 15164 of the CEQA Guidelines. This Addendum analyzes the impact of minor changes to the Facilities Master Plan as part of the modernization of the existing Los Angeles Harbor College Campus (LAHC or Campus). The proposed revisions include the construction of the new Southeast Hall and renovation of three buildings within the existing footprint. This addendum also analyzes the potential for new or more severe impacts from the demolition of the existing Old Administration Building, Nursing Building, and Special Program and Services Building, which were part of the LAHC FMP.

The LAHC FMP was approved by LACCD to provide a 5-year plan and 30-year vision for long-term development for the LAHC Campus. Improvements in the 2003 FMP would add approximately 230,000 gross square feet to the LAHC Campus. The FMP was updated in 2004, 2008, 2010, and 2013 to better address the evolving needs of the LAHC Campus and community.

## 1.2 ENVIRONMENTAL PROCEDURES

### 1.2.1 CEQA Requirements

According to CEQA Guidelines Section 15164(a), an addendum shall be prepared if some changes or additions to a previously adopted EIR are necessary but none of the conditions enumerated in CEQA Guidelines Section 15162(a)(1)–(3) calling for the preparation of subsequent EIR have occurred. As stated in CEQA Guidelines Section 15162 (Subsequent EIRs and Negative Declarations):

- a) When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
  - 1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
  - 2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

## 1. Introduction

- 3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or negative declaration was adopted, shows any of the following:
  - A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
  - B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Changes to the LAHC FMP and the regulatory conditions, described in Chapter 3, *Project Description*, would not fulfill the conditions outlined in CEQA Guidelines Sections 15162(a)(1)–(3) because these changes would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects requiring major revisions to the 2003 EIR. Accordingly, the substantial evidence required by CEQA Guidelines Section 15164(e) support the finding that a subsequent EIR is not required and an addendum to the 2003 EIR is the appropriate environmental document to address changes to the project.

As stated in CEQA Guidelines Section 15164 (Addendum to an EIR or Negative Declaration):

- a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.
- b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.
- c) An addendum need not be circulated for public review but can be included in or attached to the 2003 EIR or adopted negative declaration.
- d) The decision-making body shall consider the addendum with the 2003 EIR or adopted negative declaration prior to making a decision on the project.
- e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

## 1. Introduction

### 1.3 PREVIOUS ENVIRONMENTAL DOCUMENTATION

In March 2003, the LACCD Board of Trustees (Board) certified the Los Angeles Harbor College Facilities Master Plan Environmental Impact Report (2003 EIR) (State Clearinghouse No. 2003091037) in support of the LAHC FMP. The 2003 EIR evaluated impacts associated with the establishment and implementation of the LAHC FMP and created a mitigation monitoring program for impacts associated with the FMP. The primary goal of the LAHC FMP was to provide a framework for long-term development of the LAHC Campus, which included construction of new facilities; renovation, modernization, and additions to existing facilities; demolition of several existing structures; and development of new surface parking and/or parking structures. Completion of the LAHC FMP was anticipated to increase the building square footage on the campus from 421,000 gross square feet of floor space to approximately 651,000 gross square feet of space.

In 2004, LACCD updated the LAHC FMP (2004 Update), and an Addendum to the 2003 EIR was subsequently adopted. The 2004 Update included the demolition of most buildings on campus, with only eight major buildings remaining in the long term. Subsequently, LACCD again updated the FMP (2008 Update) and prepared a Second Addendum to the 2003 EIR. The 2008 Update included further modifications to the proposed Learning Resource Center, Student Union, Life Science, and Physical Science buildings. In 2010, the FMP was further updated (2010 Update), and LACCD adopted the Third Addendum to the 2003 EIR. The 2010 Update included an increase in building area of 42,750 square feet, new science complex buildings and Student Union buildings, and no additional demolition to historic buildings. In 2013, an amendment to the 2010 Update (2013 Update) was approved and determined to be exempt from CEQA review under Class 1, Categorical Exemption. The amendment reflected the name change from “Job Placement/Data Center” building to “Old Administration.” demolition of the General Classroom building, installation of an open space quad area, and re-siting the SPS & Health building to the east of the Nursing building.

### 1.4 CONTENT AND ORGANIZATION OF THIS ADDENDUM

This Addendum relies on the CEQA Guidelines’ Appendix G checklist, which addresses environmental issues section by section. A completed checklist is included for each topic in Chapter 5, *Environmental Analysis*. Each environmental topic has the following subheadings:

- Summary of Previous Environmental Analysis (including the LAHC FMP, 2004 Update, 2008 Update, 2010 Update, and previous CEQA documentations)
- Impacts Associated with the Proposed Revised Project (including environmental checklist)
- Adopted Mitigation Measures Applicable to the Proposed Revised Project

## 1. Introduction

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## 2. Environmental Setting

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### 2.1 PROJECT LOCATION

The LAHC Campus is at 1111 Figueroa Place in the neighborhood of Wilmington in the city of Los Angeles (see Figure 1, *Regional Location*). The LAHC Campus is bounded by West L Street to the north, Lagoon/Campus Drive to the south, Campus Drive to the west, and Figueroa Place to the east.

Regional access to the LAHC Campus is provided by the Harbor Freeway (I-110) and State Route 1 (SR-1). The I-110 runs perpendicular to the SR-1 in a north-south direction, and SR-1 runs east-west. I-110 is approximately 50 feet east of the LAHC campus, and SR-1 is approximately 0.3 mile north of the Campus. Access between the LAHC Campus and the I-110 is via off-ramps at Figueroa Place. The major streets serving the LAHC Campus are Vermont Avenue in the north-south direction and West Anaheim in the east-west direction. In addition, the LAHC Campus is bounded by the Ken Malloy Harbor Regional Park to the north, south, and west (see Figure 2, *Local Vicinity*).

#### 2.1.1 Background

LAHC is a two-year community college and one of nine colleges in the LACCD. The LAHC Campus began operating in 1949 with three main college divisions: a technical division, a business education division, and an academic or general education division. The campus is currently located on 65 acres of land and serves approximately 8,855 students per year as of Fall 2017 (LAHC 2018).

On April 10, 2001, voters authorized the LACCD to issue \$1.245 billion of general obligation bonds to implement a capital improvement program for the nine colleges within the LACCD. The bond, entitled Proposition A, allocated \$127 million of the funds to the LAHC Campus. In May 2003, voters again authorized the LACCD to issue approximately \$980 million of general obligation bonds under Proposition AA, of which \$77.4 million were allocated to the LAHC Campus. Proposition A/AA funds have been used for construction, repair, improvement, and upgrade of LACCD buildings, classrooms, and other facilities. On November 4, 2008, voters again authorized the LACCD to issue an additional \$3.5 billion to rebuild and modernize school facilities with new technology and green buildings under Measure J. LAHC has been allocated \$219 million under this bond measure. To undertake key development projects identified for the LAHC Campus, a Master Plan team was formed, and long-term and short-term goals for facility improvements have been evaluated.

## 2. Environmental Setting

### 2.2 ENVIRONMENTAL SETTING

#### 2.2.1 Existing Land Use

The Project Site is in the Wilmington-Harbor City Planning Area of Los Angeles and consists of the existing Campus on a 65-acre lot. The LAHC Campus is in a fully developed urban environment. It is divided into two areas, with academic buildings concentrated in the northern portion of the Project Site and athletic fields at the southern end. Existing buildings and uses on the LAHC Campus include classrooms, lecture halls, a library and learning resource center, administrative offices, parking lots, child development center, student union, stadium, softball field, baseball field, and other miscellaneous buildings (see Figure 3, *Aerial Photograph*).

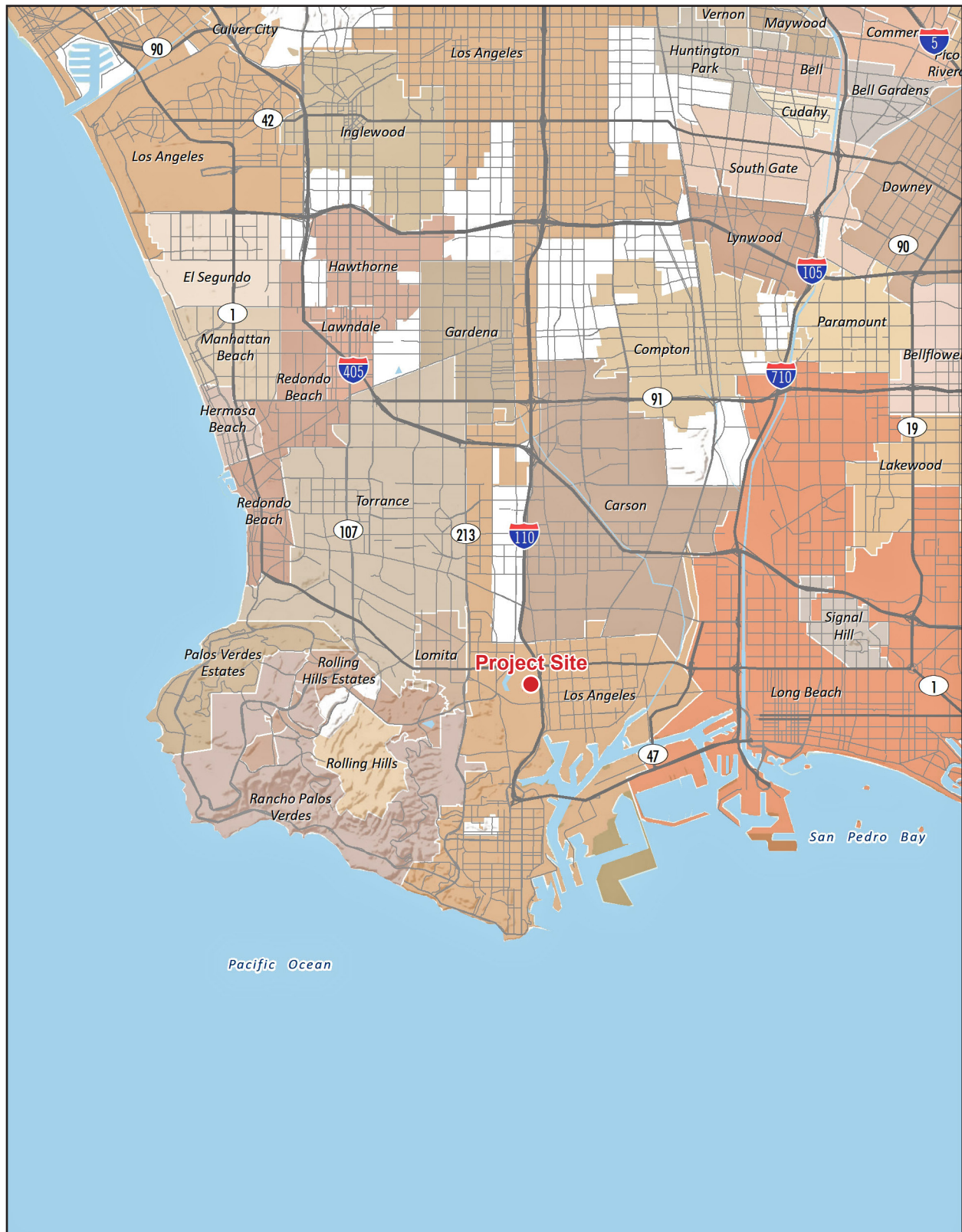
#### 2.2.2 Surrounding Land Use

Surrounding land uses in the general vicinity of the LAHC Campus include properties that are zoned Open Space, Commercial, Industrial, and Residential. The LAHC campus is bounded by the Ken Malloy Harbor Regional Park to the north, south, and west. Single-family homes are to the west of I-110, and industrial uses are to the south of West Anaheim Street. To the north, multifamily residences are located beyond the park at the corner of SR-1 and Figueroa Place. Kaiser Permanente is also located to the northwest of the LAHC Campus beyond Vermont Avenue.

#### 2.2.3 General Plan and Zoning

The LAHC Campus is designated Public Facilities (PF) in the City of Los Angeles Municipal Code and City of Los Angeles General Plan. Both the land use and zoning of the LAHC Campus allow for public school use. No changes to the existing zoning or General Plan land use designations would occur as a result of the Proposed Revised Project.

Figure 1 - Regional Location  
2. Environmental Setting



Note: Unincorporated county areas are shown in white.  
Source: ESRI, 2020

0 3  
Scale (Miles)

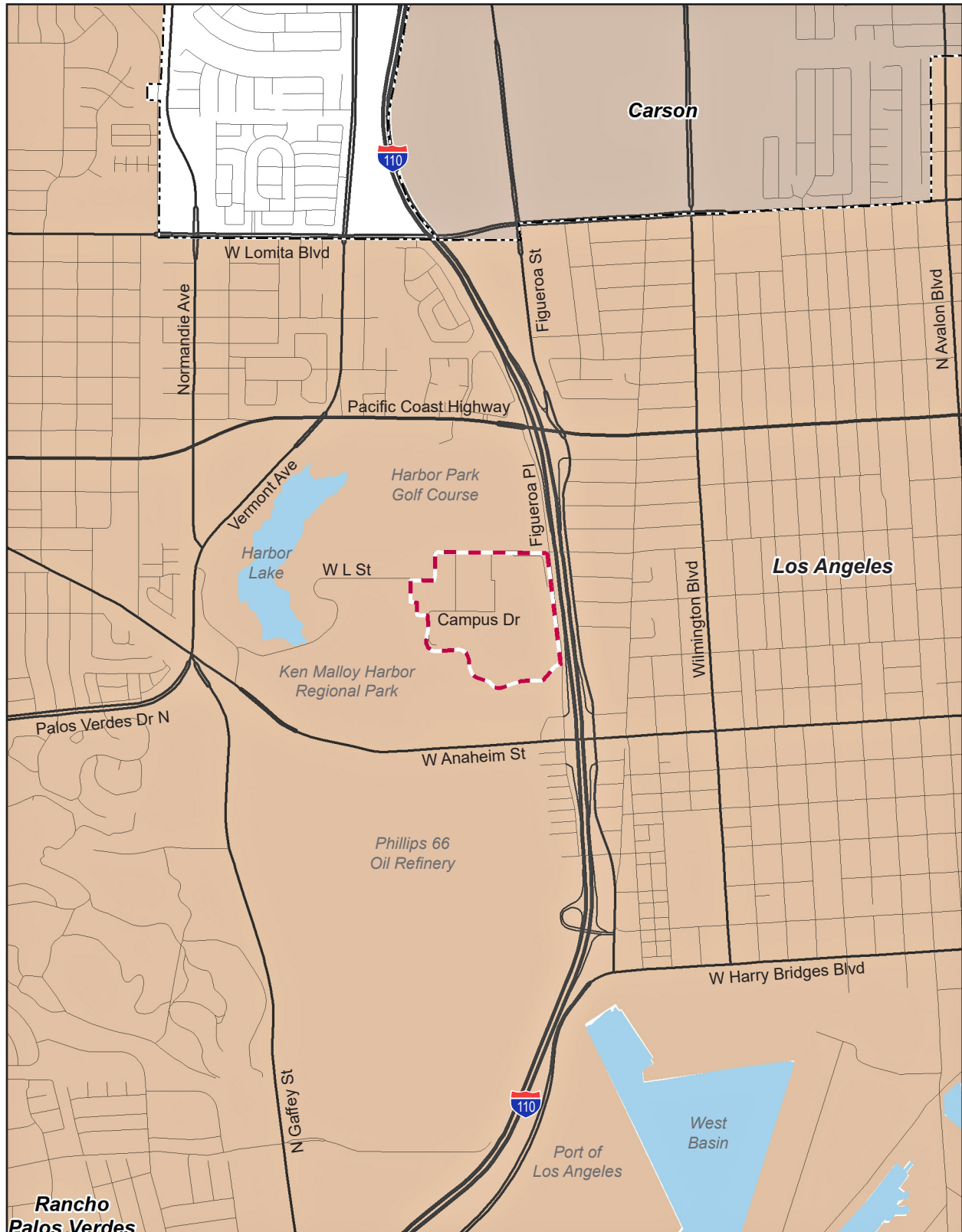


## 2. Environmental Setting

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Figure 2 - Local Vicinity  
2. Environmental Setting



--- Project Boundary

Note: Unincorporated county areas are shown in white.

Source: ESRI, 2020

0 2,000  
Scale (Feet)



## 2. Environmental Setting

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Figure 3 - Aerial Photograph  
2. Environmental Setting



--- Project Boundary

0 1,000  
Scale (Feet)



Source: Nearmap, 2020

PlaceWorks



## 2. Environmental Setting

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## 3. Project Description

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### 3.1 PROJECT BACKGROUND

The LAHC FMP was approved in 2003 to address the improvement of the LAHC Campus' physical environment. Objectives of the LAHC FMP are as follows:

- Confirm Harbor College's commitment to the communities it serves, including day time and evening students, as well as the general community, by expanding and improving its educational and athletic facilities and community-oriented programs.
- Develop state-of-the-art educational facilities with an infrastructure that can transform and expand to accommodate changing technologies, including both new equipment and new formats in teaching and educating students.
- Develop state-of-the-art facilities that meet or exceed current safety standards and requirements.
- Provide facilities to allow Harbor College to support increased projected future enrollment.
- Enhance and maintain the campus open space for recreational and community activity and harmonize the campus with the surrounding natural areas.
- Develop state-of-the-art facilities that allow the College to meet its modern role as a college preparatory institution by integrating into its curriculum areas of education associated with the four-year college and university experience, while maintaining its historical core mission of preparing students for the workplace.
- Create and design facilities that promote the Leadership in Energy & Environmental Design (LEED) Green Building standards.
- Improve ingress to and egress from the campus for motorized traffic, while at the same time increasing pedestrian safety by moving traffic out of the center of campus to reduce the potential for conflicts between pedestrian and motorized traffic.
- Construct new facilities on campus, with connecting landscaped walkways, to eventually create a "quad" appearance and result in a more harmonious and synchronous feel to the campus.

The subsequent LAHC FMP updates address issues dealing with physical image, the creation of a sense of place, and movement systems that can improve the connection between the Campus and the surrounding areas. It seeks to enhance the quality of the Campus environment to improve the overall perception of the

### 3. Project Description

Campus as a valuable part of the community. Since the adoption of the LAHC FMP in 2003, multiple changes have been made to the FMP, and some of the planned actions have already been completed.

## 3.2 PROJECT DESCRIPTION

### 3.2.1 Project Components

As shown in Table 1, *Summary of Proposed Changes*, the Proposed Revised Project would result in the construction of a new Southeast Hall and the renovation of the existing Science Complex, Technology building, and Child Development Center. The previously planned demolition of the Old Administrative, Nursing, and Special Program and Service buildings under the 2010 Update would be implemented under the Proposed Revised Project (see Figure 4, *Site Plan*). Furthermore, the Proposed Revised Project would also include the demolition and construction of landscaping and hardscape features within the Project Site. The total demolition under the Proposed Revised Project would be 48,251 square feet. Including the previously approved demolition of the General Classroom building, the total demolition on Campus with implementation of the Proposed Revised Project would be 62,587 square feet. It should be noted that the demolition of the General Classroom building will not be analyzed as part of the Proposed Revised Project, but acknowledged as part of the overall FMP for the LAHC Campus. With the demolition of the General Classroom building, completion of the Proposed Revised Project would result in a net decrease of 13,587 gross square footage of building space at the LAHC Campus.

**Table 1 Summary of Proposed Changes**

Facility	Gross Square Footage	2013 Update	2020 Update
Southeast Hall	49,000 sqft		Construction
Science Complex		Renovate	No Change
Technology Building		Renovate	No Change
Child Development Center		Renovate	No Change
Old Administration Building (previously known as Job Placement/Data Center)	24,412 sqft	Demolition	Demolition
General Classroom Building	14,336 sqft	Demolition	
Nursing Building	21,499 sqft	Demolition	Demolition
Special Program and Service Building	2,340 sqft	Demolition	Demolition
Landscape/Hardscape	157,793 sqft		Demolition/Construction
Total Demolition under the 2020 Facilities Master Plan Update		48,251 sqft	
Total Demolition <sup>1</sup>		62,587sqft	
Total New Construction		49,000 sqft	
<b>Net Change</b>		<b>-13, 587 sqft</b>	

<sup>1</sup> Includes the previously approved demolition of the General Classroom building in 2013.

### Sustainability Standards

The Proposed Revised Project would be required to adhere to the LACCD Sustainability Standards, which require all new building and major renovations over 7,500 square feet to be minimally LEED certified. Additionally, all new buildings must be designed to meet the current California Energy Code (California Code

## 3. Project Description

of Regulations (CCR), Title 24, Part 6), California Green Building Standards Code (CALGreen) (24 CCR Part 11), and applicable jurisdictional standards. LACCD also requires that 15 percent of a project's energy use be supplemented by renewable energy that comes from on-site sources.

### 3.2.2 Project Phasing

The Proposed Revised Project would be constructed in three phases that would last approximately 42 months, with demolition of the existing Old Administration building and Special Program & Service building in fall 2021 and finishing in spring 2022. Construction of the new Southeast Hall would occur in fall 2022 and is anticipated to be completed by summer of 2024. Demolition of the Nursing building would occur in fall of 2024 and is anticipated to be complete in spring 2025.

### 3.2.3 Related Projects

In addition to the proposed construction or renovation of the campus facilities, there is an additional project underway as part of the LAHC Campus improvements:

- **Vision 2020-2040:** This project is the unofficial planning compendium for use by LAHC. It provides the framework for programwide projects such as the landscape master plan and underground utilities master plan. Additionally, it provides the basis for potential future projects at LAHC.

## 3.3 REQUIRED PERMITS AND APPROVALS

As required by the CEQA Guidelines, this section provides, to the extent the information is known to the LACCD, a list of the agencies that are expected to use the environmental analysis of the Proposed Revised Project in their decision-making. This section also lists the permits and other approvals required to implement the project.

### 3.3.1 Lead Agency Approval

The Board must approve the EIR Addendum prior to approving the Proposed Revised Project. The Board will consider the information in the 2003 EIR, 2004 EIR Addendum, 2008 EIR Addendum, and 2010 EIR Addendum in making its decision to approve or deny the Proposed Revised Project with or without further modifications. The EIR Addendum is intended to disclose to the public the Proposed Revised Project's details, analyze whether the Proposed Revised Project would cause a new significant environmental impact, or substantially increase the severity of a significant environmental impact that was disclosed in the 2003 EIR.

### 3.3.2 Other Required Permits and Approvals

A public agency other than the lead agency that has discretionary approval power over a part of the Proposed Revised Project is known as a "responsible agency," as defined by CEQA Guidelines. The responsible agencies and their approvals for this project may include:

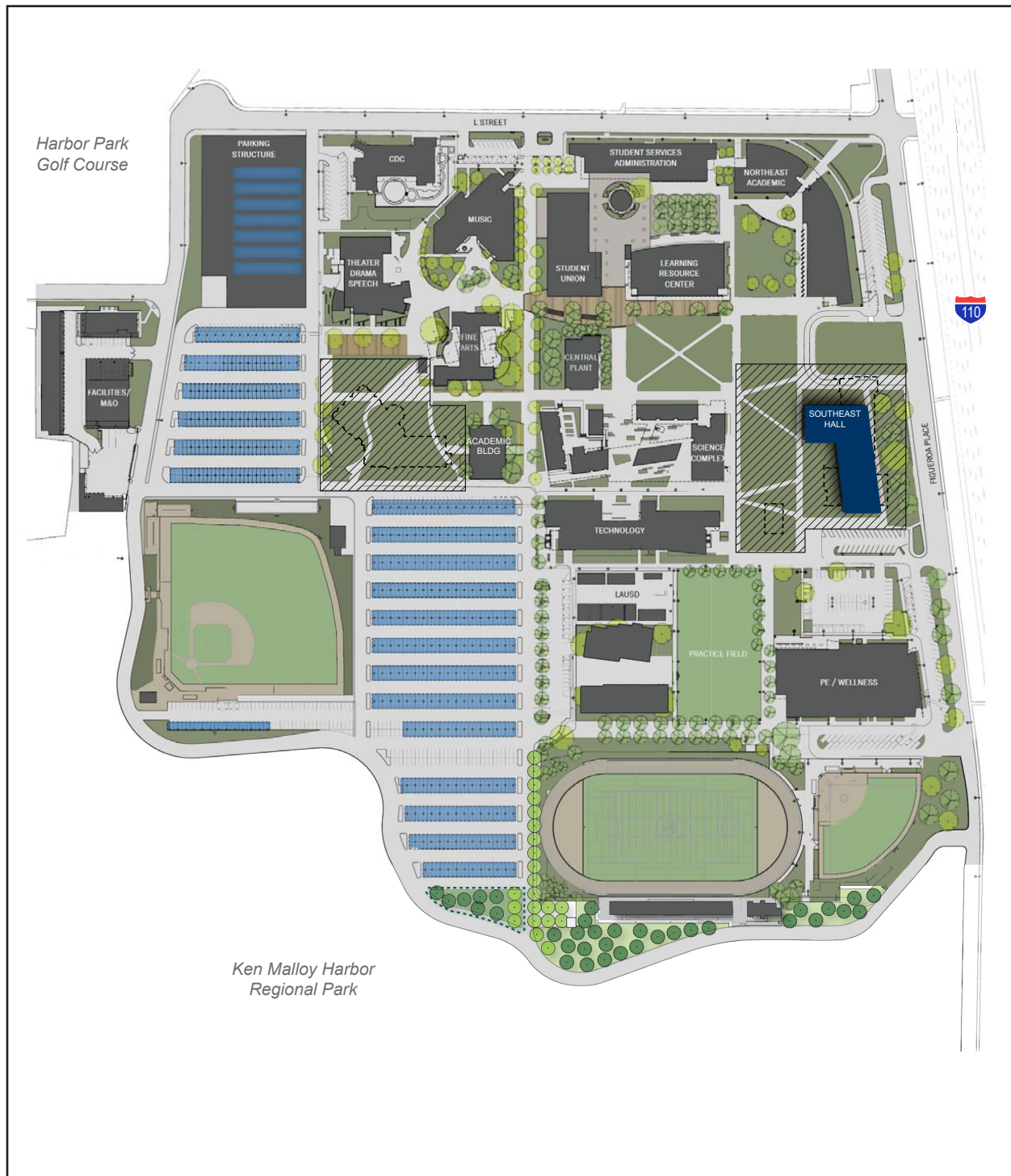
- State of California

### 3. Project Description

- Department of Toxic Substances Control (determination of “no further action”)
- Division of the State Architect (DSA) (approval of construction drawing)
- Regional Agencies
  - Los Angeles Regional Water Quality Control Board (issuance of waste discharge requirement; coverage under the regional on-site wastewater treatment system waste discharge requirements; Construction General National Pollution Discharge Elimination System Permit; Regional Dewatering General WDR; Storm Drain MS4 Permit)
  - South Coast Air Quality Management District (Rule 201: permit to construct)
- City of Los Angeles
  - Public Works/Engineering (for grading permit)
  - Planning Department (administrative plan review, site plan review)
  - Fire Department (approval of site plan for emergency access)



Figure 4 - Site Plan  
3. Project Description



PROPOSED VISION 2020-2040

- Existing/Previously Approved Building
- Proposed Building
- Demolition
- Landscape Improvements

0 350  
Scale (Feet)



Source: Steinberg Hart, 2020

### 3. Project Description

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## 4. Environmental Checklist

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### 4.1 BACKGROUND

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1. **Project Title:** Fourth Addendum to the LAHC Facilities Master Plan EIR

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2. **Lead Agency Name and Address:**  
Los Angeles Community College District  
770 Wilshire Boulevard  
Los Angeles, California 90017

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3. **Contact Person and Phone Number:**  
Andrew Skanchy  
906-551-2854

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4. **Project Location:** 1111 Figueroa Place, Wilmington, California 90744

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5. **Project Sponsor's Name and Address:**  
Los Angeles Community College District  
770 Wilshire Boulevard  
Los Angeles, California 90017

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6. **General Plan Designation:** Public Facilities

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7. **Zoning:** Public Facilities

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8. **Description of Project:**  
The Proposed Revised Project would result in the construction of a new Southeast Hall and the renovation of the existing Science Complex, Technology building, and Child Development Center. The previously planned demolition of the existing Old Administrative, Nursing, and Special Program and Service buildings under the 2010 Update will remained planned for demolition under the Proposed Revised Project. Furthermore, the Proposed Revised Project would also include the demolition and construction of landscape and hardscape on the Project Site. The total demolition under the Proposed Revised Project would be 48,251 square feet. Including the previously approved demolition of the General Classroom building, the total demolition on Campus with implementation of the Proposed Revised Project would be 62,587 square feet. It should be noted that the demolition of the General Classroom building will not be analyzed as part of the Proposed Revised Project, but acknowledged as part of the overall FMP for the LAHC Campus. Together With the demolition of the General Classroom building, completion of the Proposed Revised Project would result in a net decrease of 13,587 gross square footage of building space at the LAHC Campus.

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9. **Surrounding Land Uses and Setting:**  
Surrounding land uses in the general vicinity of the LAHC Campus include properties that are zoned Open Space, Commercial, Industrial, and Residential. The LAHC campus is bounded by the Ken Malloy

## 4. Environmental Checklist

Harbor Regional Park to the north, south, and west. Single-family homes are to the west of I-110, and industrial uses are to the south of West Anaheim Street. To the north, multifamily residences are located beyond the park at the corner of SR-1 and Figueroa Place. Kaiser Permanente is also located to the northwest of the LAHC campus beyond Vermont Avenue.

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### 10. Other Public Agencies Whose Approval Is Required (e.g., permits, financing approval, or participation agreement):

- Department of Toxic Substances Control (determination of “no further action”)
- Division of the State Architect (approval of construction drawings)
- Los Angeles Regional Water Quality Control Board (issuance of waste discharge requirement; coverage under the Regional on-site wastewater treatment system waste discharge requirements; Construction General National Pollution Discharge Elimination System (NPDES) Permit; Regional Dewatering General WDR; Storm Drain MS4 Permit)
- South Coast Air Quality Management District (Rule 201: permit to construct)
- City of Los Angeles Public Works/Engineering (for grading permit)
- City of Los Angeles Planning Department (administrative plan review, site plan review)
- City of Los Angeles Fire Department (approval of site plan for emergency access)

## 4. Environmental Checklist

### 4.2 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"/> Agricultural and Forest 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 |

### 4.3 DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

☐ 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.

\_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Date*

\_\_\_\_\_  
*Printed Name*

\_\_\_\_\_  
*For*

## 4. Environmental Checklist

### 4.4 EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - E) **Earlier Analyses Used.** Identify and state where they are available for review.
  - F) **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - G) **Mitigation Measures.** For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

## 4. Environmental Checklist

- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - A) the significance criteria or threshold, if any, used to evaluate each question; and
  - B) the mitigation measure identified, if any, to reduce the impact to less than significant.

## 4. Environmental Checklist

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## 5. Environmental Analysis

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This chapter provides evidence that no new significant impacts would occur as a result of either a change to the project or a change in circumstances. In accordance with section 21166 of CEQA, section 15162 of the CEQA Guidelines, and relevant case law, the baseline for this determination is the Approved Project. Each topical section will briefly summarize the conclusions of the 2003 EIR and then discuss whether or not the Proposed Revised Project is consistent with those findings. Applicable mitigation measures from the 2003 EIR are also provided in each section.

This is the fourth addendum to the 2003 EIR. The Proposed Revised Project, part of the LAHC FMP 2020 Update, provides an updated analysis of the environmental factors that have changed since the adoption of the LAHC FMP and its subsequent addenda. Therefore, this document incorporates applicable analysis from the 2003 EIR.

The mitigation program to reduce potential impacts of the Proposed Revised Project consists of Standard Requirements (SRs) and mitigation measures (MMs):

- **Standard Requirements.** Existing SRs are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review and also serve to offset or prevent specific impacts. Typical SRs include compliance with the provisions of the California and local building codes, South Coast Air Quality Management District rules, City of Los Angeles ordinances, and local agency impact fees, among others.
- **Mitigation Measures.** Where a potentially significant environmental effect has been identified and is not reduced to a level considered less than significant through the application of SRs, mitigation measures have been provided. All applicable measures from the 2003 EIR have been incorporated into this document. These mitigation measures have been incorporated into the Mitigation Monitoring Plan for this Addendum. Any modifications to the mitigation measures from the 2003 EIR are shown as strikethrough for deleted text and **bold** for new, inserted text.

The LACCD may substitute, at its discretion, any mitigation measure (and timing thereof) that has: (1) The same or superior result as the original mitigation measure and (2) the same or superior effect on the environment. The LACCD, in conjunction with any appropriate agencies, shall determine the adequacy of any proposed “environmental equivalent timing” and, if deemed necessary, may refer said determination to the Board.

## 5. Environmental Analysis

### 5.1 AESTHETICS

#### 5.1.1 Summary of Impacts Identified in the 2003 EIR

##### 2003 EIR

The 2003 EIR concluded that impacts to scenic vistas were not considered significant or not expected to occur. As identified in the 2003 EIR, the project area is in a fully developed urban setting with no distinguishing scenic or public views. Additionally, there are no designated scenic highways in the project vicinity and, as a result, no scenic highways would be affected.

New buildings would be designed in accordance with the design criteria and standards established by the District to ensure compatibility with existing campus architecture and enhance the overall visual quality of the campuses. A mitigation measure was identified to ensure new buildings would be compatible with the existing Campus in terms of architectural design, scale, massing, and siting. Moreover, the 2003 EIR concluded that impacts to shading and glare would be less than significant because new buildings would be in areas that are already heavily shaded by existing structures and trees and would use nonreflective building materials.

The LAHC FMP did not introduce new sources of artificial lights that could adversely affect sensitive residential uses or nighttime views. Although light impacts were not anticipated, mitigation measures were identified in the 2003 EIR to minimize lighting impacts from the playing field.

#### 5.1.2 Impacts Associated with the Proposed Revised Project

Except as provided in Public Resources Code Section 21099, would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Have a substantial adverse effect on a scenic vista?					<b>X</b>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?					<b>X</b>
c) In non-urbanized area, 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?				<b>X</b>	

## 5. Environmental Analysis

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				<b>X</b>	

The Project Site is a fully developed urban area surrounded by residential, commercial, and recreational uses. It is not in a scenic highway, and the closest designated state scenic highway is Route 2, approximately 31 miles from the Project Site (Caltrans 2019).

**Comments:****a) Have a substantial adverse effect on a scenic vista?**

**No Impact.** The Project Site is fully developed and consists of the existing LAHC Campus. The LAHC Campus' surrounding vicinity is urban and is developed with residential and commercial uses and open space. The Project Site does not contain unique visual features that would distinguish it from surrounding areas, nor is it located within a designated scenic vista. Since the Project Site is surrounded by the Ken Malloy Harbor Regional Park to the north, south, and west and the I-110 to the east, project elements would not be visible from the surrounding residential uses, and implementation of the Proposed Revised Project would not result in the obstruction or degradation of existing scenic views. No impact would occur due to implementation of the Proposed Revised Project, and no mitigation measures are necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Impact.** The Project Site is not located within a scenic highway or visible from the nearest state-designated scenic highway. The closest designated state scenic highway is Route 2, approximately 30 miles from the Project Site (Caltrans 2019). Therefore, no impact would occur due to implementation of the Proposed Revised Project, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

**c) In non-urbanized area, 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?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The existing visual character of the Proposed Revised Project site is of a community college campus located in an

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urban residential neighborhood. The demolition and construction of buildings on the existing school campus would not change the visual character of the site because these improvements would be visually consistent with the uses currently existing on the Project Site. Development of the new Southeast Hall would enhance and modernize the identity of the LAHC Campus compared to the existing conditions. Mitigation Measure V-1 identified in the 2003 EIR would continue to be applicable to the Proposed Revised Project to ensure new buildings would be compatible with the existing Campus in terms of architectural design, scale, massing, and siting. Therefore, implementation of the Proposed Revised Project would not degrade the existing visual character or quality of the site and its surroundings. The Proposed Revised Project would not conflict with applicable zoning and other regulations governing scenic quality, and impacts would be less than significant. No new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur, and no changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Proposed Project site is an already developed Campus and is currently a source of light on the surrounding area. The new Southeast Hall would be a new source of light on the LAHC Campus. However, the building is being constructed within the footprint of existing lighted buildings. The new Southeast Hall would not expose light-sensitive receptors to new sources of lighting because the building would be shielded by existing buildings and the nearest non-LAHC uses consist of open spaces. Mitigation Measure V-2 from the 2003 EIR applied to field lighting impacts. Because there would be no improvements to field lighting under the Proposed Revised Project, Mitigation Measure V-2 would not be applicable to the Proposed Revised Project. Therefore, consistent with the conclusions in the 2003 EIR, the continuation of nighttime illumination features would not represent a new, significant impact with regard to lighting or glare. Impacts to lighting would be less than significant. No new significant impacts or substantially more severe impacts than those previously identified in the 2003 EIR would occur, and no changes or new information would require preparation of a subsequent EIR.

### **5.1.3 Mitigation Measure Identified in the 2003 EIR and Applicable to the Proposed Revised Project**

The following mitigation measure from the Mitigation Monitoring Program was adopted with the 2003 EIR and would be applicable to the Proposed Revised Project. This mitigation measure has been incorporated into Mitigation Monitoring Plan for this Addendum.

- |     |  |
|-----|--|
| V-1 | New buildings and renovations to existing buildings shall adhere to the standards, criteria, and guidelines in the District's <i>Design Criteria and Standards/Sustainable Design Manual</i> to ensure compatibility with the existing campus architecture in terms of architectural design, scale, massing, and siting. |
|-----|--|

## 5. Environmental Analysis

- V-2 Nighttime lighting for the playing fields shall incorporate full-cutoff shielded fixtures or three-sided shielded fixtures pointed at least 45 degrees below the horizontal to contain the light within the campus and avoid spillover lighting impacts on off-campus properties including the adjacent parkland to the south and west and the residential neighborhoods farther to the south and east.

## 5.2 AGRICULTURE AND FOREST RESOURCES

### 5.2.1 Summary of Impacts Identified in the 2003 EIR

Agriculture resources were not discussed in the 2003 EIR, but discussed as part of the Initial Study to the EIR. As concluded, the LAHC Campus does not contain any farmland. Therefore, no impact would occur.

### 5.2.2 Impacts Associated with the Proposed Revised Project

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 Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
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?					<b>X</b>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?					<b>X</b>
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))?					<b>X</b>

## 5. Environmental Analysis

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?					<b>X</b>
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?					<b>X</b>

The Project Site is in an urbanized area, and no farmland or agricultural activity is on or in the vicinity of the Project Site (DOC 2016). Additionally, there is no land in the Project Site that is under a Williamson Act contract, and no zoned or existing forest lands or timberland, as defined in Public Resources Code (Sections 12220[g] and 4526, respectively).

### Comments:

- 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.** As indicated above, the Project Site is currently developed and does not contain farmland or other agricultural uses. Implementation of the Proposed Revised Project would not convert important farmland to nonagricultural use. No impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Impact.** The Project Site is not zoned for agricultural use, and no active Williamson Act contract applies to land in the Project Site. Implementation of the Proposed Revised Project would not conflict with agricultural zones or a Williamson Act contract. No impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

- 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.** As discussed above, the Project Site is in an urbanized location that contains no forest land or timberland resources. Implementation of Proposed Revised Project would not conflict with zoning for forest

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land or timberland. No impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Impact.** The Project Site does not contain any forest land. Implementation of the Proposed Revised Project would not result in the loss of forest land or the conversion of forest land to nonforest uses. No impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### **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.** The Project Site and surrounding area contains no farmland or forest land. Implementation of the Proposed Revised Project would not result in the loss of forest land or the conversion of forest land to nonforest uses. No impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### **5.2.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project**

No mitigation measures related to agricultural resources were identified in the 2003 EIR.

## **5.3 AIR QUALITY**

### **5.3.1 Summary of Impacts Identified in the 2003 EIR**

#### **2003 EIR**

The 2003 EIR determined that even with incorporation of Mitigation Measures AQ-1 through AQ-13, construction of the LAHC FMP would result in significant construction-related regional air quality impacts. In addition, the 2003 EIR determined that implementation of the LAHC FMP would not result in significant operation-related regional air quality impacts. The 2003 EIR also identified less than significant carbon monoxide (CO) hotspot impacts. Finally, the 2003 EIR determined that the LAHC FMP would be consistent with the South Coast Air Quality Management District (South Coast AQMD) Air Quality Management Plan (AQMP).

### **5.3.2 Impacts Associated with the Proposed Revised Project**

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.

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Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				<b>X</b>	
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?				<b>X</b>	
c) Expose sensitive receptors to substantial pollutant concentrations?				<b>X</b>	
e) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				<b>X</b>	

### Comments:

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** A consistency determination with an Air Quality Management Plan (AQMP) plays an important role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals in an AQMP. The South Coast Air Quality Management District (AQMD) is responsible for developing AQMPs for the South Coast Air Basin (SoCAB).

Since the 2003 EIR was certified, the South Coast AQMD has adopted a new AQMP. The current air quality plan for the SoCAB region is the 2016 AQMP, which was adopted March 2017 (South Coast AQMD 2017). Regional growth projections are used by South Coast AQMD to forecast future emission levels in the SoCAB. For southern California, these regional growth projections are provided by the Southern California Association of Governments (SCAG) and are partially based on land use designations in city/county general plans. Projects that are consistent with the local general plan are considered consistent with the air quality-related regional plan.

Changes in population, housing, or employment growth projections have the potential to affect SCAG's demographic projections, and therefore, the assumptions in AQMPs prepared for the region. The 2003 EIR identified that because the LAHC FMP involved a service institution, its implementation would not directly result in the growth of population, housing, and employment. Similarly, as identified in the 2003 EIR, the overall land use would remain a service institution and would also not directly or indirectly result in



## 5. Environmental Analysis

population growth. Implementation of the Proposed Revised Project would not result in the generation of operation emissions that would be anticipated to exceed South Coast AQMD regional operation-phase significance thresholds. Therefore, no new significant impact or substantially more severe significant impacts than those identified in the 2003 EIR would occur. No changes or new information would require preparation of an EIR.

**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?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The following describes the regional and localized project-related impacts from short-term construction activities.

### Regional Construction Impacts

Construction activities would result in the generation of air pollutants. These emissions would primarily be 1) exhaust emissions from off-road diesel-powered construction equipment; 2) dust generated by demolition, grading, earthmoving, and other construction activities; 3) exhaust emissions from on-road vehicles and 4) off-gas emissions of volatile organic compounds (VOCs) from application of asphalt, paints, and coatings.

Construction emissions were identified as a significant unavoidable impact in the 2003 EIR because the net increase in NO<sub>x</sub> emissions after mitigation would continue to exceed the South Coast AQMD's significance threshold. The Proposed Revised Project's construction activities at the Project Site would take place on approximately 4.75 acres of the LAHC campus and would involve 49,000 square feet of new building construction. While building demolition was identified for the LAHC FMP, for the purposes of air quality modeling, the Proposed Revised Project accounts for 48,251 square feet of building demolition and 222 debris haul trips. In addition, the Proposed Revised Project is also anticipated to include site preparation, grading, utilities relocation, paving, architectural coating, and finishing and landscaping of the site. The Proposed Revised Project's construction emissions were quantified using CalEEMod Version 2016.3.2.25 based on information provided by the LACCD. CalEEMod defaults were also used to supplement where necessary. Overall, construction activities are anticipated to start fall 2021 and end spring 2025.

Project-related construction emissions are shown in Table 2, *Proposed Revised Project Maximum Daily Regional Construction Emissions*. As shown in the table, air pollutant emissions from construction-related activities would be less than their respective South Coast AQMD regional significance threshold values. Thus, impacts from project-related construction activities to the regional air quality would not result in a new significant impact or substantially more severe significant impacts than those identified in the 2003 certified EIR. There are no changes or new significant information which would require preparation of an EIR.

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**Table 2 Proposed Revised Project Maximum Daily Regional Construction Emissions**

Source	Criteria Air Pollutants (lbs/day) <sup>1,2</sup>					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Year 2021</b>						
Demolition and Demolition Haul (2021)	3	32	22	<1	2	1
<b>Year 2022</b>						
Demolition and Demolition Haul (2022)	3	26	21	<1	1	1
Site Preparation	3	33	20	<1	10	6
Grading	2	21	16	<1	4	2
Utilities Relocation	<1	2	3	<1	<1	<1
Building Construction 2022	2	19	20	<1	2	1
<b>Year 2023</b>						
Building Construction 2023	2	17	20	<1	2	1
<b>Year 2024</b>						
Building Construction 2024	2	16	20	<1	2	1
Paving	1	8	13	<1	1	<1
Architectural Coating	9	1	2	<1	<1	<1
Finishing and Landscaping	<1	1	3	<1	<1	<1
Demolition and Demolition Haul (2024)	2	21	20	<1	1	1
<b>Year 2025</b>						
Demolition and Demolition Haul (2025)	2	19	20	<1	1	1
<b>Maximum Daily Construction Emissions</b>						
Proposed Revised Project Max Daily Emissions	9	33	22	<1	10	6
<b>South Coast AQMD Regional Threshold</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Exceeds Regional Threshold?	No	No	No	No	No	No

Source: CalEEMod, version 2016.3.2.25.

1 Construction phasing and the anticipated construction equipment are based on the preliminary information provided by the LACCD. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast AQMD of construction equipment and phasing for comparable projects.

2 Includes implementation of fugitive dust control measures required by South Coast AQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers.

### Regional Operational Impacts

Typical long-term air pollutant emissions are generated by area sources (e.g., landscape fuel use, aerosols, and architectural coatings), mobile sources from vehicle trips, and energy use (natural gas used for cooking and heating). The 2003 certified EIR did not identify any operational impacts with regards to criteria air pollutant emissions. As with the 2003 EIR, the Proposed Revised Project would result in the replacement of existing buildings with newer buildings that would serve the student population. Additionally, it is not anticipated that the Proposed Revised Project would result in an increase in student capacity or enrollment. The new building would be designed and built to meet the 2019 Building Energy Efficiency Standards and the 2019 CALGreen. As such, the new Southeast Hall building would be more energy efficient than existing buildings that would be replaced by the new development; and would therefore generate less energy sector emissions. Furthermore, because the Proposed Revised Project would not directly result in an increase in student

## 5. Environmental Analysis

capacity or enrollment, its implementation would not result in the generation of additional vehicle trips and mobile source emissions compared to the 2003 EIR. Overall, because the new buildings would be built to the latest applicable building energy efficiency standards and no new additional vehicle trips would be generated, operation of the Proposed Revised Project is not anticipated to generate operation-phase emissions that would exceed the South Coast AQMD regional significance thresholds. Therefore, no new significant impact or substantially more severe significant impacts than those identified in the 2003 certified EIR would occur. No changes or new information would require preparation of an EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Proposed Revised Project could expose sensitive receptors to elevated pollutant concentrations if it would cause or contribute significantly to elevated pollutant concentration levels. Unlike regional emissions, localized emissions are typically evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects.

### Localized Significance Thresholds

Localized significance thresholds (LST) are based on the California ambient air quality standards (AAQS), which are the most stringent AAQS that have been established, to provide a margin of safety in the protection of public health and welfare. They are designated to protect sensitive receptors most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by disease or illness, and people engaged in strenuous work or exercise. The screening-level construction LSTs are based on the size of the project site, distance to the nearest sensitive receptor, and source receptor area (SRA). Similar to the 2003 EIR, receptors near the proposed Project Site include LAHC students and residents across the I-110 freeway along Figueroa Street.

Air pollutant emissions generated by construction activities are anticipated to cause temporary increases in air pollutant concentrations. Because it was certified before the South Coast AQMD developed the LST methodology, the 2003 EIR did not include a comparison of construction impacts to their respective LSTs. The Project Site is in SRA 3: Southwest Coastal LA County. Table 3, *Proposed Revised Project Localized Construction Emissions*, shows the maximum daily construction emissions (lbs. per day) generated during on-site construction activities compared with the South Coast AQMD's screening-level construction LSTs. As shown in this table, the Proposed Revised Project construction activities would not generate emissions that exceed South Coast AQMD screening-level construction LSTs. Therefore, no new significant impact or substantially more severe significant impacts than those identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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**Table 3 Proposed Revised Project Localized Construction Emissions**

Construction Activity	Pollutants(lbs/day) <sup>1</sup>			
	NO <sub>x</sub>	CO	PM <sub>10</sub> <sup>2</sup>	PM <sub>2.5</sub> <sup>2</sup>
<b>South Coast AQMD ≤1.00 Acre LST</b>	<b>91</b>	<b>664</b>	<b>68</b>	<b>29</b>
Demolition and Demolition Haul (2021)	31	22	2	1
Demolition and Demolition Haul (2022)	26	21	1	1
Utilities Relocation	2	3	<1	<1
Paving	8	12	<1	<1
Architectural Coating	1	2	<1	<1
Finishing and Landscaping	1	3	<1	<1
Demolition and Demolition Haul (2024)	21	20	1	1
Demolition and Demolition Haul (2025)	19	19	1	1
<b>Exceeds LST?</b>	No	No	No	No
<b>South Coast AQMD 1.31 Acre LST</b>	<b>103</b>	<b>759</b>	<b>71</b>	<b>30</b>
Building Construction 2022	16	16	1	1
Building Construction 2023	14	16	1	1
Building Construction 2024	13	16	1	1
<b>Exceeds LST?</b>	No	No	No	No
<b>South Coast AQMD 2.50 Acre LST</b>	<b>142</b>	<b>1,101</b>	<b>81</b>	<b>35</b>
Grading	21	15	4	2
<b>Exceeds LST?</b>	No	No	No	No
<b>South Coast AQMD 3.50 Acre LST</b>	<b>164</b>	<b>1,368</b>	<b>89</b>	<b>39</b>
Site Preparation	33	20	9	6
<b>Exceeds LST?</b>	No	No	No	No

Source: CalEEMod Version 2016.3.2.25 and South Coast AQMD 2008 and 2011.

Notes: In accordance with South Coast AQMD methodology, only onsite stationary sources and mobile equipment occurring on the Project Site are included in the analysis. For the Project Site in SRA 3, NO<sub>x</sub> and CO screening level LSTs are based on an 82 ft receptor (students), while PM<sub>10</sub> and PM<sub>2.5</sub> screening level LSTs are based on a 800 ft receptor (residences) as students would not be on campus 24 hours per day.

1 Based on information provided or verified by the City. Where specific information regarding project-related construction activities or processes was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by the South Coast AQMD.

2 Includes implementation of fugitive dust control measures required by South Coast AQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers.

### Health Risk

The 2003 certified EIR did not identify any concentrations of short-term emissions that would constitute a significant health risk because there were no guidelines available at the time of certification. The South Coast AQMD currently does not require health risk assessments to be conducted for short-term emissions from construction equipment. Emissions from construction equipment primarily consist of diesel particulate matter (DPM). The Office of Environmental Health Hazards Assessment (OEHHA) adopted new guidance for the preparation of health risk assessments in March 2015. OEHHA has developed a cancer risk factor and noncancer chronic reference exposure level for DPM, but these are based on continuous exposure over a 30-year time frame. No short-term acute exposure levels have been developed for DPM. South Coast AQMD currently does not require the evaluation of long-term excess cancer risk or chronic health impacts for a

## 5. Environmental Analysis

short-term project. Like the 2003 EIR, the Proposed Revised Project would be completed in a relatively short duration, over approximately 42 months. When compared to a 30-year time frame, this duration would further limit exposures to on- and off-site receptors. In addition, exhaust emissions from off-road vehicles associated with overall construction activities related to the Proposed Revised Project would not exceed the screening-level LSTs. For these reasons, it is anticipated that construction emissions would not pose a threat to off-site receptors near the Proposed Revised Project, and project-related construction health impacts would be less than significant. Therefore, no new significant impact or substantially more severe significant impacts than those identified in the 2003 Certified EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### Operation-Phase LSTs

Operation of the Proposed Revised Project would not generate substantial quantities of emissions from on-site, stationary sources. Land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from South Coast AQMD include industrial land uses, such as chemical processing and warehousing operations where substantial truck idling would occur on-site. The proposed college buildings do not fall within these categories of uses. While operation of the proposed buildings could result in the use of standard landscaping equipment for Project Site maintenance, air pollutant emissions generated from these activities are anticipated to be nominal. Additionally, compared to the 2003 EIR, any regular Project Site maintenance, including use of landscaping equipment required for the proposed building, is assumed to already occur for the existing buildings. Furthermore, the Proposed Revised Project would be similar to the types of facilities and buildings considered in the 2003 EIR. Thus, localized air quality impacts related to stationary-source emissions would not expose sensitive receptors to pollutant concentrations. Therefore, no new significant impact or substantially more severe significant impacts than those identified in the 2003 certified EIR would occur. Thus, no changes or new information would require preparation of an EIR.

### CO Hotspots

The 2003 EIR identified less than significant CO hotspot impacts. Based on the scope and nature of the Proposed Revised Project, which would not increase student capacity, it would not result in the generation of new vehicle trips. Therefore, its implementation would not introduce new significant impacts nor substantially more severe significant CO hotspot impacts than those previously identified in the 2003 EIR. No changes or new significant information would require preparation of an EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The 2003 certified EIR did not identify any substantial odors from operation of the college. Because the Proposed Revised Project would not introduce new sources of odor as compared to the 2003 EIR, there would be no changes or new significant information which would require preparation of an EIR.

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### 5.3.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

The following mitigation measures from the Mitigation Monitoring Program were adopted in connection with the 2003 EIR and would be applicable to the Proposed Revised Project. These mitigation measures have been incorporated into Mitigation Monitoring Plan for this Addendum.

- |       |   |
|-------|---|
| AQ-1  | Moisten soil not more than 15 minutes prior to moving soil and three times a day or four times a day under windy conditions in order to maintain soil moisture of 12 percent.   |
| AQ-2  | On the last day of active operations prior to a weekend or holiday, apply water or a chemical stabilizer to maintain a stabilized surface.  |
| AQ-3  | Water excavated soil piles hourly or cover piles with temporary coverings.  |
| AQ-4  | Cease grading during periods when winds exceed 25 miles per hour.   |
| AQ-5  | Moisten excavated soil prior to loading on trucks.  |
| AQ-6  | Apply cover to all loads of dirt leaving the site or leave sufficient freeboard capacity in truck to prevent fugitive dust emissions en route to disposal site.   |
| AQ-7  | Sweep streets to remove dirt carried out by truck wheels.   |
| AQ-8  | Schedule grading and excavation activities that occur within approximately 200 feet of the Child Development Center (CDC) during periods when children are not in attendance. If it is not possible to schedule grading and excavation activities when children are not present at the CDC, then children shall be kept indoors with the windows closed. Air conditioners in the CDC building shall have proper filters to ensure dust generated by construction activities is not transmitted indoors via the building's ventilation system. |
| AQ-9  | Construct a temporary fence around the perimeter of the Child Development Center site to shield the Center from fugitive dust emissions. The fence shall have a minimum height of 8 feet and a solid or impermeable surface.  |
| AQ-10 | Turn off equipment when not in use for longer than 5 minutes.   |
| AQ-11 | Use bio-diesel fuel in all onsite diesel-powered equipment, if feasible.  |
| AQ-12 | Use alternatively fueled (compressed natural gas (CNG), liquefied natural gas (LNG), dual-fuel or electric) construction equipment, if feasible.  |
| AQ-13 | To the extent feasible, minimize truck idling on site and locate staging areas away from locations where students are congregated.  |

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### 5.4 BIOLOGICAL RESOURCES

#### 5.4.1 Summary of Impacts Identified in the 2003 EIR

The 2003 EIR concluded that no native vegetation communities existed on the LAHC campus. However, construction would remove ruderal and landscaped/developed vegetation and structures, which could lead to a potentially significant impact. Removal of trees on-site would potentially lead to the nest damage of one or more active nest of birds listed by the Migratory Bird Treaty Act. Mitigation measures were identified to reduce impacts to vegetation and wildlife habitat to a less than significant level.

The LAHC Campus is not part of a wildlife corridor; therefore, no direct impacts would occur. No species listed as threatened or endangered were expected to occur on the Campus. Therefore, no significant direct impacts on any listed species were expected due to construction of the LAHC FMP. However, construction activities in the southern portion of the Campus (adjacent to Lagoon Drive) could affect breeding activities and breeding success of special-interest species (least bittern, Cooper's hawk, least Bell's vireo, yellow warbler, and tricolored blackbird) and raptors other than Cooper's hawk, nesting in the Ken Malloy Harbor Regional Park (KMHRP) near the southern boundary of the Campus. Additionally, impacts from lighting on special-interest species breeding within the KMHRP and removal of southern spikeweed were identified as potential impacts. Mitigation measures were identified to reduce impacts to special-status species to a less than significant level.

#### 5.4.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
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?				<b>X</b>	
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?				<b>X</b>	

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Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
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?				<b>X</b>	
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?				<b>X</b>	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				<b>X</b>	
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?					<b>X</b>

The Project Site is in an area that has been urbanized for many years and does not contain species identified as candidate, sensitive, or special status species. The site is not located within an area with riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife (CDFW). However, the project site is surrounded by the KMHRP, which comprises multiple freshwater forested/shrub wetlands, freshwater emergent wetlands, freshwater ponds, and a lake (FWS 2018). Additionally, the Project Site is not in the plan area of an adopted habitat conservation plan and is not subject to a local policy or ordinance protecting biological resources (CDFW 2019).

### Comments:

- 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 Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Project Site does not contain habitat for candidate, sensitive, or special status species. However, as discussed above, the project site is within close proximity of the KMHRP, which contains multiple special status species. Mitigation Measures BR-5 through BR-7 were identified to reduce impacts to a less than significant level. Therefore, impacts would remain less than significant under the Proposed Revised Project. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.



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- 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 Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** As discussed in the 2003 EIR, the Project Site does not contain riparian habitat or other sensitive natural community. However, due to the close proximity to the KMHRP, Mitigation Measures BR-1 and BR-4 were identified to reduce potential significant impacts. Therefore, impacts would remain less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

- 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 Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Project Site does not contain federally protected wetlands as defined by the Clean Water Act. However, due to the close proximity to the KMHRP, Mitigation Measures BR-1 and BR-4 were identified to reduce potential significant impacts. Therefore, impacts would remain less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

- d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Project Site is not located within a movement corridor for native fish or wildlife. Furthermore, it does not contain native wildlife nursery sites. However, Mitigation Measures BR-2 and BR-5 were identified to reduce potential impacts to the special-interest birds or raptors nesting within 500 feet of the proposed construction. Therefore, impacts would remain less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Project Site is not subject to a City tree preservation ordinance or other local regulation protecting biological resources. Removal of trees as part of the Proposed Revised Project would be mitigated through Mitigation Measure BR-3. Therefore, impacts to trees would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Impact.** The Project Site is not within the plan area of an adopted habitat conservation plan. No impact to habitat conservation plans would occur from implementation of the Proposed Revised Project, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### 5.4.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

The following mitigation measures from the Mitigation Monitoring Program were adopted in connection with the 2003 EIR and would be applicable to the Proposed Revised Project. These mitigation measures have been incorporated into Mitigation Monitoring Plan for this Addendum.

BR-1            In order to avoid significant impacts on riparian habitat and violations of laws protecting riparian habitat and drainages, project engineering documents shall specify that all construction components and activities remain out of the drainage on the west side of the campus south of Lot M, and out of the riparian vegetation of KMHRP on the south side of campus at the northwest corner of the proposed softball field. If any project construction or operation activities would result in even minor alterations of drainages or riparian vegetation in these or other areas on the south side of campus, Los Angeles Harbor College shall retain the services of a qualified wetland specialist to conduct wetland delineations as necessary. The wetland specialist shall contact appropriate resources agencies (USACOE and CDFG) regarding permits and agreements that may be required prior to initiation of activities in drainages or riparian habitats; and to prepare documentation as appropriate so that permits and agreements pursuant to Section 404 of the U.S. Clean Water Act and Section 1600 of the California Fish and Game Code can be obtained. The permits will require preparation of a riparian mitigation plan; the mitigation plan will include the following provisions:

Restoration Specialist: The restoration specialist shall be approved by the KMHRP and CDFG. The restoration specialist shall have demonstrated experience in the successful restoration of riparian habitat in southern California. Because an element of the restoration program could include eradication of giant reed from the KMHRP, the restoration specialist shall demonstrate experience in giant reed removal.

Site Selection: Consultations with USACOE, CDFG, and KMHRP personnel shall be conducted to select a suitable restoration site location within the KMHRP. Riparian restoration could include, as one element, eradication of exotic vegetation within the KMHRP and restoration of the eradicated areas to native vegetation under a plan approved by CDFG, KMHRP, any other appropriate agencies or landowners, such as the County of

## 5. Environmental Analysis

Los Angeles. Preference shall be given to eradication of exotic species where the potential for future infestation (mainly from upstream sources) is low.

Mitigation Ratios: Ratios for restoration of riparian habitat will depend upon the type of mitigation (restoration, enhancement, removal of exotic vegetation, or a combination of these) agreed upon by CDFG. However, CDFG recommends that mitigation be three-to-one per acre of riparian vegetation (CDFG 2003). Ratios shall be specified in the Streambed Alteration Agreement from CDFG.

Selection of Plant Palettes: The plant palette shall include appropriate trees, understory, and early-successional species native to the area being restored.

Quantities, Container Sizes, Planting Patterns, Origins: Seed quantities, plant container sizes, and planting patterns shall be specified, as appropriate. To the extent feasible, plants and seeds used in the restoration plans shall be collected from the KMHRP, as near to the restoration site as possible. The use of locally native propagules will increase the chances of success and maintain the genetic integrity of the local ecosystem.

Exotic Species to be Eradicated: It is anticipated that the primary species to be eradicated will be giant reed (*Arundo donax*), but additional species may also be removed, such as pampas grass (*Cortaderia* spp.), pepper trees (*Schinus* spp.), castor bean (*Ricinus communis*), and California fan palm (*Washingtonia filifera*). The types and amounts of exotic species to be targeted shall be determined at the time final plans are developed during consultation with the resources agencies and KMHRP.

Methods/Timing for Eradication: The exotic species eradication specialist shall determine the methods to be used, including timing of eradication, in consultation with CDFG.

Timing for Planting: For best results, seeding and planting should take place after the onset of the rainy season and prior to March 31. Riparian woodlands may achieve good results with installation at other times of the year.

Mycorrhizal Fungi: In order to improve the ability of the planted material to compete with non-native forbs and grasses, mycorrhizal inoculum shall be specified for all container plants known to benefit from this symbiotic association.

Site Preparation: Methods to prepare the site for planting shall be specified, including consideration of soil requirements (e.g., soil type, compaction, etc.) and weed control prior to planting (if needed).

Seeding and Planting Techniques: Methods to install seeds and plants shall be specified, including specifications for hand seeding, hydroseeding, etc., and planting methods.

Irrigation: The restoration specialist shall determine the need, frequency, and duration for irrigation of riparian restoration sites.

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**Maintenance:** Maintenance of all plantings and actions required to effect complete eradication of exotic species will be the applicant's responsibility, and shall include any activities required to meet the performance standards set for the restoration program. A minimum of 5 years of maintenance shall be required unless the plan's long-term performance standards are satisfied in less than 5 years.

**Monitoring:** The project proponent shall be responsible for monitoring the restoration site for a minimum of 5 years, or until all of the project's long term performance standards are met. The site monitor shall be a biologist, native landscape horticulturist or other professional qualified to 1) assess the performance of the planting effort, 2) recommend corrective measures, if needed, and 3) document wildlife use of planting areas over time. The site monitor shall I be selected by the KMHRP and CDFG.

**Performance Standards:** Short-term (e.g., 90 and 180 days) and long-term (e.g., 3-year and 5-year) performance standards shall be set for the restoration plan, consistent with the goal of establishing self-supporting riparian habitat that supports native plant and wildlife species. The plan shall specify appropriate corrective actions to be taken if the site monitor determines that any restoration area is not meeting the performance standards set for the plan.

If performance standards cannot be achieved due to adverse soil or other unmanageable site conditions, an alternative or auxiliary mitigation plan may be submitted to the KMHRP and CDFG.

**Documentation:** The monitoring results shall be reported at least annually to the KMHRP and CDFG.

BR-2

Los Angeles Harbor College shall limit grubbing, trimming, and removal of any trees and buildings on the campus and in the KMHRP during the bird breeding season (approximately March 1 to September 15, and as early as February 1 for raptors). Of particular note is the nest of a great blue heron (*Ardea herodias*) in a eucalyptus tree adjacent to Lagoon Drive (Mitch Heindel, pers. comm.); herons may begin nesting as early as February. If the bird breeding season cannot be avoided, Los Angeles Harbor College shall retain a qualified ornithologist to initiate surveys of the construction zone 30 days prior to the initiation of construction and weekly thereafter, with the last survey not more than 3 days prior to the initiation of construction, to minimize the potential for nesting following the survey and prior to construction. If the ornithologist detects any occupied nest or nests of native birds within the construction zone, Los Angeles Harbor College shall conspicuously flag off the area(s) supporting bird nests, providing a minimum buffer of 300 feet between the nests and limits of construction (500 feet for raptors). The construction crew shall be instructed to avoid any activities in this zone until the bird nests are no longer occupied, per a subsequent survey by the ornithologist.

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BR-3 Any trees on campus or in the KMHRP removed as part of project construction shall be replaced at a minimum ratio of 1:1, and replacement trees shall possess a canopy upon planting and be a minimum size of 15 gallons. Aside from the eucalyptus tree with the great blue heron nest, eucalyptus trees removed for project construction along Lagoon Drive, which is adjacent to riparian habitat of KMHRP, shall be replaced with native riparian trees (sycamores and cottonwoods, already planted in other areas of the campus). In addition, Los Angeles Harbor College shall consult with KMHRP regarding the list of trees and other plants to be used for the campus to ensure that none of these species are invasive to the extent that they could encroach upon and become established within KMHRP.

BR-4 Los Angeles Harbor College shall comply with National Pollutant Discharge Elimination System and Municipal Separate Storm Sewer System permit standards to ensure, during and following construction, that no pollutants, siltation, or runoff are discharged from the campus and eventually drain into the riparian, freshwater marsh, and lagoon habitats of KMHRP.

BR-5 In order to avoid potentially significant indirect impacts due to construction on special interest species breeding within KMHRP, if any construction activities are planned for the breeding season for birds, approximately February 1 through July 31, Los Angeles Harbor College shall retain a qualified ornithologist to conduct a baseline survey of areas within the KMHRP south of campus that would be located within 500 feet of any construction activity. The baseline survey shall be conducted not more than 1 week prior to the initiation of any construction activity and shall document whether any special interest bird species (least bittern, peregrine falcon, Cooper's hawk, sharp-shinned hawk, osprey, northern harrier, loggerhead shrike, yellow warbler, tricolored blackbird) or any raptors (red-tailed hawk, red-shouldered hawk, white-tailed kite) other than special interest species are nesting within 500 feet of any proposed construction activities.

If any nests of special-interest species are located in the KMHRP within 500 feet of proposed construction, the ornithologist shall note the nest(s) location and return to monitor the nest(s) the first 2 days of construction to document whether nesting behavior (in terms of the potential for nest abandonment) has changed with the initiation of construction. Because of the presence of the Harbor Freeway and existing campus activities, it is doubtful that birds nesting near the campus would abandon nests because of construction activities. However, if the ornithologist detects behavior(s) that suggest nest abandonment is imminent, noise mitigation measures such as placement of noise barriers around the construction site or equipment shall be implemented or construction activities closest to the nest shall be discontinued in that part of campus until activities at that nest are complete, per the ornithologist.

During construction, the ornithologist shall continue monitoring the KMHRP area within 500 feet of construction once weekly until the end of the breeding season or until the end of construction within 500 feet of the campus south boundary, whichever comes first,

## 5. Environmental Analysis

whether or not nests of special-interest species are detected within 500 feet of proposed construction during the baseline survey. During weekly surveys, the ornithologist shall continue to monitor the effects of construction, if any, on special-interest species nesting in the area. If no special-interest species are detected nesting in the 500-foot distance during the baseline survey, the weekly surveys will document whether special-interest species initiate nesting in the area during construction and to monitor any apparent effects of construction.

If any project construction activities would occur between March 15 and September 15, protocol surveys for least Bell's vireos, which nest in the KMHRP, shall be conducted within 500 feet of the construction zone in any areas of the KMHRP even marginally suitable for the vireo, if present. If least Bell's vireos are detected nesting within 500 feet of the construction zone, an ornithologist with demonstrated experience in identifying and observing behavior of least Bell's vireos shall observe the vireos for 2 hours daily during the construction period and determine whether behavior suggests that the vireos may be abandoning their nesting territory due to construction-related noise or activity. The monitor shall observe other nesting vireos, including the vireo pair at the dam in KMHRP, if present, for comparison. If the monitor determines that vireos within 500 feet of project construction have altered or abnormal behavior due to project construction, noise mitigation measures such as placement of noise barriers around the construction site or equipment shall be implemented or construction activities within 500 feet of the vireo territory shall cease until the vireos have completed breeding activities and departed the area.

BR-6 In order to avoid potentially significant indirect impacts due to campus lighting on special-interest species breeding within KMHRP, nighttime lighting for the playing fields shall incorporate full-cutoff shielded fixtures or three-sided shielded fixtures pointed at least 45 degrees below the horizontal to contain the light within the campus. In addition, in order to minimize the impact of vehicle lights on nesting habitats in the KMHRP, the loop road extension shall be separated from the KMHRP by fencing a minimum of 5 feet high. If chain link fencing is used, native shrubs similar to those within the KMHRP adjacent to the loop road shall be planted side-by-side along the fence so that light spill from vehicles is sufficiently minimized, per evaluation of a qualified ornithologist.

BR-7 Should focused surveys of the campus for the southern spikeweed (southern tarplant) during summer 2003 locate any individuals of this species, the campus shall retain the services of a restoration specialist with demonstrated experience in the successful design and implementation of mitigation plans for special-interest plant species. The restoration specialist shall prepare a plan to replace the number of individuals of southern spikeweed to be removed by project construction on a two-to-one basis. The plan shall detail provisions to enhance existing populations of southern spikeweed in the KMHRP. The plan shall include the following details:

- Procedures and timing for collection of seeds from the campus tarplant population or from other populations within a 20-mile radius of the campus;

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- Site preparation methods to ensure that existing tarplant populations are not damaged and that disturbance of other native plants is minimized;
- Site protection methods including fencing as necessary to minimize human intrusion into the planting area;
- Performance criteria and methods to measure those criteria and the timing to do so, to ensure that the two-to-one mitigation has occurred;
- Methods for monitoring, maintenance (including weed control) and reporting.

### 5.5 CULTURAL RESOURCES

#### 5.5.1 Summary of Impacts Identified in the 2003 EIR

##### 2003 EIR

As identified in the 2003 EIR, the Tech 1 and Tech 2 Buildings and the Liberal Arts Building on the LAHC Campus were eligible for the California Register of Historical Resources. Removal of these building would result in a potentially significant impact to historical resources. Mitigation measures were identified to document the visual record of the buildings that would be removed. However, these measures could not reduce the impact to historical resources to a less than significant level. Therefore, impacts to historical resources were significant and unavoidable.

There are no known archaeological sites found on or adjacent to the LAHC Campus. However, the proximity of the Campus to identified historic resources that are depicted on the 1944 USGS Redondo Quadrangle suggested the possibility of Native American cultural resources or subsurface historical features. In the unlikely event that such resources were discovered during project grading and/or excavation activities, mitigation measures were identified to reduce impact to archeological resources to a less than significant level.

#### 5.5.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?				<b>X</b>	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?				<b>X</b>	
c) Disturb any human remains, including those interred outside of formal cemeteries?				<b>X</b>	

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The Project Site and its vicinity is not known for any archeological sites or historical and cultural monuments. Nothing on the Project Site is currently listed on the National Register of Historic Places (NPS 2020). The closest historic place is Banning House, located 1.3 miles east of the Project Site. An archaeological records search was conducted for the Proposed Revised Project at the California Historic Resources Information System (CHRIS), located at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton, on January 28, 2020. Results of the search indicated no previously recorded resources are located on the Campus, and three cultural resources are within 0.25 mile of the LAHC Campus.

### Comments:

The analysis in this section is based partly on the following technical study, which is included as Appendix A to this Addendum:

- *Historic Resources Evaluation For Los Angeles Harbor College, Los Angeles County, California*, Cogstone, February 2020

### Threshold of Significance

Under CEQA, public agencies must consider the effects of their actions on both historical resources and unique archaeological resources. Pursuant to Public Resources Code (PRC) Section 21084.1, a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. Section 21083.2 requires agencies to determine whether proposed projects would have impacts on unique archaeological resources.

The term “historical resource” is defined in PRC Section 21084.1. The State CEQA Guidelines Section 15064.5 describes how significant impacts on historical and archaeological resources are determined. Under Section 15064.5(a), historical resources include the following:

- A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (PRC Section 5024.1).
- A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g), will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing in the California Register of Historical Resources (PRC Section 5024.1), including the following:



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- A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B) Is associated with the lives of persons important in our past;
- C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- D) Has yielded, or may be likely to yield, information important in prehistory or history.

The fact that a resource is not listed in or determined to be eligible for listing in the California Register, not included in a local register of historical resources (pursuant to PRC Section 5020.1(k)), and not identified in a historical resources survey (meeting the criteria in Section 5024.1(g)) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Section 5020.1(j) or 5024.1.

Historical resources are usually 50 years old or older and must meet at least one of the above criteria for listing in the CRHR (such as association with historical events, important people, or architectural significance), in addition to maintaining a sufficient level of physical integrity.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Proposed Revised Project includes the demolition of the Old Administration building, Nursing building, and Special Program and Service building. In July 2012, Galvin Preservation Associates (GPA) prepared a Historic Resources Survey Report for the City of Los Angeles titled "Historic Resources Survey Report: Wilmington-Harbor City Community Plan Area." Per GPA's findings, the Harbor College Administration Building (constructed in 1963) was recommended as eligible for state and local listing under Criterion C: 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. However, consultation with the Los Angeles Conservancy confirmed that no additional documentation or evaluation associated with this recommendation of eligibility can be located and likely does not exist.

Based on a search of the historical record and the site evaluation, Cogstone determined that the Old Administration building did not meet the criterion for eligibility for listing (see Appendix A). This building is associated with notable California architect Archie C. Zimmerman (1894–1970). According to the Los Angeles Conservancy, this building appears to be part of the original 1940s campus plan but was not constructed until the 1960s. The function and association of this building is directly tied to LAHC and would be considered a contributor if the campus was recommended as a historic district. However, significant alterations to the LAHC campus—involving the demolition of original and historic-aged buildings and addition of new modern buildings—result in significant loss of integrity for the campus and, by extension, the Old Administration building. Therefore, this building is not recommended eligible for listing under Criterion C.

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Furthermore, based on the historic resource evaluation from Cogstone on the Old Administration building, Nursing building, and Special Program and Service building, none of the three buildings are eligible for listing on the California Register of Historical Resources. Therefore, impacts of the Proposed Revised Project are similar to those evaluated in the 2003 EIR. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** There are no archeological resources found in or within the vicinity of the Project Site. In the unlikely event such resources are discovered during project grading and/or excavation activities, Mitigation Measures AR-1 through AR-4 were identified to reduce impacts to archeological resources to a less than significant level. Therefore, impacts to archeological resources would remain less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** There are no cemeteries or known human burials in or within the vicinity of the Project Site. In the unlikely event such resources are discovered during project grading and/or excavation activities, Mitigation Measure AR-4 was identified to reduce impact to human remains to a less than significant level. Therefore, impacts to human remains would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### 5.5.3 Mitigation Measures Identified in the 2003 EIR And Applicable to the Proposed Revised Project

The following mitigation measures from the Mitigation Monitoring Program were adopted in connection with the 2003 EIR and would be applicable to the Proposed Revised Project. Mitigation Measure HR-1 would no longer apply because the Tech 1 and 2 buildings and Liberal Arts building were already approved for demolition in 2003 and not as part of the Proposed Revised Project. The remaining mitigation measures would apply, unchanged, to the Proposed Revised Project. These mitigation measures have been incorporated into Mitigation Monitoring Plan for this Addendum.

HR-1	Historic American Building Survey (HABS) or equivalent documentation of the Tech 1 and 2 Buildings and the Liberal Arts Building shall be undertaken, prior to demolition of these buildings. This documentation shall be deposited with the Harbor College Library as well as made available to local museums.
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## 5. Environmental Analysis

- AR-1 A certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, shall monitor all project-related ground disturbing activities that extend beyond the depth of artificial fill and into natural sand sediments (as identified in the geotechnical investigations for the Master Plan projects), in areas of archaeological sensitivity such as along the slough and in the area of the former historical structure depicted on the 1944 USGS Redondo Quadrangle.
- AR-2 In those areas that are not monitored by an archaeologist and a certified culturally affiliated Native American, if buried cultural resources are uncovered during construction, all work shall be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery and assess the significance of the archaeological resource.
- AR-3 Provisions for the disposition of recovered prehistoric artifacts shall be made in consultation with culturally affiliated Native Americans.
- AR-4 In the event of an accidental discovery of any human remains in a location other than a dedicated cemetery, the steps and procedures specified in Health and Safety Code 7050.5, State CEQA Guidelines 15064.5(e), and Public Resources Code 5097.98 shall be implemented.

### 5.6 ENERGY

#### 5.6.1 Summary of Impacts Identified in the 2003 EIR

The 2003 EIR did not specifically analyze energy because it was certified prior to the 2019 amendments to the CEQA Guidelines to incorporate subdivision (b) to CEQA Guidelines Section 15162.2. Under Appendix F of the CEQA Guidelines, an analysis of energy impacts was required, but the amendment to section 15126.2 clarified the need for an energy analysis.

Because environmental and regulatory settings were not addressed specifically with respect to energy in the 2003 EIR, and because the environmental and regulatory settings for the Proposed Revised Project have changed since certification of the EIR for the LAHC FMP, the following discussion is provided to update conditions relative to development of the Proposed Revised Project.

#### 5.6.2 Environmental Setting

Section 21100(b)(3) of CEQA requires that an EIR include a detailed statement with mitigation measures proposed to minimize significant effects on the environment, including but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy. Appendix F of the State CEQA Guidelines states that, in order to ensure that energy implications are considered in project decisions, the potential energy implications of a project shall be considered in an EIR, to the extent relevant and applicable to the project. Appendix F further states that a project's energy consumption and proposed conservation measures may be addressed, as relevant and applicable, in the project description, environmental setting, and impact analysis portions of technical sections, as well as through mitigation measures and alternatives.

## 5. Environmental Analysis

In accordance with Appendixes F and G of the State CEQA Guidelines, this Addendum includes relevant information and analyses that address the energy implications of the Proposed Revised Project. This section summarizes the Proposed Revised Project's anticipated energy needs, impacts, and conservation measures. The information in this section and other aspects of the Proposed Revised Project's energy implications are also discussed in Chapter 3, *Project Description*, and Sections 5.3, *Air Quality*, 5.8, *Greenhouse Gas Emissions*, and 5.15, *Transportation*.

### 5.6.3 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Result potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				<b>X</b>	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				<b>X</b>	

#### Comments

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

No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.

#### Short-Term Construction

##### *Electricity*

Construction of the Proposed Revised Project would require electricity use to power the construction equipment. The electricity use during construction would vary during different phases of construction—the majority of construction equipment during demolition, site preparation, grading, trenching, and paving would be gas or diesel powered, and the later construction phases would require electricity powered equipment for interior construction and architectural coatings. The use of electricity would be temporary and would fluctuate according to the phase of construction. Additionally, it is anticipated that most electric-powered construction equipment would be hand tools (e.g., power drills, table saws, compressors) and lighting, which would result in minimal electricity usage during construction activities. Therefore, project-related construction activities would not result in wasteful or unnecessary electricity demands, and impacts would be less than significant.

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### *Natural Gas Energy*

It is not anticipated that natural gas would power construction equipment for the Proposed Revised Project, and no natural gas demand would occur during construction. Therefore, there is no impact with respect to natural gas usage.

### *Transportation Energy*

Transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy used during construction of the Proposed Revised Project would come from the transport and use of construction equipment, delivery vehicles, and construction employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary. Upon completion of project construction, all construction-equipment would cease.

To limit wasteful and unnecessary energy consumption, the construction contractors would minimize nonessential idling of construction equipment in accordance with 13 CCR Article 4.8, Chapter 9, Section 2449. In addition, electrical energy would be available for use during construction from existing power lines and connections, which would minimize or avoid the use of generators, which are less efficient. Furthermore, construction trips would not result in unnecessary use of energy since nearby regional freeway systems provide the most direct and shortest routes from various areas of the region (e.g., I-110 and SR-1). Overall, construction fuel associated with the Proposed Revised Project would not be inefficient, wasteful, or unnecessary. Therefore, impacts would be less than significant with respect to transportation energy during construction.

Thus, the short-term impacts of the Proposed Revised Project would not result in substantial changes requiring major revisions of the original project. No changes or new significant information which would require preparation of an EIR are anticipated.

### **Long-Term Operation**

#### *Building Energy*

During operation, energy would be used for heating, cooling, and ventilation of the buildings; water heating; onsite equipment; appliances; indoor, outdoor, and perimeter lighting; and security systems. Electrical and natural gas services to the project site would be provided by Los Angeles Department of Water and Power (LADWP) through connections to existing off-site lines and new on-site infrastructure.

While the Proposed Revised Project would involve the construction of a new building, because it would be replacing older buildings, there would be an overall net decrease in building area compared to existing conditions. Additionally, development of the new building would be required to comply with the LACCD's Sustainability Standards, adopted in October 2019. The Sustainability Standards require that all new building meet 2019 Building Energy Efficiency Standards, CALGreen, and LEED Green Building standards, and that 15 percent of a project's energy use to be supplemented by renewable energy from on-site sources. Because the Proposed Revised Project would be consistent with the requirements of energy-related regulations and

## 5. Environmental Analysis

would be required to implement the mitigation measures below, it would not result in wasteful or unnecessary electricity demands.

### *Transportation Energy*

The Proposed Revised Project would consume transportation energy during operations from the use of motor vehicles. Under the Proposed Revised Project, the student capacity of the Los Angeles Harbor College would not change. Thus, it is anticipated that the modified project would not have a significant impact on overall vehicle miles traveled (VMT) and related transportation energy use. Furthermore, the project site would be within an urbanized area with nearby amenities and public transit options. These features and aspects of the modified project would contribute to minimizing VMT and transportation-related fuel usage. Overall, it is expected that operation-related fuel usage associated with the modified project would not be any more inefficient, wasteful, or unnecessary than similar development projects.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** In October 2015, Governor Brown signed Senate Bill 100, which sets a 100 percent clean, zero carbon, and renewable energy policy for California's electricity system by 2045. In 2003, the LACCD Board of Trustees adopted the LEED rating system to deliver new construction and major renovation projects funded by Proposition A. The policy requires that all new buildings and major renovations over 7,500 square feet and an occupied structure to minimally be LEED certified. Minor renovations are exempt from LEED certification, but must exceed Title 24 by 10 percent, and 15 percent of the project's energy use must be supplemented by renewable energy, of which a minimum of 10 percent is to come from on-site sources (BuildLACCD 2016). Additionally, in May 2019, the Board of Governors of the California Community Colleges approved Resolution 2019-11 "Climate Change and Sustainable Policy." The policy establishes eight goals for 2030, with incremental progress expected by 2025 (Board of Governors 2019). Furthermore, new building construction would be required to comply with the 2019 Building Energy Efficiency Standards and CALGreen. A project that is consistent with the adopted implementation of state and local plans is presumed to have less than significant energy consumption impacts. Therefore, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### **5.6.4 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project**

The following mitigation measure from the Mitigation Monitoring Program was adopted in connection with the 2003 EIR and would be applicable to the Proposed Revised Project. This mitigation measure has been incorporated into Mitigation Monitoring Plan for this Addendum.

- |     |  |
|-----|--|
| E-1 | If necessary to maintain the 25 percent safety capacity required by the NEC, LADWP shall upgrade the LADWP main line from 270 amps to 300 amps or greater. |
|-----|--|

## 5. Environmental Analysis

### 5.7 GEOLOGY AND SOILS

#### 5.7.1 Summary of Impacts Identified in the 2003 EIR

##### 2003 EIR

The 2003 EIR concluded that grading and excavation activities could lead to soil erosion; however, best management practices would reduce soil erosion impact to a less than significant level. Additionally, any temporary slopes created by construction would be stabilized by temporary measures in compliance with building codes and Occupational Safety and Health Administration standards. Mitigation measures were identified to further reduce impact from unstable temporary slopes during construction to a less than significant level.

The LAHC Campus is not in an Alquist-Priolo Earthquake Fault Zone, but strong earthquake-induced ground shaking could be triggered by seismic activity on the fault within 29 miles of the Project Site. Therefore, impacts to ground shaking were potentially significant, and mitigation measures were identified to reduce impacts to a less than significant level.

Portions of the LAHC Campus is in a liquefaction zone; however, subsurface soils are not likely to be subjected to liquefaction due to their density and composition. A mitigation measure was identified to reduce impacts from liquefaction. Additionally, near surface soils in portions of the Campus have a medium potential for expansion and could lead to a potentially significant impact. A mitigation measure was identified to reduce impacts from expansive soils to a less than significant level.

Based on the results of previous paleontological studies in the immediate vicinity of the Campus, there was potential to encounter paleontological resources during project-related excavation. Although the depth of excavation would be shallow, mitigation measures were identified to reduce impacts in an event discovery of paleontological resources were found during construction activities.

#### 5.7.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					

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Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
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.					<b>X</b>
ii) Strong seismic ground shaking?				<b>X</b>	
iii) Seismic-related ground failure, including liquefaction?				<b>X</b>	
iv) Landslides?					<b>X</b>
b) Result in substantial soil erosion or the loss of topsoil?				<b>X</b>	
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?				<b>X</b>	
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?				<b>X</b>	
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?					<b>X</b>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?				<b>X</b>	

The Project Site is on the western edge of the Los Angeles Basin. The U.S. Department of Agriculture's Soil Survey for Los Angeles County indicates the site has been identified with Ramona Placentia Association soils. The project area is underlain predominantly by late Pleistocene older alluvium and Holocene younger alluvium. Elevations on the LAHC Campus range from approximately 20 feet to 40 feet above mean sea level.

The Project Site is not within a state-designated Alquist-Priolo Earthquake Fault Zone. Known regional faults that could produce significant ground shaking at the site include the Palos Verdes, Compton Thrust, and Newport-Inglewood faults.

Liquefaction occurs when loose, cohesionless, water-saturated soils (generally fine-grained sands) are subjected to strong seismic ground motion of significant duration. Liquefied soils may behave like liquids



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losing load bearing strength; however, they generally maintain some residual strength during and immediately after liquefaction. Structures on liquefiable soils such as silt or sand may experience significant damage during an earthquake due to the instability of structural foundations and the moving earth. Liquefaction more often occurs in earthquake-prone areas underlain by young alluvium where the groundwater table is less than 50 feet below the ground surface. The magnitude and nature of settlement due to liquefaction depends on many factors, including the homogeneity of the liquefiable layers, the depth to the liquefiable layer, the magnitude of the triggering event, and the duration of the shaking. The Project Site is also relatively flat and, according to the 1999 Seismic Hazard Zones Map for the Torrance Quadrangle, a portion of the Campus is within the liquefaction zones (CGS, 1999).

### Comments:

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.**

**No Impact.** As analyzed in the 2003 EIR, the LAHC Campus is not within an Alquist-Priolo Earthquake Fault zone. There are no known faults that traverse the site, and fault rupture is not expected to impact the Project Site. No impact would occur, and no changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** As disclosed in the 2003 EIR, the estimated site intensity for the estimated maximum earthquake on any fault within the vicinity of the Project Site is very high and would potentially result in a significant impact relating to strong seismic ground shaking. The Palos Verdes fault is approximately one mile from the Project Site. Due to the close proximity of the Project Site to the Palos Verdes fault, there is potential for significant impact to strong seismic ground shaking. Mitigation Measures GE-1 and GE-2, identified in the 2003 EIR, address any impacts related to seismic ground shaking and reduce impacts to a less than significant level. Therefore, the Proposed Revised Project would not result in any new significant impacts or substantially more severe significant impacts with respect to ground shaking than those previously identified in the 2003 EIR. No changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** According to the 1999 Seismic Hazard Zones Map for the Torrance Quadrangle, portions of the Project Site are in an area that has been identified by the State of California as being potentially susceptible to liquefaction (CGS 1999). Therefore, potential impacts from liquefaction would occur, and Mitigation

## 5. Environmental Analysis

Measure GS-3 would reduce impacts to a less than significant level. The Proposed Revised Project would not result in any new impacts or substantially more severe significant impacts with respect to liquefaction than those previously identified in the 2003 EIR. No changes or new information would require preparation of a subsequent EIR.

### iv) Landslides?

**No Impact.** The potential for seismically induced landslides is considered low due to the absence of slopes at the site. Additionally, review of the Seismic Hazard Zones Map for the Hollywood Quadrangle (CGS 1999) indicates the subject site is not in an area that has been identified by the State of California as potentially susceptible to seismically induced landslides. Therefore, the Proposed Revised Project would not result in any new impacts or substantially more severe significant impacts with respect to landslides than those previously identified in the 2003 EIR. No changes or new information would require preparation of a subsequent EIR.

### b) Result in substantial soil erosion or the loss of topsoil?

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** Construction of the Proposed Revised Project would result in ground surface disturbance during excavation, grading, and trenching that could create the potential for soil erosion to occur. Once construction is complete, the Project Site shall comply with best management practices (BMP) identified in the preliminary water quality management plan prepared for the Proposed Revised Project to reduce erosion effects to less than significant levels, as discussed in Section 5.10, *Hydrology and Water Quality*. Furthermore, construction activities would be performed pursuant to the current National Pollutant Discharge Elimination System permit requirements. Therefore, the Proposed Revised Project would not result in any new impacts or substantially more severe significant impacts with respect to soil erosion than those identified in the 2003 EIR. No changes or new information would require preparation of a subsequent EIR.

### 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.

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Proposed Revised Project would involve the construction of new buildings and the redevelopment of building. Any temporary slopes created by construction would be stabilized by temporary measures in compliance with building codes and Occupational Safety and Health Administration standards. Moreover, Mitigation Measures GS-1 and GS-2 from the 2003 EIR would continue to be applicable and reduce the impact to a less than significant level. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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- d) **Be located on expansive soil, as defined in Table 19-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** As identified in the 2003 EIR, soils on the Project Site have medium potential for expansion. Therefore, the Proposed Revised Project would potentially result in a significant impact related to expansive soils. However, Mitigation Measure GS-4 from the 2003 EIR would continue to be applicable and would reduce the impact to a less than significant level. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

- e) **Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

**No Impact.** Implementation of the Proposed Revised Project would not involve the construction or use of septic tanks or other alternative wastewater disposal system. No impact would occur, and no changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** As concluded in the 2003 EIR, there is potential for paleontological resources within the Project Site. In the unlikely event such resources are discovered during project grading and/or excavation activities, mitigation measures, PR-1 through PR-4, were identified to reduce impact to paleontological resources to a less than significant level. Therefore, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### 5.7.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

The following mitigation measures from the Mitigation Monitoring Program were adopted in connection with the 2003 EIR and would be applicable to the Proposed Revised Project. These mitigation measures have been incorporated into Mitigation Monitoring Plan for this Addendum.

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| GE-1 | All earthwork and grading shall meet the requirements of State of California Building Code, Title 24, part 2, volume 1 and shall be performed in accordance with the recommendations in the Geotechnical Investigation conducted for each proposed project at the Harbor College campus. |
| GE-2 | All excavation and shoring systems shall meet the minimum requirements of the Occupational Safety and Health Administration (OSHA) standards.  |

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- GS-1 Geotechnical investigations shall be performed by qualified licensed professionals before final design of any structures and recommendations provided in these reports should be implemented, as appropriate.
- GS-2 **Ground Shaking.** Design and construction of structures for the proposed project shall conform to all applicable provisions of the California State Architect, which follows guidelines set forth in the 2019 California Building Code (CBC). The CBC is based on the 1997 Uniform Building Code (UBC) and sets forth regulations concerning proper earthquake design and engineering. In addition, design and construction shall conform to the 1997 UBC's earthquake design criteria for Seismic Zone 4.
- GS-3 **Liquefaction.** If liquefiable soils are identified by geotechnical investigations for project structures, then mitigation shall be implemented. Appropriate mitigation, which could include the use of piles, deep foundations, dynamic densification, ground improvement, grouting, or removal of suspect soils, is dependent on site-specific conditions that will be identified by the geotechnical investigation.
- GS-4 **Unsuitable Soil Conditions.** The geotechnical investigation of proposed facilities shall fully characterize the presence and extent of corrosive, expansive, or loose compactable soil. Based on the collected data, appropriate mitigation shall be designed. Mitigation options could include the following: removal of unsuitable subgrade soils and replacement with engineered fill, installation of cathodic protection systems to protect buried metal utilities, use of coated or nonmetallic (i.e., concrete or PVC) pipes not susceptible to corrosion, construction of foundations using sulfate resistant concrete, support of structures on deep pile foundation systems, densification of compactable subgrade soils with in-situ techniques, and placement of moisture barriers above and around expansive subgrade soils to help prevent variations in soil moisture content.
- PR-1 A qualified paleontological monitor shall monitor excavation in areas identified as likely to contain paleontological resources (i.e., areas where excavation extends beyond the depth of artificial fill and into Palos Verdes Sand and/or San Pedro Sand as identified in the geotechnical investigations for the Master Plan projects). The monitor shall be equipped to salvage fossils and samples of sediments as they are unearthed to avoid construction delays and shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if the potentially fossiliferous units, previously described, are not found to be present or, if present, are determined by qualified paleontological personnel to have low potential to contain fossil resources.
- PR-2 Recovered specimens shall be prepared to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates.
- PR-3 Specimens shall be curated into a professional, accredited museum repository with permanent retrievable storage.

## 5. Environmental Analysis

- PR-4 A report of findings, with an appended itemized inventory of specimens, shall be prepared. The report and inventory, when submitted to Los Angeles Harbor College, would signify completion of the program to mitigate impacts to paleontological resources.

### 5.8 GREENHOUSE GAS EMISSIONS

#### 5.8.1 Summary of Impacts Identified in the 2003 EIR

This topic was not analyzed in the 2003 EIR, which was written prior to the adoption of Assembly Bill 32 (AB 32) and Senate Bill 97 (SB 97) and related amendments to the CEQA Guidelines (adopted December 30, 2009, effective March 18, 2010), and GHG emissions had not yet been generally recognized as an environmental issue.

#### 5.8.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				<b>X</b>	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				<b>X</b>	

#### Comments:

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

GHG emissions were not a topic of environmental concern in the 2003 Certified EIR. The Proposed Revised Project construction-related GHG emissions are shown in Table 4, *Project-Related GHG Emissions*. Construction activities would amount to 1,607 metric tons of carbon dioxide-equivalent (MTCO<sub>2</sub>e). Because construction emissions are one-time emissions, the South Coast AQMD Working Group recommended

## 5. Environmental Analysis

amortizing emissions over 30 years, amounting to 54 MTCO<sub>2</sub>e per year, which would not exceed the South Coast AQMD threshold of 3,000 MTCO<sub>2</sub>e per year.

As a reference, based on the general energy efficiency improvements in standards, nonresidential buildings built under the 2019 standards would be approximately 53.5 percent more efficient than nonresidential buildings built under the 2008 standards.<sup>1</sup> Because the existing buildings designated for replacement were built prior to the 2008 standards, the proposed replacement buildings would be even more than 53.5 percent energy efficient and less polluting. Additionally, the uses proposed under the Proposed Revised Project would be similar to the types of uses considered in the project as previously approved. Furthermore, the Proposed Revised Project would neither increase student capacity nor directly result in employment growth compared to the project as previously approved. Thus, it would not result in the generation of new additional vehicle trips, water demand, and solid waste generation and would not result in generation of additional emissions from these sources.

Additionally, development of the new building would be required to comply with the LACCD's Sustainability Standards, adopted in October 2019. The Sustainability Standards require that all new buildings meet 2019 Building Energy Efficiency Standards, CALGreen, and LEED Green Building standards, and that 15 percent of a project's energy use be supplemented by renewable energy from on-site sources. Because the Proposed Revised Project would be consistent with the requirements of energy-related regulations, and there would not be an increase in student capacity, implementation of the Proposed Revised Project would not result in an increase in operation-phase GHG emissions compared to the 2003 EIR. Therefore, the Proposed Revised Project's cumulative contribution to GHG emissions is less than significant. There are no changes or new significant information which would require preparation of an EIR.

**Table 4 Project-Related GHG Emissions**

Source	GHG (MTCO <sub>2</sub> e Total/year)
Construction Emissions	1,607
Amortized Construction Emissions <sup>1</sup>	54
<b>Proposed South Coast AQMD Bright-Line Threshold</b>	<b>3,000 MTCO<sub>2</sub>e/year</b>
Exceeds Bright-Line Threshold?	No

Source: CalEEMod, Version 2016.3.2.25

Notes: MT: metric tons; MTCO<sub>2</sub>e: metric ton of carbon dioxide equivalent

<sup>1</sup> Total construction emission are amortized over 30 years per South Coast AQMD methodology (South Coast AQMD 2008b).

<sup>1</sup> In general, for nonresidential buildings, the 2013 standards are 30 percent more energy efficient for nonresidential buildings than the 2008 standards (CEC 2014). The 2016 standards are 5 percent more energy efficient than the 2013 standards, and the 2019 standards are 30 percent more energy efficient than the 2016 standards (CEC 2015, 2018).

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

#### **No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.**

##### **CARB Scoping Plan**

The California Air Resources Board's (CARB) Scoping Plan is California's GHG reduction strategy to achieve the state's GHG emissions reduction target established by AB 32, which is 1990 levels by year 2020, and SB 32, which is 40 percent below 1990 levels by 2030. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard, California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the corporate average fuel economy standards, and other early action measures to the state is on target to achieve the GHG emissions reduction goals of AB 32. The Proposed Revised Project's GHG emissions would be reduced through compliance with statewide measures that have been adopted since AB 32 and SB 32. Thus, the Proposed Revised Project would not conflict with statewide strategies identified to implement the CARB Scoping Plan. Therefore, there are no changes or new significant information which would require preparation of an EIR.

##### **SCAG's Regional Transportation Plan/Sustainable Communities Strategy**

SCAG's 2016-2040 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) was adopted April 7, 2016. SCAG has released a draft of the 2020-2045 RTP/SCS (Connect SoCal), which is anticipated to be adopted in April 2020 (SCAG 2019). The RTP/SCS identifies multimodal transportation investments, including bus rapid transit, light rail transit, heavy rail transit, commuter rail, and high-speed rail; active transportation strategies (e.g., bike ways and sidewalks); transportation demand management strategies; transportation systems management; highway improvements such as interchange improvements, high-occupancy vehicle lanes, high-occupancy toll lanes; arterial improvements; goods movement strategies; aviation and airport ground access improvements; and operations and maintenance to the existing multimodal transportation system.

The RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The overarching strategy in the RTP/SCS is to provide for a plan that allows the southern California region to grow in more compact communities in existing urban areas; provides neighborhoods with efficient and plentiful public transit and abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserves more of the region's remaining natural lands (SCAG 2016). The RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecast development that is generally consistent with regional-level general plan data. The projected regional development, when integrated with the proposed regional transportation network identified in the RTP/SCS, would reduce per capita vehicular-travel-related GHG emissions and achieve the GHG reduction per capita targets for the SCAG region. The RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the RTP/SCS, but provides incentives for consistency to governments and developers.

## 5. Environmental Analysis

The Proposed Revised Project would replace existing buildings with a newer building that would provide and serve similar functions and purposes. Thus, the land uses planned under the Proposed Revised Project would be consistent with the current uses. In addition, like the 2003 EIR, the implementation of the Proposed Revised Project would not directly induce substantial population growth. Additionally, the Proposed Revised Project would also not directly increase student enrollment compared to the 2003 EIR. Thus, implementation of the Proposed Revised Project would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS. Therefore, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 certified EIR would occur. No changes or new information would require preparation of an EIR.

### 5.8.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

This topic was not previously analyzed and thus, no mitigation measures were identified.

## 5.9 HAZARDS AND HAZARDOUS MATERIALS

### 5.9.1 Summary of Impacts Identified in the 2003 EIR

#### 2003 EIR

The 2003 EIR concluded that there are three listed hazardous material sites in the immediate project area. Potential significant impact could occur if construction activities took place next to those areas. Additionally, renovation and replacement of buildings containing asbestos or leaded paint could potentially create health hazards to workers at construction sites and residents and employees in the vicinity of these sites. Therefore, construction of the project potentially led to a significant impact related to the release of hazardous materials. Mitigation measures were identified to reduce the impacts to a less than significant level.

Several oil wells are mapped to the north and south of the campus, and there was potential to encounter oil wells during construction. Mitigation measure was identified to reduce impacts to a less than significant level.

### 5.9.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				<b>X</b>	



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Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
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?				<b>X</b>	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				<b>X</b>	
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?				<b>X</b>	
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?					<b>X</b>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				<b>X</b>	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?					<b>X</b>

Based on the environmental database review conducted of the LAHC Campus, there are 170 sites within a one-mile radius of the Project Site and 37 sites within a quarter mile. One underground storage tank (UST) is at the receiving yard of the Campus. Due to the age of many buildings on Campus, the presence of asbestos-containing building materials and lead-based paint is possible for some buildings within the Project Site.

The LAHC campus is not in an oil field. However, it is just south of two active oil fields, the Wilmington and Torrance oil fields. As stated in the 2003 EIR, review of Division of Oil and Gas Wildcat and Oil Field maps indicated no wells were present within the campus boundaries; however, several abandoned wells are mapped to the north and south of the campus.

The Project Site remain outside of an adopted airport land use plan and outside of zones classified as having high wildland fire risks.

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### Comments:

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.**

### Construction

Construction of the Proposed Revised Project would involve use of hazardous materials, including fuels; oil, greases, and other lubricants; pesticides; paints; fertilizers; and solvents and other cleansers. Hazardous materials would be transported, used, stored, and disposed of per several regulations, including the Hazardous Materials Transportation Act, the Resource Conservation and Recovery Act, the California Hazardous Waste Control Act, and the California Accidental Release Prevention Program, all of which are designed to prevent the release of hazardous materials into the environment and unacceptable exposure of people to such hazardous substances. The construction contractor would maintain equipment and supplies for containing and cleaning up small hazardous material spills and would train workers in such containment and cleanup. The contractor would notify the Los Angeles City Fire Department immediately in the event that the amount and/or toxicity of a hazardous material release could not be safely contained and cleaned up by on-site construction workers. Therefore, the use of hazardous materials during project construction would not pose substantial hazards to the public or the environment, and impacts would be less than significant.

### Operation

Operation of the Proposed Revised Project would use only limited amounts of hazardous materials for cleaning and maintenance purposes. Such hazardous materials would be used in compliance with the laws and regulations in the preceding paragraph. Thus, the use of hazardous materials during Proposed Revised Project operation would not cause substantial hazards to the public or the environment, and impacts would be less than significant. Therefore, the Proposed Revised Project would not result in any new impacts or substantially more severe significant impacts with respect to hazardous materials, as compared to the 2003 EIR. No changes or new information would require preparation of a subsequent EIR.

- 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?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Project Site is currently a developed college campus. Due to the age of the buildings on-site, there is risk of exposure to asbestos-containing materials or lead-based paint during demolition for construction workers and for residents and employees within the vicinity of the Project Site. During the construction and operational activities associated with the Proposed Revised Project, there is potential for the use of materials categorized as “hazardous,” which include paints, solvents, certain cleaners, and other corrosive materials which are common cleaners and detergents. The use, transport, storage, and disposal of these materials would comply with all regulations governing their use. Construction and operational activities associated with the Proposed Revised Project would be in compliance with all applicable federal, state, and local laws and regulations regarding hazardous waste. These impacts are consistent with those identified in the 2003 EIR, and

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Mitigation Measures HM-1 through HM-5 were previously adopted to address potential hazards impacts. Therefore, the Proposed Revised Project would not result in any new impacts or substantially more severe significant impacts with respect to hazardous materials, as compared to the 2003 EIR. No changes or new information would require preparation of a subsequent EIR.

**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 Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Project Site is on an existing community college campus, and there are no schools within a one-quarter mile of the Project Site. As noted above, the Proposed Revised Project has potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste due to the demolition of buildings containing asbestos or lead-based paint, or the removal of electrical transformers and lighting ballasts that contain PCBs. However, the handling and transport of these materials would be conducted in compliance with all applicable federal, State, and local laws and regulations regarding hazardous waste. Implementation of Mitigation Measures HM-1 through HM-5 would reduce impacts to a less than significant level. Therefore, the Proposed Revised Project would not create a new significant impact or substantially more severe significant impacts than those previously identified effects in the 2003 EIR. No changes or new information would require preparation of a subsequent EIR.

**d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** According to the 2003 EIR, there was at least one underground storage tank on the proposed project property. However, this storage tank was already removed as part of the relocation of the plant buildings under the LAHC FMP. Further, implementation of Mitigation Measures HM-1 through HM-5 from the 2003 EIR (listed below) would ensure that any unforeseen impacts related to hazardous materials would be less than significant. No new significant impacts or substantially more severe significant impacts related to hazardous materials sites than those previously identified in the 2003 EIR would occur and no additional mitigation is required. Accordingly, no changes or new information would require preparation of a subsequent EIR.

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

**No Impact.** The LAHC Campus is not in an airport land use plan or within two miles of a public use airport. The closest airport, Torrance Municipal Airport–Zamperini Field, is approximately three miles northwest of the Project Site. Therefore, the Proposed Revised Project would not result in a safety hazard or excessive noise associated with airports for people residing or working in the project area. No impact would occur, and no changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** According to the City of Los Angeles General Plan's Safety Element, the streets bounded by the Project Site are not designated disaster routes (Los Angeles 1996). Moreover, construction activity would be confined to the Project Site and would not interfere with vehicle movement or emergency access along the surrounding streets. Therefore, impacts related to interference with an emergency response plan or emergency evacuation plan would be less than significant. No new significant impacts or substantially more severe significant impacts related to emergency response or evacuation plan than those previously identified in the 2003 EIR would occur and no additional mitigation is required. Accordingly, no changes or new information would require preparation of a subsequent EIR.

**g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

**No Impact.** The Proposed Revised Project is not in a state responsibility area or on land classified in a very high fire hazard severity zone, as identified in the Los Angeles County Fire Hazard Severity Zone Map (CAL FIRE 2007). Additionally, as identified in the Wildland-Urban Interface Change 1990-2010 map, the Project Site is not within a WUI area (University of Wisconsin-Madison 2010). Therefore, no impact would occur, and no changes or new information would require preparation of a subsequent EIR.

### 5.9.3 Mitigation Measures Identified in the Program EIR and Applicable to the Proposed Revised Project

The following mitigation measures from the Mitigation Monitoring Program were adopted in connection with the 2003 EIR and would be applicable to the Proposed Revised Project. HM-2 no longer applies since the relocation of plant buildings have been completed. These mitigation measures have been incorporated into the Mitigation Monitoring Plan for this Addendum.

HM-1      **Moderate Potential Sites.** A thorough review of available environmental records, a thorough historical land use assessment, and a site-specific inspection shall be completed. Record review shall identify data confirming remediation of onsite and offsite contamination of known contaminated sites, or agency-certified closure of the site. The status and/or number of tanks that are not reported shall undergo further record review to determine the status, condition, contents, and number of tanks. At sites with inactive or improperly abandoned USTs, the tanks may be old and in poor condition and, therefore, shall be thoroughly evaluated for condition and possible leaks. A detailed site inspection of hazardous material storage areas in or near proposed project areas shall be performed to determine if leaks or spills may have caused potential environmental contamination. Results of the record review or visual inspection that indicate contamination may be present in a proposed project area shall result in implementation of Mitigation Measure HM-3.

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- HM-2      **Relocation of Plant buildings.** Relocation of the Plant Facilities/Receiving Yard buildings and appurtenances will require removal and relocation of their UST. Removal of the active UST in the Receiving Yard area shall be monitored by a qualified professional for evidence of leaks. If any evidence of leakage is noted, a site assessment shall be performed to determine the extent of contamination and to identify appropriate remediation in consultation with the Regional Water Quality Control Board or Department of Toxic Substances Control. Remediation identified as a result of the site assessment shall be completed.
- HM-3      **Unknown Soil or Groundwater Contamination.** During excavation for the proposed structures, the contractor shall observe the exposed soil for visual evidence of contamination. If visual contamination indicators are observed during excavation or grading activities, all work shall stop and an investigation shall be designed and performed to verify the presence and extent of contamination at the site. A qualified and approved environmental consultant shall perform the review and investigation. Results shall be reviewed and approved by the Los Angeles County Fire Department, Health Hazardous Materials Division or Department of Toxic Substances Control prior to construction. The investigation shall include collecting samples for laboratory analysis and quantification of contaminant levels within the proposed excavation and surface disturbance areas. Subsurface investigation shall determine appropriate worker protection and hazardous material handling and disposal procedures appropriate for the subject site.
- Construction activities that require dewatering may require treatment of contaminated groundwater prior to discharge. Appropriate regulatory agencies, such as California EPA, the Regional Water Quality Control Board and the Los Angeles County Fire Department, Health Hazardous Materials Division shall be notified in advance of construction and discharge permits identifying discharge points, quantities, and groundwater treatment (if necessary) shall be identified and obtained.
- Areas with contaminated soil determined to be hazardous waste shall be excavated by personnel who have been trained through the OSHA-recommended 40-hour safety program (29CFR1910.120) with an approved plan for excavation, control of contaminant releases to the air, and offsite transport or onsite treatment. Health and safety plans prepared by a qualified and approved industrial hygienist shall be developed to protect the public and all workers in the construction area. Health and safety plans shall be reviewed and approved by the appropriate agencies, such as the Los Angeles County Fire Department, Health Hazardous Materials Division or California Department of Toxic Substances Control.
- HM-4      **Asbestos-Containing Material and Lead-Based Paint.** Records of previously completed asbestos-containing material and lead-based paint surveys and remediation efforts at the College shall be reviewed. Based on these findings appropriate measures for handling, removal, and disposal of these materials can be developed by a qualified and approved environmental specialist prior to final project design. Regulatory agencies for the State of

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California and Los Angeles County shall be contacted to plan handling, treatment, and/or disposal options. Remediation of asbestos-containing material (in accordance with SCAQMD Rule 1403) and/or lead based paint shall be conducted prior to any construction on or demolition of existing structures.

To ensure no adverse impacts would occur in the event improperly abandoned oil wells are encountered during construction, the following mitigation measure shall be implemented.

**HM-5 Abandoned Oil Wells.** Prior to construction, the California Department of Conservation, Division of Oil, Gas and Geothermal Resources shall be contacted for specific information on wells located within the Harbor College campus, including location and abandonment details. A diligent effort shall be made to avoid construction over abandoned oil wells. If any portion of the project facilities is located over or within 50 feet of a plugged or abandoned well, or if an unrecorded well is encountered during construction, the contractor shall coordinate with the Division of Oil, Gas and Geothermal Resources and other local regulatory agencies, such as the Los Angeles County Department of Public Works, to ensure that the well is flagged for avoidance and is evaluated to determine whether it was properly abandoned and whether it will require remedial plugging or the installation of a gas venting system.

## 5.10 HYDROLOGY AND WATER QUALITY

### 5.10.1 Summary of Impacts Identified in the 2003 EIR

The 2003 EIR concluded that compliance with water quality permits and regulatory requirements, and construction of the proposed stormwater treatment facilities would capture and remove pollutants that might run off the Campus. Additionally, the LAHC FMP did not require pumping of groundwater resources, and the LAHC Campus is not in a 100-year floodplain. Therefore, impacts to hydrology and water quality were less than significant.

### 5.10.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				<b>X</b>	

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Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				<b>X</b>	
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;				<b>X</b>	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				<b>X</b>	
iii) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems?				<b>X</b>	
iv) impede or redirect flood flows?					<b>X</b>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?					<b>X</b>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?					<b>X</b>

### Comments:

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

### No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.

Implementation of the Proposed Revised Project would include construction activities, such as excavation and trenching for foundations and utilities, soil compaction, cut-and-fill activities, and grading, all of which would temporarily disturb soils. Disturbed soils are susceptible to higher rates of erosion from wind and rain, resulting in sediment transport from the site. Excavation and exposure of native soils during construction would increase these materials' vulnerability to erosion, especially during heavy rain or wind.

Construction activities subject to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (SWRCB Order No. 2009-009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ) include sites that disturb at least one acre and small construction sites less than one acre but part of a larger common plan of at least one acre. The Construction General Permit includes three levels of risk for construction sites based on calculated project sediment and receiving water risk. The permit

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includes measures to eliminate or reduce pollutant discharges through implementation of a Storm Water Pollution Prevention Plan (SWPPP), which describes the implementation and maintenance of BMPs to reduce or eliminate pollutants in stormwater discharges and authorized nonstorm water discharges from the site during construction.

Prior to construction, the District would be required to prepare a SWPPP and obtain a waste discharge identification number from the SWRCB. The SWPPP would include a series of specific measures that would be included in the construction process to address erosion, accidental spills, and the quality of stormwater runoff. BMPs that must be implemented as part of a SWPPP can be grouped into two major categories: erosion and sediment control BMPs, and nonstorm water management and materials management BMPs. Erosion controls include practices to stabilize soil, protect the soil in its existing location, and prevent soil particles from migrating. Sediment controls are practices to collect soil particles after they have migrated but before the sediment leaves the site. Examples of sediment control BMPs are street sweeping, fiber rolls, silt fencing, gravel bags, sand bags, storm drain inlet protection, sediment traps, and stockpile management areas. Tracking controls prevent sediment from being tracked off-site via vehicles leaving the site to the extent practicable. A stabilized construction entrance not only limits the access points to the construction site but also functions to partially remove sediment from vehicles before they leave the site.

Construction of the Proposed Revised Project would be subject to local, State, and federal water quality regulations. This includes, but is not limited to, required adherence to the federal Clean Water Act, Los Angeles Regional Water Quality Control Board (RWQCB) regulations, NPDES requirements, the National Flood Insurance Act, California Department of Water Resources requirements, the California Fish and Game Code, the California Water Code, and other applicable regulatory requirements. Development of the Proposed Revised Project would cause a significant impact to hydrology and water quality if associated construction activities or operations would result in the violation of any water quality or waste discharge standards or substantially degrade surface- or groundwater quality.

Requirements for waste discharges to stormwater from operation of developed land uses within the coastal watersheds of Los Angeles and Ventura counties are set forth in the Municipal Stormwater Permit (MS4 Permit), Order No. R4-2012-0175, issued by the Los Angeles RWQCB in 2012. The Proposed Revised Project would include preparation and implementation of a water quality management plan pursuant to the MS4 Permit, specifying BMPs to be used during project design and operation to minimize stormwater pollution. It is anticipated that project conformance with appropriate BMPs and compliance with applicable local, State, and federal water quality regulations, in combination with design standards implemented by LACCD, would reduce potential water quality impacts during construction and operation to less than significant. Therefore, impacts related to water quality would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.



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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Project Site is in a highly urbanized area and not within a designated groundwater recharge area, and it does not serve as a primary source of groundwater recharge. No water features (e.g., streams or creeks) that serve the purpose of groundwater recharge for the area are in the project site. The construction of the new Southeast Hall would be built on existing impervious surfaces. Therefore, implementation of the Proposed Revised Project would not result in a depletion of groundwater supplies and would not interfere with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Impacts would be less than significant and no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

- 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 substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?**

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** Refer to Section 5.10.2(a). As stated above, the District's contractor would be responsible for preparation and implementation of a SWPPP by using a qualified SWPPP practitioner as defined in the Construction General Permit. This would include the maintenance of erosion and sediment controls during the life of the project and submittal of the annual reports.

Implementation of the Proposed Revised Project would not alter the existing drainage patterns as all runoff will be directed to the existing LAHC storm drain infrastructure. The District's contractor would be required to prepare a SWPPP in order to comply with the RWQCB's General Construction Storm Water Permit. The SWPPP will identify BMPs to be implemented during and after construction activities at the Project Site to minimize soil erosion and protect existing drainage systems. Compliance with existing regulations developed to minimize erosion and siltation would reduce this impact to a less than significant level. Project infrastructure would be built on existing impervious surfaces and would not result in an increase in impervious surfaces. Project infrastructure would connect to existing off-site storm drain infrastructure, and no upgrades or expansion of such facilities would be necessary with project implementation. Therefore, potential construction and operation impacts on erosion and siltation would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** Refer to Section 5.10.2 (c.i), above. Implementation of the Proposed Revised Project would not result in an increase in off-site flooding as there would be minimal or no increase in impervious surfaces with implementation of the Proposed Revised Project, and all project related runoff would be directed into the existing LAHC storm drain infrastructure. Therefore, impacts would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

- iii) **Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** Potential impacts associated with additional sources of polluted runoff are addressed under Section 5.10.2(a) and Section 5.10.1(c.i), above. The Proposed Revised Project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The existing stormwater infrastructure is adequate to accommodate stormwater runoff from the site, which would not increase in rate or amount compared to existing conditions due to project implementation. Therefore, impacts would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Impact.** As identified in the 2003 EIR, the Project Site is within Federal Emergency Management Agency's (FEMA) Flood Zone Designation X (Zone X) (FEMA 2008). Zone X is an area of minimal flood hazard, usually depicted on Flood Insurance Rate Maps as above the 500-year flood level. Therefore, no impact would occur, and no changes or new information would require preparation of a subsequent EIR.

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

**No Impact.** The Project Site is approximately five miles from the Pacific Ocean and is not in a inundation or tsunami hazard area (Los Angeles 1996). Additionally, the Project Site is not in a flood hazard zone. Therefore, no impact would occur, and no changes or new information would require preparation of a subsequent EIR.

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

**No Impact.** As stated in Responses 5.10.2(a) and 5.10.2(b), above, compliance with existing laws and regulations would ensure that the Proposed Revised Project would result in a less than significant impact and would not conflict with or obstruct implementation of a water quality control plan or sustainable

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groundwater management plan. Therefore, no impact would occur, and no changes or new information would require preparation of a subsequent EIR.

### 5.10.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

No mitigation measures related to hydrology and water quality were outlined in the 2003 EIR.

## 5.11 LAND USE AND PLANNING

### 5.11.1 Summary of Impacts Identified in the 2003 EIR

#### 2003 EIR

The 2003 EIR concluded that no established communities would be physically divided by the proposed LAHC FMP development. Additionally, the LAHC FMP would not conflict with the policies or goals of the Wilmington–Harbor City Community Plan or SCAG’s Regional Comprehensive Plan, with the exception of cultural resources. The proposed new buildings and facilities were compatible with the height restrictions for the LAHC Campus, with the exception of some requiring variances or conditional use permits. Therefore, no impacts related to compatibility with local plan and land use regulations were identified.

### 5.11.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Physically divide an established community?					<b>X</b>
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?					<b>X</b>

#### Comments:

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

**No Impact.** The Proposed Revised Project would not divide an established residential community because the Proposed Revised Project would occur entirely on an existing LAHC Campus. It is anticipated that all proposed improvements would occur within the interior of the site, and that no off-site improvements (e.g., construction of new roadways) would be required. Therefore, no impact would occur, and no mitigation is

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necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### 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?

**No Impact.** The City of Los Angeles General Plan designates the Project Site as Public Facilities (PF). No changes to the existing land use or zoning designation would be required as a result of the Proposed Revised Project. The proposed uses would be consistent with current uses that exist on the LAHC Campus. Therefore, the Proposed Revised Project would not result in 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. No impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### 5.11.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

No mitigation measures related to land use and planning were outlined in the 2003 EIR.

## 5.12 MINERAL RESOURCES

### 5.12.1 Summary of Impacts Identified in the 2003 EIR

The 2003 EIR concluded that impacts to mineral resources were not considered significant or not expect to occur. No mineral resources of value to the region or to the residents of the state were found or known to exist on or immediately adjacent to the Project Site.

### 5.12.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?					<b>X</b>
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?					<b>X</b>

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For the purpose of CEQA analysis, mineral resources refer to aggregate resources that consist of sand, gravel, and crushed rock. Aggregate resources provide bulk and strength in construction materials such as portland cement and asphaltic concrete. Other nonfuel mineral resources include metals such as gold, silver, iron, and copper and industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt, and dimension stone.

The California Geological Survey (CGS) classifies the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act (SMARA) of 1975. The State Geologist is responsible for classifying areas within California that are subject to urban expansion or other irreversible land uses. SMARA also allowed the State Mining and Geology Board, after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance. Classification into mineral resource zones (MRZ) is completed by the State Geologist in accordance with the board's priority list and according to the presence or absence of significant mineral resources.

Of the four MRZ categories, lands classified MRZ-2 are of the greatest importance. Such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are designated by the State Mining and Geology Board "regionally significant." Such designations require that a lead agency's land use decisions involving designated areas be in accordance with its mineral resource management policies (if any exist) and that it consider the importance of the mineral resource to the region or the state as a whole, not just to the lead agency's jurisdiction.

According to CGS, the Project Site is not classified MRZ-2 (CGS 2010).

### Comments:

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

**No Impact.** The Project Site does not contain known mineral resources of any value to the region or the residents of California. Therefore, the Proposed Revised Project would not result in the loss of availability of known mineral resources that would be of value to the region and the residents of the state. No impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

**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.** The Project Site does not contain mineral resources of local important as identified on a local general plan, specific plan, or other land use plan. Therefore, the Proposed Revised Project would not 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 would occur, and no mitigation is necessary.

## 5. Environmental Analysis

Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### 5.12.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

No mitigation measures related to mineral resources were outlined in the 2003 EIR.

## 5.13 NOISE

### 5.13.1 Summary of Impacts Identified in the 2003 EIR

#### 2003 EIR

The 2003 EIR concluded that noise from construction activities would exceed the significance threshold established by the City of Los Angeles for construction activities. However, this noise was temporary and intermittent and mitigations measures were identified to reduce the impact of construction noise to a less than significant level.

Noise associated with vehicular traffic was used to analyze the operational noise impacts of the LAHC FMP. It was concluded that there would not be a noticeable change in noise from the increase in traffic, and impacts would be less than significant.

### 5.13.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
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?				<b>X</b>	
b) Generation of excessive groundborne vibration or groundborne noise levels?				<b>X</b>	

## 5. Environmental Analysis

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
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?					<b>X</b>

The existing noise environment of the project area is typical of an urban region and can be characterized by a background, or ambient, noise level generated by vehicular traffic on the nearest roadways and a variety of other characteristic urban noise events, such as home and car stereos and people.

As identified in the 2003 EIR, Noise-sensitive receptors within the vicinity of the Project Site include:

- Harbor Golf Driving Range on L Street
- Multifamily residential uses west of Figueroa Place and south of SR-1
- Single-family residential uses west of I-110

### Comments:

- 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?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The main source of noise that would be generated by the Proposed Revised Project would be construction activities associated with demolition of existing buildings and construction of the new buildings. Mitigation Measures N-1 through N-4 from the 2003 EIR reduce construction-related noise levels at sensitive receptors and would continue to be applicable to the Proposed Revised Project; therefore, impacts would be less than significant.

As identified in the 2003 EIR, operational traffic noise impacts would be less than significant. Since the Proposed Revised Project is expected to generate a similar amount of traffic, impacts related to the increase in vehicular traffic would remain less than significant. Therefore, impacts would remain the same, and the findings of the 2003 EIR would apply to the Proposed Revised Project. The Proposed Revised Project would not create a new significant impact or a substantially more severe significant impacts than those previously identified in the 2003 EIR. No changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** Construction activities associated with grading/excavation would result in vibration impacts at the nearby

## 5. Environmental Analysis

sensitive receptors, and mitigation measures were identified in the 2003 EIR to reduce the impacts. Proposed construction would include grading, asphalt demolition, trenching, hardscape installation, and building construction. This would require equipment such as loaders, tractors, and dozers. Some of this equipment can generate substantial levels of vibration at close distances. Building damage is typically not a concern for most projects, with the occasional exception of blasting and pile driving during construction. No blasting, pile driving, or hard rock ripping/crushing activities will be required during project construction. The anticipated construction activities associated with the Proposed Revised Project would be comparable to or less than what was assumed in the 2003 EIR. Therefore, construction vibration impacts would be the same or less than those identified in 2003 EIR for the Project Site, and the findings of the 2003 EIR would apply to the Proposed Revised Project. Mitigation Measures N-1 through N-4 from the 2003 EIR would continue to be applicable. The Proposed Revised Project would not create a new significant impact or substantially more severe significant impacts than those previously identified in the 2003 EIR. No changes or new information would require preparation of a subsequent EIR.

- 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?**

**No Impact.** The LAHC Campus is not within an airport land use plan or within two miles of a public use airport. The closest airport, Torrance Municipal Airport–Zamperini Field, is approximately three miles northwest of the Project Site. Therefore, the Proposed Revised Project would not expose people residing or working in the project area to excessive noise levels. No impact would occur, and no changes or new information would require preparation of a subsequent EIR.

### 5.13.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

The following mitigation measures from the Mitigation Monitoring Program were adopted in connection with the 2003 EIR and would be applicable to the Proposed Revised Project. These mitigation measures have been incorporated into Mitigation Monitoring Plan for this Addendum.

- |     |   |
|-----|---|
| N-1 | In consultation with the Vice-President for Academic Affairs, construction shall be scheduled, when feasible, so that louder activities (e.g., demolition, excavation/grading) occur on weekends, during school vacations or holidays, or at other times when school is not in session. |
| N-2 | Sound barriers, such as particle board fencing, shall be constructed around construction sites that are within 200 feet of academic classroom facilities in use.  |
| N-3 | Other noise control devices, such as equipment mufflers and enclosures, shall be used where feasible.   |
| N-4 | All sound-reducing devices and restrictions shall be maintained throughout the construction period.   |



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## 5.14 POPULATION AND HOUSING

## 5.14.1 Summary of Impacts Identified in the 2003 EIR

The 2003 EIR concluded that impacts to population and house were not considered significant or not expected to occur. As identified in the 2003 EIR, the LAHC FMP was not anticipated to induce substantial population growth in the area since no residential units would be included in the project. Employment generated from construction would not induce workers to relocate their households, but would be from the local area and general region. The additional 35 on-campus employees generated from the LAHC FMP project would not require the construction of new housing.

## 5.14.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
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)?					<b>X</b>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?					<b>X</b>

**Comments:**

- 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)?**

**No Impact.** The Project Site is on the established LAHC Campus, and no new roads or extensions of existing roads that could enable development of undeveloped land are proposed. The Proposed Revised Project does not include the construction of any new homes or businesses. Therefore, the Proposed Revised Project would not directly or indirectly induce substantial unplanned population growth in an area. No impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Impact.** The Project Site is completely within the existing school boundaries. No residences would be displaced or removed as a result of the Proposed Revised Project, and the Proposed Revised Project would have no impact on existing housing. Therefore, the Proposed Revised Project would not displace any people or necessitate the construction of any replacement housing. No impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### **5.14.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project**

No mitigation measures related to population and housing were outlined in the 2003 EIR.

## **5.15 PUBLIC SERVICES**

### **5.15.1 Summary of Impacts Identified in the 2003 EIR**

#### **2003 EIR**

The 2003 EIR concluded that during construction, police protection services could be adversely impacted due to the diminished access from street closures or restriction in pedestrian access. However, since the potential impacts were temporary and there was a Los Angeles County Sheriff's station on Campus, impacts were less than significant. Additionally, the increase in student population and employees generated did not require the construction of new or expanded facilities. Although impacts were determined to be less than significant, Mitigation Measure PS-1 was identified to minimize any potential impacts to police services during construction.

Similarly, during construction, fire protection services could be affected if emergency vehicle access were impeded due to street or lane closures, or water service were temporarily disrupted. However, with the implementation of Mitigation Measures FPS-1 through FPS-5, impacts were reduced to a less than significant level. Additionally, the increase in student population and employees generated did not require the construction of new or expanded facilities.

The additional 35 employees generated by the LAHC FMP was expected to generate 7.7 to 8.75 elementary school students, 3.5 middle school students, and 3.5 to 4.9 high school students based on LAUSD student generation rates. Since the new employees could live anywhere within a large area and the expected generation would occur over seven years, impacts to schools were considered less than significant.

Despite the increase in enrollment and additional 35 full time employees, the LAHC FMP did not result in an increase in recreational facilities usage that would cause acceleration in the deterioration of these facilities. Additionally, implementation of the FMP included projects that would renovate and modernize existing

## 5. Environmental Analysis

recreational and athletic facilities on the Campus, providing students and employees with improved recreational opportunities.

### 5.15.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Fire protection?				<b>X</b>	
b) Police protection?				<b>X</b>	
c) Schools?					<b>X</b>
d) Parks?					<b>X</b>
e) Other public facilities?					<b>X</b>

Fire protection for the LAHC Campus is provided by the City of Los Angeles Fire Department (LAFD). The two nearest fire stations to the Project Site are Station 85 and Station 38, approximately 1.0 mile northwest and 1.2 mile west, respectively.

Security protection at the LAHC Campus has been provided by the Los Angeles County Sheriff's Department since January 2001, and police protection for areas outside of the Campus is provided by the Los Angeles Police Department's (LAPD) Harbor Community Police Station.

#### Comments:

##### a) Fire protection?

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** Implementation of the LAHC FMP would potentially affect emergency services during construction. The Proposed Revised Project would involve construction of a new building and demolition or renovation of existing buildings. Therefore, impacts to fire protection would remain potentially significant. Mitigation Measures FPS-1 through FPS-5 were identified to reduce this impact to a less than significant level and are applicable to the Proposed Revised Project. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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### b) Police protection?

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Proposed Revised Project would an increase in student population and; therefore, would not lead to a significant impact to the demand in police protection. However, PS-1 was identified to reduce potential impact to police services during construction. The Proposed Revised Project would not lead to an increase in student population that would significantly increase the demand of police protection or require the construction of new or expanded facilities. Therefore, impacts to police service would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### c) Schools?

**No Impact.** The Proposed Revised Project does not involve the construction of residential uses. Therefore, impacts on the LAUSD are not expected as a result of the Proposed Revised Project. No impact would occur, and no mitigation is necessary. Accordingly, no new or significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### d) Parks?

**No Impact.** The Proposed Revised Project does not involve the construction of residential uses. Therefore, there would not be an increase in population nor a significant increase in employment on the LAHC Campus resulting from an increase in student population. Therefore, no new or expansions of park would be required. No impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### e) Other public facilities?

**No Impact.** The Proposed Revised Project does not involve the construction of residential uses. Therefore, there would not be an increase in population nor a significant increase in employment on LAHC Campus resulting from an increase in student population. Therefore, no new or expansions of public facilities would be required. Therefore, no impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### 5.15.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

The following mitigation measures from the Mitigation Monitoring Program were adopted in connection with the 2003 EIR and would be applicable to the Proposed Revised Project. These mitigation measures have been incorporated into Mitigation Monitoring Plan for this Addendum.

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PS-1	Prior to initiation of any construction activities that may interfere with emergency service and access, the construction contractor shall consult and coordinate with the LASD and LAPD to ensure disruption is minimized and to identify alternative routes for emergency vehicles.
FPS-1	The College shall consult with the City Engineer and the City Los Angeles Fire Department regarding appropriate standards (e.g., lane widths, grades, cut corners, etc.) for private streets and entry gates to ensure adequate access for Fire Department vehicles and equipment.
FPS-2	All landscaping shall use fire-resistant plants and materials.
FPS-3	Sprinkler systems shall be required throughout any structure to be built, in accordance with state codes and standards established by the State Architect and State Fire Marshal.
FPS-4	The proposed project shall comply with all applicable codes and regulations administered by the State Architect and State Fire Marshall.
FPS-5	Prior to initiation of any construction activities that may interfere with emergency service and access, the construction contractor shall consult and coordinate with the City of Los Angeles Fire Department to ensure disruption is minimized and to identify alternative routes for emergency vehicles.

### 5.16 RECREATION

#### 5.16.1 Summary of Impacts Identified in the 2003 EIR

The 2003 EIR concluded that impacts to recreation were not considered significant or not expect to occur. As identified in the 2003 EIR, despite the increase in enrollment and additional 35 full-time employees, the minor increase in recreational facilities usage would not accelerate their deterioration. Additionally, implementation of the LAHC FMP included projects that would renovate and modernize existing recreational and athletic facilities on the Campus, providing students and employees with improved recreational opportunities.

#### 5.16.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

## 5. Environmental Analysis

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
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?					<b>X</b>
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?					<b>X</b>

### Comments:

- a) **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?**

**No Impact.** Implementation of the Proposed Revised Project would not increase the use of existing neighborhood and regional parks or other recreational facilities. Physical impacts to recreation facilities are usually associated with population growth. The Proposed Revised Project would not include the construction of new residential uses. Therefore, the Proposed Revised Project would not result in an increase in the use of recreational facilities. No impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

- 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?**

**No Impact.** The Proposed Revised Project would not include or require the construction or expansion of recreational facilities. Therefore, no impact would occur, and no mitigation is necessary. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### 5.16.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

No mitigation measures related to recreation were outlined in the 2003 EIR.

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### 5.17 TRANSPORTATION

#### 5.17.1 Summary of Impacts Identified in the 2003 EIR

##### 2003 EIR

According to the traffic study prepared for the 2003 EIR, the increase in student enrollment to 3,843 by 2008 would create significant traffic impacts at 2 of the 13 studied intersections within the LAHC Campus vicinity during one of the peak hours. Mitigation measures were identified to reduce the impacts to a less than significant level; however, if mitigation measures were determined to be infeasible based on further review, impacts would remain significant and unavoidable.

In addition, the LAHC FMP would increase the number of parking spaces from 2,069 to 2,031 and, based on the increase in student enrollment and existing program activities at the LAHC Campus, there would be no impact related to parking.

#### 5.17.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?				<b>X</b>	
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?				<b>X</b>	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?					<b>X</b>
d) Result in inadequate emergency access?				<b>X</b>	

Regional access to the LAHC Campus is provided by the I-100 and SR-1. I-110 is approximately 50 feet east of the LAHC campus, and SR-1 is approximately 0.3 mile north of the LAHC Campus. Access between the LAHC Campus and the I-110 is obtained via off-ramps at Figueroa Place. Los Angeles County Metropolitan Transportation Authority (Metro) bus lines 205 and 232 provide access to the LAHC campus, with stops on L Street and Figueroa Street, respectively.

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### Comments:

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The results of the traffic analysis in the 2003 EIR indicate the LAHC FMP would create a significant impact to the surrounding roadway system during the future with project condition. The 2003 EIR anticipated a new student population of approximately 3,843 new students by 2008 with implementation of the LAHC FMP. Project-generated trips would contribute to deteriorating levels of service at two local intersections. Mitigation measures were developed for those intersection to increase capacity and included operational improvements and potential physical improvements, reducing the impacts to a less than significant level; however, if mitigation measures were determined to be infeasible based on further review, impacts would remain significant and unavoidable.

Enrollment for at LAHC for the Fall 2019 semester was 8,068 full-time equivalent students. Implementation of the Proposed Revised Project is anticipated to serve the existing and future student population and would not result in an increase in student population or vehicle trips, and therefore would not increase adverse traffic impacts beyond those identified in the 2003 EIR. Impacts would remain similar to those identified in the 2003 EIR, and the findings of the 2003 EIR would apply to the Proposed Revised Project. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

- b) **Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** CEQA Guidelines Section 15064.3, which was updated in 2018, describes specific considerations for evaluating a project's transportation impact using vehicle miles traveled (VMT) instead of previous measures (e.g., auto delay, LOS, and similar other measures of vehicular capacity or traffic congestion) as a basis for determining significant impacts. The purpose of the change is to help ensure that the new criteria for determining the significance of transportation impacts "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (PRC Section 21099(b)(1)). While the updated CEQA Guidelines went into effect in December 2018, the update gives agencies until July 1, 2020, to adopt the new VMT-based criteria under the updated CEQA Guidelines. The Proposed Revised Project has been designed to serve existing and future students of LAHC and would not result in an increase in student population or vehicle trips. Therefore, the Proposed Revised Project would not result in an increase in VMT that would result in a significant impact. The Proposed Revised Project would not result in conflicts or inconsistency with CEQA Guidelines Section 15064.3, subdivision (b). Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.



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

**No Impact.** The Proposed Revised Project does not involve any off-site improvements or new access drives or roadway improvements to provide access to the Project Site. Access to the LAHC Campus would remain the same. Therefore, no improvements that could result in hazardous conditions would occur. Additionally, the Proposed Revised Project would not change the existing land use of the site, as the property currently is developed as college campus. Therefore, no impact related to hazards due to a geometric design feature or incompatible uses would occur. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** Construction of the Proposed Revised Project would generate construction vehicle trips, potential roadway lane closures, and potential increases in construction and operational traffic that could impact daily traffic volumes on local roadways and intersections, thereby impeding emergency access. However, as discussed previously in Section 5.15, Mitigation Measures PS-1, FPS-1, and FPS-5 were identified to reduce impacts to emergency access to a less than significant level. Therefore, impacts related to emergency access would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### 5.17.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

The following mitigation measures from the Mitigation Monitoring Program were adopted in connection with the 2003 EIR and would be applicable to the Proposed Revised Project. These mitigation measures have been incorporated into Mitigation Monitoring Plan for this Addendum.

- T-1 Palos Verdes Drive/Gaffey Street/Vermont Avenue & Anaheim Street - To mitigate the incremental project impact at this location, a Transportation Demand Management Program shall be implemented on the campus to reduce campus tripmaking. The Transportation Demand Management Program shall include: trip reduction program marketing; personalized commute assistance; rideshare matching services; a guaranteed ride home program; transit subsidies; and direct financial rewards (\$1.00 per day) for carpooling, vanpooling, transit, walking, and bicycling. No further physical or operational improvement would be required to mitigate the project impact.
- T-2 Figueroa Place & 1-110 Southbound Off-Ramp - A traffic signal shall be installed in consultation with Caltrans and the City of Los Angeles Department of Transportation. Installation of the signal shall be coordinated with the existing signal at Figueroa Place/Anaheim Street. Figueroa Place shall be restriped between the freeway off-ramp and

## 5. Environmental Analysis

Anaheim Street to formally provide two southbound lanes, with the curb lane terminating as forced right-turn lane at Anaheim Street. The new signal shall operate as a three-phase signal with east/west split phasing and demand-actuation on the eastbound I Street approach.

- PS-1 Prior to initiation of any construction activities that may interfere with emergency service and access, the construction contractor shall consult and coordinate with the LASD and LAPD to ensure disruption is minimized and to identify alternative routes for emergency vehicles.
- FPS-1 The College shall consult with the City Engineer and the City Los Angeles Fire Department regarding appropriate standards (e.g., lane widths, grades, cut corners, etc.) for private streets and entry gates to ensure adequate access for Fire Department vehicles and equipment.
- FPS-5 Prior to initiation of any construction activities that may interfere with emergency service and access, the construction contractor shall consult and coordinate with the City of Los Angeles Fire Department to ensure disruption is minimized and to identify alternative routes for emergency vehicles.

### 5.18 TRIBAL CULTURAL RESOURCES

#### 5.18.1 Summary of Impacts Identified in the 2003 EIR

Tribal cultural resources were not analyzed as a topic in the 2003 EIR but were addressed in the archaeological resources section of the previous environmental documents. The 2003 EIR confirmed with the Native American Heritage Commission (NAHC) that there were no Native American cultural resources in the project area from the results of the record search of the Sacred Lands Files. However, representatives from the Gabrielino/Tongva expressed concern about the discovery of Native American archeological site and human remains during project-related grading and excavation activities. In the unlikely event that such resources are discovered during project grading and/or excavation activities, Mitigation Measures AR-1 through AR-4 were identified to reduce impact to tribal cultural resources to a less than significant level.

#### 5.18.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised 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:

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Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				<b>X</b>	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision				<b>X</b>	

**Comments:**

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** As stated previously, there are several buildings within the LAHC Campus that are eligible for the California Register of Historical Resources. However, further evaluation concluded that these buildings are not eligible. Furthermore, there are no identified tribal cultural resources in or within the vicinity of the Project Site upon consultation with the NAHC. In the unlikely event such resources are discovered during project grading and/or excavation activities, Mitigation Measures AR-1 through AR-4 were identified to reduce impacts to tribal cultural resources to a less than significant level. Therefore, impacts to tribal cultural resources would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** See response under Section 5.18(a).

### 5.18.3 Mitigation Measures Identified in the 2003 EIR And Applicable to the Proposed Revised Project

The following mitigation measures from the Mitigation Monitoring Program were adopted in connection with the 2003 EIR and would be applicable to the Proposed Revised Project. These mitigation measures have been incorporated into Mitigation Monitoring Plan for this Addendum.

## 5. Environmental Analysis

- AR-1 A certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, shall monitor all project-related ground disturbing activities that extend beyond the depth of artificial fill and into natural sand sediments (as identified in the geotechnical investigations for the Master Plan projects), in areas of archaeological sensitivity such as along the slough and in the area of the former historical structure depicted on the 1944 USGS Redondo Quadrangle.
- AR-2 In those areas that are not monitored by an archaeologist and a certified culturally affiliated Native American, if buried cultural resources are uncovered during construction, all work shall be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery and assess the significance of the archaeological resource.
- AR-3 Provisions for the disposition of recovered prehistoric artifacts shall be made in consultation with culturally affiliated Native Americans.
- AR-4 In the event of an accidental discovery of any human remains in a location other than a dedicated cemetery, the steps and procedures specified in Health and Safety Code 7050.5, State CEQA Guidelines 15064.5(e), and Public Resources Code 5097.98 shall be implemented.

### 5.19 UTILITIES AND SERVICE SYSTEMS

#### 5.19.1 Summary of Impacts Identified in the 2003 EIR

##### 2003 EIR

The 2003 EIR concluded that the anticipated increase in student enrollment from 3,125 students to 3,848 students by 2008 would increase water, wastewater, stormwater drainage, solid waste, electricity, and natural gas by a negligible amount compared to the capacity of the existing systems. Therefore, there were no impacts to the water, wastewater, storm water drainage, solid waste, electricity, and natural gas. However, the existing 10-inch sewer line was in need of repair to accommodate the projected wastewater flow; therefore, mitigation measures were identified to ensure impacts to wastewater would be less than significant. Additionally, mitigation measures were also identified for upgrading the LADWP main line in the event of additional loads to the main line.

#### 5.19.2 Impacts Associated with the Proposed Revised Project

Would the Proposed Revised Project:

## 5. Environmental Analysis

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Require or result in the relocation or construction of new or expanded water, waste water treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				<b>X</b>	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				<b>X</b>	
c) Result in a determination by the waste water 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?				<b>X</b>	
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?				<b>X</b>	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				<b>X</b>	

Water at the LAHC Campus, as well as in the rest of the Los Angeles Basin, is supplied by the Los Angeles Department of Water and Power (LADWP). The LADWP obtains its water from the Los Angeles Aqueduct (water supplied from the eastern Sierra Nevada Mountains, local wells, water purchased by the Metropolitan Water District of Southern California from the Colorado River and the State Water Project, and from the reclamation of wastewater (for nondrinking uses).

Wastewater flow from the LAHC Campus is discharged into the local sewer line and conveyed to the Hyperion Treatment Plant (HTP). HTP is operated by the Los Angeles DWP and is the oldest and largest wastewater treatment plant in the city. In 2003, it received average of 339 millions gallons per day (mgd) of influent and discharged an average of 315 mgd of secondary effluent to the ocean. Total wastewater treatment capacity for HTP is 450 mgd (LARWQCB 2005).

The proposed project area is within the Los Angeles River Basin, and the majority of the site consists of impervious surfaces. Areas that are not paved or developed are landscaped with trees and grass, and a stormwater drainage system is in place throughout the Campus to accommodate existing runoff. Harbor College is in the Harbor solids collection district for the City of Los Angeles. In 2001 the College diverted approximately 43.7 percent of its total tonnage of solid waste. In July of 2001 the LACCD Board of Trustees

## 5. Environmental Analysis

adopted Waste Reduction Policy 71100, which mandates that the various colleges within the District engage in responsible business practices, such as source reduction, purchasing and utilizing durable and reusable products, supporting new markets for recycled content products, providing a recycling coordinator to manage activities, and providing educational/outreach program, etc. to help protect the environment by meeting California's goals for diverting solid waste from landfills.

Electricity is supplied to the LAHC Campus by the LADWP, while natural gas is supplied by the Southern California Gas Company (SCG).

### Comments:

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** As described in the 2003 EIR, the Facilities Master Plan was anticipated to increase student enrollment from 3,125 students to 3,848 students by 2008. The Proposed Revised Project would not result in an increase in student enrollment. The Proposed Revised Project would not result in the construction or relocation of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. Since water has been an ongoing issue in California, Mitigation Measures WW-1 and WW-2 were identified to ensure the conservation of water resources. Similarly, Mitigation Measure E-1 was identified in the event that additional loads to the main line are required. Therefore, impacts would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** As discussed in the 2003 EIR, the Facilities Master Plan would increase water demand due to the projected increase in student enrollment by 2012. The Proposed Revised Project would not affect student enrollment. Therefore, impacts to having sufficient water supplies available during normal, dry, and multiple-dry years would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

- c) **Result in a determination by the waste water 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?**

**No Substantial Increase in Severity New Information Requiring Preparation of an EIR.** Refer to Section 5.19.2(a). The increase in wastewater demand due to the projected increase in student enrollment identified in the 2003 EIR is minimal compared to the existing capacity of the HTP. The Proposed Revised

## 5. Environmental Analysis

Project would not affect student enrollment. Therefore, impacts related to wastewater capacity would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

**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?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The increase in solid waste generation due to the projected increase in student enrollment identified in the 2003 EIR is minimal compared to the existing generation at the area landfills. The Proposed Revised Project would not affect student enrollment. Additionally, efforts for waste reduction are being encouraged and monitored by the District and the California Department of Resources Recycling and Recovery (CalRecycle) to ensure that waste reduction activities continue and the District meets the goals of AB 939 and AB 341. Specifically, AB 939 required city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from landfill disposal by 2000. AB 341 goes beyond AB 939 and establishes the new recycling goal of 75 percent by 2020. Demolition materials from the Proposed Revised Project would comply with the District's Integrated Waste Management Plan requirements, which includes the tracking of demolition and excess construction materials in consultation with general contractors to ensure marketable materials are recycled. Therefore, impacts related to the excess generation of solid waste would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

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

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** During construction and operation, the Proposed Revised Project will comply with local, regional, and State solid waste diversion, reduction, and recycling mandates, including compliance with the LACCD policies. Therefore, impacts would be less than significant. Accordingly, no new significant impacts or substantially more severe significant impacts than those previously identified in 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### 5.19.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

The following mitigation measures from the Mitigation Monitoring Program were adopted in connection with the 2003 EIR and would be applicable to the Proposed Revised Project. These mitigation measures have been incorporated into Mitigation Monitoring Plan for this Addendum.

WW-1	All new construction renovation shall include water conservation measures, such as low flush toilets.
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## 5. Environmental Analysis

WW-2 The 10-inch sewer main shall be repaired and or improved by the City of Los Angeles, as necessary, to accommodate existing and projected Master Plan wastewater flows.

E-1 If necessary to maintain the 25 percent safety capacity required by the NEC, LADWP shall upgrade the LADWP main line from 270 amps to 300 amps or greater.

### 5.20 WILDFIRE

#### 5.20.1 Summary of Impacts Identified in the 2003 EIR

Wildfire was not analyzed as a topic in the prior environmental documents.

#### 5.20.2 Impacts Associated with the Proposed Revised Project

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Proposed Revised Project:

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				<b>X</b>	
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?				<b>X</b>	
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?					<b>X</b>
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?				<b>X</b>	

The Proposed Revised Project is not located within state responsibility area (SRA) or land classified as very high fire hazard severity zones as identified in the Los Angeles County Fire Hazard Severity Zone Map (CAL FIRE 2007). Additionally, as identified in the Wildland-Urban Interface (WUI) Change 1990-2010 map, the Project Site is not located within a WUI area (University of Wisconsin-Madison 2010).



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### Comments:

**a) Substantially impair an adopted emergency response plan or emergency evacuation plan?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** According to the City of Los Angeles General Plan's Safety Element, the streets bounded by the Project Site are not designated disaster routes (Los Angeles 1996). Moreover, construction activity would be confined to the Project Site and would not interfere with vehicle movement or emergency access along the surrounding streets. Therefore, impacts related to impairment with an adopted emergency response plan or emergency evacuation plan would be less than significant. No new impacts or substantially more severe significant impacts related to emergency response or evacuation plan than those previously identified in the 2003 EIR and no additional mitigation is required. Accordingly, no changes or new information would require preparation of a subsequent EIR.

**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?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Proposed Revised Project is located in a relatively level area, and there are no steep slopes where high winds can exacerbate wildfire risks. No wildlands exist within the immediate vicinity of the site with the exception of the park land that surrounds the Project Site. The Project Site and surrounding area are characterized by features typical of an urban landscape. Consequently, development of the Proposed Revised Project would not result in the exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope and prevailing winds and impact would be less than significant. Accordingly, no new or significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

**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?**

**No Impact.** The Proposed Revised Project does not require the installation or maintenance of associated infrastructure, as the Proposed Revised Project would occur entirely on the existing LAHC Campus. Therefore, the Proposed Revised Project would not exacerbate fire risk that may result in temporary or ongoing impacts to the environment. No impact would occur and no mitigation is necessary. Accordingly, no new or significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

**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 Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** Refer to Sections 5.7.2 (a.iii), 5.10.2 (c.i), and 5.10.2 (c.ii) above. The topography of the Project Site is relatively flat and

## 5. Environmental Analysis

the soils on the site are not susceptible to landslides. Additionally, implementation of the Proposed Revised Project would not alter the existing drainage patterns or substantially increase the amount of runoff as the proposed uses would occur on the existing LAHC Campus and would not result in changes to the drainage for those facilities. Therefore, the Proposed Revised Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides and impacts would be less than significant. Accordingly, no new or significant impacts or substantially more severe significant impacts than those previously identified in 2003 EIR would occur. No changes or new information would require preparation of a subsequent EIR.

### 5.20.3 Mitigation Measures Identified in the 2003 EIR and Applicable to the Proposed Revised Project

No mitigation measures related to wildfire were outlined in the 2003 EIR.

## 5.21 MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Issues	Substantial Change in Project Requiring Major EIR Revisions	Substantial Change in Circumstances Requiring Major EIR Revisions	New Information Showing New or Increased Significant Effects	No Substantial Increase in Severity or New Information Requiring Preparation of an EIR	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?				<b>X</b>	
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.)				<b>X</b>	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				<b>X</b>	

#### Comments:

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below

## 5. Environmental Analysis

**self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Project Site does not contain any significant biological resources. As demonstrated in this Addendum, the Proposed Revised Project would not result in new significant impacts or substantially more severe significant impacts to biological or cultural resources than those previously identified in the 2003 EIR. No changes or new information would require preparation of a subsequent EIR.

- 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.)**

**No Substantial Increase in Severity or New Information Requiring Preparation of an EIR.** The Proposed Revised Project is consistent with the amount of development planned for the Project Site in the 2003 EIR. Therefore, the Proposed Revised Project will not result in any new cumulatively considerable impacts or substantially increase the severity of the cumulative effects previously disclosed in the 2003 EIR. As demonstrated in this Addendum, the Proposed Revised Project would not result in new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR. Because the Proposed Revised Project would not meet any of the criteria identified in Section 15162 of the State CEQA Guidelines requiring preparation of a subsequent or supplemental EIR, an Addendum to the 2003 EIR is the appropriate document type for the Proposed Revised Project.

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

**No Substantial Increase in Severity New Information Requiring Preparation of an EIR.** As demonstrated in this Addendum, the Proposed Revised Project would not result in new significant impacts or substantially more severe significant impacts than those previously identified in the 2003 EIR. Because the Proposed Revised Project would not meet any of the criteria identified in Section 15162 of the State CEQA Guidelines requiring preparation of a subsequent or supplemental EIR, an Addendum to the 2003 EIR is the appropriate document type for the Proposed Revised Project.

## 5. Environmental Analysis

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## 7. References

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- BuildLACCD. 2016, August 30. LACCD Sustainability Standards. <http://az776130.vo.msecnd.net/media/docs/default-source/contractors-and-bidders-library/standards-guidelines/Sustainable-Design-Standards/laccd-sustainability-design-standards-2016.pdf?sfvrsn=0>
- California Department of Conservation (DOC). 2016. California Important Farmland Finder (CIFF). <https://maps.conservation.ca.gov/dlrp/ciff/>.
- California Department of Fish and Wildlife (CDFW). April 2019. California Natural Community Conservation Plans. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>.
- California Department of Forestry and Fire Protection (CAL FIRE). 2007. Los Angeles County FHSZ Map. [https://osfm.fire.ca.gov/media/6705/fhszs\\_map19.pdf](https://osfm.fire.ca.gov/media/6705/fhszs_map19.pdf).
- California Department of Transportation (Caltrans). 2019. California Highway System. <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=026e830c914c495797c969a3e5668538>.
- California Energy Commission (CEC). 2007, December. State Alternative Fuels Plan. <https://ww2.energy.ca.gov/2007publications/CEC-600-2007-011/CEC-600-2007-011-CMF.PDF>.
- . 2017a, January. California Energy Commission Renewables Portfolio Standard Eligibility Commission Guidebook, Ninth Edition (revised). <https://efiling.energy.ca.gov/getdocument.aspx?tn=217317>.
- . 2017b, January. 2016 Appliance Efficiency Regulations. <https://ww2.energy.ca.gov/2017publications/CEC-400-2017-002/CEC-400-2017-002.pdf>
- . 2018a. News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. [http://www.energy.ca.gov/releases/2018\\_releases/2018-05-09\\_building\\_standards\\_adopted\\_nr.html](http://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html).
- . 2018b. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. [http://www.energy.ca.gov/title24/2019standards/documents/2018\\_Title\\_24\\_2019\\_Building\\_Standards\\_FAQ.pdf](http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf).
- California Geological Survey (CGS). 2010. San Gabriel Valley P-C Region showing MRZ-2 Areas and Active Mine Operations. [ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR\\_209/](ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_209/).

## 7. References

- California Public Utilities Commission. 2014. Renewables Portfolio Standard Quarterly Report, 3rd Quarter 2014.
- March 25, 1999. State of California Seismic Hazard Zones, Torrance Quadrangle.  
[https://gmw.conservation.ca.gov/SHP/EZRIM/Maps/TORRANCE\\_EZRIM.pdf](https://gmw.conservation.ca.gov/SHP/EZRIM/Maps/TORRANCE_EZRIM.pdf).
- Federal Emergency Management Agency (FEMA) 2008, September 26. Map Service Center—FEMA-Issued Flood Maps (Map ID 06037C1945F, Los Angeles, City of).  
<https://msc.fema.gov/portal/search?AddressQuery=1111%20Figueroa%20Pl%2C%20Wilmington%2C%20CA%2090744#searchresultsanchor>
- Los Angeles, City of. 1996, November 26. Safety Element of the City of Los Angeles General Plan.  
<https://planning.lacity.org/cwd/gnlpln/saftyelt.pdf>
- Los Angeles, City of. 2001, September 26. Conservation Element of the City of Los Angeles General Plan.  
[https://planning.lacity.org/odocument/28af7e21-ffdd-4f26-84e6-dfa967b2a1ee/Conservation\\_Element.pdf](https://planning.lacity.org/odocument/28af7e21-ffdd-4f26-84e6-dfa967b2a1ee/Conservation_Element.pdf).
- Los Angeles Regional Water Quality Control Board. 2005, April 7. Order No. R4-2005-0020 NPDES Permit No. CA0109991.  
[https://www.waterboards.ca.gov/water\\_issues/programs/tmdl/records/region\\_4/2011/ref3839.pdf](https://www.waterboards.ca.gov/water_issues/programs/tmdl/records/region_4/2011/ref3839.pdf)
- National Parks Service (NPS). 2020. National Register of Historic Places.  
<https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466>
- University of Wisconsin-Madison. 2010. Wildland-Urban Interface (WUI) Change 1990-2010. Assessed February 17, 2020. <http://silvis.forest.wisc.edu/data/wui-change/>
- United States Environmental Protection Agency (USEPA). 2019, May 6 (updated). Summary of the Energy Independence and Security Act Public Law 110-140 (2007). <https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act>.
- United States Fish and Wildlife Service (FWS) 2018. National Wetlands Inventory.  
<https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>.



Appendix A     Addendum to Los Angeles Harbor  
College Master Plan Final EIR Air  
Quality and Greenhouse Gas  
Emissions Technical Memorandum

## Appendix

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# Air Quality and Greenhouse Gas Background

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## AIR QUALITY

### Climate/Meteorology

#### SOUTH COAST AIR BASIN

The project site lies in the South Coast Air Basin (SoCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (South Coast AQMD 2005).

#### Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the project site with temperature data is the Torrance AP, California Monitoring Station (ID No. 048973). The lowest average temperature is reported at 44.3°F in December, and the highest average temperature is 78.6°F in August (WRCC 2020).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from October through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall historically averages 13.55 inches per year in the project area (WRCC 2020).

#### Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (South Coast AQMD 2005).

## **Wind**

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur, both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting their eastward transport. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (South Coast AQMD 2005).

## **Inversions**

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These are the marine/subsidence inversion and the radiation inversion. The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area (South Coast AQMD 2005).

## **Air Quality Regulations**

The proposed project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the SoCAB and is subject to the rules and regulations imposed by the South Coast Air Quality Management District (South Coast AQMD). However, South Coast AQMD reports to California Air Resources board (CARB), and all criteria emissions are also governed by the California and national Ambient Air Quality Standards (AAQS). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

## **AMBIENT AIR QUALITY STANDARDS**

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve

and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

These National AAQS and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect “sensitive receptors” most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health based AAQS for seven air pollutants. As shown in Table 1, *Ambient Air Quality Standards for Criteria Pollutants*, these pollutants include ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), coarse inhalable particulate matter (PM<sub>10</sub>), fine inhalable particulate matter (PM<sub>2.5</sub>), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

**Table 1      Ambient Air Quality Standards for Criteria Pollutants**

Pollutant	Averaging Time	California Standard <sup>1</sup>	Federal Primary Standard <sup>2</sup>	Major Pollutant Sources
Ozone (O <sub>3</sub> ) <sup>3</sup>	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO <sub>2</sub> )	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM <sub>10</sub> )	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric

**Table 1 Ambient Air Quality Standards for Criteria Pollutants**

Pollutant	Averaging Time	California Standard <sup>1</sup>	Federal Primary Standard <sup>2</sup>	Major Pollutant Sources
Respirable Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>4</sup>	24 hours	*	35 µg/m <sup>3</sup>	photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
Lead (Pb)	30-Day Average	1.5 µg/m <sup>3</sup>	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m <sup>3</sup>	
	Rolling 3-Month Average	*	0.15 µg/m <sup>3</sup>	
Sulfates (SO <sub>4</sub> ) <sup>5</sup>	24 hours	25 µg/m <sup>3</sup>	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H <sub>2</sub> S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hours	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.

Notes: ppm: parts per million; µg/m<sup>3</sup>: micrograms per cubic meter

\* Standard has not been established for this pollutant/duration by this entity.

1 California standards for O<sub>3</sub>, CO (except 8-hour Lake Tahoe), SO<sub>2</sub> (1 and 24 hour), NO<sub>2</sub>, and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than O<sub>3</sub>, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O<sub>3</sub> standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

4 On December 14, 2012, the national annual PM<sub>2.5</sub> primary standard was lowered from 15 µg/m<sup>3</sup> to 12.0 µg/m<sup>3</sup>. The existing national 24-hour PM<sub>2.5</sub> standards (primary and secondary) were retained at 35 µg/m<sup>3</sup>, as was the annual secondary standard of 15 µg/m<sup>3</sup>. The existing 24-hour PM<sub>10</sub> standards (primary and secondary) of 150 µg/m<sup>3</sup> also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

5 On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code

## CRITERIA AIR POLLUTANTS

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are categorized as primary or secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), coarse inhalable particulate matter (PM<sub>10</sub>), fine inhalable particulate matter (PM<sub>2.5</sub>), and lead (Pb) are primary air pollutants. Of these, CO, SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are “criteria air pollutants,” which means that ambient air quality standards (AAQS) have been established for them. VOC and oxides of nitrogen (NO<sub>x</sub>) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O<sub>3</sub>) and NO<sub>2</sub> are the principal secondary pollutants. A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

**Carbon Monoxide (CO)** is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion, engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (South Coast AQMD 2005; USEPA 2019a). The SoCAB is designated under the California and National AAQS as being in attainment of CO criteria levels (CARB 2017a).

**Volatile Organic Compounds (VOC)** are compounds composed primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of VOCs include evaporative emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. There are no ambient air quality standards established for VOCs. However, because they contribute to the formation of ozone (O<sub>3</sub>), South Coast AQMD has established a significance threshold for this pollutant (South Coast AQMD 2005).

**Nitrogen Oxides (NO<sub>x</sub>)** are a byproduct of fuel combustion and contribute to the formation of O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The two major forms of NO<sub>x</sub> are nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>). The principal form of NO<sub>2</sub> produced by combustion is NO, but NO reacts with oxygen to form NO<sub>2</sub>, creating the mixture of NO and NO<sub>2</sub> commonly called NO<sub>x</sub>. NO<sub>2</sub> acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO<sub>2</sub> is only potentially irritating. There is some indication of a relationship between NO<sub>2</sub> and chronic pulmonary fibrosis. Some increase in bronchitis in children (two and three years old) has also been observed at concentrations below 0.3 part per million (ppm).

NO<sub>2</sub> absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure (South Coast AQMD 2005; USEPA 2019a). The SoCAB is designated as an attainment area for NO<sub>2</sub> under the National AAQS California AAQS (CARB 2017a).

**Sulfur Dioxide (SO<sub>2</sub>)** is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and from chemical processes at chemical plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO<sub>2</sub> (South Coast AQMD 2005; USEPA 2019a). When sulfur dioxide forms sulfates (SO<sub>4</sub>) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO<sub>x</sub>). Thus, SO<sub>2</sub> is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO<sub>2</sub> may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO<sub>2</sub> may do greater harm by injuring lung tissue. The SoCAB is designated as attainment under the California and National AAQS (CARB 2017a).

**Suspended Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>)** consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM<sub>10</sub>, include the particulate matter with an aerodynamic diameter of 10 microns (i.e., 10 millionths of a meter or 0.0004 inch) or less. Inhalable fine particles, or PM<sub>2.5</sub>, have an aerodynamic diameter of 2.5 microns (i.e., 2.5 millionths of a meter or 0.0001 inch) or less. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind action on arid landscapes also contributes substantially to local particulate loading (i.e., fugitive dust). Both PM<sub>10</sub> and PM<sub>2.5</sub> may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems (South Coast AQMD 2005).

The US Environmental Protection Agency's (EPA) scientific review concluded that PM<sub>2.5</sub>, which penetrates deeply into the lungs, is more likely than PM<sub>10</sub> to contribute to health effects and at concentrations that extend well below those allowed by the current PM<sub>10</sub> standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms (South Coast AQMD 2005). There has been emerging evidence that even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.1 millionths of a meter or <0.000004 inch), known as ultrafine particulates (UFPs), have human health implications, because UFPs toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (South Coast AQMD 2013). However, the EPA or CARB have yet to adopt AAQS to regulate these particulates. Diesel particulate matter (DPM) is classified by the CARB as a carcinogen (CARB 1998). Particulate matter can also cause environmental



effects such as visibility impairment,<sup>1</sup> environmental damage,<sup>2</sup> and aesthetic damage<sup>3</sup> (South Coast AQMD 2005; USEPA 2019a). The SoCAB is a nonattainment area for PM<sub>2.5</sub> under California and National AAQS and a nonattainment area for PM<sub>10</sub> under the California AAQS (CARB 2017a).<sup>4</sup>

**Ozone (O<sub>3</sub>)** is commonly referred to as “smog” and is a gas that is formed when VOCs and NO<sub>x</sub>, both by-products of internal combustion engine exhaust, undergo photochemical reactions in the presence of sunlight. O<sub>3</sub> is a secondary criteria air pollutant. O<sub>3</sub> concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for the formation of this pollutant. O<sub>3</sub> poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O<sub>3</sub> can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O<sub>3</sub> also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O<sub>3</sub> also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O<sub>3</sub> harms sensitive vegetation during the growing season (South Coast AQMD 2005; USEPA 2019a). The SoCAB is designated as extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2017a).

**Lead (Pb)** is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (South Coast AQMD 2005; USEPA 2019a). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA’s regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted stricter lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.<sup>5</sup> As a result of these

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<sup>1</sup> PM<sub>2.5</sub> is the main cause of reduced visibility (haze) in parts of the United States.

<sup>2</sup> Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

<sup>3</sup> Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

<sup>4</sup> CARB approved the SCAQMD’s request to redesignate the SoCAB from serious nonattainment for PM<sub>10</sub> to attainment for PM<sub>10</sub> under the National AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM<sub>10</sub> standards during the period from 2004 to 2007. In June 2013, the EPA approved the State of California’s request to redesignate the PM<sub>10</sub> nonattainment area to attainment of the PM<sub>10</sub> National AAQS, effective on July 26, 2013.

<sup>5</sup> Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (SCAQMD 2012).

violations, the Los Angeles County portion of the SoCAB is designated nonattainment under the National AAQS for lead (South Coast AQMD 2012; CARB 2017a). Because emissions of lead are found only in projects that are permitted by South Coast AQMD, lead is not a pollutant of concern for the project.

## **TOXIC AIR CONTAMINANTS**

The public's exposure to air pollutants classified as toxic air contaminants (TACs) is a significant environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant (HAP) pursuant to Section 112(b) of the federal Clean Air Act (42 United States Code §7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. To date, CARB has established formal control measures for 11 TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

### **Diesel Particulate Matter**

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

CARB has promulgated the following specific rules to limit TAC emissions:

- 13 CCR Chapter 10, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- 13 CCR Chapter 10, Section 2480, Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- 13 CCR Section 2477 and Article 8, Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

### **Community Risk**

In addition, to reduce exposure to TACs, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources. CARB's recommendations on the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic, DPM from trucks, and benzene and 1,3-butadiene from passenger vehicles. CARB recommendations are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

### **Multiple Airborne Toxics Exposure Study (MATES)**

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on ambient concentrations of TACs and estimated the potential health risks from air toxics in the SoCAB. In 2008, South Coast AQMD conducted its third update to the MATES study (MATES III). The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in a million. The largest contributor to this risk was diesel exhaust, accounting for 84 percent of the cancer risk (South Coast AQMD 2008b).

South Coast AQMD recently released the fourth update (MATES IV). The results showed that the overall monitored risk for excess cancer from a lifetime exposure to ambient levels of air toxics decreased to approximately 418 in one million. Compared to the 2008 MATES III, monitored excess cancer risks decreased by approximately 65 percent. Approximately 90 percent of the risk is attributed to mobile sources while 10 percent is attributed to TACs from stationary sources, such as refineries, metal processing facilities, gas stations, and chrome plating facilities. The largest contributor to this risk was diesel exhaust, accounting for approximately 68 percent of the air toxics risk. Compared to MATES III, MATES IV found substantial improvement in air quality and associated decrease in air toxics exposure. As a result, the estimated basin-wide population-weighted risk decreased by approximately 57 percent compared to the analysis done for the MATES III time period (South Coast AQMD 2015a).

The Office of Environmental Health Hazard Assessment (OEHHA) updated the guidelines for estimating cancer risks on March 6, 2015. The new method utilizes higher estimates of cancer potency during early life exposures, which result in a higher calculation of risk. There are also differences in the assumptions on breathing rates and length of residential exposures. When combined together, South Coast AQMD estimates that risks for a given inhalation exposure level will be about 2.7 times higher using the proposed updated methods identified in MATES IV (e.g., 2.7 times higher than 418 in one million overall excess cancer risk) (South Coast AQMD 2015a).

## Air Quality Management Planning

South Coast AQMD is the agency responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

### 2016 AQMP

On March 3, 2017, South Coast AQMD adopted the 2016 AQMP as an update to the 2012 AQMP. The 2016 AQMP addresses strategies and measures to attain the following National AAQS:

- 2008 National 8-hour ozone standard by 2031,
- 2012 National annual PM<sub>2.5</sub> standard by 2025<sup>6</sup>,
- 2006 National 24-hour PM<sub>2.5</sub> standard by 2019,
- 1997 National 8-hour ozone standard by 2023, and the
- 1979 National 1-hour ozone standard by year 2022.

It is projected that total NO<sub>x</sub> emissions in the SoCAB would need to be reduced to 150 tons per day (tpd) by year 2023 and to 100 tpd in year 2031 to meet the 1997 and 2008 federal 8-hour ozone standards. The strategy to meet the 1997 federal 8-hour ozone standard would also lead to attaining the 1979 federal 1-hour ozone standard by year 2022 (South Coast AQMD 2017), which requires reducing NO<sub>x</sub> emissions in the SoCAB to 250 tpd. This is approximately 45 percent additional reductions above existing regulations for the 2023 ozone standard and 55 percent additional reductions above existing regulations to meet the 2031 ozone standard.

Reducing NO<sub>x</sub> emissions would also reduce PM<sub>2.5</sub> concentrations in the SoCAB. However, as the goal is to meet the 2012 federal annual PM<sub>2.5</sub> standard no later than year 2025, South Coast AQMD is seeking to reclassify the SoCAB from “moderate” to “serious” nonattainment under this federal standard. A “moderate” nonattainment would require meeting the 2012 federal standard by no later than 2021.

Overall, the 2016 AQMP is composed of stationary and mobile-source emission reductions from regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile-source strategies, and reductions from federal sources such as aircrafts, locomotives, and ocean-going vessels. Strategies outlined in

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<sup>6</sup> The 2016 AQMP requests a reclassification from moderate to serious non-attainment for the 2012 National PM<sub>2.5</sub> standard.

the 2016 AQMP would be implemented in collaboration between CARB and the EPA (South Coast AQMD 2017).

## LEAD STATE IMPLEMENTATION PLAN

In 2008 EPA designated the Los Angeles County portion of the SoCAB nonattainment under the federal lead (Pb) classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in Vernon and the City of Industry exceeding the new standard. The rest of the SoCAB, outside the Los Angeles County nonattainment area remains in attainment of the new standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to EPA for approval.

## AREA DESIGNATIONS

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan (SIP). Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- **Unclassified:** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- **Attainment:** a pollutant is in attainment if the CAAQS for that pollutant was not violated at any site in the area during a three-year period.
- **Nonattainment:** a pollutant is in nonattainment if there was at least one violation of a state AAQS for that pollutant in the area.
- **Nonattainment/Transitional:** a subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 2, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*. The SoCAB is designated in attainment of the California AAQS for sulfates. The SoCAB is designated as nonattainment for lead (Los Angeles County only) under the National AAQS.

**Table 2 Attainment Status of Criteria Pollutants in the South Coast Air Basin**

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM <sub>10</sub>	Serious Nonattainment	Attainment/Maintenance
PM <sub>2.5</sub>	Nonattainment	Nonattainment <sup>1</sup>
CO	Attainment	Attainment
NO <sub>2</sub>	Attainment	Attainment/Maintenance
SO <sub>2</sub>	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only) <sup>2</sup>
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2017b.

<sup>1</sup> South Coast AQMD is seeking to reclassify the SoCAB from “moderate” to “serious” nonattainment under federal PM<sub>2.5</sub> standard.

<sup>2</sup> In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new federal and existing state AAQS as a result of large industrial emitters. Remaining areas in the SoCAB are unclassified.

## Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site are best documented by measurements taken by the South Coast AQMD. The project site is located within Source Receptor Area (SRA) 3 – Southwest Coastal LA County. The air quality monitoring station within SRA 3 closest to the project site is the Long Beach – 2425 Webster Street Monitoring Station. This station monitors O<sub>3</sub>, NO<sub>2</sub>, and PM<sub>10</sub>. Data for PM<sub>2.5</sub> is supplemented by the Compton – 700 Bullis Road Monitoring Station. The most current five years of data from these monitoring stations are included in Table 3. The data show occasional violations of the state O<sub>3</sub> and federal NO<sub>x</sub> standards and regular violations of state PM<sub>10</sub> and federal PM<sub>2.5</sub> standards in the last five years.

**Table 3 Ambient Air Quality Monitoring Summary**

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations				
	2014	2015	2016	2017	2018
<b>Ozone (O<sub>3</sub>)</b>					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	0	0	0	0	0
State 8-hour ≥ 0.07 ppm (days exceed threshold)	1	0	0	0	0
Federal 8-Hour > 0.075 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.087	0.087	0.079	0.082	0.074
Max. 8-Hour Conc. (ppm)	0.072	0.066	0.059	0.068	0.063
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>					
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Federal 1-Hour ≥ 0.100 ppm (days exceed threshold)	2	1	0	0	0
Max. 1-Hour Conc. (ppb)	0.1359	0.1018	0.0756	0.0895	0.0853
<b>Coarse Particulates (PM<sub>10</sub>)</b>					
State 24-Hour > 50 µg/m <sup>3</sup> (days exceed threshold)	3	6	8	10	4
Federal 24-Hour > 150 µg/m <sup>3</sup> (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m <sup>3</sup> )	84.0	80.0	75.3	79.0	84.0

**Table 3 Ambient Air Quality Monitoring Summary**

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations				
	2014	2015	2016	2017	2018
<b>Fine Particulates (PM<sub>2.5</sub>)</b>					
Federal 24-Hour > 35 µg/m <sup>3</sup> (days exceed threshold)	1	3	1	5	2
Max. 24-Hour Conc. (µg/m <sup>3</sup> )	35.8	41.3	36.3	66.7	49.4
Source: CARB 2019. Data for O <sub>3</sub> , NO <sub>2</sub> , and PM <sub>10</sub> obtained from the Long Beach –2425 Webster Street Monitoring Station. Data for PM <sub>2.5</sub> obtained from the Compton – 700 Bullis Road Monitoring Station. ppm: parts per million; parts per billion, µg/m <sup>3</sup> : micrograms per cubic meter Notes: * Data not available.					

## Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Residential areas are also considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public. The nearest sensitive receptors to the proposed project site are the employees and students of the Los Angeles Harbor College and the residences to the east of I-110 along Figueroa Street.

## Methodology

Projected construction-related air pollutant emissions are calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2.25. CalEEMod compiles an emissions inventory of construction (fugitive dust, off-gas emissions, on-road emissions, and off-road emissions), area sources, indirect emissions from energy use, mobile sources, indirect emissions from waste disposal (annual only), and indirect emissions from water/wastewater (annual only) use. The calculated emissions of the project are compared to thresholds of significance for individual projects using the South Coast AQMD's CEQA Air Quality Analysis Guidance Handbook.

## Thresholds of Significance

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in South Coast AQMD's *CEQA Air Quality Handbook* and the significance thresholds on South

Coast AQMD's website (South Coast AQMD 1993).<sup>7</sup> CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. South Coast AQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation. In addition to the daily thresholds listed above, projects are also subject to the AAQS. These are addressed through an analysis of localized CO impacts and localized significance thresholds (LSTs).

## REGIONAL SIGNIFICANCE THRESHOLDS

South Coast AQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB. Table 4, *South Coast AQMD Significance Thresholds*, lists South Coast AQMD's regional significance thresholds that are applicable for all projects uniformly regardless of size or scope. There is growing evidence that although ultrafine particulates contribute a very small portion of the overall atmospheric mass concentration, they represent a greater proportion of the health risk from PM. However, the EPA or CARB have not yet adopted AAQS to regulate ultrafine particulates; therefore, South Coast AQMD has not developed thresholds for them.

**Table 4 South Coast AQMD Significance Thresholds**

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO <sub>x</sub> )	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO <sub>x</sub> )	150 lbs/day	150 lbs/day
Particulates (PM <sub>10</sub> )	150 lbs/day	150 lbs/day
Particulates (PM <sub>2.5</sub> )	55 lbs/day	55 lbs/day

Source: South Coast AQMD 2019.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- Linked to increased cancer risk (PM<sub>2.5</sub>, TACs)
- Aggravates respiratory disease (O<sub>3</sub>, PM<sub>2.5</sub>)
- Increases bronchitis (O<sub>3</sub>, PM<sub>2.5</sub>)
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O<sub>3</sub>)
- Reduces resistance to infections and increases fatigue (O<sub>3</sub>)
- Reduces lung growth in children (PM<sub>2.5</sub>)
- Contributes to heart disease and heart attacks (PM<sub>2.5</sub>)
- Contributes to premature death (O<sub>3</sub>, PM<sub>2.5</sub>)

<sup>7</sup> SCAQMD's Air Quality Significance Thresholds are current as of March 2015 and can be found here: <http://www.aqmd.gov/ceqa/hdbk.html>.



- Linked to lower birth weight in newborns (PM<sub>2.5</sub>) (South Coast AQMD 2015b)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of PM<sub>2.5</sub> is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists responsible for a landmark children's health study found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (South Coast AQMD 2015c).

Mass emissions in Table 4 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. Therefore, regional emissions from a single project do not single-handedly trigger a regional health impact. South Coast AQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of air quality in the SoCAB. To achieve the health-based standards established by the EPA, South Coast AQMD prepares an AQMP that details regional programs to attain the AAQS.

## CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined.

In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hot spot analysis conducted for the attainment by South Coast AQMD for busiest intersections in Los Angeles during the peak morning and afternoon periods plan did not predict a violation of CO standards.<sup>8</sup> As identified in South Coast AQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in previous years, prior to redesignation, were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2017).

## LOCALIZED SIGNIFICANCE THRESHOLDS

South Coast AQMD developed LSTs for emissions of NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> generated at the project site (offsite mobile-source emissions are not included in the LST analysis). LSTs represent the maximum emissions

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<sup>8</sup> The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

at a project site that are not expected to cause or contribute to an exceedance of the most stringent federal or state AAQS and are shown in Table 5, *South Coast AQMD Localized Significance Thresholds*.

**Table 5 South Coast AQMD Localized Significance Thresholds**

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO <sub>2</sub> Standard (CAAQS)	0.18 ppm
Annual NO <sub>2</sub> Standard (CAAQS)	0.03 ppm
24-Hour PM <sub>10</sub> Standard – Construction (South Coast AQMD) <sup>1</sup>	10.4 µg/m <sup>3</sup>
24-Hour PM <sub>2.5</sub> Standard – Construction (South Coast AQMD) <sup>1</sup>	10.4 µg/m <sup>3</sup>
24-Hour PM <sub>10</sub> Standard – Operation (South Coast AQMD) <sup>1</sup>	2.5 µg/m <sup>3</sup>
24-Hour PM <sub>2.5</sub> Standard – Operation (South Coast AQMD) <sup>1</sup>	2.5 µg/m <sup>3</sup>

Source: South Coast AQMD 2019.

ppm – parts per million; µg/m<sup>3</sup> – micrograms per cubic meter

<sup>1</sup> Threshold is based on South Coast AQMD Rule 403. Since the SoCAB is in nonattainment for PM<sub>10</sub> and PM<sub>2.5</sub>, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

To assist lead agencies, South Coast AQMD developed screening-level LSTs to back-calculate the mass amount (lbs. per day) of emissions generated onsite that would trigger the levels shown in Table 5 for projects under 5-acres. These “screening-level” LSTs tables are the localized significance thresholds for all projects of five acres and less; however, it can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required to compare concentrations of air pollutants generated by the project to the localized concentrations shown in Table 5.

In accordance with South Coast AQMD’s LST methodology, construction LSTs are based on the acreage disturbed per day based on equipment use. The construction LSTs for the project site in SRA 3 are shown in Table 6, *South Coast AQMD Screening-Level Construction Localized Significance Thresholds*, sensitive receptors within 82 feet (25 meters) for NO<sub>x</sub> and CO and 800 feet (244 meters) for PM<sub>10</sub> and PM<sub>2.5</sub>. These two distances represent residences at 800 feet, which are assumed to be exposed to construction emissions 24 hours a day, and the student population at 82 feet, who would not be exposed to construction emissions for most of the day.

**Table 6 South Coast AQMD Screening-Level Construction Localized Significance Thresholds**

Acreage Disturbed	Threshold (lbs/day)			
	Nitrogen Oxides (NO <sub>x</sub> ) <sup>1</sup>	Carbon Monoxide (CO) <sup>1</sup>	Coarse Particulates (PM <sub>10</sub> ) <sup>2</sup>	Fine Particulates (PM <sub>2.5</sub> ) <sup>2</sup>
≤1.00 Acre Disturbed Per Day	91	664	68	29
1.31 Acre Disturbed Per Day	103	759	71	30
2.50 Acre Disturbed Per Day	142	1,101	81	35
3.50 Acre Disturbed Per Day	164	1,368	89	39

Source: South Coast AQMD 2008a and 2011.

<sup>1</sup> LSTs are based on receptors within 82 feet (25 meters) in SRA 3.

<sup>2</sup> LSTs are based on receptors within 800 feet (244 meters) in SRA 10.

Because the project is not an industrial project that has the potential to emit substantial sources of stationary emissions, operational LSTs are not an air quality impact of concern associated with the project.

Whenever a project would require use of chemical compounds that have been identified in South Coast AQMD Rule 1401, placed on CARB's air toxics list pursuant to AB 1807, or placed on the EPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the South Coast AQMD. Table 7, *Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. The purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment, not the significant effects of the environment on the proposed project. (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (Case No. S213478)). CEQA does not require CEQA-level environmental document to analyze the environmental effects of attracting development and people to an area. However, the environmental document must analyze the impacts of environmental hazards on future users, when a proposed project exacerbates an existing environmental hazard or condition. Residential, commercial, and office uses do not use substantial quantities of TACs and typically do not exacerbate existing hazards, so these thresholds are typically applied to new industrial projects.

**Table 7      South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds**

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0
Cancer Burden in areas ≥ 1 in 1 million	> 0.5 excess cancer cases
Source: South Coast AQMD 2019.	

## GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHG, to the atmosphere. Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHG—water vapor,<sup>9</sup> carbon (CO<sub>2</sub>), methane (CH<sub>4</sub>), and ozone (O<sub>3</sub>)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).<sup>10</sup> The major GHG are briefly described below.

- **Carbon dioxide (CO<sub>2</sub>)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH<sub>4</sub>)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.
- **Nitrous oxide (N<sub>2</sub>O)** is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.
- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.
  - **Chlorofluorocarbons (CFCs)** are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are also ozone-depleting gases

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<sup>9</sup> Water vapor (H<sub>2</sub>O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

<sup>10</sup> Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017a). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

and are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.

- **Perfluorocarbons (PFCs)** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF<sub>4</sub>] and perfluoroethane [C<sub>2</sub>F<sub>6</sub>]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high global warming potential.
- **Sulfur Hexafluoride (SF<sub>6</sub>)** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF<sub>6</sub> is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.
- **Hydrochlorofluorocarbons (HCFCs)** contain hydrogen, fluorine, chlorine, and carbon atoms. Although ozone-depleting substances, they are less potent at destroying stratospheric ozone than CFCs. They have been introduced as temporary replacements for CFCs and are also GHGs.
- **Hydrofluorocarbons (HFCs)** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs (IPCC 2001; USEPA 2019b).

GHGs are dependent on the lifetime or persistence of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 8, *GHG Emissions and Their Relative Global Warming Potential Compared to CO<sub>2</sub>*. The GWP is used to convert GHGs to CO<sub>2</sub>-equivalence (CO<sub>2</sub>e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Fourth Assessment Report (AR4) GWP values for CH<sub>4</sub>, a project that generates 10 metric tons (MT) of CH<sub>4</sub> would be equivalent to 250 MT of CO<sub>2</sub>.<sup>11</sup>

**Table 8 GHG Emissions and Their Relative Global Warming Potential Compared to CO<sub>2</sub>**

GHGs	Second Assessment Report Atmospheric Lifetime (Years)	Fourth Assessment Report Atmospheric Lifetime (Years)	Second Assessment Report Global Warming Potential Relative to CO <sub>2</sub> <sup>1</sup>	Fourth Assessment Report Global Warming Potential Relative to CO <sub>2</sub> <sup>1</sup>
Carbon Dioxide (CO <sub>2</sub> )	50 to 200	50 to 200	1	1
Methane <sup>2</sup> (CH <sub>4</sub> )	12 (±3)	12	21	25
Nitrous Oxide (N <sub>2</sub> O)	120	114	310	298
Hydrofluorocarbons:				
HFC-23	264	270	11,700	14,800
HFC-32	5.6	4.9	650	675
HFC-125	32.6	29	2,800	3,500
HFC-134a	14.6	14	1,300	1,430
HFC-143a	48.3	52	3,800	4,470
HFC-152a	1.5	1.4	140	124
HFC-227ea	36.5	34.2	2,900	3,220
HFC-236fa	209	240	6,300	9,810
HFC-4310mee	17.1	15.9	1,300	1,030
Perfluoromethane: CF <sub>4</sub>	50,000	50,000	6,500	7,390
Perfluoroethane: C <sub>2</sub> F <sub>6</sub>	10,000	10,000	9,200	12,200
Perfluorobutane: C <sub>4</sub> F <sub>10</sub>	2,600	NA	7,000	8,860
Perfluoro-2-methylpentane: C <sub>6</sub> F <sub>14</sub>	3,200	NA	7,400	9,300
Sulfur Hexafluoride (SF <sub>6</sub> )	3,200	NA	23,900	22,800

Source: IPCC 1995; IPCC 2007.

Notes: The GWP values in the IPCC's Fifth Assessment Report (2013) reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO<sub>2</sub>. However, South Coast AQMD uses the AR4 GWP values to maintain consistency in statewide GHG emissions modeling. In addition, the 2017 Scoping Plan Update was based on the AR4 GWP values.

<sup>1</sup> Based on 100-year time horizon of the GWP of the air pollutant relative to CO<sub>2</sub>.

<sup>2</sup> The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO<sub>2</sub> is not included.

## California's Greenhouse Gas Sources and Relative Contribution

In 2019, the statewide GHG emissions inventory was updated for 2000 to 2017 emissions using the GWPs in IPCC's AR4.<sup>12</sup> Based on these GWPs, California produced 424.10 MMTCO<sub>2</sub>e GHG emissions in 2017. California's transportation sector was the single largest generator of GHG emissions, producing 40.1 percent of the state's total emissions. Industrial sector emissions made up 21.1 percent, and electric power generation made up 14.7 percent of the state's emissions inventory. Other major sectors of GHG emissions include commercial and residential (9.7 percent), agriculture and forestry (7.6 percent) high GWP (4.7 percent), and recycling and waste (2.1 percent) (CARB 2019a).

California's GHG emissions have followed a declining trend since 2007. In 2017, emissions from routine GHG emitting activities statewide were 424 MMTCO<sub>2</sub>e, 5 MMTCO<sub>2</sub>e lower than 2016 levels. This represents an overall decrease of 14 percent since peak levels in 2004 and 7 MMTCO<sub>2</sub>e below the 1990 level and the state's

<sup>12</sup> Methodology for determining the statewide GHG inventory is not the same as the methodology used to determine statewide GHG emissions under Assembly Bill 32 (2006).

2020 GHG target. During the 2000 to 2017 period, per capita GHG emissions in California have continued to drop from a peak in 2001 of 14.0 MTCO<sub>2</sub>e per capita to 10.7 MTCO<sub>2</sub>e per capita in 2017, a 24 percent decrease. Overall trends in the inventory also demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product (GDP)) is declining, representing a 41 percent decline since the 2001 peak, while the state's GDP has grown 52 percent during this period. For the first time since California started to track GHG emissions, California uses more electricity from zero-GHG sources (hydro, solar, wind, and nuclear energy) (CARB 2019b).

## **Regulatory Settings**

### **REGULATION OF GHG EMISSIONS ON A NATIONAL LEVEL**

The EPA announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements but allow the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

To regulate GHGs from passenger vehicles, EPA was required to issue an endangerment finding. The finding identifies emissions of six key GHGs—CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, hydrofluorocarbons, perfluorocarbons, and SF<sub>6</sub>—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the project's GHG emissions inventory because they constitute the majority of GHG emissions and, per South Coast AQMD guidance, are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

#### **US Mandatory Report Rule for GHGs (2009)**

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT or more of CO<sub>2</sub> per year are required to submit an annual report.

#### **Update to Corporate Average Fuel Economy Standards (2010/2012)**

The current Corporate Average Fuel Economy standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in 2012 for model years 2017–2025 that will require a fleet average of 54.5 miles per gallon in 2025.

While the EPA is reexamining the 2017–2025 emissions and CAFE standards, a consortium of automakers and California have agreed on a voluntary framework to reduce emissions that can serve as an alternative path forward for clean vehicle standards nationwide. Automakers who agreed to the framework are Ford, Honda,

BMW of North America and Volkswagen Group of America. The framework supports continued annual reductions of vehicle greenhouse gas emissions through the 2026 model year, encourages innovation to accelerate the transition to electric vehicles, and provides industry the certainty needed to make investments and create jobs. This commitment means that the auto companies party to the voluntary agreement will only sell cars in the United States that meet these standards (CARB 2019c).

### **EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)**

Pursuant to its authority under the Clean Air Act, the EPA has been developing regulations for new, large, stationary sources of emissions, such as power plants and refineries. Under former President Obama's 2013 Climate Action Plan, the EPA was directed to develop regulations for existing stationary sources as well. On June 19, 2019, the EPA issued the final Affordable Clean Energy (ACE) rule which became effective on August 19, 2019. The ACE rule was crafted under the direction of President Trump's Energy Independence Executive Order. It officially rescinds the Clean Power Plan rule issued during the Obama Administration and sets emissions guidelines for states in developing plans to limit CO<sub>2</sub> emissions from coal-fired power plants.

### **REGULATION OF GHG EMISSIONS ON A STATE LEVEL**

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32) and Senate Bill 375 (SB 375).

#### **Executive Order S-3-05**

Executive Order S-3-05, signed June 1, 2005. Executive Order S-3-05 set the following GHG reduction targets for the State:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

#### **Assembly Bill 32, the Global Warming Solutions Act (2006)**

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in AB 32. AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-03-05.

#### ***CARB 2008 Scoping Plan***

The final Scoping Plan was adopted by CARB on December 11, 2008. The *2008 Scoping Plan* identified that GHG emissions in California are anticipated to be approximately 596 MMTCO<sub>2e</sub> in 2020. In December 2007, CARB approved a 2020 emissions limit of 427 MMTCO<sub>2e</sub> (471 million tons) for the state (CARB 2008). In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than



25,000 MTCO<sub>2</sub>e per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012.

### *First Update to the Scoping Plan*

CARB completed a five-year update to the 2008 Scoping Plan, as required by AB 32. The First Update to the Scoping Plan was adopted at the May 22, 2014, board hearing. The update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the original 2008 Scoping Plan. As part of the update, CARB recalculated the 1990 GHG emission levels with the updated AR4 GWPs, and the 427 MMTCO<sub>2</sub>e 1990 emissions level and 2020 GHG emissions limit, established in response to AB 32, is slightly higher at 431 MMTCO<sub>2</sub>e (CARB 2014).

As identified in the Update to the Scoping Plan, California is on track to meeting the goals of AB 32. However, the update also addresses the state's longer-term GHG goals within a post-2020 element. The post-2020 element provides a high-level view of a long-term strategy for meeting the 2050 GHG goals, including a recommendation for the state to adopt a midterm target. According to the Update to the Scoping Plan, local government reduction targets should chart a reduction trajectory that is consistent with or exceeds the trajectory created by statewide goals (CARB 2014). CARB identified that reducing emissions to 80 percent below 1990 levels will require a fundamental shift to efficient, clean energy in every sector of the economy. Progressing toward California's 2050 climate targets will require significant acceleration of GHG reduction rates. Emissions from 2020 to 2050 will have to decline several times faster than the rate needed to reach the 2020 emissions limit (CARB 2014).

### **Executive Order B-30-15**

Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions in the state to 40 percent of 1990 levels by year 2030. Executive Order B-30-15 also directs CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in Executive Order S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaption strategy, Safeguarding California, in order to ensure climate change is accounted for in state planning and investment decisions.

### **Senate Bill 32 and Assembly Bill 197**

In September 2016, Governor Brown signed SB 32 and AB 197 into law, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

### *2017 Climate Change Scoping Plan Update*

Executive Order B-30-15 and SB 32 required CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On December 24, 2017, CARB adopted the 2017 Climate Change Scoping Plan Update, which outlines potential regulations and programs, including strategies consistent with AB 197

requirements, to achieve the 2030 target. The 2017 Scoping Plan establishes a new emissions limit of 260 MMTCO<sub>2</sub>e for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030 (CARB 2017c).

California's climate strategy will require contributions from all sectors of the economy, including enhanced focus on zero- and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, such as solar roofs, wind, and other types of distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning, to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for GHG reductions at stationary sources complement local air pollution control efforts by the local air districts to tighten criteria air pollutants and TACs emissions limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks;
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydrofluorocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- Continued implementation of SB 375.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

In addition to the statewide strategies listed above, the 2017 Climate Change Scoping Plan also identified local governments as essential partners in achieving the State's long-term GHG reduction goals and identified local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends statewide targets of no more than 6 MTCO<sub>2</sub>e or less per capita by 2030 and 2 MTCO<sub>2</sub>e or less per capita by 2050. CARB recommends that local governments evaluate and adopt robust and quantitative locally-appropriate goals that align with the statewide per capita targets and the State's sustainable development objectives and develop plans to achieve the local goals. The statewide per capita goals were developed by applying the percent reductions necessary to reach the 2030 and 2050 climate goals (i.e., 40 percent and 80 percent, respectively) to the State's

1990 emissions limit established under AB 32. For CEQA projects, CARB states that lead agencies have discretion to develop evidenced-based numeric thresholds (mass emissions, per capita, or per service population)—consistent with the Scoping Plan and the state’s long-term GHG goals. To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT, and direct investments in GHG reductions within the project’s region that contribute potential air quality, health, and economic co-benefits. Where further project design or regional investments are infeasible or not proven to be effective, CARB recommends mitigating potential GHG impacts through purchasing and retiring carbon credits.

The Scoping Plan scenario is set against what is called the business-as-usual (BAU) yardstick—that is, what would the GHG emissions look like if the State did nothing at all beyond the existing policies that are required and already in place to achieve the 2020 limit, as shown in Table 9, *2017 Climate Change Scoping Plan Emissions Reductions Gap*. It includes the existing renewables requirements, advanced clean cars, the “10 percent” Low Carbon Fuel Standard (LCFS), and the SB 375 program for more vibrant communities, among others. However, it does not include a range of new policies or measures that have been developed or put into statute over the past two years. Also shown in the table, the known commitments are expected to result in emissions that are 60 MMTCO<sub>2</sub>e above the target in 2030. If the estimated GHG reductions from the known commitments are not realized due to delays in implementation or technology deployment, the post-2020 Cap-and-Trade Program would deliver the additional GHG reductions in the sectors it covers to ensure the 2030 target is achieved.

**Table 9      2017 Climate Change Scoping Plan Emissions Reductions Gap**

Modeling Scenario	2030 GHG Emissions MMTCO <sub>2</sub> e
Reference Scenario (Business-as-Usual)	389
With Known Commitments	320
2030 GHG Target	<b>260</b>
Gap to 2030 Target	<b>60</b>

Source: CARB 2017c.

Table 10, *2017 Climate Change Scoping Plan Emissions Change by Sector*, provides estimated GHG emissions by sector, compared to 1990 levels, and the range of GHG emissions for each sector estimated for 2030.

**Table 10 2017 Climate Change Scoping Plan Emissions Change by Sector**

Scoping Plan Sector	1990 MMTCO <sub>2</sub> e	2030 Proposed Plan Ranges MMTCO <sub>2</sub> e	% Change from 1990
Agricultural	26	24-25	-8% to -4%
Residential and Commercial	44	38-40	-14% to -9%
Electric Power	108	30-53	-72% to -51%
High GWP	3	8-11	267% to 367%
Industrial	98	83-90	-15% to -8%
Recycling and Waste	7	8-9	14% to 29%
Transportation (including TCU)	152	103-111	-32% to -27%
Net Sink <sup>1</sup>	-7	TBD	TBD
Sub Total	431	294-339	-32% to -21%
Cap-and-Trade Program	NA	24-79	NA
<b>Total</b>	<b>431</b>	<b>260</b>	<b>-40%</b>

Source: CARB 2017c.

Notes: TCU = Transportation, Communications, and Utilities; TBD: To Be Determined.

<sup>1</sup> Work is underway through 2017 to estimate the range of potential sequestration benefits from the natural and working lands sector.

## Senate Bill 1383

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH<sub>4</sub>. Black carbon is the light-absorbing component of fine particulate matter produced during incomplete combustion of fuels. SB 1383 requires the state board, no later than January 1, 2018, to approve and begin implementing that comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030, as specified. The bill also establishes targets for reducing organic waste in landfill. On March 14, 2017, CARB adopted the “Final Proposed Short-Lived Climate Pollutant Reduction Strategy,” which identifies the state’s approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s despite the tripling of diesel fuel use (CARB 2017b). In-use on-road rules are expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. The South Coast AQMD is one of the air districts that requires air pollution control technologies for chain-driven broilers, which reduces particulate emissions from these charbroilers by over 80 percent (CARB 2017b). Additionally, South Coast AQMD Rule 445 limits installation of new fireplaces in the SoCAB.

## Senate Bill 375

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range

transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPOs). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 MMTCO<sub>2e</sub> of reductions by 2020 and 15 MMTCO<sub>2e</sub> of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

### *2017 Update to the SB 375 Targets*

CARB is required to update the targets for the MPOs every eight years. In June 2017, CARB released updated targets and technical methodology and recently released another update in February 2018. The updated targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update, while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of percent per capita reduction in GHG emissions from automobiles and light trucks relative to 2005. This excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies such as statewide road user pricing. The proposed targets call for greater per capita GHG emission reductions from SB 375 than are currently in place, which for 2035, translate into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs. As proposed, CARB staff's proposed targets would result in an additional reduction of over 8 MMTCO<sub>2e</sub> in 2035 compared to the current targets. For the next round of SCS updates, CARB's updated targets for the SCAG region are an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018). CARB adopted the updated targets and methodology on March 22, 2018. All SCSs adopted after October 1, 2018 are subject to these new targets.

### *SCAG's 2016-2040 RTP/SCS*

SB 375 requires each MPO to prepare an SCS in their regional transportation plan. For the SCAG region, the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted on April 7, 2016, and is an update to the 2012 RTP/SCS (SCAG 2016). In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation

measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

The 2016-2040 RTP/SCS projects that the SCAG region will meet or exceed the passenger per capita targets set in 2010 by CARB. It is projected that VMT per capita in the region for year 2040 would be reduced by 7.4 percent with implementation of the 2016-2040 RTP/SCS compared to a no-plan year 2040 scenario. Under the 2016-2040 RTP/SCS, SCAG anticipates lowering GHG emissions 8 percent below 2005 levels by 2020, 18 percent by 2035, and 21 percent by 2040. The 18 percent reduction by 2035 over 2005 levels represents a 2 percent increase in reduction compared to the 2012 RTP/SCS projection. Overall, the SCS is meant to provide growth strategies that will achieve the aforementioned regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high quality transit areas and livable corridors and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles (SCAG 2016). However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency.

### **Assembly Bill 1493**

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and was anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the Corporate Average Fuel Economy standards under *Federal Laws*, above). In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

### **Executive Order S-01-07**

On January 18, 2007, the state set a new LCFS for transportation fuels sold in the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in carbon dioxide equivalent gram per unit of fuel energy sold in California. The LCFS requires a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

### **Senate Bills 1078, 107, X1-2, and Executive Order S-14-08**

A major component of California's Renewable Energy Program is the RPS established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount

of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08 was signed in November 2008, which expanded the state's Renewable Energy Standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects, because electricity production from renewable sources is generally considered carbon neutral.

### **Senate Bill 350**

Senate Bill 350 (de Leon), was signed into law in September 2015. SB 350 establishes tiered increases to the RPS of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

### **Senate Bill 100**

On September 10, 2018, Governor Brown signed SB 100, which replaces the SB 350 requirement of 45 percent renewable energy by 2027 with the requirement of 50 percent by 2026 and also raises California's RPS requirements for 2050 from 50 percent to 60 percent. SB 100 also establishes RPS requirements for publicly owned utilities that consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. Furthermore, the bill also establishes an overall state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

### **Executive Order B-55-18**

Executive Order B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO<sub>2e</sub> from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

### **Executive Order B-16-2012**

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate zero-emissions vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directs the number of zero-emission vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are zero-emission by 2015 and at least 25 percent by 2020. The executive order also establishes a target

for the transportation sector of reducing GHG emissions from the transportation sector 80 percent below 1990 levels.

### **California Building Code: Building Energy Efficiency Standards**

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2016 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the CEC adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017.

The 2016 Standards continues to improve upon the previous 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. Under the 2016 Standards, residential and nonresidential buildings are 28 and 5 percent more energy efficient than the 2013 Standards, respectively (CEC 2015a). Buildings that are constructed in accordance with the 2013 Building Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the prior 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features. While the 2016 standards do not achieve zero net energy, they do get very close to the state's goal and make important steps toward changing residential building practices in California. The 2019 standards will take the final step to achieve zero net energy for newly constructed residential buildings throughout California (CEC 2015b).

The 2019 standards move towards cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multi-family buildings of 3 stories and less. Four key areas the 2019 standards will focus on include 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements (CEC 2018a). Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards while single-family homes will be 7 percent more energy efficient (CEC 2018b). When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards (CEC 2018b).

### **California Building Code: CALGreen**

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.<sup>13</sup> The mandatory provisions of CALGreen became effective January 1, 2011, and were last updated in 2016. The 2016 CALGreen became effective on January 1, 2017.

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<sup>13</sup> The green building standards became mandatory in the 2010 edition of the code.



## **2006 Appliance Efficiency Regulations**

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as “business as usual,” they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

## **Solid Waste Regulations**

California’s Integrated Waste Management Act of 1989 (AB 939; Public Resources Code §§ 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses.

The California Solid Waste Reuse and Recycling Access Act (AB 1327; Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

Section 5.408 of the 2016 and 2019 CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

In October of 2014 Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.

## **Water Efficiency Regulations**

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed “SBX7-7.” SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 requires urban water providers to adopt a

water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

## Thresholds of Significance

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.<sup>14</sup>

## SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, South Coast AQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) held in September 2010, South Coast AQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where South Coast AQMD is not the lead agency (South Coast AQMD 2010):

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

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<sup>14</sup> The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, South Coast AQMD requires an assessment of GHG emissions. South Coast AQMD is proposing a screening-level threshold of 3,000 MTCO<sub>2</sub>e annually for all land use types or the following land-use-specific thresholds: 1,400 MTCO<sub>2</sub>e for commercial projects, 3,500 MTCO<sub>2</sub>e for residential projects, or 3,000 MTCO<sub>2</sub>e for mixed-use projects. These bright-line thresholds are based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore, less than cumulatively considerable impact on GHG emissions:

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

The South Coast AQMD Working Group has identified an efficiency target for projects that exceed the screening threshold of 4.8 MTCO<sub>2</sub>e per year per service population (MTCO<sub>2</sub>e/year/SP) for project-level analyses and 6.6 MTCO<sub>2</sub>e/year/SP for plan level projects (e.g., program-level projects such as general plans) for the year 2020.<sup>15</sup> The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.

For purposes of this analysis, because the proposed project has an anticipated opening year post-2020 (year 2021), the bright-line screening-level criterion of 3,000 MTCO<sub>2</sub>e/yr is used as the significance threshold for this project. Therefore, if the project operation-phase emissions exceed the 3,000 MTCO<sub>2</sub>e/yr threshold, GHG emissions would be considered potentially significant in the absence of mitigation measures.

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<sup>15</sup> It should be noted that the Working Group also considered efficiency targets for 2035 for the first time in this Working Group meeting.

## BIBLIOGRAPHY

- Bay Area Air Quality Management District (BAAQMD). 2017, May. California Environmental Quality Act Air Quality Guidelines.
- California Air Pollution Control Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod). Version 2016.3.2. Prepared by: BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts.
- California Air Resources Board (CARB). 1998, April 22. The Report on Diesel Exhaust.  
<http://www.arb.ca.gov/toxics/dieseltac/de-fnds.htm>.
- . 1999. California Air Resources Board (CARB). Final Staff Report: Update to the Toxic Air Contaminant List.
- . 2005, April. Air Quality and Land Use Handbook: A Community Health Perspective.  
<https://www.arb.ca.gov/ch/handbook.pdf>.
- . 2008, October. Climate Change Proposed Scoping Plan, a Framework for Change.
- . 2010, August. Staff Report Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375.
- . 2014, May 15. First Update to the Climate Change Scoping Plan: Building on the Framework, Pursuant to AB 32, The California Global Warming Solutions Act of 2006.  
<http://www.arb.ca.gov/cc/scopingplan/document/updatescopingplan2013.htm>.
- . 2016, October 1. Ambient Air Quality Standards. <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.
- . 2017a, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy.  
<https://www.arb.ca.gov/cc/shortlived/shortlived.htm>.
- . 2017b, May 5. Area Designations Maps/State and National. <http://www.arb.ca.gov/desig/desig.htm>.
- . 2017c, November. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target.  
[https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf).
- . 2018, February. Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets.  
[https://www.arb.ca.gov/cc/sb375/sb375\\_target\\_update\\_final\\_staff\\_report\\_feb2018.pdf](https://www.arb.ca.gov/cc/sb375/sb375_target_update_final_staff_report_feb2018.pdf).
- . 2019a, August 26. 2019 Edition California Greenhouse Gas Inventory for 2000-2017: By Category as Defined in the 2008 Scoping Plan. <https://www.arb.ca.gov/cc/inventory/data/data.htm>.

- . 2019b, August 26. California Greenhouse Emissions for 2000 to 2017: Trends of Emissions and Other Indicators. <https://www.arb.ca.gov/cc/inventory/data/data.htm>.
- . 2019c, September 5 (accessed). California and major automakers reach groundbreaking framework agreement on clean emission standards. Accessed September 5, 2019. <https://ww2.arb.ca.gov/news/california-and-major-automakers-reach-groundbreaking-framework-agreement-clean-emission>.
- . 2020, February 6 (accessed). Air Pollution Data Monitoring Cards (2014, 2015, 2016, 2017, and 2018). <http://www.arb.ca.gov/adam/topfour/topfour1.php>.
- California Energy Commission (CEC). 2015a, June 10. 2016 Building Energy Efficiency Standards, Adoption Hearing Presentation. <http://www.energy.ca.gov/title24/2016standards/rulemaking/documents>.
- . 2015b. 2016 Building Energy and Efficiency Standards Frequently Asked Questions. [http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2016\\_Building\\_Energy\\_Efficiency\\_Standards\\_FAQ.pdf](http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2016_Building_Energy_Efficiency_Standards_FAQ.pdf).
- . 2018a. News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. [http://www.energy.ca.gov/releases/2018\\_releases/2018-05-09\\_building\\_standards\\_adopted\\_nr.html](http://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html).
- . 2018b. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. [http://www.energy.ca.gov/title24/2019standards/documents/2018\\_Title\\_24\\_2019\\_Building\\_Standards\\_FAQ.pdf](http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf).
- Intergovernmental Panel on Climate Change (IPCC). 1995. Second Assessment Report: Climate Change 1995. [https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc\\_sar\\_wg\\_I\\_full\\_report.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_sar_wg_I_full_report.pdf).
- . 2001. Third Assessment Report: Climate Change 2001. New York: Cambridge University Press. [https://www.ipcc.ch/site/assets/uploads/2018/03/WGI\\_TAR\\_full\\_report.pdf](https://www.ipcc.ch/site/assets/uploads/2018/03/WGI_TAR_full_report.pdf).
- . 2007. Fourth Assessment Report: Climate Change 2007. New York: Cambridge University Press. [https://www.ipcc.ch/site/assets/uploads/2018/02/ar4\\_syr\\_full\\_report.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/ar4_syr_full_report.pdf).
- . 2013. Fifth Assessment Report: Climate Change 2013. New York: Cambridge University Press. [https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5\\_all\\_final.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_all_final.pdf).
- South Coast Air Quality Management District (South Coast AQMD). 1993. California Environmental Quality Act Air Quality Handbook.
- . 2005, May. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.
- . 2008a, July. Final Localized Significance Threshold Methodology.

- . 2008b, September. Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES III). <https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-iii>.
- . 2011. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/calmod-guidance.pdf?sfvrsn=2>.
- . 2010, September 28. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 15. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf).
- . 2012, May 4. Final 2012 Lead State Implementation Plan: Los Angeles County. <http://www3.aqmd.gov/hb/attachments/2011-2015/2012May/2012-May4-030.pdf>.
- . 2013, February. 2012 Final Air Quality Management Plan. [https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-\(february-2013\)/main-document-final-2012.pdf](https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-(february-2013)/main-document-final-2012.pdf).
- . 2015a, October 3. Final Report Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV). <https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-iv>.
- . 2015b. Health Effects of Air Pollution. <http://www.aqmd.gov/docs/default-source/publications/brochures/the-health-effects-of-air-pollution-brochure.pdf>.
- . 2015c, October. “Blueprint for Clean Air: 2016 AQMP White Paper.” 2016 AQMP White Papers Web Page. <https://www.aqmd.gov/nav/about/groups-committees/aqmp-advisory-group/2016-aqmp-white-papers/Blueprint>.
- . 2017, March 4. Final 2016 Air Quality Management Plan. <https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15>.
- . 2019, April (revised). South Coast AQMD Air Quality Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.
- Southern California Association of Governments (SCAG). 2016, April. The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life. <http://scagrtpscscs.net/Documents/2016/final/f2016RTPSCS.pdf>.
- US Environmental Protection Agency (USEPA). 2009, December. EPA: Greenhouse Gases Threaten Public Health and the Environment. Science overwhelmingly shows greenhouse gas concentrations at unprecedented levels due to human activity.

[https://archive.epa.gov/epapages/newsroom\\_archive/newsreleases/08d11a451131bca585257685005bf252.html](https://archive.epa.gov/epapages/newsroom_archive/newsreleases/08d11a451131bca585257685005bf252.html).

———. 2019a, September 24 (accessed). Criteria Air Pollutants. <https://www.epa.gov/criteria-air-pollutants>.

———. 2019b, October 3 (accessed). Overview of Greenhouse Gases. Accessed on October 3, 2019. <http://www3.epa.gov/climatechange/ghgemissions/gases.html>.

Western Regional Climate Center (WRCC). 2020, February 20 (accessed). Torrance AP, California ([Station ID] 048973): Period of Record Monthly Climate Summary, 01/01/1932 to 06/09/2016. Western U.S. Climate Summaries. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca8973>.

## Regional Construction Emissions Worksheet:

Demolition 2021							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	2021 Summer						
	Off-Road	3.17	31.44	21.57	0.04	1.55	1.44
	Total	3.17	31.44	21.57	0.04	1.55	1.44
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.19	0.05	0.00	0.01	0.00
	Worker	0.06	0.04	0.60	0.00	0.16	0.04
	Total	0.07	0.24	0.65	0.00	0.17	0.05
	TOTAL	3.24	31.68	22.22	0.04	1.72	1.49
Onsite	2021 Winter						
	Off-Road	3.17	31.44	21.57	0.04	1.55	1.44
	Total	3.17	31.44	21.57	0.04	1.55	1.44
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.19	0.06	0.00	0.01	0.00
	Worker	0.07	0.05	0.55	0.00	0.16	0.04
	Total	0.08	0.24	0.61	0.00	0.17	0.05
	TOTAL	3.24	31.68	22.17	0.04	1.72	1.49
Onsite	2021						
	Off-Road	3.17	31.44	21.57	0.04	1.55	1.44
	Total	3.17	31.44	21.57	0.04	1.55	1.44
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.19	0.06	0.00	0.01	0.00
	Worker	0.07	0.05	0.60	0.00	0.16	0.04
	Total	0.08	0.24	0.65	0.00	0.17	0.05
	TOTAL	3.24	31.68	22.22	0.04	1.72	1.49
Demolition 2022							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	2022 Summer						
	Off-Road	2.64	25.72	20.59	0.04	1.24	1.16
	Total	2.64	25.72	20.59	0.04	1.24	1.16
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.18	0.05	0.00	0.01	0.00
	Worker	0.06	0.04	0.56	0.00	0.16	0.04
	Total	0.07	0.22	0.61	0.00	0.17	0.05
	TOTAL	2.71	25.94	21.20	0.04	1.41	1.20
Onsite	2022 Winter						
	Off-Road	2.64	25.72	20.59	0.04	1.24	1.16
	Total	2.64	25.72	20.59	0.04	1.24	1.16
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.18	0.05	0.00	0.01	0.00
	Worker	0.07	0.04	0.51	0.00	0.16	0.04
	Total	0.07	0.23	0.56	0.00	0.17	0.05
	TOTAL	2.71	25.95	21.16	0.04	1.41	1.20
Onsite	2022						
	Off-Road	2.64	25.72	20.59	0.04	1.24	1.16
	Total	2.64	25.72	20.59	0.04	1.24	1.16
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.18	0.05	0.00	0.01	0.00
	Worker	0.07	0.04	0.56	0.00	0.16	0.04
	Total	0.07	0.23	0.61	0.00	0.17	0.05
	TOTAL	2.71	25.95	21.20	0.04	1.41	1.20



Demolition Haul 2021							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer					
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Hauling	0.01	0.25	0.06	0.00	0.02	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.25	0.06	0.00	0.02	0.00
<b>TOTAL</b>		<b>0.01</b>	<b>0.25</b>	<b>0.06</b>	<b>0.00</b>	<b>0.02</b>	<b>0.00</b>
Onsite		2021 Winter					
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Hauling	0.01	0.25	0.06	0.00	0.02	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.25	0.06	0.00	0.02	0.00
<b>TOTAL</b>		<b>0.01</b>	<b>0.25</b>	<b>0.06</b>	<b>0.00</b>	<b>0.02</b>	<b>0.00</b>
Onsite		2021					
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Hauling	0.01	0.25	0.06	0.00	0.02	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.25	0.06	0.00	0.02	0.00
<b>TOTAL</b>		<b>0.01</b>	<b>0.25</b>	<b>0.06</b>	<b>0.00</b>	<b>0.02</b>	<b>0.00</b>
Demolition Haul 2022							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Hauling	0.01	0.24	0.06	0.00	0.02	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.24	0.06	0.00	0.02	0.00
<b>TOTAL</b>		<b>0.01</b>	<b>0.24</b>	<b>0.06</b>	<b>0.00</b>	<b>0.02</b>	<b>0.00</b>
Onsite		2022 Winter					
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Hauling	0.01	0.24	0.06	0.00	0.02	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.24	0.06	0.00	0.02	0.00
<b>TOTAL</b>		<b>0.01</b>	<b>0.24</b>	<b>0.06</b>	<b>0.00</b>	<b>0.02</b>	<b>0.00</b>
Onsite		2022					
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Hauling	0.01	0.24	0.06	0.00	0.02	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.24	0.06	0.00	0.02	0.00
<b>TOTAL</b>		<b>0.01</b>	<b>0.24</b>	<b>0.06</b>	<b>0.00</b>	<b>0.02</b>	<b>0.00</b>

Site Preparation							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Fugitive Dust					7.72	4.25
	Off-Road	3.17	33.08	19.70	0.04	1.61	1.48
	Total	3.17	33.08	19.70	0.04	9.34	5.73
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.18	0.05	0.00	0.01	0.00
	Worker	0.07	0.05	0.67	0.00	0.19	0.05
	Total	0.08	0.23	0.72	0.00	0.20	0.05
<b>TOTAL</b>		3.25	33.32	20.41	0.04	9.54	5.78
Onsite		2022 Winter					
	Fugitive Dust					7.72	4.25
	Off-Road	3.17	33.08	19.70	0.04	1.61	1.48
	Total	3.17	33.08	19.70	0.04	9.34	5.73
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.18	0.05	0.00	0.01	0.00
	Worker	0.08	0.05	0.61	0.00	0.19	0.05
	Total	0.09	0.24	0.66	0.00	0.20	0.05
<b>TOTAL</b>		3.26	33.32	20.36	0.04	9.54	5.78
Onsite		2022					
	Fugitive Dust	0.00	0.00	0.00	0.00	7.72	4.25
	Off-Road	3.17	33.08	19.70	0.04	1.61	1.48
	Total	3.17	33.08	19.70	0.04	9.34	5.73
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.18	0.05	0.00	0.01	0.00
	Worker	0.08	0.05	0.67	0.00	0.19	0.05
	Total	0.09	0.24	0.72	0.00	0.20	0.05
<b>TOTAL</b>		3.26	33.32	20.41	0.04	9.54	5.78
Grading							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Fugitive Dust					2.80	1.44
	Off-Road	1.95	20.86	15.27	0.03	0.94	0.87
	Total	1.95	20.86	15.27	0.03	3.74	2.31
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.18	0.05	0.00	0.01	0.00
	Worker	0.06	0.04	0.56	0.00	0.16	0.04
	Total	0.07	0.22	0.61	0.00	0.17	0.05
<b>TOTAL</b>		2.01	21.08	15.88	0.03	3.91	2.35
Onsite		2022 Winter					
	Fugitive Dust					2.80	1.44
	Off-Road	1.95	20.86	15.27	0.03	0.94	0.87
	Total	1.95	20.86	15.27	0.03	3.74	2.31
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.18	0.05	0.00	0.01	0.00
	Worker	0.07	0.04	0.51	0.00	0.16	0.04
	Total	0.07	0.23	0.56	0.00	0.17	0.05
<b>TOTAL</b>		2.02	21.08	15.83	0.03	3.91	2.35
Onsite		2022					
	Fugitive Dust	0.00	0.00	0.00	0.00	2.80	1.44
	Off-Road	1.95	20.86	15.27	0.03	0.94	0.87
	Total	1.95	20.86	15.27	0.03	3.74	2.31
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.18	0.05	0.00	0.01	0.00
	Worker	0.07	0.04	0.56	0.00	0.16	0.04
	Total	0.07	0.23	0.61	0.00	0.17	0.05
<b>TOTAL</b>		2.02	21.08	15.88	0.03	3.91	2.35

Utilities Relocation							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2022 Summer</b>					
	Off-Road	0.20	1.78	3.26	0.01	0.09	0.08
	Total	<b>0.20</b>	<b>1.78</b>	<b>3.26</b>	<b>0.01</b>	<b>0.09</b>	<b>0.08</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Total	<b>0.01</b>	<b>0.01</b>	<b>0.11</b>	<b>0.00</b>	<b>0.03</b>	<b>0.01</b>
<b>TOTAL</b>		<b>0.21</b>	<b>1.78</b>	<b>3.37</b>	<b>0.01</b>	<b>0.12</b>	<b>0.09</b>
Onsite		<b>2022 Winter</b>					
	Off-Road	0.20	1.78	3.26	0.01	0.09	0.08
	Total	<b>0.20</b>	<b>1.78</b>	<b>3.26</b>	<b>0.01</b>	<b>0.09</b>	<b>0.08</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.10	0.00	0.03	0.01
	Total	<b>0.01</b>	<b>0.01</b>	<b>0.10</b>	<b>0.00</b>	<b>0.03</b>	<b>0.01</b>
<b>TOTAL</b>		<b>0.22</b>	<b>1.79</b>	<b>3.36</b>	<b>0.01</b>	<b>0.12</b>	<b>0.09</b>
Onsite		<b>2022</b>					
	Off-Road	0.20	1.78	3.26	0.01	0.09	0.08
	Total	<b>0.20</b>	<b>1.78</b>	<b>3.26</b>	<b>0.01</b>	<b>0.09</b>	<b>0.08</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Total	<b>0.01</b>	<b>0.01</b>	<b>0.11</b>	<b>0.00</b>	<b>0.03</b>	<b>0.01</b>
<b>TOTAL</b>		<b>0.22</b>	<b>1.79</b>	<b>3.37</b>	<b>0.01</b>	<b>0.12</b>	<b>0.09</b>

Building Construction 2022							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		<b>2022 Summer</b>					
	Off-Road	1.71	15.62	16.36	0.03	0.81	0.76
	Total	<b>1.71</b>	<b>15.62</b>	<b>16.36</b>	<b>0.03</b>	<b>0.81</b>	<b>0.76</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.10	3.14	0.82	0.01	0.21	0.06
	Worker	0.35	0.23	3.23	0.01	0.90	0.25
	Total	<b>0.45</b>	<b>3.37</b>	<b>4.05</b>	<b>0.02</b>	<b>1.11</b>	<b>0.31</b>
<b>TOTAL</b>		<b>2.15</b>	<b>18.99</b>	<b>20.41</b>	<b>0.05</b>	<b>1.92</b>	<b>1.07</b>
Onsite		<b>2022 Winter</b>					
	Off-Road	1.71	15.62	16.36	0.03	0.81	0.76
	Total	<b>1.71</b>	<b>15.62</b>	<b>16.36</b>	<b>0.03</b>	<b>0.81</b>	<b>0.76</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.10	3.13	0.90	0.01	0.21	0.07
	Worker	0.39	0.26	2.95	0.01	0.90	0.25
	Total	<b>0.49</b>	<b>3.39</b>	<b>3.85</b>	<b>0.02</b>	<b>1.11</b>	<b>0.31</b>
<b>TOTAL</b>		<b>2.20</b>	<b>19.00</b>	<b>20.22</b>	<b>0.04</b>	<b>1.92</b>	<b>1.07</b>
Onsite		<b>2022</b>					
	Off-Road	1.71	15.62	16.36	0.03	0.81	0.76
	Total	<b>1.71</b>	<b>15.62</b>	<b>16.36</b>	<b>0.03</b>	<b>0.81</b>	<b>0.76</b>
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.10	3.14	0.90	0.01	0.21	0.07
	Worker	0.39	0.26	3.23	0.01	0.90	0.25
	Total	<b>0.49</b>	<b>3.39</b>	<b>4.05</b>	<b>0.02</b>	<b>1.11</b>	<b>0.31</b>
<b>TOTAL</b>		<b>2.20</b>	<b>19.00</b>	<b>20.41</b>	<b>0.05</b>	<b>1.92</b>	<b>1.07</b>

Building Construction 2023							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	2022 Summer						
	Off-Road	1.57	14.38	16.24	0.03	0.70	0.66
	Total	1.57	14.38	16.24	0.03	0.70	0.66
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.07	2.38	0.74	0.01	0.21	0.06
	Worker	0.33	0.21	2.98	0.01	0.90	0.25
	Total	0.40	2.59	3.71	0.02	1.11	0.31
TOTAL		1.97	16.98	19.96	0.04	1.81	0.97
Onsite	2022 Winter						
	Off-Road	1.57	14.38	16.24	0.03	0.70	0.66
	Total	1.57	14.38	16.24	0.03	0.70	0.66
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.08	2.37	0.80	0.01	0.21	0.06
	Worker	0.37	0.23	2.71	0.01	0.90	0.25
	Total	0.44	2.60	3.52	0.02	1.11	0.31
TOTAL		2.02	16.99	19.76	0.04	1.81	0.97
Onsite	2022						
	Off-Road	1.57	14.38	16.24	0.03	0.70	0.66
	Total	1.57	14.38	16.24	0.03	0.70	0.66
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.08	2.38	0.80	0.01	0.21	0.06
	Worker	0.37	0.23	2.98	0.01	0.90	0.25
	Total	0.44	2.60	3.71	0.02	1.11	0.31
TOTAL		2.02	16.99	19.96	0.04	1.81	0.97
Building Construction 2024							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	2022 Summer						
	Off-Road	1.47	13.44	16.17	0.03	0.61	0.58
	Total	1.47	13.44	16.17	0.03	0.61	0.58
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.07	2.37	0.71	0.01	0.21	0.06
	Worker	0.31	0.19	2.78	0.01	0.90	0.25
	Total	0.38	2.56	3.49	0.02	1.11	0.31
TOTAL		1.85	16.01	19.66	0.04	1.72	0.88
Onsite	2022 Winter						
	Off-Road	1.47	13.44	16.17	0.03	0.61	0.58
	Total	1.47	13.44	16.17	0.03	0.61	0.58
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.07	2.36	0.78	0.01	0.21	0.06
	Worker	0.35	0.21	2.53	0.01	0.90	0.25
	Total	0.42	2.57	3.30	0.02	1.11	0.31
TOTAL		1.89	16.02	19.47	0.04	1.72	0.88
Onsite	2022						
	Off-Road	1.47	13.44	16.17	0.03	0.61	0.58
	Total	1.47	13.44	16.17	0.03	0.61	0.58
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.07	2.37	0.78	0.01	0.21	0.06
	Worker	0.35	0.21	2.78	0.01	0.90	0.25
	Total	0.42	2.57	3.49	0.02	1.11	0.31
TOTAL		1.89	16.02	19.66	0.04	1.72	0.88

Paving							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2024 Summer					
	Off-Road	0.88	8.27	12.22	0.02	0.40	0.37
	Paving	0.00				0.00	0.00
	Total	0.88	8.27	12.22	0.02	0.40	0.37
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.07	0.04	0.64	0.00	0.21	0.06
	Total	0.07	0.04	0.64	0.00	0.21	0.06
<b>TOTAL</b>		<b>0.95</b>	<b>8.32</b>	<b>12.86</b>	<b>0.02</b>	<b>0.61</b>	<b>0.43</b>
Onsite		2024 Winter					
	Off-Road	0.88	8.27	12.22	0.02	0.40	0.37
	Paving	0.00				0.00	0.00
	Total	0.88	8.27	12.22	0.02	0.40	0.37
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.08	0.05	0.58	0.00	0.21	0.06
	Total	0.08	0.05	0.58	0.00	0.21	0.06
<b>TOTAL</b>		<b>0.96</b>	<b>8.32</b>	<b>12.80</b>	<b>0.02</b>	<b>0.61</b>	<b>0.43</b>
Onsite		2024					
	Off-Road	0.88	8.27	12.22	0.02	0.40	0.37
	Paving	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.88	8.27	12.22	0.02	0.40	0.37
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.08	0.05	0.64	0.00	0.21	0.06
	Total	0.08	0.05	0.64	0.00	0.21	0.06
<b>TOTAL</b>		<b>0.96</b>	<b>8.32</b>	<b>12.86</b>	<b>0.02</b>	<b>0.61</b>	<b>0.43</b>
Architectural Coating							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2021 Summer					
	Archit. Coating	8.74				0.00	0.00
	Off-Road	0.18	1.22	1.81	0.00	0.06	0.06
	Total	8.92	1.22	1.81	0.00	0.06	0.06
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.06	0.04	0.54	0.00	0.18	0.05
	Total	0.06	0.04	0.54	0.00	0.18	0.05
<b>TOTAL</b>		<b>8.98</b>	<b>1.26</b>	<b>2.35</b>	<b>0.00</b>	<b>0.24</b>	<b>0.11</b>
Onsite		2021 Winter					
	Archit. Coating	8.74				0.00	0.00
	Off-Road	0.18	1.22	1.81	0.00	0.06	0.06
	Total	8.92	1.22	1.81	0.00	0.06	0.06
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.07	0.04	0.49	0.00	0.18	0.05
	Total	0.07	0.04	0.49	0.00	0.18	0.05
<b>TOTAL</b>		<b>8.98</b>	<b>1.26</b>	<b>2.30</b>	<b>0.00</b>	<b>0.24</b>	<b>0.11</b>
Onsite		2021					
	Archit. Coating	8.74	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.18	1.22	1.81	0.00	0.06	0.06
	Total	8.92	1.22	1.81	0.00	0.06	0.06
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.07	0.04	0.54	0.00	0.18	0.05
	Total	0.07	0.04	0.54	0.00	0.18	0.05
<b>TOTAL</b>		<b>8.98</b>	<b>1.26</b>	<b>2.35</b>	<b>0.00</b>	<b>0.24</b>	<b>0.11</b>

Finishing and Landscaping							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	2024 Summer						
	Off-Road	0.18	1.40	3.27	0.01	0.07	0.06
	Total	0.18	1.40	3.27	0.01	0.07	0.06
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.10	0.00	0.03	0.01
	Total	0.01	0.01	0.10	0.00	0.03	0.01
TOTAL		0.19	1.41	3.36	0.01	0.10	0.07
Onsite	2024 Winter						
	Off-Road	0.18	1.40	3.27	0.01	0.07	0.06
	Total	0.18	1.40	3.27	0.01	0.07	0.06
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.09	0.00	0.03	0.01
	Total	0.01	0.01	0.09	0.00	0.03	0.01
TOTAL		0.19	1.41	3.35	0.01	0.10	0.07
Onsite	2024						
	Off-Road	0.18	1.40	3.27	0.01	0.07	0.06
	Total	0.18	1.40	3.27	0.01	0.07	0.06
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.10	0.00	0.03	0.01
	Total	0.01	0.01	0.10	0.00	0.03	0.01
TOTAL		0.19	1.41	3.36	0.01	0.10	0.07
Demolition 2024							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	2024 Summer						
	Off-Road	2.24	20.88	19.71	0.04	0.96	0.89
	Total	2.24	20.88	19.71	0.04	0.96	0.89
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.14	0.04	0.00	0.01	0.00
	Worker	0.05	0.03	0.48	0.00	0.16	0.04
	Total	0.06	0.17	0.52	0.00	0.17	0.05
TOTAL		2.30	21.05	20.23	0.04	1.13	0.94
Onsite	2024 Winter						
	Off-Road	2.24	20.88	19.71	0.04	0.96	0.89
	Total	2.24	20.88	19.71	0.04	0.96	0.89
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.14	0.05	0.00	0.01	0.00
	Worker	0.06	0.04	0.44	0.00	0.16	0.04
	Total	0.06	0.18	0.48	0.00	0.17	0.05
TOTAL		2.31	21.05	20.19	0.04	1.13	0.94
Onsite	2024						
	Off-Road	2.24	20.88	19.71	0.04	0.96	0.89
	Total	2.24	20.88	19.71	0.04	0.96	0.89
Offsite	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.14	0.05	0.00	0.01	0.00
	Worker	0.06	0.04	0.48	0.00	0.16	0.04
	Total	0.06	0.18	0.52	0.00	0.17	0.05
TOTAL		2.31	21.05	20.23	0.04	1.13	0.94

Demolition 2025							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2025 Summer					
	Off-Road	2.09	19.20	19.42	0.04	0.85	0.79
	Total	2.09	19.20	19.42	0.04	0.85	0.79
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.14	0.04	0.00	0.01	0.00
	Worker	0.05	0.03	0.44	0.00	0.16	0.04
	Total	0.05	0.17	0.49	0.00	0.17	0.05
<b>TOTAL</b>		2.15	19.37	19.90	0.04	1.02	0.84
Onsite		2025 Winter					
	Off-Road	2.09	19.20	19.42	0.04	0.85	0.79
	Total	2.09	19.20	19.42	0.04	0.85	0.79
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.14	0.04	0.00	0.01	0.00
	Worker	0.06	0.03	0.40	0.00	0.16	0.04
	Total	0.06	0.17	0.45	0.00	0.17	0.05
<b>TOTAL</b>		2.15	19.37	19.87	0.04	1.02	0.84
Onsite		2025					
	Off-Road	2.09	19.20	19.42	0.04	0.85	0.79
	Total	2.09	19.20	19.42	0.04	0.85	0.79
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.14	0.04	0.00	0.01	0.00
	Worker	0.06	0.03	0.44	0.00	0.16	0.04
	Total	0.06	0.17	0.49	0.00	0.17	0.05
<b>TOTAL</b>		2.15	19.37	19.90	0.04	1.02	0.84
Demolition Haul 2024							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2024 Summer					
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Hauling	0.00	0.12	0.04	0.00	0.01	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.12	0.04	0.00	0.01	0.00
<b>TOTAL</b>		0.00	0.12	0.04	0.00	0.01	0.00
Onsite		2024 Winter					
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Hauling	0.00	0.12	0.04	0.00	0.01	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.12	0.04	0.00	0.01	0.00
<b>TOTAL</b>		0.00	0.12	0.04	0.00	0.01	0.00
Onsite		2024					
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Hauling	0.00	0.12	0.04	0.00	0.01	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.12	0.04	0.00	0.01	0.00
<b>TOTAL</b>		0.00	0.12	0.04	0.00	0.01	0.00

Demolition Haul 2025							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2025 Summer					
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Hauling	0.00	0.13	0.05	0.00	0.01	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.13	0.05	0.00	0.01	0.00
<b>TOTAL</b>		0.00	0.13	0.05	0.00	0.01	0.00
Onsite		2025 Winter					
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Hauling	0.00	0.13	0.05	0.00	0.01	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.13	0.05	0.00	0.01	0.00
<b>TOTAL</b>		0.00	0.13	0.05	0.00	0.01	0.00
Onsite		2025					
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00
Offsite							
	Hauling	0.00	0.13	0.05	0.00	0.01	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.13	0.05	0.00	0.01	0.00
<b>TOTAL</b>		0.00	0.13	0.05	0.00	0.01	0.00
Demolition and Demolition Haul (2021)		3	32	22	0	2	1
Demolition and Demolition Haul (2022)		3	26	21	0	1	1
Site Preparation		3	33	20	0	10	6
Grading		2	21	16	0	4	2
Utilities Relocation		0	2	3	0	0	0
Building Construction 2022		2	19	20	0	2	1
Building Construction 2023		2	17	20	0	2	1
Building Construction 2024		2	16	20	0	2	1
Paving		1	8	13	0	1	0
Architectural Coating		9	1	2	0	0	0
Finishing and Landscaping		0	1	3	0	0	0
Demolition and Demolition Haul (2024)		2	21	20	0	1	1
Demolition and Demolition Haul (2025)		2	19	20	0	1	1
<b>MAX DAILY</b>		9.0	33.3	22.3	0.0	9.5	5.8
Regional Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		No	No	No	No	No	No



## Construction LST Worksheet:

Demolition 2021						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2021				
	Off-Road		31.44	21.57	1.55	1.44
	Total		31.44	21.57	1.55	1.44
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			<b>31.44</b>	<b>21.57</b>	<b>1.55</b>	<b>1.44</b>
Onsite		2021				
	Off-Road		31.44	21.57	1.55	1.44
	Total		31.44	21.57	1.55	1.44
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			<b>31.44</b>	<b>21.57</b>	<b>1.55</b>	<b>1.44</b>
Onsite		2021				
	Off-Road		31.44	21.57	1.55	1.44
	Total		31.44	21.57	1.55	1.44
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			<b>31.44</b>	<b>21.57</b>	<b>1.55</b>	<b>1.44</b>
Demolition 2022						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2022				
	Off-Road		25.72	20.59	1.24	1.16
	Total		25.72	20.59	1.24	1.16
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			<b>25.72</b>	<b>20.59</b>	<b>1.24</b>	<b>1.16</b>
Onsite		2022				
	Off-Road		25.72	20.59	1.24	1.16
	Total		25.72	20.59	1.24	1.16
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			<b>25.72</b>	<b>20.59</b>	<b>1.24</b>	<b>1.16</b>
Onsite		2022				
	Off-Road		25.72	20.59	1.24	1.16
	Total		25.72	20.59	1.24	1.16
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			<b>25.72</b>	<b>20.59</b>	<b>1.24</b>	<b>1.16</b>

Demolition Haul 2021			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2021				
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Onsite		2021				
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Onsite		2021				
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Demolition Haul 2022			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2022				
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Onsite		2022				
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Onsite		2022				
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Site Preparation						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2022				
	Fugitive Dust				7.72	4.25
	Off-Road		33.08	19.70	1.61	1.48
	Total		33.08	19.70	9.34	5.73
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			33.08	19.70	9.34	5.73
Onsite		2022				
	Fugitive Dust				7.72	4.25
	Off-Road		33.08	19.70	1.61	1.48
	Total		33.08	19.70	9.34	5.73
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			33.08	19.70	9.34	5.73
Onsite		2022				
	Fugitive Dust		0.00	0.00	7.72	4.25
	Off-Road		33.08	19.70	1.61	1.48
	Total		33.08	19.70	9.34	5.73
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
TOTAL			33.08	19.70	9.34	5.73
Grading						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2022				
	Fugitive Dust				2.80	1.44
	Off-Road		20.86	15.27	0.94	0.87
	Total		20.86	15.27	3.74	2.31
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			20.86	15.27	3.74	2.31
Onsite		2022				
	Fugitive Dust				2.80	1.44
	Off-Road		20.86	15.27	0.94	0.87
	Total		20.86	15.27	3.74	2.31
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			20.86	15.27	3.74	2.31
Onsite		2022				
	Fugitive Dust		0.00	0.00	2.80	1.44
	Off-Road		20.86	15.27	0.94	0.87
	Total		20.86	15.27	3.74	2.31
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
TOTAL			20.86	15.27	3.74	2.31

Utilities Relocation			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2022				
	Off-Road		1.78	3.26	0.09	0.08
	Total		1.78	3.26	0.09	0.08
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			1.78	3.26	0.09	0.08
Onsite		2022				
	Off-Road		1.78	3.26	0.09	0.08
	Total		1.78	3.26	0.09	0.08
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			1.78	3.26	0.09	0.08
Onsite		2022				
	Off-Road		1.78	3.26	0.09	0.08
	Total		1.78	3.26	0.09	0.08
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			1.78	3.26	0.09	0.08
Building Construction 2022			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2022				
	Off-Road		15.62	16.36	0.81	0.76
	Total		15.62	16.36	0.81	0.76
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			15.62	16.36	0.81	0.76
Onsite		2022				
	Off-Road		15.62	16.36	0.81	0.76
	Total		15.62	16.36	0.81	0.76
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			15.62	16.36	0.81	0.76
Onsite		2022				
	Off-Road		15.62	16.36	0.81	0.76
	Total		15.62	16.36	0.81	0.76
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			15.62	16.36	0.81	0.76

### Building Construction 2023

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2022				
	Off-Road		14.38	16.24	0.70	0.66
	Total		14.38	16.24	0.70	0.66
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			14.38	16.24	0.70	0.66
Onsite		2022				
	Off-Road		14.38	16.24	0.70	0.66
	Total		14.38	16.24	0.70	0.66
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			14.38	16.24	0.70	0.66
Onsite		2022				
	Off-Road		14.38	16.24	0.70	0.66
	Total		14.38	16.24	0.70	0.66
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			14.38	16.24	0.70	0.66

### Building Construction 2024

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2022				
	Off-Road		13.44	16.17	0.61	0.58
	Total		13.44	16.17	0.61	0.58
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			13.44	16.17	0.61	0.58
Onsite		2022				
	Off-Road		13.44	16.17	0.61	0.58
	Total		13.44	16.17	0.61	0.58
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			13.44	16.17	0.61	0.58
Onsite		2022				
	Off-Road		13.44	16.17	0.61	0.58
	Total		13.44	16.17	0.61	0.58
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			13.44	16.17	0.61	0.58

Paving						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2024				
	Off-Road		8.27	12.22	0.40	0.37
	Paving				0.00	0.00
	Total		8.27	12.22	0.40	0.37
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			8.27	12.22	0.40	0.37
Onsite		2024				
	Off-Road		8.27	12.22	0.40	0.37
	Paving				0.00	0.00
	Total		8.27	12.22	0.40	0.37
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			8.27	12.22	0.40	0.37
Onsite		2024				
	Off-Road		8.27	12.22	0.40	0.37
	Paving		0.00	0.00	0.00	0.00
	Total		8.27	12.22	0.40	0.37
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			8.27	12.22	0.40	0.37
Architectural Coating						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2021				
	Archit. Coating				0.00	0.00
	Off-Road		1.22	1.81	0.06	0.06
	Total		1.22	1.81	0.06	0.06
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			1.22	1.81	0.06	0.06
Onsite		2021				
	Archit. Coating				0.00	0.00
	Off-Road		1.22	1.81	0.06	0.06
	Total		1.22	1.81	0.06	0.06
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			1.22	1.81	0.06	0.06
Onsite		2021				
	Archit. Coating		0.00	0.00	0.00	0.00
	Off-Road		1.22	1.81	0.06	0.06
	Total		1.22	1.81	0.06	0.06
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			1.22	1.81	0.06	0.06

Finishing and Landscaping						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2024				
	Off-Road		1.40	3.27	0.07	0.06
	Total		1.40	3.27	0.07	0.06
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			1.40	3.27	0.07	0.06
Onsite		2024				
	Off-Road		1.40	3.27	0.07	0.06
	Total		1.40	3.27	0.07	0.06
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			1.40	3.27	0.07	0.06
Onsite		2024				
	Off-Road		1.40	3.27	0.07	0.06
	Total		1.40	3.27	0.07	0.06
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			1.40	3.27	0.07	0.06
Demolition 2024						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2024				
	Off-Road		20.88	19.71	0.96	0.89
	Total		20.88	19.71	0.96	0.89
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			20.88	19.71	0.96	0.89
Onsite		2024				
	Off-Road		20.88	19.71	0.96	0.89
	Total		20.88	19.71	0.96	0.89
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			20.88	19.71	0.96	0.89
Onsite		2024				
	Off-Road		20.88	19.71	0.96	0.89
	Total		20.88	19.71	0.96	0.89
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			20.88	19.71	0.96	0.89

Demolition 2025						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2025				
	Off-Road		19.20	19.42	0.85	0.79
	Total		19.20	19.42	0.85	0.79
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			19.20	19.42	0.85	0.79
Onsite		2025				
	Off-Road		19.20	19.42	0.85	0.79
	Total		19.20	19.42	0.85	0.79
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			19.20	19.42	0.85	0.79
Onsite		2025				
	Off-Road		19.20	19.42	0.85	0.79
	Total		19.20	19.42	0.85	0.79
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			19.20	19.42	0.85	0.79
Demolition Haul 2024						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2024				
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			0.00	0.00	0.00	0.00
Onsite		2024				
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			0.00	0.00	0.00	0.00
Onsite		2024				
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			0.00	0.00	0.00	0.00



Demolition Haul 2025						
		2025	NOx	CO	PM10 Total	PM2.5 Total
Onsite						
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Onsite						
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
<b>TOTAL</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Onsite						
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
<b>TOTAL</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Demolition and Demolition Haul (2021)</b>			<b>31</b>	<b>22</b>	<b>2</b>	<b>1</b>
<b>1.00 Acre LST</b>			<b>91</b>	<b>664</b>	<b>68</b>	<b>29</b>
<b>Exceeds LST?</b>			<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>
<b>Demolition and Demolition Haul (2022)</b>			<b>26</b>	<b>21</b>	<b>1</b>	<b>1</b>
<b>1.00 Acre LST</b>			<b>91</b>	<b>664</b>	<b>68</b>	<b>29</b>
<b>Exceeds LST?</b>			<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>
<b>Site Preparation</b>			<b>33</b>	<b>20</b>	<b>9</b>	<b>6</b>
<b>3.50 Acre LST</b>			<b>164</b>	<b>1,368</b>	<b>89</b>	<b>39</b>
<b>Exceeds LST?</b>			<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>
<b>Grading</b>			<b>21</b>	<b>15</b>	<b>4</b>	<b>2</b>
<b>2.50 Acre LST</b>			<b>142</b>	<b>1,101</b>	<b>81</b>	<b>35</b>
<b>Exceeds LST?</b>			<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>
<b>Utilities Relocation</b>			<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>
<b>0.50 Acre LST</b>			<b>91</b>	<b>664</b>	<b>68</b>	<b>29</b>
<b>Exceeds LST?</b>			<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>
<b>Building Construction 2022</b>			<b>16</b>	<b>16</b>	<b>1</b>	<b>1</b>
<b>1.31 Acre LST</b>			<b>103</b>	<b>759</b>	<b>71</b>	<b>30</b>
<b>Exceeds LST?</b>			<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>
<b>Building Construction 2023</b>			<b>14</b>	<b>16</b>	<b>1</b>	<b>1</b>
<b>1.31 Acre LST</b>			<b>103</b>	<b>759</b>	<b>71</b>	<b>30</b>
<b>Exceeds LST?</b>			<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>
<b>Building Construction 2024</b>			<b>13</b>	<b>16</b>	<b>1</b>	<b>1</b>

<b>1.31 Acre LST</b>	<b>103</b>	<b>759</b>	<b>71</b>	<b>30</b>
<b>Exceeds LST?</b>	<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>
<b>Paving</b>	<b>8</b>	<b>12</b>	<b>0</b>	<b>0</b>
<b>0.50 Acre LST</b>	<b>91</b>	<b>664</b>	<b>68</b>	<b>29</b>
<b>Exceeds LST?</b>	<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>
<b>Architectural Coating</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>
<b>0.00 Acre LST</b>	<b>91</b>	<b>664</b>	<b>68</b>	<b>29</b>
<b>Exceeds LST?</b>	<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>
<b>Finishing and Landscaping</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>
<b>0.00 Acre LST</b>	<b>91</b>	<b>664</b>	<b>68</b>	<b>29</b>
<b>Exceeds LST?</b>	<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>
<b>Demolition and Demolition Haul (2024)</b>	<b>21</b>	<b>20</b>	<b>1</b>	<b>1</b>
<b>1.00 Acre LST</b>	<b>91</b>	<b>664</b>	<b>68</b>	<b>29</b>
<b>Exceeds LST?</b>	<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>
<b>Demolition and Demolition Haul (2025)</b>	<b>19</b>	<b>19</b>	<b>1</b>	<b>1</b>
<b>1.00 Acre LST</b>	<b>91</b>	<b>664</b>	<b>68</b>	<b>29</b>
<b>Exceeds LST?</b>	<b>no</b>	<b>no</b>	<b>no</b>	<b>no</b>

\*\*NOx and CO LSTs based on 82 ft receptor (students), PM10 and PM2.5 LSTs based on 800 ft receptor (residences) as students would not be on campus 24hrs/day

# GHG Emissions Inventory

## Proposed Project Buildout

### Construction

		<u>MTCO<sub>2</sub>e Total Project*</u>	
	2021	203.09	
	2022	446.32	
	2023	511.93	
	2024	403.62	
	2025	42.03	
	<b>Total Construction</b>	<b>1,607</b>	
Amortized Construction Emissions***	54		MTCO <sub>2</sub> e/Year

\*CalEEMod, Version 2016.3.2.

CalEEMod Inputs - LA Harbor College, Construction

Name: LA Harbor College  
Project Number: BBK-09  
1111 Figueroa Pl, Wilmington, CA  
90744  
Project Location:  
County/Air Basin: Los Angeles  
Climate Zone: 11  
Land Use Setting: Urban  
Operational Year: 2025  
Utility Company: LAWPD  
Air Basin: South Coast Air Basin  
Air District: SCAQMD  
SRA: 3 - Southwest Coastal LA County

Project Site Acreage	65
Disturbed Site Acreage	4.75

Project Components	SQFT	Acres
<b>Demolition</b>		
Admin Building	24,412	
Nursing Building	21,499	
Modular Building	2,340	
	48,251	
<b>New Construction</b>		
Southeast Hall	49,000	1.12
Other Non-asphalt Surfaces	157,793	3.62

Haul (cy)	Demo Timeline
11,200	Demolition 2021/2022
10,000	Demolition 2024/2025
	Demolition 2021/2022

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage*	Land Use Square Feet
Educational	Elementary School	49,000	1000 sqft	1.12	49,000
Parking Lot	Other Non-asphalt Surfaces	157,793	1000 sqft	3.62	157,793
				4.75	

\* while lot acreage for CalEEMod inputs exceeds disturbed site acreage, only construction equipment mix provided by applicant would affect emissions outputs

Demolition	Component	Amount to be Demolished [Tons]	Haul Truck Capacity (tons) <sup>1</sup>	Hauling Distance (Miles) <sup>2</sup>	Total Trip Ends	Trip Ends/ day	Duration (days)
Demolition 2021		1,025	20	20	102	1	110
Demolition 2022		205	20	20	21	1	22
Demolition 2024		817	20	20	81	1	109
Demolition 2025		172	20	20	18	1	23
<b>Total</b>		<b>2,220</b>			<b>222</b>		

<sup>1</sup> CalEEMod Default

Architectural Coating

Percentage of Proposed Buildings*	
Interior Painted:	100%
Percentage of Proposed Buildings*	
Exterior Painted:	100%

Rule 1113

Interior Paint VOC content:	50	grams per liter
Exterior Paint VOC content:	50	grams per liter

Residential Structures	Land Use Square Feet	CalEEMod Factor <sup>2</sup>	Total Paintable Surface Area	Paintable Interior Area <sup>1</sup>	Paintable Exterior Area <sup>1</sup>
Junior College	49,000	2.0	98,000	73,500	24,500
			98,000	73,500	24,500

<sup>1</sup>CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.

<sup>2</sup>The program assumes the total surface for painting equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage defined by the user. Architectural coatings for the parking lot is based on CalEEMod methodology applied to a surface parking lot (i.e., striping), in which 6% of surface area is painted.

<sup>3</sup>100% of the interior and exterior of buildings to be modernized will be painted

LAWPD Carbon Intensity Factors

CO <sub>2</sub> : <sup>1,2</sup>	1,227.89	pounds per megawatt hour
CH <sub>4</sub> : <sup>3</sup>	0.029	pound per megawatt hour
N <sub>2</sub> O: <sup>3</sup>	0.00617	pound per megawatt hour

<sup>1</sup> Based on CO<sub>2</sub>e intensity factor of 507 pounds per megawatt hour; Southern California Edison. 2019, May. 2018 Sustainability Report. <https://www.edison.com/content/dam/eix/documents/sustainability/eix-2018-sustainability-report.pdf>.

<sup>2</sup> Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH<sub>4</sub> and N<sub>2</sub>O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

<sup>3</sup> CalEEMod default values.

Construction Mitigation

SCAQMD Rule 403

Replace Ground Cover	PM10:	5	% Reduction
Replace Ground Cover	PM2.5:	5	% Reduction

Water Exposed Area	Frequency:	2	per day
	PM10:	55	% Reduction
	PM25:	55	% Reduction

Unpaved Roads	Vehicle Speed:	15	mph
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SCAQMD Rule 1186	Clean Paved Road	9	% PM Reduction
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**Construction Activities and Schedule Assumptions: LA Harbor College**

Demolition and Construction schedule provided by applicant, normalized CalEEMod defaults used for other phases

		Construction Schedule		
Construction Activities	Phase Type	Start Date	End Date	CalEEMod Duration (Workday)
Demolition 2021/2022	Demolition	8/1/2021	2/1/2022	132
Demolition Haul 2021	Demolition	8/1/2021	12/31/2021	110
Demolition Haul 2022	Demolition	1/1/2022	2/1/2022	22
Site Preparation	Site Preparation	2/2/2022	2/15/2022	10
Grading	Grading	2/16/2022	3/1/2022	10
Utilities	Trenching	3/2/2022	3/15/2022	10
Building Construction	Building Construction	8/1/2022	5/1/2024	458
Paving	Paving	5/2/2024	5/27/2024	18
Architectural Coating	Architectural Coating	5/28/2024	6/20/2024	18
Finishing and Landscaping	Trenching	6/20/2024	7/3/2024	10
Demolition 2024/2025	Demolition	8/1/2024	2/1/2025	132
Demolition Haul 2024	Demolition	8/1/2024	12/31/2024	109
Demolition Haul 2025	Demolition	1/1/2025	2/1/2025	23

**CalEEMod Inputs\***

Construction Activities	Phase Type	Start Date	End Date	CalEEMod Duration (Workday)
Demolition 2021/2022	Demolition	8/1/2021	2/1/2022	132
Demolition Haul 2021	Demolition	8/1/2021	12/31/2021	110
Demolition Haul 2022	Demolition	1/1/2022	2/1/2022	22
Site Preparation	Site Preparation	2/2/2022	4/21/2022	57
Grading	Grading	4/22/2022	7/11/2022	57
Utilities	Trenching	7/12/2022	7/31/2022	14
Building Construction	Building Construction	8/1/2022	5/1/2024	458
Paving	Paving	5/2/2024	6/6/2024	26
Architectural Coating	Architectural Coating	6/7/2024	7/14/2024	26
Finishing and Landscaping	Trenching	7/15/2024	7/31/2024	13
Demolition 2024/2025	Demolition	8/1/2024	2/1/2025	132
Demolition Haul 2024	Demolition	8/1/2024	12/31/2024	109
Demolition Haul 2025	Demolition	1/1/2025	2/1/2025	23

# CalEEMod Construction Off-Road Equipment Inputs

\*Based on CalEEMod defaults, assumed equipment would not be shared for most conservative results

General Construction Hours: 8 hours btwn 7:00 AM to 4:00 PM (with 1 hr break), Mon-Fri

Construction Equipment Details							
Equipment	model	# of Equipment	hr/day	hp	load factor*	Tier Rating	total trips
<b>Demolition 2021/2022</b>							
Concrete/Industrial Saws		1	8	81	0.73		
Excavators		3	8	158	0.38		
Rubber Tired Dozers		2	8	247	0.4		
Worker Trips							15
Vendor Trips							0
Hauling Trips							0
Water Trucks							2
<b>Demolition Debris Haul 2021</b>							
no additional equipment required for Demo Haul							
Worker Trips							0
Vendor Trips							0
Hauling Trips							102
Water Trucks							
<b>Demolition Debris Haul 2022</b>							
no additional equipment required for Demo Haul							
Worker Trips							0
Vendor Trips							0
Hauling Trips							21
Water Trucks							
<b>Site Preparation</b>							
Rubber Tired Dozers		3	8	247	0.4		
Tractors/Loaders/Backhoes		4	8	97	0.37		
Worker Trips							18
Vendor Trips							0
Hauling Trips							2
<b>Grading</b>							
Excavators		1	8	158	0.38		
Graders		1	8	187	0.41		
Rubber Tired Dozers		1	8	247	0.4		
Tractors/Loaders/Backhoes		3	8	97	0.37		
Worker Trips							15
Vendor Trips							0
Hauling Trips							2
<b>* while lot acreage for CalEEMod inputs exceeds disturbed site acreage, only construction equipment mix provided by applicant would affect emissions outputs</b>							
Excavators		1	8	158	0.3819		
Worker Trips							3
Vendor Trips							0
Hauling Trips							0
<b>Building Construction</b>							
Cranes		1	7	231	0.29		
Forklifts		3	8	89	0.2		
Generator Sets		1	8	84	0.74		
Tractors/Loaders/Backhoes		3	7	97	0.37		
Welders		1	8	46	0.45		
Worker Trips							87
Vendor Trips							34
Hauling Trips							0
<b>Paving</b>							
Cement and Mortar Mixers		2	6	9	0.56		
Pavers		1	8	130	0.42		
Paving Equipment		2	6	132	0.36		
Rollers		2	6	80	0.38		
Tractors/Loaders/Backhoes		1	8	97	0.37		
Worker Trips							20
Vendor Trips							0
Hauling Trips							0
<b>Architectural Coating (surface lots, etc...)</b>							
Air Compressors		1	6	78	0.48		
Worker Trips							17
Vendor Trips							0
Hauling Trips							0
<b>Finishing/Landscaping</b>							
Excavators		1	8	158	0.3819		
Worker Trips							3
Vendor Trips							0
Hauling Trips							0
<b>Demolition 2024/2025</b>							
Concrete/Industrial Saws		1	8	81	0.73		
Excavators		3	8	158	0.38		
Rubber Tired Dozers		2	8	247	0.4		
Worker Trips							15
Vendor Trips							0
Hauling Trips							0
Water Trucks							2
<b>Demolition Debris Haul 2024</b>							
no additional equipment required for Demo Haul							
Worker Trips							
Vendor Trips							
Hauling Trips							81
Water Trucks							
<b>Demolition Debris Haul 2025</b>							
no additional equipment required for Demo Haul							
Worker Trips							0
Vendor Trips							0
Hauling Trips							18
Water Trucks							

## Demo Haul Trip Calculation

### Conversion factors\*

0.046 ton/SF  
 1.2641662 tons/cy  
 20 tons  
 15.82070459 CY  
 0.791035229 CY/ton

Building	BSF Demo	Tons/SF	Tons	Haul Truck (CY)	Haul Truck (Ton)	Round Trips	Total Trip Ends
<b>Demolition 2021/2022</b>	26,752.0	0.046	1,230.6	16	20.23	61	122
<b>Demolition 2024/2025</b>	21,499.0	0.046	989.0	16	20.23	49	98
	48,251.0		2,219.5			109.7	219.5

\*CalEEMod User's Guide Version 2016.3.2, Appendix A

## LA Harbor College Construction Run - Los Angeles-South Coast County, Summer

## LA Harbor College Construction Run Los Angeles-South Coast County, Summer

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	49.00	1000sqft	1.12	49,000.00	0
Other Non-Asphalt Surfaces	157.79	1000sqft	3.62	157,793.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2025
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MW hr)</b>	1227.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - see assumptions file for normalized schedule

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - no additional equipment required for Demo Haul



Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - assuming 1 excavator for finishing/landscaping

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Assuming 1 excavator for trenching

Grading -

Trips and VMT - assuming 2 VT/water truck per day, see assumpt file for trips calculation

Architectural Coating - scaqmd rule 1113, no parking striping

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	9,468.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	132.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	5.00	57.00
tblConstructionPhase	NumDays	8.00	57.00
tblConstructionPhase	NumDays	230.00	458.00
tblConstructionPhase	NumDays	18.00	26.00
tblConstructionPhase	NumDays	18.00	26.00
tblConstructionPhase	NumDays	20.00	132.00
tblConstructionPhase	NumDays	20.00	109.00
tblConstructionPhase	NumDays	20.00	23.00
tblLandUse	LandUseSquareFeet	157,790.00	157,793.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	102.00
tblTripsAndVMT	HaulingTripNumber	0.00	21.00
tblTripsAndVMT	HaulingTripNumber	0.00	81.00
tblTripsAndVMT	HaulingTripNumber	0.00	18.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.2432	31.9278	22.2783	0.0418	0.1967	1.5539	1.7505	0.0526	1.4434	1.4960	0.0000	4,052.2252	4,052.2252	1.0685	0.0000	4,078.9376
2022	3.2481	33.3161	21.2589	0.0452	18.2803	1.6145	19.8948	9.9877	1.4854	11.4731	0.0000	4,436.6653	4,436.6653	1.2007	0.0000	4,453.9527
2023	1.9728	16.9763	19.9587	0.0446	1.1901	0.7099	1.9000	0.3206	0.6679	0.9884	0.0000	4,373.3745	4,373.3745	0.6788	0.0000	4,390.3432
2024	8.9766	21.1720	20.2706	0.0442	1.1901	0.9618	1.8135	0.3206	0.8937	0.9454	0.0000	4,341.6829	4,341.6829	1.0589	0.0000	4,358.4982
2025	2.1515	19.4910	19.9491	0.0414	0.1942	0.8544	1.0485	0.0519	0.7935	0.8454	0.0000	4,009.8641	4,009.8641	1.0567	0.0000	4,036.2812
Maximum	8.9766	33.3161	22.2783	0.0452	18.2803	1.6145	19.8948	9.9877	1.4854	11.4731	0.0000	4,436.6653	4,436.6653	1.2007	0.0000	4,453.9527

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.2432	31.9278	22.2783	0.0418	0.1816	1.5539	1.7355	0.0489	1.4434	1.4923	0.0000	4,052.2252	4,052.2252	1.0685	0.0000	4,078.9376
2022	3.2481	33.3161	21.2589	0.0452	7.9208	1.6145	9.5353	4.2984	1.4854	5.7837	0.0000	4,436.6653	4,436.6653	1.2007	0.0000	4,453.9527
2023	1.9728	16.9763	19.9587	0.0446	1.1001	0.7099	1.8100	0.2985	0.6679	0.9663	0.0000	4,373.3745	4,373.3745	0.6788	0.0000	4,390.3432
2024	8.9766	21.1720	20.2706	0.0442	1.1001	0.9618	1.7234	0.2985	0.8937	0.9418	0.0000	4,341.6829	4,341.6829	1.0589	0.0000	4,358.4982
2025	2.1515	19.4910	19.9491	0.0414	0.1793	0.8544	1.0337	0.0483	0.7935	0.8417	0.0000	4,009.8641	4,009.8641	1.0567	0.0000	4,036.2812
Maximum	8.9766	33.3161	22.2783	0.0452	7.9208	1.6145	9.5353	4.2984	1.4854	5.7837	0.0000	4,436.6653	4,436.6653	1.2007	0.0000	4,453.9527

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	50.21	0.00	40.02	53.49	0.00	36.34	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition 2021/2022	Demolition	8/1/2021	2/1/2022	5	132	
2	Demolition Haul 2021	Demolition	8/1/2021	12/31/2021	5	110	
3	Demolition Haul 2022	Demolition	1/1/2022	2/1/2022	5	22	
4	Site Preparation	Site Preparation	2/2/2022	4/21/2022	5	57	
5	Grading	Grading	4/22/2022	7/11/2022	5	57	
6	Utilities Trenching	Trenching	7/12/2022	7/31/2022	5	14	
7	Building Construction	Building Construction	8/1/2022	5/1/2024	5	458	
8	Paving	Paving	5/2/2024	6/6/2024	5	26	
9	Architectural Coating	Architectural Coating	6/7/2024	7/14/2024	5	26	
10	Finishing and Landscaping	Trenching	7/15/2024	7/31/2024	5	13	

11	Demolition 2024/2025	Demolition	8/1/2024	2/1/2025	5	132
12	Demolition Haul 2024	Demolition	8/1/2024	12/31/2024	5	109
13	Demolition Haul 2025	Demolition	1/1/2025	4/31/2025	5	23

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 28.5**

**Acres of Paving: 3.62**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 73,500; Non-Residential Outdoor: 24,500; Striped Parking Area: 0**

### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition 2021/2022	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition 2021/2022	Excavators	3	8.00	158	0.38
Demolition 2021/2022	Rubber Tired Dozers	2	8.00	247	0.40
Demolition Haul 2021	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition Haul 2021	Excavators	0	8.00	158	0.38
Demolition Haul 2021	Rubber Tired Dozers	0	8.00	247	0.40
Demolition Haul 2022	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition Haul 2022	Excavators	0	8.00	158	0.38
Demolition Haul 2022	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Utilities Trenching	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Finishing and Landscaping	Excavators	1	8.00	158	0.38
Demolition 2024/2025	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition 2024/2025	Excavators	3	8.00	158	0.38
Demolition 2024/2025	Rubber Tired Dozers	2	8.00	247	0.40
Demolition Haul 2024	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition Haul 2024	Excavators	0	8.00	158	0.38
Demolition Haul 2024	Rubber Tired Dozers	0	8.00	247	0.40
Demolition Haul 2025	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition Haul 2025	Excavators	0	8.00	158	0.38
Demolition Haul 2025	Rubber Tired Dozers	0	8.00	247	0.40

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition 2021/2022	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Haul 2021	0	0.00	0.00	102.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Haul 2022	0	0.00	0.00	21.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	87.00	34.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Finishing and Landscaping	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Demolition 2024/2025	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Haul 2024	0	0.00	0.00	81.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Haul 2025	0	0.00	0.00	18.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 3.2 Demolition 2021/2022 - 2021

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0800e-003	0.1942	0.0508	5.1000e-004	0.0128	4.0000e-004	0.0132	3.6900e-003	3.8000e-004	4.0700e-003		54.9761	54.9761	3.2400e-003		55.0571
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.0704	0.2384	0.6549	2.2200e-003	0.1805	1.7500e-003	0.1822	0.0482	1.6300e-003	0.0498		225.7916	225.7916	8.2700e-003		225.9984

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
<b>Total</b>	<b>3.1651</b>	<b>31.4407</b>	<b>21.5650</b>	<b>0.0388</b>		<b>1.5513</b>	<b>1.5513</b>		<b>1.4411</b>	<b>1.4411</b>	<b>0.0000</b>	<b>3,747.9449</b>	<b>3,747.9449</b>	<b>1.0549</b>		<b>3,774.3174</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0800e-003	0.1942	0.0508	5.1000e-004	0.0120	4.0000e-004	0.0124	3.4900e-003	3.8000e-004	3.8600e-003		54.9761	54.9761	3.2400e-003		55.0571
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1546	1.3500e-003	0.1559	0.0413	1.2500e-003	0.0425		170.8155	170.8155	5.0300e-003		170.9413
<b>Total</b>	<b>0.0704</b>	<b>0.2384</b>	<b>0.6549</b>	<b>2.2200e-003</b>	<b>0.1665</b>	<b>1.7500e-003</b>	<b>0.1683</b>	<b>0.0447</b>	<b>1.6300e-003</b>	<b>0.0464</b>		<b>225.7916</b>	<b>225.7916</b>	<b>8.2700e-003</b>		<b>225.9984</b>

### **3.2 Demolition 2021/2022 - 2022**

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>		<b>1.2427</b>	<b>1.2427</b>		<b>1.1553</b>	<b>1.1553</b>		<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7100e-003	0.1847	0.0480	5.1000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.3000e-004	4.0200e-003		54.4972	54.4972	3.1300e-003		54.5754
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
<b>Total</b>	<b>0.0659</b>	<b>0.2246</b>	<b>0.6054</b>	<b>2.1600e-003</b>	<b>0.1805</b>	<b>1.6600e-003</b>	<b>0.1821</b>	<b>0.0482</b>	<b>1.5400e-003</b>	<b>0.0497</b>		<b>219.3040</b>	<b>219.3040</b>	<b>7.6800e-003</b>		<b>219.4959</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>		<b>1.2427</b>	<b>1.2427</b>		<b>1.1553</b>	<b>1.1553</b>	<b>0.0000</b>	<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7100e-003	0.1847	0.0480	5.1000e-004	0.0120	3.5000e-004	0.0123	3.4900e-003	3.3000e-004	3.8200e-003		54.4972	54.4972	3.1300e-003		54.5754
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1546	1.3100e-003	0.1559	0.0413	1.2100e-003	0.0425		164.8069	164.8069	4.5500e-003		164.9206
<b>Total</b>	<b>0.0659</b>	<b>0.2246</b>	<b>0.6054</b>	<b>2.1600e-003</b>	<b>0.1665</b>	<b>1.6600e-003</b>	<b>0.1682</b>	<b>0.0447</b>	<b>1.5400e-003</b>	<b>0.0463</b>		<b>219.3040</b>	<b>219.3040</b>	<b>7.6800e-003</b>		<b>219.4959</b>

## 3.3 Demolition Haul 2021 - 2021

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>



### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.7300e-003	0.2487	0.0583	7.2000e-004	0.0162	7.6000e-004	0.0170	4.4400e-003	7.3000e-004	5.1700e-003		78.4887	78.4887	5.3300e-003		78.6218
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>7.7300e-003</b>	<b>0.2487</b>	<b>0.0583</b>	<b>7.2000e-004</b>	<b>0.0162</b>	<b>7.6000e-004</b>	<b>0.0170</b>	<b>4.4400e-003</b>	<b>7.3000e-004</b>	<b>5.1700e-003</b>		<b>78.4887</b>	<b>78.4887</b>	<b>5.3300e-003</b>		<b>78.6218</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.7300e-003	0.2487	0.0583	7.2000e-004	0.0151	7.6000e-004	0.0159	4.1700e-003	7.3000e-004	4.9000e-003		78.4887	78.4887	5.3300e-003		78.6218
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>7.7300e-003</b>	<b>0.2487</b>	<b>0.0583</b>	<b>7.2000e-004</b>	<b>0.0151</b>	<b>7.6000e-004</b>	<b>0.0159</b>	<b>4.1700e-003</b>	<b>7.3000e-004</b>	<b>4.9000e-003</b>		<b>78.4887</b>	<b>78.4887</b>	<b>5.3300e-003</b>		<b>78.6218</b>

## 3.4 Demolition Haul 2022 - 2022

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.5700e-003	0.2379	0.0594	7.3000e-004	0.0167	6.8000e-004	0.0174	4.5800e-003	6.5000e-004	5.2300e-003		79.8415	79.8415	5.4000e-003		79.9765
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>7.5700e-003</b>	<b>0.2379</b>	<b>0.0594</b>	<b>7.3000e-004</b>	<b>0.0167</b>	<b>6.8000e-004</b>	<b>0.0174</b>	<b>4.5800e-003</b>	<b>6.5000e-004</b>	<b>5.2300e-003</b>		<b>79.8415</b>	<b>79.8415</b>	<b>5.4000e-003</b>		<b>79.9765</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.5700e-003	0.2379	0.0594	7.3000e-004	0.0156	6.8000e-004	0.0162	4.3000e-003	6.5000e-004	4.9500e-003		79.8415	79.8415	5.4000e-003		79.9765
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>7.5700e-003</b>	<b>0.2379</b>	<b>0.0594</b>	<b>7.3000e-004</b>	<b>0.0156</b>	<b>6.8000e-004</b>	<b>0.0162</b>	<b>4.3000e-003</b>	<b>6.5000e-004</b>	<b>4.9500e-003</b>		<b>79.8415</b>	<b>79.8415</b>	<b>5.4000e-003</b>		<b>79.9765</b>

### 3.5 Site Preparation - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0663</b>	<b>1.6126</b>	<b>19.6788</b>	<b>9.9307</b>	<b>1.4836</b>	<b>11.4143</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7100e-003	0.1847	0.0480	5.1000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.3000e-004	4.0200e-003		54.4972	54.4972	3.1300e-003		54.5754
Worker	0.0723	0.0479	0.6689	1.9800e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		197.7682	197.7682	5.4600e-003		197.9047
<b>Total</b>	<b>0.0780</b>	<b>0.2326</b>	<b>0.7169</b>	<b>2.4900e-003</b>	<b>0.2140</b>	<b>1.9200e-003</b>	<b>0.2159</b>	<b>0.0571</b>	<b>1.7800e-003</b>	<b>0.0588</b>		<b>252.2654</b>	<b>252.2654</b>	<b>8.5900e-003</b>		<b>252.4800</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Total	3.1701	33.0835	19.6978	0.0380	7.7233	1.6126	9.3359	4.2454	1.4836	5.7289	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
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### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7100e-003	0.1847	0.0480	5.1000e-004	0.0120	3.5000e-004	0.0123	3.4900e-003	3.3000e-004	3.8200e-003		54.4972	54.4972	3.1300e-003		54.5754
Worker	0.0723	0.0479	0.6689	1.9800e-003	0.1855	1.5700e-003	0.1870	0.0495	1.4500e-003	0.0510		197.7682	197.7682	5.4600e-003		197.9047
Total	0.0780	0.2326	0.7169	2.4900e-003	0.1974	1.9200e-003	0.1994	0.0530	1.7800e-003	0.0548		252.2654	252.2654	8.5900e-003		252.4800

### 3.6 Grading - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331		2,872.0464	2,872.0464	0.9289		2,895.2684

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7100e-003	0.1847	0.0480	5.1000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.3000e-004	4.0200e-003		54.4972	54.4972	3.1300e-003		54.5754

Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
<b>Total</b>	<b>0.0659</b>	<b>0.2246</b>	<b>0.6054</b>	<b>2.1600e-003</b>	<b>0.1805</b>	<b>1.6600e-003</b>	<b>0.1821</b>	<b>0.0482</b>	<b>1.5400e-003</b>	<b>0.0497</b>		<b>219.3040</b>	<b>219.3040</b>	<b>7.6800e-003</b>		<b>219.4959</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8011	0.0000	2.8011	1.4396	0.0000	1.4396			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>2.8011</b>	<b>0.9409</b>	<b>3.7420</b>	<b>1.4396</b>	<b>0.8656</b>	<b>2.3052</b>	<b>0.0000</b>	<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895.2684</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7100e-003	0.1847	0.0480	5.1000e-004	0.0120	3.5000e-004	0.0123	3.4900e-003	3.3000e-004	3.8200e-003		54.4972	54.4972	3.1300e-003		54.5754
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1546	1.3100e-003	0.1559	0.0413	1.2100e-003	0.0425		164.8069	164.8069	4.5500e-003		164.9206
<b>Total</b>	<b>0.0659</b>	<b>0.2246</b>	<b>0.6054</b>	<b>2.1600e-003</b>	<b>0.1665</b>	<b>1.6600e-003</b>	<b>0.1682</b>	<b>0.0447</b>	<b>1.5400e-003</b>	<b>0.0463</b>		<b>219.3040</b>	<b>219.3040</b>	<b>7.6800e-003</b>		<b>219.4959</b>

## 3.7 Utilities Trenching - 2022

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2024	1.7770	3.2551	5.1700e-003		0.0859	0.0859		0.0790	0.0790		500.0153	500.0153	0.1617		504.0582

Total	0.2024	1.7770	3.2551	5.1700e-003		0.0859	0.0859		0.0790	0.0790		500.0153	500.0153	0.1617		504.0582
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### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0121	7.9800e-003	0.1115	3.3000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		32.9614	32.9614	9.1000e-004		32.9841
Total	0.0121	7.9800e-003	0.1115	3.3000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		32.9614	32.9614	9.1000e-004		32.9841

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2024	1.7770	3.2551	5.1700e-003		0.0859	0.0859		0.0790	0.0790	0.0000	500.0153	500.0153	0.1617		504.0582
Total	0.2024	1.7770	3.2551	5.1700e-003		0.0859	0.0859		0.0790	0.0790	0.0000	500.0153	500.0153	0.1617		504.0582

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0121	7.9800e-003	0.1115	3.3000e-004	0.0309	2.6000e-004	0.0312	8.2500e-003	2.4000e-004	8.4900e-003		32.9614	32.9614	9.1000e-004		32.9841
Total	0.0121	7.9800e-003	0.1115	3.3000e-004	0.0309	2.6000e-004	0.0312	8.2500e-003	2.4000e-004	8.4900e-003		32.9614	32.9614	9.1000e-004		32.9841

### 3.8 Building Construction - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0970	3.1392	0.8165	8.6600e-003	0.2177	5.9000e-003	0.2236	0.0627	5.6400e-003	0.0683		926.4520	926.4520	0.0532		927.7812
Worker	0.3493	0.2315	3.2329	9.5900e-003	0.9725	7.6100e-003	0.9801	0.2579	7.0100e-003	0.2649		955.8797	955.8797	0.0264		956.5393
<b>Total</b>	<b>0.4463</b>	<b>3.3708</b>	<b>4.0495</b>	<b>0.0183</b>	<b>1.1901</b>	<b>0.0135</b>	<b>1.2037</b>	<b>0.3206</b>	<b>0.0127</b>	<b>0.3332</b>		<b>1,882.3317</b>	<b>1,882.3317</b>	<b>0.0796</b>		<b>1,884.3204</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0970	3.1392	0.8165	8.6600e-003	0.2037	5.9000e-003	0.2096	0.0593	5.6400e-003	0.0649		926.4520	926.4520	0.0532		927.7812
Worker	0.3493	0.2315	3.2329	9.5900e-003	0.8964	7.6100e-003	0.9040	0.2392	7.0100e-003	0.2462		955.8797	955.8797	0.0264		956.5393
<b>Total</b>	<b>0.4463</b>	<b>3.3708</b>	<b>4.0495</b>	<b>0.0183</b>	<b>1.1001</b>	<b>0.0135</b>	<b>1.1136</b>	<b>0.2985</b>	<b>0.0127</b>	<b>0.3111</b>		<b>1,882.3317</b>	<b>1,882.3317</b>	<b>0.0796</b>		<b>1,884.3204</b>

### 3.8 Building Construction - 2023

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0720	2.3819	0.7374	8.3800e-003	0.2177	2.7500e-003	0.2204	0.0627	2.6300e-003	0.0653		897.2853	897.2853	0.0471		898.4631
Worker	0.3280	0.2095	2.9773	9.2400e-003	0.9725	7.4000e-003	0.9799	0.2579	6.8100e-003	0.2647		920.8793	920.8793	0.0238		921.4740
<b>Total</b>	<b>0.4000</b>	<b>2.5914</b>	<b>3.7147</b>	<b>0.0176</b>	<b>1.1901</b>	<b>0.0102</b>	<b>1.2003</b>	<b>0.3206</b>	<b>9.4400e-003</b>	<b>0.3300</b>		<b>1,818.1646</b>	<b>1,818.1646</b>	<b>0.0709</b>		<b>1,819.9371</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061



Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
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### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0720	2.3819	0.7374	8.3800e-003	0.2037	2.7500e-003	0.2065	0.0593	2.6300e-003	0.0619		897.2853	897.2853	0.0471		898.4631
Worker	0.3280	0.2095	2.9773	9.2400e-003	0.8964	7.4000e-003	0.9038	0.2392	6.8100e-003	0.2460		920.8793	920.8793	0.0238		921.4740
Total	0.4000	2.5914	3.7147	0.0176	1.1001	0.0102	1.1102	0.2985	9.4400e-003	0.3079		1,818.1646	1,818.1646	0.0709		1,819.9371

### 3.8 Building Construction - 2024

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0702	2.3728	0.7149	8.3400e-003	0.2177	2.7200e-003	0.2204	0.0627	2.6000e-003	0.0653		893.6439	893.6439	0.0464		894.8049
Worker	0.3103	0.1910	2.7755	8.9500e-003	0.9725	7.2900e-003	0.9797	0.2579	6.7100e-003	0.2646		892.3401	892.3401	0.0218		892.8857
Total	0.3806	2.5639	3.4904	0.0173	1.1901	0.0100	1.2002	0.3206	9.3100e-003	0.3299		1,785.9840	1,785.9840	0.0683		1,787.6906

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0702	2.3728	0.7149	8.3400e-003	0.2037	2.7200e-003	0.2065	0.0593	2.6000e-003	0.0619		893.6439	893.6439	0.0464		894.8049
Worker	0.3103	0.1910	2.7755	8.9500e-003	0.8964	7.2900e-003	0.9037	0.2392	6.7100e-003	0.2459		892.3401	892.3401	0.0218		892.8857
Total	0.3806	2.5639	3.4904	0.0173	1.1001	0.0100	1.1101	0.2985	9.3100e-003	0.3078		1,785.9840	1,785.9840	0.0683		1,787.6906

## 3.9 Paving - 2024

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0713	0.0439	0.6380	2.0600e-003	0.2236	1.6800e-003	0.2252	0.0593	1.5400e-003	0.0608		205.1357	205.1357	5.0200e-003		205.2611
<b>Total</b>	<b>0.0713</b>	<b>0.0439</b>	<b>0.6380</b>	<b>2.0600e-003</b>	<b>0.2236</b>	<b>1.6800e-003</b>	<b>0.2252</b>	<b>0.0593</b>	<b>1.5400e-003</b>	<b>0.0608</b>		<b>205.1357</b>	<b>205.1357</b>	<b>5.0200e-003</b>		<b>205.2611</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8814</b>	<b>8.2730</b>	<b>12.2210</b>	<b>0.0189</b>		<b>0.3987</b>	<b>0.3987</b>		<b>0.3685</b>	<b>0.3685</b>	<b>0.0000</b>	<b>1,805.6205</b>	<b>1,805.6205</b>	<b>0.5673</b>		<b>1,819.8039</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0713	0.0439	0.6380	2.0600e-003	0.2061	1.6800e-003	0.2077	0.0550	1.5400e-003	0.0565		205.1357	205.1357	5.0200e-003		205.2611
<b>Total</b>	<b>0.0713</b>	<b>0.0439</b>	<b>0.6380</b>	<b>2.0600e-003</b>	<b>0.2061</b>	<b>1.6800e-003</b>	<b>0.2077</b>	<b>0.0550</b>	<b>1.5400e-003</b>	<b>0.0565</b>		<b>205.1357</b>	<b>205.1357</b>	<b>5.0200e-003</b>		<b>205.2611</b>

## 3.10 Architectural Coating - 2024

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.7352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>8.9160</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0606	0.0373	0.5423	1.7500e-003	0.1900	1.4200e-003	0.1914	0.0504	1.3100e-003	0.0517		174.3653	174.3653	4.2600e-003		174.4719
<b>Total</b>	<b>0.0606</b>	<b>0.0373</b>	<b>0.5423</b>	<b>1.7500e-003</b>	<b>0.1900</b>	<b>1.4200e-003</b>	<b>0.1914</b>	<b>0.0504</b>	<b>1.3100e-003</b>	<b>0.0517</b>		<b>174.3653</b>	<b>174.3653</b>	<b>4.2600e-003</b>		<b>174.4719</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.7352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>8.9160</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0606	0.0373	0.5423	1.7500e-003	0.1752	1.4200e-003	0.1766	0.0467	1.3100e-003	0.0481		174.3653	174.3653	4.2600e-003		174.4719
<b>Total</b>	<b>0.0606</b>	<b>0.0373</b>	<b>0.5423</b>	<b>1.7500e-003</b>	<b>0.1752</b>	<b>1.4200e-003</b>	<b>0.1766</b>	<b>0.0467</b>	<b>1.3100e-003</b>	<b>0.0481</b>		<b>174.3653</b>	<b>174.3653</b>	<b>4.2600e-003</b>		<b>174.4719</b>

### 3.11 Finishing and Landscaping - 2024

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1803	1.4029	3.2650	5.1700e-003		0.0691	0.0691		0.0636	0.0636		500.2654	500.2654	0.1618		504.3103
<b>Total</b>	<b>0.1803</b>	<b>1.4029</b>	<b>3.2650</b>	<b>5.1700e-003</b>		<b>0.0691</b>	<b>0.0691</b>		<b>0.0636</b>	<b>0.0636</b>		<b>500.2654</b>	<b>500.2654</b>	<b>0.1618</b>		<b>504.3103</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0107	6.5900e-003	0.0957	3.1000e-004	0.0335	2.5000e-004	0.0338	8.8900e-003	2.3000e-004	9.1200e-003		30.7704	30.7704	7.5000e-004		30.7892
<b>Total</b>	<b>0.0107</b>	<b>6.5900e-003</b>	<b>0.0957</b>	<b>3.1000e-004</b>	<b>0.0335</b>	<b>2.5000e-004</b>	<b>0.0338</b>	<b>8.8900e-003</b>	<b>2.3000e-004</b>	<b>9.1200e-003</b>		<b>30.7704</b>	<b>30.7704</b>	<b>7.5000e-004</b>		<b>30.7892</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1803	1.4029	3.2650	5.1700e-003		0.0691	0.0691		0.0636	0.0636	0.0000	500.2654	500.2654	0.1618		504.3103
<b>Total</b>	<b>0.1803</b>	<b>1.4029</b>	<b>3.2650</b>	<b>5.1700e-003</b>		<b>0.0691</b>	<b>0.0691</b>		<b>0.0636</b>	<b>0.0636</b>	<b>0.0000</b>	<b>500.2654</b>	<b>500.2654</b>	<b>0.1618</b>		<b>504.3103</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0107	6.5900e-003	0.0957	3.1000e-004	0.0309	2.5000e-004	0.0312	8.2500e-003	2.3000e-004	8.4800e-003		30.7704	30.7704	7.5000e-004		30.7892
<b>Total</b>	<b>0.0107</b>	<b>6.5900e-003</b>	<b>0.0957</b>	<b>3.1000e-004</b>	<b>0.0309</b>	<b>2.5000e-004</b>	<b>0.0312</b>	<b>8.2500e-003</b>	<b>2.3000e-004</b>	<b>8.4800e-003</b>		<b>30.7704</b>	<b>30.7704</b>	<b>7.5000e-004</b>		<b>30.7892</b>

### 3.12 Demolition 2024/2025 - 2024

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
<b>Total</b>	<b>2.2437</b>	<b>20.8781</b>	<b>19.7073</b>	<b>0.0388</b>		<b>0.9602</b>	<b>0.9602</b>		<b>0.8922</b>	<b>0.8922</b>		<b>3,747.4228</b>	<b>3,747.4228</b>	<b>1.0485</b>		<b>3,773.6345</b>

#### Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.1300e-003	0.1396	0.0421	4.9000e-004	0.0128	1.6000e-004	0.0130	3.6900e-003	1.5000e-004	3.8400e-003		52.5673	52.5673	2.7300e-003		52.6356
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
<b>Total</b>	<b>0.0576</b>	<b>0.1725</b>	<b>0.5206</b>	<b>2.0300e-003</b>	<b>0.1805</b>	<b>1.4200e-003</b>	<b>0.1819</b>	<b>0.0482</b>	<b>1.3100e-003</b>	<b>0.0495</b>		<b>206.4190</b>	<b>206.4190</b>	<b>6.4900e-003</b>		<b>206.5814</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
<b>Total</b>	<b>2.2437</b>	<b>20.8781</b>	<b>19.7073</b>	<b>0.0388</b>		<b>0.9602</b>	<b>0.9602</b>		<b>0.8922</b>	<b>0.8922</b>	<b>0.0000</b>	<b>3,747.4228</b>	<b>3,747.4228</b>	<b>1.0485</b>		<b>3,773.6345</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.1300e-003	0.1396	0.0421	4.9000e-004	0.0120	1.6000e-004	0.0121	3.4900e-003	1.5000e-004	3.6400e-003		52.5673	52.5673	2.7300e-003		52.6356
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1546	1.2600e-003	0.1558	0.0413	1.1600e-003	0.0424		153.8517	153.8517	3.7600e-003		153.9458
<b>Total</b>	<b>0.0576</b>	<b>0.1725</b>	<b>0.5206</b>	<b>2.0300e-003</b>	<b>0.1665</b>	<b>1.4200e-003</b>	<b>0.1679</b>	<b>0.0447</b>	<b>1.3100e-003</b>	<b>0.0460</b>		<b>206.4190</b>	<b>206.4190</b>	<b>6.4900e-003</b>		<b>206.5814</b>

## 3.12 Demolition 2024/2025 - 2025

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606

<b>Total</b>	<b>2.0926</b>	<b>19.1966</b>	<b>19.4184</b>	<b>0.0388</b>		<b>0.8528</b>	<b>0.8528</b>		<b>0.7920</b>	<b>0.7920</b>		<b>3,747.5996</b>	<b>3,747.5996</b>	<b>1.0464</b>		<b>3,773.7606</b>
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### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.0300e-003	0.1384	0.0410	4.9000e-004	0.0128	1.6000e-004	0.0130	3.6900e-003	1.5000e-004	3.8400e-003		52.2776	52.2776	2.6900e-003		52.3450
Worker	0.0508	0.0301	0.4445	1.4800e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1300e-003	0.0456		147.8903	147.8903	3.4300e-003		147.9761
<b>Total</b>	<b>0.0548</b>	<b>0.1685</b>	<b>0.4854</b>	<b>1.9700e-003</b>	<b>0.1805</b>	<b>1.3900e-003</b>	<b>0.1819</b>	<b>0.0482</b>	<b>1.2800e-003</b>	<b>0.0494</b>		<b>200.1679</b>	<b>200.1679</b>	<b>6.1200e-003</b>		<b>200.3210</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606
<b>Total</b>	<b>2.0926</b>	<b>19.1966</b>	<b>19.4184</b>	<b>0.0388</b>		<b>0.8528</b>	<b>0.8528</b>		<b>0.7920</b>	<b>0.7920</b>	<b>0.0000</b>	<b>3,747.5996</b>	<b>3,747.5996</b>	<b>1.0464</b>		<b>3,773.7606</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.0300e-003	0.1384	0.0410	4.9000e-004	0.0120	1.6000e-004	0.0121	3.4900e-003	1.5000e-004	3.6400e-003		52.2776	52.2776	2.6900e-003		52.3450
Worker	0.0508	0.0301	0.4445	1.4800e-003	0.1546	1.2300e-003	0.1558	0.0413	1.1300e-003	0.0424		147.8903	147.8903	3.4300e-003		147.9761
<b>Total</b>	<b>0.0548</b>	<b>0.1685</b>	<b>0.4854</b>	<b>1.9700e-003</b>	<b>0.1665</b>	<b>1.3900e-003</b>	<b>0.1679</b>	<b>0.0447</b>	<b>1.2800e-003</b>	<b>0.0460</b>		<b>200.1679</b>	<b>200.1679</b>	<b>6.1200e-003</b>		<b>200.3210</b>



### 3.13 Demolition Haul 2024 - 2024

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.8800e-003	0.1213	0.0427	5.4000e-004	0.0130	2.2000e-004	0.0132	3.5600e-003	2.1000e-004	3.7700e-003		59.2949	59.2949	3.9100e-003		59.3927
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.8800e-003	0.1213	0.0427	5.4000e-004	0.0130	2.2000e-004	0.0132	3.5600e-003	2.1000e-004	3.7700e-003		59.2949	59.2949	3.9100e-003		59.3927

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

#### Mitigated Construction Off-Site

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



Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
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### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.0600e-003	0.1259	0.0453	5.7000e-004	0.0128	2.3000e-004	0.0130	3.5200e-003	2.2000e-004	3.7400e-003		62.0967	62.0967	4.1200e-003		62.1996
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	4.0600e-003	0.1259	0.0453	5.7000e-004	0.0128	2.3000e-004	0.0130	3.5200e-003	2.2000e-004	3.7400e-003		62.0967	62.0967	4.1200e-003		62.1996

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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### Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

## LA Harbor College Construction Run - Los Angeles-South Coast County, Winter

## LA Harbor College Construction Run

### Los Angeles-South Coast County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	49.00	1000sqft	1.12	49,000.00	0
Other Non-Asphalt Surfaces	157.79	1000sqft	3.62	157,793.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2025
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MW hr)</b>	1227.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - see assumptions file for normalized schedule

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - assuming 1 excavator for finishing/landscaping

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Assuming 1 excavator for trenching

Grading -

Trips and VMT - assuming 2 VT/water truck per day, see assump file for trips calculation

Architectural Coating - scaqmd rule 1113, no parking striping

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	9,468.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	132.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	5.00	57.00
tblConstructionPhase	NumDays	8.00	57.00
tblConstructionPhase	NumDays	230.00	458.00
tblConstructionPhase	NumDays	18.00	26.00
tblConstructionPhase	NumDays	18.00	26.00
tblConstructionPhase	NumDays	20.00	132.00
tblConstructionPhase	NumDays	20.00	109.00
tblConstructionPhase	NumDays	20.00	23.00
tblLandUse	LandUseSquareFeet	157,790.00	157,793.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	102.00
tblTripsAndVMT	HaulingTripNumber	0.00	21.00
tblTripsAndVMT	HaulingTripNumber	0.00	81.00
tblTripsAndVMT	HaulingTripNumber	0.00	18.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.2509	31.9352	22.2354	0.0416	0.1967	1.5539	1.7506	0.0526	1.4435	1.4961	0.0000	4,039.3807	4,039.3807	1.0686	0.0000	4,066.0956
2022	3.2567	33.3207	21.2189	0.0444	18.2803	1.6145	19.8948	9.9877	1.4854	11.4731	0.0000	4,355.3080	4,355.3080	1.2006	0.0000	4,372.6416
2023	2.0155	16.9878	19.7593	0.0438	1.1901	0.7100	1.9002	0.3206	0.6680	0.9886	0.0000	4,295.2773	4,295.2773	0.6800	0.0000	4,312.2774
2024	8.9840	21.1757	20.2330	0.0435	1.1901	0.9618	1.8136	0.3206	0.8937	0.9454	0.0000	4,265.4831	4,265.4831	1.0589	0.0000	4,282.3303
2025	2.1582	19.4946	19.9141	0.0413	0.1942	0.8544	1.0486	0.0519	0.7935	0.8454	0.0000	3,998.7684	3,998.7684	1.0567	0.0000	4,025.1866
Maximum	8.9840	33.3207	22.2354	0.0444	18.2803	1.6145	19.8948	9.9877	1.4854	11.4731	0.0000	4,355.3080	4,355.3080	1.2006	0.0000	4,372.6416

## Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.2509	31.9352	22.2354	0.0416	0.1816	1.5539	1.7355	0.0489	1.4435	1.4924	0.0000	4,039.3807	4,039.3807	1.0686	0.0000	4,066.0956
2022	3.2567	33.3207	21.2189	0.0444	7.9208	1.6145	9.5353	4.2984	1.4854	5.7837	0.0000	4,355.3080	4,355.3080	1.2006	0.0000	4,372.6416
2023	2.0155	16.9878	19.7593	0.0438	1.1001	0.7100	1.8101	0.2985	0.6680	0.9665	0.0000	4,295.2773	4,295.2773	0.6800	0.0000	4,312.2774
2024	8.9840	21.1757	20.2330	0.0435	1.1001	0.9618	1.7235	0.2985	0.8937	0.9418	0.0000	4,265.4831	4,265.4831	1.0589	0.0000	4,282.3303
2025	2.1582	19.4946	19.9141	0.0413	0.1793	0.8544	1.0337	0.0483	0.7935	0.8417	0.0000	3,998.7684	3,998.7684	1.0567	0.0000	4,025.1866
Maximum	8.9840	33.3207	22.2354	0.0444	7.9208	1.6145	9.5353	4.2984	1.4854	5.7837	0.0000	4,355.3080	4,355.3080	1.2006	0.0000	4,372.6416

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	50.21	0.00	40.02	53.49	0.00	36.34	0.00	0.00	0.00	0.00	0.00	0.00

## 3.0 Construction Detail

### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition 2021/2022	Demolition	8/1/2021	2/1/2022	5	132	
2	Demolition Haul 2021	Demolition	8/1/2021	12/31/2021	5	110	
3	Demolition Haul 2022	Demolition	1/1/2022	2/1/2022	5	22	
4	Site Preparation	Site Preparation	2/2/2022	4/21/2022	5	57	
5	Grading	Grading	4/22/2022	7/11/2022	5	57	
6	Utilities Trenching	Trenching	7/12/2022	7/31/2022	5	14	
7	Building Construction	Building Construction	8/1/2022	5/1/2024	5	458	
8	Paving	Paving	5/2/2024	6/6/2024	5	26	
9	Architectural Coating	Architectural Coating	6/7/2024	7/14/2024	5	26	
10	Finishing and Landscaping	Trenching	7/15/2024	7/31/2024	5	13	

11	Demolition 2024/2025	Demolition	8/1/2024	2/1/2025	5	132
12	Demolition Haul 2024	Demolition	8/1/2024	12/31/2024	5	109
13	Demolition Haul 2025	Demolition	1/1/2025	4/31/2025	5	23

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 28.5**

**Acres of Paving: 3.62**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 73,500; Non-Residential Outdoor: 24,500; Striped Parking Area: 0**

### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition 2021/2022	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition 2021/2022	Excavators	3	8.00	158	0.38
Demolition 2021/2022	Rubber Tired Dozers	2	8.00	247	0.40
Demolition Haul 2021	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition Haul 2021	Excavators	0	8.00	158	0.38
Demolition Haul 2021	Rubber Tired Dozers	0	8.00	247	0.40
Demolition Haul 2022	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition Haul 2022	Excavators	0	8.00	158	0.38
Demolition Haul 2022	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Utilities Trenching	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37



Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Finishing and Landscaping	Excavators	1	8.00	158	0.38
Demolition 2024/2025	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition 2024/2025	Excavators	3	8.00	158	0.38
Demolition 2024/2025	Rubber Tired Dozers	2	8.00	247	0.40
Demolition Haul 2024	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition Haul 2024	Excavators	0	8.00	158	0.38
Demolition Haul 2024	Rubber Tired Dozers	0	8.00	247	0.40
Demolition Haul 2025	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition Haul 2025	Excavators	0	8.00	158	0.38
Demolition Haul 2025	Rubber Tired Dozers	0	8.00	247	0.40

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition 2021/2022	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Haul 2021	0	0.00	0.00	102.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Haul 2022	0	0.00	0.00	21.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	87.00	34.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Finishing and Landscaping	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Demolition 2024/2025	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Haul 2024	0	0.00	0.00	81.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Haul 2025	0	0.00	0.00	18.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 3.2 Demolition 2021/2022 - 2021

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.3800e-003	0.1938	0.0562	5.0000e-004	0.0128	4.1000e-004	0.0132	3.6900e-003	3.9000e-004	4.0800e-003		53.4691	53.4691	3.4500e-003		53.5554
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.0779	0.2427	0.6085	2.1100e-003	0.1805	1.7600e-003	0.1822	0.0482	1.6400e-003	0.0498		214.3068	214.3068	8.1800e-003		214.5114

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.3800e-003	0.1938	0.0562	5.0000e-004	0.0120	4.1000e-004	0.0124	3.4900e-003	3.9000e-004	3.8800e-003		53.4691	53.4691	3.4500e-003		53.5554
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1546	1.3500e-003	0.1559	0.0413	1.2500e-003	0.0425		160.8377	160.8377	4.7300e-003		160.9560
Total	0.0779	0.2427	0.6085	2.1100e-003	0.1665	1.7600e-003	0.1683	0.0447	1.6400e-003	0.0464		214.3068	214.3068	8.1800e-003		214.5114

## 3.2 Demolition 2021/2022 - 2022

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.9900e-003	0.1842	0.0532	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.4000e-004	4.0300e-003		52.9941	52.9941	3.3300e-003		53.0773
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
<b>Total</b>	<b>0.0732</b>	<b>0.2283</b>	<b>0.5619</b>	<b>2.0600e-003</b>	<b>0.1805</b>	<b>1.6700e-003</b>	<b>0.1821</b>	<b>0.0482</b>	<b>1.5500e-003</b>	<b>0.0497</b>		<b>208.1795</b>	<b>208.1795</b>	<b>7.6000e-003</b>		<b>208.3696</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>		<b>1.2427</b>	<b>1.2427</b>		<b>1.1553</b>	<b>1.1553</b>	<b>0.0000</b>	<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.9900e-003	0.1842	0.0532	5.0000e-004	0.0120	3.6000e-004	0.0123	3.4900e-003	3.4000e-004	3.8300e-003		52.9941	52.9941	3.3300e-003		53.0773
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1546	1.3100e-003	0.1559	0.0413	1.2100e-003	0.0425		155.1854	155.1854	4.2700e-003		155.2922
<b>Total</b>	<b>0.0732</b>	<b>0.2283</b>	<b>0.5619</b>	<b>2.0600e-003</b>	<b>0.1665</b>	<b>1.6700e-003</b>	<b>0.1682</b>	<b>0.0447</b>	<b>1.5500e-003</b>	<b>0.0463</b>		<b>208.1795</b>	<b>208.1795</b>	<b>7.6000e-003</b>		<b>208.3696</b>

## 3.3 Demolition Haul 2021 - 2021

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.9200e-003	0.2518	0.0618	7.1000e-004	0.0162	7.8000e-004	0.0170	4.4400e-003	7.4000e-004	5.1900e-003		77.1290	77.1290	5.5100e-003		77.2668
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	7.9200e-003	0.2518	0.0618	7.1000e-004	0.0162	7.8000e-004	0.0170	4.4400e-003	7.4000e-004	5.1900e-003		77.1290	77.1290	5.5100e-003		77.2668

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.9200e-003	0.2518	0.0618	7.1000e-004	0.0151	7.8000e-004	0.0159	4.1700e-003	7.4000e-004	4.9200e-003		77.1290	77.1290	5.5100e-003		77.2668
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	7.9200e-003	0.2518	0.0618	7.1000e-004	0.0151	7.8000e-004	0.0159	4.1700e-003	7.4000e-004	4.9200e-003		77.1290	77.1290	5.5100e-003		77.2668

### 3.4 Demolition Haul 2022 - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.7600e-003	0.2406	0.0629	7.2000e-004	0.0167	6.9000e-004	0.0174	4.5800e-003	6.6000e-004	5.2400e-003		78.4461	78.4461	5.5900e-003		78.5858
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>7.7600e-003</b>	<b>0.2406</b>	<b>0.0629</b>	<b>7.2000e-004</b>	<b>0.0167</b>	<b>6.9000e-004</b>	<b>0.0174</b>	<b>4.5800e-003</b>	<b>6.6000e-004</b>	<b>5.2400e-003</b>		<b>78.4461</b>	<b>78.4461</b>	<b>5.5900e-003</b>		<b>78.5858</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

#### Mitigated Construction Off-Site

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

Hauling	7.7600e-003	0.2406	0.0629	7.2000e-004	0.0156	6.9000e-004	0.0163	4.3000e-003	6.6000e-004	4.9600e-003		78.4461	78.4461	5.5900e-003		78.5858
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>7.7600e-003</b>	<b>0.2406</b>	<b>0.0629</b>	<b>7.2000e-004</b>	<b>0.0156</b>	<b>6.9000e-004</b>	<b>0.0163</b>	<b>4.3000e-003</b>	<b>6.6000e-004</b>	<b>4.9600e-003</b>		<b>78.4461</b>	<b>78.4461</b>	<b>5.5900e-003</b>		<b>78.5858</b>

### 3.5 Site Preparation - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0663</b>	<b>1.6126</b>	<b>19.6788</b>	<b>9.9307</b>	<b>1.4836</b>	<b>11.4143</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.9900e-003	0.1842	0.0532	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.4000e-004	4.0300e-003		52.9941	52.9941	3.3300e-003		53.0773
Worker	0.0806	0.0530	0.6105	1.8700e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		186.2225	186.2225	5.1300e-003		186.3507
<b>Total</b>	<b>0.0866</b>	<b>0.2372</b>	<b>0.6637</b>	<b>2.3700e-003</b>	<b>0.2140</b>	<b>1.9300e-003</b>	<b>0.2159</b>	<b>0.0571</b>	<b>1.7900e-003</b>	<b>0.0588</b>		<b>239.2166</b>	<b>239.2166</b>	<b>8.4600e-003</b>		<b>239.4280</b>

#### Mitigated Construction On-Site

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

Fugitive Dust					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>7.7233</b>	<b>1.6126</b>	<b>9.3359</b>	<b>4.2454</b>	<b>1.4836</b>	<b>5.7289</b>	<b>0.0000</b>	<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.9900e-003	0.1842	0.0532	5.0000e-004	0.0120	3.6000e-004	0.0123	3.4900e-003	3.4000e-004	3.8300e-003		52.9941	52.9941	3.3300e-003		53.0773
Worker	0.0806	0.0530	0.6105	1.8700e-003	0.1855	1.5700e-003	0.1870	0.0495	1.4500e-003	0.0510		186.2225	186.2225	5.1300e-003		186.3507
<b>Total</b>	<b>0.0866</b>	<b>0.2372</b>	<b>0.6637</b>	<b>2.3700e-003</b>	<b>0.1974</b>	<b>1.9300e-003</b>	<b>0.1994</b>	<b>0.0530</b>	<b>1.7900e-003</b>	<b>0.0548</b>		<b>239.2166</b>	<b>239.2166</b>	<b>8.4600e-003</b>		<b>239.4280</b>

### 3.6 Grading - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>6.5523</b>	<b>0.9409</b>	<b>7.4932</b>	<b>3.3675</b>	<b>0.8656</b>	<b>4.2331</b>		<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895.2684</b>

#### Unmitigated Construction Off-Site

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



Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.9900e-003	0.1842	0.0532	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.4000e-004	4.0300e-003		52.9941	52.9941	3.3300e-003		53.0773
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
<b>Total</b>	<b>0.0732</b>	<b>0.2283</b>	<b>0.5619</b>	<b>2.0600e-003</b>	<b>0.1805</b>	<b>1.6700e-003</b>	<b>0.1821</b>	<b>0.0482</b>	<b>1.5500e-003</b>	<b>0.0497</b>		<b>208.1795</b>	<b>208.1795</b>	<b>7.6000e-003</b>		<b>208.3696</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8011	0.0000	2.8011	1.4396	0.0000	1.4396			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>2.8011</b>	<b>0.9409</b>	<b>3.7420</b>	<b>1.4396</b>	<b>0.8656</b>	<b>2.3052</b>	<b>0.0000</b>	<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895.2684</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.9900e-003	0.1842	0.0532	5.0000e-004	0.0120	3.6000e-004	0.0123	3.4900e-003	3.4000e-004	3.8300e-003		52.9941	52.9941	3.3300e-003		53.0773
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1546	1.3100e-003	0.1559	0.0413	1.2100e-003	0.0425		155.1854	155.1854	4.2700e-003		155.2922
<b>Total</b>	<b>0.0732</b>	<b>0.2283</b>	<b>0.5619</b>	<b>2.0600e-003</b>	<b>0.1665</b>	<b>1.6700e-003</b>	<b>0.1682</b>	<b>0.0447</b>	<b>1.5500e-003</b>	<b>0.0463</b>		<b>208.1795</b>	<b>208.1795</b>	<b>7.6000e-003</b>		<b>208.3696</b>

## 3.7 Utilities Trenching - 2022

### Unmitigated Construction On-Site

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

Off-Road	0.2024	1.7770	3.2551	5.1700e-003		0.0859	0.0859		0.0790	0.0790		500.0153	500.0153	0.1617		504.0582
<b>Total</b>	<b>0.2024</b>	<b>1.7770</b>	<b>3.2551</b>	<b>5.1700e-003</b>		<b>0.0859</b>	<b>0.0859</b>		<b>0.0790</b>	<b>0.0790</b>		<b>500.0153</b>	<b>500.0153</b>	<b>0.1617</b>		<b>504.0582</b>

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0134	8.8400e-003	0.1018	3.1000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		31.0371	31.0371	8.5000e-004		31.0585
<b>Total</b>	<b>0.0134</b>	<b>8.8400e-003</b>	<b>0.1018</b>	<b>3.1000e-004</b>	<b>0.0335</b>	<b>2.6000e-004</b>	<b>0.0338</b>	<b>8.8900e-003</b>	<b>2.4000e-004</b>	<b>9.1300e-003</b>		<b>31.0371</b>	<b>31.0371</b>	<b>8.5000e-004</b>		<b>31.0585</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2024	1.7770	3.2551	5.1700e-003		0.0859	0.0859		0.0790	0.0790	0.0000	500.0153	500.0153	0.1617		504.0582
<b>Total</b>	<b>0.2024</b>	<b>1.7770</b>	<b>3.2551</b>	<b>5.1700e-003</b>		<b>0.0859</b>	<b>0.0859</b>		<b>0.0790</b>	<b>0.0790</b>	<b>0.0000</b>	<b>500.0153</b>	<b>500.0153</b>	<b>0.1617</b>		<b>504.0582</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0134	8.8400e-003	0.1018	3.1000e-004	0.0309	2.6000e-004	0.0312	8.2500e-003	2.4000e-004	8.4900e-003		31.0371	31.0371	8.5000e-004		31.0585

Total	0.0134	8.8400e-003	0.1018	3.1000e-004	0.0309	2.6000e-004	0.0312	8.2500e-003	2.4000e-004	8.4900e-003		31.0371	31.0371	8.5000e-004		31.0585
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### 3.8 Building Construction - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1019	3.1307	0.9036	8.4200e-003	0.2177	6.0900e-003	0.2238	0.0627	5.8300e-003	0.0685		900.8990	900.8990	0.0566		902.3144
Worker	0.3896	0.2563	2.9508	9.0300e-003	0.9725	7.6100e-003	0.9801	0.2579	7.0100e-003	0.2649		900.0754	900.0754	0.0248		900.6950
Total	0.4915	3.3869	3.8545	0.0175	1.1901	0.0137	1.2038	0.3206	0.0128	0.3334		1,800.9744	1,800.9744	0.0814		1,803.0094

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1019	3.1307	0.9036	8.4200e-003	0.2037	6.0900e-003	0.2098	0.0593	5.8300e-003	0.0651		900.8990	900.8990	0.0566		902.3144
Worker	0.3896	0.2563	2.9508	9.0300e-003	0.8964	7.6100e-003	0.9040	0.2392	7.0100e-003	0.2462		900.0754	900.0754	0.0248		900.6950
<b>Total</b>	<b>0.4915</b>	<b>3.3869</b>	<b>3.8545</b>	<b>0.0175</b>	<b>1.1001</b>	<b>0.0137</b>	<b>1.1138</b>	<b>0.2985</b>	<b>0.0128</b>	<b>0.3113</b>		<b>1,800.9744</b>	<b>1,800.9744</b>	<b>0.0814</b>		<b>1,803.0094</b>

### 3.8 Building Construction - 2023

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0757	2.3711	0.8030	8.1500e-003	0.2177	2.8900e-003	0.2206	0.0627	2.7700e-003	0.0654		872.9205	872.9205	0.0498		874.1666
Worker	0.3671	0.2318	2.7124	8.7000e-003	0.9725	7.4000e-003	0.9799	0.2579	6.8100e-003	0.2647		867.1469	867.1469	0.0223		867.7048
<b>Total</b>	<b>0.4427</b>	<b>2.6029</b>	<b>3.5153</b>	<b>0.0169</b>	<b>1.1901</b>	<b>0.0103</b>	<b>1.2004</b>	<b>0.3206</b>	<b>9.5800e-003</b>	<b>0.3302</b>		<b>1,740.0674</b>	<b>1,740.0674</b>	<b>0.0722</b>		<b>1,741.8713</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0757	2.3711	0.8030	8.1500e-003	0.2037	2.8900e-003	0.2066	0.0593	2.7700e-003	0.0620		872.9205	872.9205	0.0498		874.1666
Worker	0.3671	0.2318	2.7124	8.7000e-003	0.8964	7.4000e-003	0.9038	0.2392	6.8100e-003	0.2460		867.1469	867.1469	0.0223		867.7048
<b>Total</b>	<b>0.4427</b>	<b>2.6029</b>	<b>3.5153</b>	<b>0.0169</b>	<b>1.1001</b>	<b>0.0103</b>	<b>1.1104</b>	<b>0.2985</b>	<b>9.5800e-003</b>	<b>0.3081</b>		<b>1,740.0674</b>	<b>1,740.0674</b>	<b>0.0722</b>		<b>1,741.8713</b>

## 3.8 Building Construction - 2024

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>		<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0738	2.3626	0.7786	8.1100e-003	0.2177	2.8400e-003	0.2205	0.0627	2.7200e-003	0.0654		869.5349	869.5349	0.0491		870.7622
Worker	0.3483	0.2113	2.5251	8.4300e-003	0.9725	7.2900e-003	0.9797	0.2579	6.7100e-003	0.2646		840.2493	840.2493	0.0205		840.7605
<b>Total</b>	<b>0.4221</b>	<b>2.5739</b>	<b>3.3037</b>	<b>0.0165</b>	<b>1.1901</b>	<b>0.0101</b>	<b>1.2003</b>	<b>0.3206</b>	<b>9.4300e-003</b>	<b>0.3300</b>		<b>1,709.7842</b>	<b>1,709.7842</b>	<b>0.0695</b>		<b>1,711.5226</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>	<b>0.0000</b>	<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0738	2.3626	0.7786	8.1100e-003	0.2037	2.8400e-003	0.2066	0.0593	2.7200e-003	0.0620		869.5349	869.5349	0.0491		870.7622
Worker	0.3483	0.2113	2.5251	8.4300e-003	0.8964	7.2900e-003	0.9037	0.2392	6.7100e-003	0.2459		840.2493	840.2493	0.0205		840.7605
<b>Total</b>	<b>0.4221</b>	<b>2.5739</b>	<b>3.3037</b>	<b>0.0165</b>	<b>1.1001</b>	<b>0.0101</b>	<b>1.1102</b>	<b>0.2985</b>	<b>9.4300e-003</b>	<b>0.3079</b>		<b>1,709.7842</b>	<b>1,709.7842</b>	<b>0.0695</b>		<b>1,711.5226</b>

## 3.9 Paving - 2024

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

<b>Total</b>	<b>0.8814</b>	<b>8.2730</b>	<b>12.2210</b>	<b>0.0189</b>		<b>0.3987</b>	<b>0.3987</b>		<b>0.3685</b>	<b>0.3685</b>		<b>1,805.6205</b>	<b>1,805.6205</b>	<b>0.5673</b>		<b>1,819.8039</b>
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### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0801	0.0486	0.5805	1.9400e-003	0.2236	1.6800e-003	0.2252	0.0593	1.5400e-003	0.0608		193.1608	193.1608	4.7000e-003		193.2783
<b>Total</b>	<b>0.0801</b>	<b>0.0486</b>	<b>0.5805</b>	<b>1.9400e-003</b>	<b>0.2236</b>	<b>1.6800e-003</b>	<b>0.2252</b>	<b>0.0593</b>	<b>1.5400e-003</b>	<b>0.0608</b>		<b>193.1608</b>	<b>193.1608</b>	<b>4.7000e-003</b>		<b>193.2783</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8814</b>	<b>8.2730</b>	<b>12.2210</b>	<b>0.0189</b>		<b>0.3987</b>	<b>0.3987</b>		<b>0.3685</b>	<b>0.3685</b>	<b>0.0000</b>	<b>1,805.6205</b>	<b>1,805.6205</b>	<b>0.5673</b>		<b>1,819.8039</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0801	0.0486	0.5805	1.9400e-003	0.2061	1.6800e-003	0.2077	0.0550	1.5400e-003	0.0565		193.1608	193.1608	4.7000e-003		193.2783
<b>Total</b>	<b>0.0801</b>	<b>0.0486</b>	<b>0.5805</b>	<b>1.9400e-003</b>	<b>0.2061</b>	<b>1.6800e-003</b>	<b>0.2077</b>	<b>0.0550</b>	<b>1.5400e-003</b>	<b>0.0565</b>		<b>193.1608</b>	<b>193.1608</b>	<b>4.7000e-003</b>		<b>193.2783</b>

### 3.10 Architectural Coating - 2024

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.7352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>8.9160</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0681	0.0413	0.4934	1.6500e-003	0.1900	1.4200e-003	0.1914	0.0504	1.3100e-003	0.0517		164.1866	164.1866	4.0000e-003		164.2865
<b>Total</b>	<b>0.0681</b>	<b>0.0413</b>	<b>0.4934</b>	<b>1.6500e-003</b>	<b>0.1900</b>	<b>1.4200e-003</b>	<b>0.1914</b>	<b>0.0504</b>	<b>1.3100e-003</b>	<b>0.0517</b>		<b>164.1866</b>	<b>164.1866</b>	<b>4.0000e-003</b>		<b>164.2865</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.7352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443



<b>Total</b>	<b>8.9160</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>
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### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0681	0.0413	0.4934	1.6500e-003	0.1752	1.4200e-003	0.1766	0.0467	1.3100e-003	0.0481		164.1866	164.1866	4.0000e-003		164.2865
<b>Total</b>	<b>0.0681</b>	<b>0.0413</b>	<b>0.4934</b>	<b>1.6500e-003</b>	<b>0.1752</b>	<b>1.4200e-003</b>	<b>0.1766</b>	<b>0.0467</b>	<b>1.3100e-003</b>	<b>0.0481</b>		<b>164.1866</b>	<b>164.1866</b>	<b>4.0000e-003</b>		<b>164.2865</b>

### 3.11 Finishing and Landscaping - 2024

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1803	1.4029	3.2650	5.1700e-003		0.0691	0.0691		0.0636	0.0636		500.2654	500.2654	0.1618		504.3103
<b>Total</b>	<b>0.1803</b>	<b>1.4029</b>	<b>3.2650</b>	<b>5.1700e-003</b>		<b>0.0691</b>	<b>0.0691</b>		<b>0.0636</b>	<b>0.0636</b>		<b>500.2654</b>	<b>500.2654</b>	<b>0.1618</b>		<b>504.3103</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0120	7.2900e-003	0.0871	2.9000e-004	0.0335	2.5000e-004	0.0338	8.8900e-003	2.3000e-004	9.1200e-003		28.9741	28.9741	7.1000e-004		28.9917
<b>Total</b>	<b>0.0120</b>	<b>7.2900e-003</b>	<b>0.0871</b>	<b>2.9000e-004</b>	<b>0.0335</b>	<b>2.5000e-004</b>	<b>0.0338</b>	<b>8.8900e-003</b>	<b>2.3000e-004</b>	<b>9.1200e-003</b>		<b>28.9741</b>	<b>28.9741</b>	<b>7.1000e-004</b>		<b>28.9917</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1803	1.4029	3.2650	5.1700e-003		0.0691	0.0691		0.0636	0.0636	0.0000	500.2654	500.2654	0.1618		504.3103
Total	0.1803	1.4029	3.2650	5.1700e-003		0.0691	0.0691		0.0636	0.0636	0.0000	500.2654	500.2654	0.1618		504.3103

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0120	7.2900e-003	0.0871	2.9000e-004	0.0309	2.5000e-004	0.0312	8.2500e-003	2.3000e-004	8.4800e-003		28.9741	28.9741	7.1000e-004		28.9917
Total	0.0120	7.2900e-003	0.0871	2.9000e-004	0.0309	2.5000e-004	0.0312	8.2500e-003	2.3000e-004	8.4800e-003		28.9741	28.9741	7.1000e-004		28.9917

### 3.12 Demolition 2024/2025 - 2024

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
Total	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.3400e-003	0.1390	0.0458	4.8000e-004	0.0128	1.7000e-004	0.0130	3.6900e-003	1.6000e-004	3.8500e-003		51.1491	51.1491	2.8900e-003		51.2213
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
<b>Total</b>	<b>0.0644</b>	<b>0.1754</b>	<b>0.4812</b>	<b>1.9300e-003</b>	<b>0.1805</b>	<b>1.4300e-003</b>	<b>0.1819</b>	<b>0.0482</b>	<b>1.3200e-003</b>	<b>0.0495</b>		<b>196.0197</b>	<b>196.0197</b>	<b>6.4200e-003</b>		<b>196.1800</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
<b>Total</b>	<b>2.2437</b>	<b>20.8781</b>	<b>19.7073</b>	<b>0.0388</b>		<b>0.9602</b>	<b>0.9602</b>		<b>0.8922</b>	<b>0.8922</b>	<b>0.0000</b>	<b>3,747.4228</b>	<b>3,747.4228</b>	<b>1.0485</b>		<b>3,773.6345</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.3400e-003	0.1390	0.0458	4.8000e-004	0.0120	1.7000e-004	0.0122	3.4900e-003	1.6000e-004	3.6500e-003		51.1491	51.1491	2.8900e-003		51.2213
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1546	1.2600e-003	0.1558	0.0413	1.1600e-003	0.0424		144.8706	144.8706	3.5300e-003		144.9587
<b>Total</b>	<b>0.0644</b>	<b>0.1754</b>	<b>0.4812</b>	<b>1.9300e-003</b>	<b>0.1665</b>	<b>1.4300e-003</b>	<b>0.1680</b>	<b>0.0447</b>	<b>1.3200e-003</b>	<b>0.0461</b>		<b>196.0197</b>	<b>196.0197</b>	<b>6.4200e-003</b>		<b>196.1800</b>

## 3.12 Demolition 2024/2025 - 2025

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606

<b>Total</b>	<b>2.0926</b>	<b>19.1966</b>	<b>19.4184</b>	<b>0.0388</b>		<b>0.8528</b>	<b>0.8528</b>		<b>0.7920</b>	<b>0.7920</b>		<b>3,747.5996</b>	<b>3,747.5996</b>	<b>1.0464</b>		<b>3,773.7606</b>
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### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.2300e-003	0.1378	0.0446	4.7000e-004	0.0128	1.6000e-004	0.0130	3.6900e-003	1.6000e-004	3.8400e-003		50.8749	50.8749	2.8400e-003		50.9460
Worker	0.0572	0.0333	0.4040	1.4000e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1300e-003	0.0456		139.2625	139.2625	3.2100e-003		139.3429
<b>Total</b>	<b>0.0614</b>	<b>0.1711</b>	<b>0.4486</b>	<b>1.8700e-003</b>	<b>0.1805</b>	<b>1.3900e-003</b>	<b>0.1819</b>	<b>0.0482</b>	<b>1.2900e-003</b>	<b>0.0494</b>		<b>190.1374</b>	<b>190.1374</b>	<b>6.0500e-003</b>		<b>190.2888</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606
<b>Total</b>	<b>2.0926</b>	<b>19.1966</b>	<b>19.4184</b>	<b>0.0388</b>		<b>0.8528</b>	<b>0.8528</b>		<b>0.7920</b>	<b>0.7920</b>	<b>0.0000</b>	<b>3,747.5996</b>	<b>3,747.5996</b>	<b>1.0464</b>		<b>3,773.7606</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.2300e-003	0.1378	0.0446	4.7000e-004	0.0120	1.6000e-004	0.0122	3.4900e-003	1.6000e-004	3.6400e-003		50.8749	50.8749	2.8400e-003		50.9460
Worker	0.0572	0.0333	0.4040	1.4000e-003	0.1546	1.2300e-003	0.1558	0.0413	1.1300e-003	0.0424		139.2625	139.2625	3.2100e-003		139.3429
<b>Total</b>	<b>0.0614</b>	<b>0.1711</b>	<b>0.4486</b>	<b>1.8700e-003</b>	<b>0.1665</b>	<b>1.3900e-003</b>	<b>0.1679</b>	<b>0.0447</b>	<b>1.2900e-003</b>	<b>0.0460</b>		<b>190.1374</b>	<b>190.1374</b>	<b>6.0500e-003</b>		<b>190.2888</b>

### 3.13 Demolition Haul 2024 - 2024

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.9700e-003	0.1222	0.0445	5.3000e-004	0.0130	2.2000e-004	0.0132	3.5600e-003	2.1000e-004	3.7800e-003		58.2716	58.2716	4.0200e-003		58.3722
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.9700e-003	0.1222	0.0445	5.3000e-004	0.0130	2.2000e-004	0.0132	3.5600e-003	2.1000e-004	3.7800e-003		58.2716	58.2716	4.0200e-003		58.3722

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

#### Mitigated Construction Off-Site

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



Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
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### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1600e-003	0.1269	0.0471	5.6000e-004	0.0128	2.3000e-004	0.0130	3.5200e-003	2.2000e-004	3.7500e-003		61.0314	61.0314	4.2300e-003		61.1372
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	4.1600e-003	0.1269	0.0471	5.6000e-004	0.0128	2.3000e-004	0.0130	3.5200e-003	2.2000e-004	3.7500e-003		61.0314	61.0314	4.2300e-003		61.1372

## 10.0 Stationary Equipment

### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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### Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

LA Harbor College Construction Run - Los Angeles-South Coast County, Annual

## LA Harbor College Construction Run Los Angeles-South Coast County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	49.00	1000sqft	1.12	49,000.00	0
Other Non-Asphalt Surfaces	157.79	1000sqft	3.62	157,793.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	11			<b>Operational Year</b>	2025
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MW hr)</b>	1227.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - see assumptions file for normalized schedule

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - no additional equipment required for Demo Haul



Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - assuming 1 excavator for finishing/landscaping

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Assuming 1 excavator for trenching

Grading -

Trips and VMT - assuming 2 VT/water truck per day, see assump file for trips calculation

Architectural Coating - scaqmd rule 1113, no parking striping

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	9,468.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	132.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	5.00	57.00
tblConstructionPhase	NumDays	8.00	57.00
tblConstructionPhase	NumDays	230.00	458.00
tblConstructionPhase	NumDays	18.00	26.00
tblConstructionPhase	NumDays	18.00	26.00
tblConstructionPhase	NumDays	20.00	132.00
tblConstructionPhase	NumDays	20.00	109.00
tblConstructionPhase	NumDays	20.00	23.00
tblLandUse	LandUseSquareFeet	157,790.00	157,793.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	102.00
tblTripsAndVMT	HaulingTripNumber	0.00	21.00
tblTripsAndVMT	HaulingTripNumber	0.00	81.00
tblTripsAndVMT	HaulingTripNumber	0.00	18.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1784	1.7570	1.2235	2.2900e-003	0.0106	0.0855	0.0961	2.8400e-003	0.0794	0.0822	0.0000	201.7621	201.7621	0.0533	0.0000	203.0948
2022	0.3000	2.9001	2.4034	5.0100e-003	0.7792	0.1324	0.9116	0.3999	0.1229	0.5228	0.0000	443.7804	443.7804	0.1014	0.0000	446.3163
2023	0.2569	2.2141	2.5745	5.7300e-003	0.1518	0.0923	0.2441	0.0410	0.0868	0.1278	0.0000	509.9258	509.9258	0.0801	0.0000	511.9274
2024	0.3377	1.9948	2.1803	4.5500e-003	0.0672	0.0863	0.1535	0.0181	0.0805	0.0986	0.0000	401.4396	401.4396	0.0871	0.0000	403.6182
2025	0.0248	0.2243	0.2291	4.8000e-004	2.1900e-003	9.8300e-003	0.0120	5.9000e-004	9.1200e-003	9.7100e-003	0.0000	41.7567	41.7567	0.0110	0.0000	42.0323
Maximum	0.3377	2.9001	2.5745	5.7300e-003	0.7792	0.1324	0.9116	0.3999	0.1229	0.5228	0.0000	509.9258	509.9258	0.1014	0.0000	511.9274

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1784	1.7570	1.2235	2.2900e-003	9.8000e-003	0.0855	0.0953	2.6400e-003	0.0794	0.0820	0.0000	201.7618	201.7618	0.0533	0.0000	203.0946
2022	0.3000	2.9001	2.4034	5.0100e-003	0.3717	0.1324	0.5041	0.1815	0.1229	0.3044	0.0000	443.7800	443.7800	0.1014	0.0000	446.3159
2023	0.2569	2.2141	2.5745	5.7300e-003	0.1403	0.0923	0.2326	0.0381	0.0868	0.1250	0.0000	509.9254	509.9254	0.0801	0.0000	511.9270
2024	0.3377	1.9948	2.1803	4.5500e-003	0.0621	0.0863	0.1484	0.0168	0.0805	0.0974	0.0000	401.4392	401.4392	0.0871	0.0000	403.6178
2025	0.0248	0.2243	0.2291	4.8000e-004	2.0200e-003	9.8300e-003	0.0119	5.5000e-004	9.1200e-003	9.6700e-003	0.0000	41.7567	41.7567	0.0110	0.0000	42.0323
Maximum	0.3377	2.9001	2.5745	5.7300e-003	0.3717	0.1324	0.5041	0.1815	0.1229	0.3044	0.0000	509.9254	509.9254	0.1014	0.0000	511.9270

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	42.04	0.00	29.99	48.17	0.00	26.48	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2021	10-31-2021	1.1558	1.1558
2	11-1-2021	1-31-2022	1.0866	1.0866
3	2-1-2022	4-30-2022	1.1165	1.1165
4	5-1-2022	7-31-2022	0.6081	0.6081
5	8-1-2022	10-31-2022	0.6952	0.6952
6	11-1-2022	1-31-2023	0.6723	0.6723
7	2-1-2023	4-30-2023	0.6035	0.6035
8	5-1-2023	7-31-2023	0.6226	0.6226
9	8-1-2023	10-31-2023	0.6232	0.6232
10	11-1-2023	1-31-2024	0.6123	0.6123
11	2-1-2024	4-30-2024	0.5752	0.5752
12	5-1-2024	7-31-2024	0.2741	0.2741
13	8-1-2024	10-31-2024	0.7715	0.7715
14	11-1-2024	1-31-2025	0.7514	0.7514

15	2-1-2025	4-30-2025	0.0077	0.0077
		Highest	1.1558	1.1558

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition 2021/2022	Demolition	8/1/2021	2/1/2022	5	132	
2	Demolition Haul 2021	Demolition	8/1/2021	12/31/2021	5	110	
3	Demolition Haul 2022	Demolition	1/1/2022	2/1/2022	5	22	
4	Site Preparation	Site Preparation	2/2/2022	4/21/2022	5	57	
5	Grading	Grading	4/22/2022	7/11/2022	5	57	
6	Utilities Trenching	Trenching	7/12/2022	7/31/2022	5	14	
7	Building Construction	Building Construction	8/1/2022	5/1/2024	5	458	
8	Paving	Paving	5/2/2024	6/6/2024	5	26	
9	Architectural Coating	Architectural Coating	6/7/2024	7/14/2024	5	26	
10	Finishing and Landscaping	Trenching	7/15/2024	7/31/2024	5	13	
11	Demolition 2024/2025	Demolition	8/1/2024	2/1/2025	5	132	
12	Demolition Haul 2024	Demolition	8/1/2024	12/31/2024	5	109	
13	Demolition Haul 2025	Demolition	1/1/2025	1/31/2025	5	23	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 28.5

Acres of Paving: 3.62

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 73,500; Non-Residential Outdoor: 24,500; Striped Parking Area: 0

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition 2021/2022	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition 2021/2022	Excavators	3	8.00	158	0.38
Demolition 2021/2022	Rubber Tired Dozers	2	8.00	247	0.40

Demolition Haul 2021	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition Haul 2021	Excavators	0	8.00	158	0.38
Demolition Haul 2021	Rubber Tired Dozers	0	8.00	247	0.40
Demolition Haul 2022	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition Haul 2022	Excavators	0	8.00	158	0.38
Demolition Haul 2022	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Utilities Trenching	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Finishing and Landscaping	Excavators	1	8.00	158	0.38
Demolition 2024/2025	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition 2024/2025	Excavators	3	8.00	158	0.38
Demolition 2024/2025	Rubber Tired Dozers	2	8.00	247	0.40
Demolition Haul 2024	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition Haul 2024	Excavators	0	8.00	158	0.38
Demolition Haul 2024	Rubber Tired Dozers	0	8.00	247	0.40

Demolition Haul 2025	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition Haul 2025	Excavators	0	8.00	158	0.38
Demolition Haul 2025	Rubber Tired Dozers	0	8.00	247	0.40

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition 2021/2022	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Haul 2021	0	0.00	0.00	102.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Haul 2022	0	0.00	0.00	21.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	87.00	34.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Finishing and Landscaping	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition 2024/2025	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Haul 2024	0	0.00	0.00	81.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Haul 2025	0	0.00	0.00	18.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 3.2 Demolition 2021/2022 - 2021

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1741	1.7292	1.1861	2.1400e-003		0.0853	0.0853		0.0793	0.0793	0.0000	187.0043	187.0043	0.0526	0.0000	188.3202
<b>Total</b>	<b>0.1741</b>	<b>1.7292</b>	<b>1.1861</b>	<b>2.1400e-003</b>		<b>0.0853</b>	<b>0.0853</b>		<b>0.0793</b>	<b>0.0793</b>	<b>0.0000</b>	<b>187.0043</b>	<b>187.0043</b>	<b>0.0526</b>	<b>0.0000</b>	<b>188.3202</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.4000e-004	0.0109	2.9400e-003	3.0000e-005	6.9000e-004	2.0000e-005	7.2000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.7115	2.7115	1.7000e-004	0.0000	2.7156
Worker	3.5500e-003	2.7600e-003	0.0312	9.0000e-005	9.0400e-003	7.0000e-005	9.1100e-003	2.4000e-003	7.0000e-005	2.4700e-003	0.0000	8.1586	8.1586	2.4000e-004	0.0000	8.1646
<b>Total</b>	<b>3.8900e-003</b>	<b>0.0136</b>	<b>0.0341</b>	<b>1.2000e-004</b>	<b>9.7300e-003</b>	<b>9.0000e-005</b>	<b>9.8300e-003</b>	<b>2.6000e-003</b>	<b>9.0000e-005</b>	<b>2.6900e-003</b>	<b>0.0000</b>	<b>10.8700</b>	<b>10.8700</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>10.8802</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1741	1.7292	1.1861	2.1400e-003		0.0853	0.0853		0.0793	0.0793	0.0000	187.0041	187.0041	0.0526	0.0000	188.3200
<b>Total</b>	<b>0.1741</b>	<b>1.7292</b>	<b>1.1861</b>	<b>2.1400e-003</b>		<b>0.0853</b>	<b>0.0853</b>		<b>0.0793</b>	<b>0.0793</b>	<b>0.0000</b>	<b>187.0041</b>	<b>187.0041</b>	<b>0.0526</b>	<b>0.0000</b>	<b>188.3200</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.4000e-004	0.0109	2.9400e-003	3.0000e-005	6.5000e-004	2.0000e-005	6.7000e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.7115	2.7115	1.7000e-004	0.0000	2.7156
Worker	3.5500e-003	2.7600e-003	0.0312	9.0000e-005	8.3400e-003	7.0000e-005	8.4100e-003	2.2300e-003	7.0000e-005	2.3000e-003	0.0000	8.1586	8.1586	2.4000e-004	0.0000	8.1646
<b>Total</b>	<b>3.8900e-003</b>	<b>0.0136</b>	<b>0.0341</b>	<b>1.2000e-004</b>	<b>8.9900e-003</b>	<b>9.0000e-005</b>	<b>9.0800e-003</b>	<b>2.4200e-003</b>	<b>9.0000e-005</b>	<b>2.5100e-003</b>	<b>0.0000</b>	<b>10.8700</b>	<b>10.8700</b>	<b>4.1000e-004</b>	<b>0.0000</b>	<b>10.8802</b>

### 3.2 Demolition 2021/2022 - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0290	0.2829	0.2265	4.3000e-004		0.0137	0.0137		0.0127	0.0127	0.0000	37.3893	37.3893	0.0105	0.0000	37.6518
<b>Total</b>	<b>0.0290</b>	<b>0.2829</b>	<b>0.2265</b>	<b>4.3000e-004</b>		<b>0.0137</b>	<b>0.0137</b>		<b>0.0127</b>	<b>0.0127</b>	<b>0.0000</b>	<b>37.3893</b>	<b>37.3893</b>	<b>0.0105</b>	<b>0.0000</b>	<b>37.6518</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.0600e-003	5.6000e-004	1.0000e-005	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5375	0.5375	3.0000e-005	0.0000	0.5383
Worker	6.7000e-004	5.0000e-004	5.7500e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.5744	1.5744	4.0000e-005	0.0000	1.5754
<b>Total</b>	<b>7.3000e-004</b>	<b>2.5600e-003</b>	<b>6.3100e-003</b>	<b>3.0000e-005</b>	<b>1.9500e-003</b>	<b>1.0000e-005</b>	<b>1.9600e-003</b>	<b>5.2000e-004</b>	<b>1.0000e-005</b>	<b>5.3000e-004</b>	<b>0.0000</b>	<b>2.1119</b>	<b>2.1119</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>2.1138</b>



### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0290	0.2829	0.2265	4.3000e-004		0.0137	0.0137		0.0127	0.0127	0.0000	37.3892	37.3892	0.0105	0.0000	37.6518
<b>Total</b>	<b>0.0290</b>	<b>0.2829</b>	<b>0.2265</b>	<b>4.3000e-004</b>		<b>0.0137</b>	<b>0.0137</b>		<b>0.0127</b>	<b>0.0127</b>	<b>0.0000</b>	<b>37.3892</b>	<b>37.3892</b>	<b>0.0105</b>	<b>0.0000</b>	<b>37.6518</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.0600e-003	5.6000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5375	0.5375	3.0000e-005	0.0000	0.5383
Worker	6.7000e-004	5.0000e-004	5.7500e-003	2.0000e-005	1.6700e-003	1.0000e-005	1.6800e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5744	1.5744	4.0000e-005	0.0000	1.5754
Total	7.3000e-004	2.5600e-003	6.3100e-003	3.0000e-005	1.8000e-003	1.0000e-005	1.8100e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	2.1119	2.1119	7.0000e-005	0.0000	2.1138

### 3.3 Demolition Haul 2021 - 2021

### Unmitigated Construction On-Site

[illegible]

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.3000e-004	0.0141	3.2900e-003	4.0000e-005	8.8000e-004	4.0000e-005	9.2000e-004	2.4000e-004	4.0000e-005	2.8000e-004	0.0000	3.8877	3.8877	2.7000e-004	0.0000	3.8945
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.3000e-004	0.0141	3.2900e-003	4.0000e-005	8.8000e-004	4.0000e-005	9.2000e-004	2.4000e-004	4.0000e-005	2.8000e-004	0.0000	3.8877	3.8877	2.7000e-004	0.0000	3.8945

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.3000e-004	0.0141	3.2900e-003	4.0000e-005	8.2000e-004	4.0000e-005	8.6000e-004	2.3000e-004	4.0000e-005	2.7000e-004	0.0000	3.8877	3.8877	2.7000e-004	0.0000	3.8945
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.3000e-004	0.0141	3.2900e-003	4.0000e-005	8.2000e-004	4.0000e-005	8.6000e-004	2.3000e-004	4.0000e-005	2.7000e-004	0.0000	3.8877	3.8877	2.7000e-004	0.0000	3.8945

### 3.4 Demolition Haul 2022 - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

### **Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.7000e-003	6.7000e-004	1.0000e-005	1.8000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7909	0.7909	5.0000e-005	0.0000	0.7923
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>8.0000e-005</b>	<b>2.7000e-003</b>	<b>6.7000e-004</b>	<b>1.0000e-005</b>	<b>1.8000e-004</b>	<b>1.0000e-005</b>	<b>1.9000e-004</b>	<b>5.0000e-005</b>	<b>1.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.7909</b>	<b>0.7909</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.7923</b>

### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.7000e-003	6.7000e-004	1.0000e-005	1.7000e-004	1.0000e-005	1.8000e-004	5.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.7909	0.7909	5.0000e-005	0.0000	0.7923
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>8.0000e-005</b>	<b>2.7000e-003</b>	<b>6.7000e-004</b>	<b>1.0000e-005</b>	<b>1.7000e-004</b>	<b>1.0000e-005</b>	<b>1.8000e-004</b>	<b>5.0000e-005</b>	<b>1.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.7909</b>	<b>0.7909</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.7923</b>

### 3.5 Site Preparation - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5149	0.0000	0.5149	0.2830	0.0000	0.2830	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0904	0.9429	0.5614	1.0800e-003		0.0460	0.0460		0.0423	0.0423	0.0000	95.3023	95.3023	0.0308	0.0000	96.0728
<b>Total</b>	<b>0.0904</b>	<b>0.9429</b>	<b>0.5614</b>	<b>1.0800e-003</b>	<b>0.5149</b>	<b>0.0460</b>	<b>0.5609</b>	<b>0.2830</b>	<b>0.0423</b>	<b>0.3253</b>	<b>0.0000</b>	<b>95.3023</b>	<b>95.3023</b>	<b>0.0308</b>	<b>0.0000</b>	<b>96.0728</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	5.3400e-003	1.4400e-003	1.0000e-005	3.6000e-004	1.0000e-005	3.7000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	1.3927	1.3927	8.0000e-005	0.0000	1.3948
Worker	2.0700e-003	1.5500e-003	0.0179	5.0000e-005	5.6200e-003	4.0000e-005	5.6700e-003	1.4900e-003	4.0000e-005	1.5300e-003	0.0000	4.8948	4.8948	1.3000e-004	0.0000	4.8982
<b>Total</b>	<b>2.2400e-003</b>	<b>6.8900e-003</b>	<b>0.0193</b>	<b>6.0000e-005</b>	<b>5.9800e-003</b>	<b>5.0000e-005</b>	<b>6.0400e-003</b>	<b>1.5900e-003</b>	<b>5.0000e-005</b>	<b>1.6400e-003</b>	<b>0.0000</b>	<b>6.2875</b>	<b>6.2875</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>6.2930</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2201	0.0000	0.2201	0.1210	0.0000	0.1210	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0904	0.9429	0.5614	1.0800e-003		0.0460	0.0460		0.0423	0.0423	0.0000	95.3022	95.3022	0.0308	0.0000	96.0727
<b>Total</b>	<b>0.0904</b>	<b>0.9429</b>	<b>0.5614</b>	<b>1.0800e-003</b>	<b>0.2201</b>	<b>0.0460</b>	<b>0.2661</b>	<b>0.1210</b>	<b>0.0423</b>	<b>0.1633</b>	<b>0.0000</b>	<b>95.3022</b>	<b>95.3022</b>	<b>0.0308</b>	<b>0.0000</b>	<b>96.0727</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	5.3400e-003	1.4400e-003	1.0000e-005	3.4000e-004	1.0000e-005	3.5000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	1.3927	1.3927	8.0000e-005	0.0000	1.3948
Worker	2.0700e-003	1.5500e-003	0.0179	5.0000e-005	5.1800e-003	4.0000e-005	5.2300e-003	1.3900e-003	4.0000e-005	1.4300e-003	0.0000	4.8948	4.8948	1.3000e-004	0.0000	4.8982
<b>Total</b>	<b>2.2400e-003</b>	<b>6.8900e-003</b>	<b>0.0193</b>	<b>6.0000e-005</b>	<b>5.5200e-003</b>	<b>5.0000e-005</b>	<b>5.5800e-003</b>	<b>1.4900e-003</b>	<b>5.0000e-005</b>	<b>1.5400e-003</b>	<b>0.0000</b>	<b>6.2875</b>	<b>6.2875</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>6.2930</b>

### 3.6 Grading - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1867	0.0000	0.1867	0.0960	0.0000	0.0960	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0555	0.5944	0.4353	8.5000e-004		0.0268	0.0268		0.0247	0.0247	0.0000	74.2561	74.2561	0.0240	0.0000	74.8565
<b>Total</b>	<b>0.0555</b>	<b>0.5944</b>	<b>0.4353</b>	<b>8.5000e-004</b>	<b>0.1867</b>	<b>0.0268</b>	<b>0.2136</b>	<b>0.0960</b>	<b>0.0247</b>	<b>0.1206</b>	<b>0.0000</b>	<b>74.2561</b>	<b>74.2561</b>	<b>0.0240</b>	<b>0.0000</b>	<b>74.8565</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	5.3400e-003	1.4400e-003	1.0000e-005	3.6000e-004	1.0000e-005	3.7000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	1.3927	1.3927	8.0000e-005	0.0000	1.3948
Worker	1.7200e-003	1.2900e-003	0.0149	5.0000e-005	4.6800e-003	4.0000e-005	4.7200e-003	1.2400e-003	3.0000e-005	1.2800e-003	0.0000	4.0790	4.0790	1.1000e-004	0.0000	4.0818
<b>Total</b>	<b>1.8900e-003</b>	<b>6.6300e-003</b>	<b>0.0163</b>	<b>6.0000e-005</b>	<b>5.0400e-003</b>	<b>5.0000e-005</b>	<b>5.0900e-003</b>	<b>1.3400e-003</b>	<b>4.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>5.4717</b>	<b>5.4717</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>5.4766</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0798	0.0000	0.0798	0.0410	0.0000	0.0410	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0555	0.5944	0.4353	8.5000e-004		0.0268	0.0268		0.0247	0.0247	0.0000	74.2560	74.2560	0.0240	0.0000	74.8564
<b>Total</b>	<b>0.0555</b>	<b>0.5944</b>	<b>0.4353</b>	<b>8.5000e-004</b>	<b>0.0798</b>	<b>0.0268</b>	<b>0.1066</b>	<b>0.0410</b>	<b>0.0247</b>	<b>0.0657</b>	<b>0.0000</b>	<b>74.2560</b>	<b>74.2560</b>	<b>0.0240</b>	<b>0.0000</b>	<b>74.8564</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	5.3400e-003	1.4400e-003	1.0000e-005	3.4000e-004	1.0000e-005	3.5000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	1.3927	1.3927	8.0000e-005	0.0000	1.3948
Worker	1.7200e-003	1.2900e-003	0.0149	5.0000e-005	4.3200e-003	4.0000e-005	4.3600e-003	1.1500e-003	3.0000e-005	1.1900e-003	0.0000	4.0790	4.0790	1.1000e-004	0.0000	4.0818
<b>Total</b>	<b>1.8900e-003</b>	<b>6.6300e-003</b>	<b>0.0163</b>	<b>6.0000e-005</b>	<b>4.6600e-003</b>	<b>5.0000e-005</b>	<b>4.7100e-003</b>	<b>1.2500e-003</b>	<b>4.0000e-005</b>	<b>1.3000e-003</b>	<b>0.0000</b>	<b>5.4717</b>	<b>5.4717</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>5.4766</b>

## 3.7 Utilities Trenching - 2022

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4200e-003	0.0124	0.0228	4.0000e-005		6.0000e-004	6.0000e-004		5.5000e-004	5.5000e-004	0.0000	3.1752	3.1752	1.0300e-003	0.0000	3.2009
<b>Total</b>	<b>1.4200e-003</b>	<b>0.0124</b>	<b>0.0228</b>	<b>4.0000e-005</b>		<b>6.0000e-004</b>	<b>6.0000e-004</b>		<b>5.5000e-004</b>	<b>5.5000e-004</b>	<b>0.0000</b>	<b>3.1752</b>	<b>3.1752</b>	<b>1.0300e-003</b>	<b>0.0000</b>	<b>3.2009</b>

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	7.3000e-004	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2004	0.2004	1.0000e-005	0.0000	0.2005
<b>Total</b>	<b>8.0000e-005</b>	<b>6.0000e-005</b>	<b>7.3000e-004</b>	<b>0.0000</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>2.3000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.2004</b>	<b>0.2004</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2005</b>

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4200e-003	0.0124	0.0228	4.0000e-005		6.0000e-004	6.0000e-004		5.5000e-004	5.5000e-004	0.0000	3.1752	3.1752	1.0300e-003	0.0000	3.2009
<b>Total</b>	<b>1.4200e-003</b>	<b>0.0124</b>	<b>0.0228</b>	<b>4.0000e-005</b>		<b>6.0000e-004</b>	<b>6.0000e-004</b>		<b>5.5000e-004</b>	<b>5.5000e-004</b>	<b>0.0000</b>	<b>3.1752</b>	<b>3.1752</b>	<b>1.0300e-003</b>	<b>0.0000</b>	<b>3.2009</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	7.3000e-004	0.0000	2.1000e-004	0.0000	2.1000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2004	0.2004	1.0000e-005	0.0000	0.2005
<b>Total</b>	<b>8.0000e-005</b>	<b>6.0000e-005</b>	<b>7.3000e-004</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.2004</b>	<b>0.2004</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2005</b>

### 3.8 Building Construction - 2022

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0938	0.8589	0.9000	1.4800e-003		0.0445	0.0445		0.0419	0.0419	0.0000	127.4489	127.4489	0.0305	0.0000	128.2122
<b>Total</b>	<b>0.0938</b>	<b>0.8589</b>	<b>0.9000</b>	<b>1.4800e-003</b>		<b>0.0445</b>	<b>0.0445</b>		<b>0.0419</b>	<b>0.0419</b>	<b>0.0000</b>	<b>127.4489</b>	<b>127.4489</b>	<b>0.0305</b>	<b>0.0000</b>	<b>128.2122</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.4500e-003	0.1753	0.0473	4.7000e-004	0.0118	3.3000e-004	0.0121	3.4000e-003	3.1000e-004	3.7100e-003	0.0000	45.6900	45.6900	2.7300e-003	0.0000	45.7582
Worker	0.0193	0.0145	0.1667	5.1000e-004	0.0524	4.2000e-004	0.0529	0.0139	3.9000e-004	0.0143	0.0000	45.6563	45.6563	1.2600e-003	0.0000	45.6877
<b>Total</b>	<b>0.0248</b>	<b>0.1898</b>	<b>0.2141</b>	<b>9.8000e-004</b>	<b>0.0642</b>	<b>7.5000e-004</b>	<b>0.0650</b>	<b>0.0173</b>	<b>7.0000e-004</b>	<b>0.0180</b>	<b>0.0000</b>	<b>91.3463</b>	<b>91.3463</b>	<b>3.9900e-003</b>	<b>0.0000</b>	<b>91.4460</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0938	0.8589	0.9000	1.4800e-003		0.0445	0.0445		0.0419	0.0419	0.0000	127.4487	127.4487	0.0305	0.0000	128.2121
<b>Total</b>	<b>0.0938</b>	<b>0.8589</b>	<b>0.9000</b>	<b>1.4800e-003</b>		<b>0.0445</b>	<b>0.0445</b>		<b>0.0419</b>	<b>0.0419</b>	<b>0.0000</b>	<b>127.4487</b>	<b>127.4487</b>	<b>0.0305</b>	<b>0.0000</b>	<b>128.2121</b>



### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.4500e-003	0.1753	0.0473	4.7000e-004	0.0110	3.3000e-004	0.0114	3.2200e-003	3.1000e-004	3.5300e-003	0.0000	45.6900	45.6900	2.7300e-003	0.0000	45.7582
Worker	0.0193	0.0145	0.1667	5.1000e-004	0.0483	4.2000e-004	0.0488	0.0129	3.9000e-004	0.0133	0.0000	45.6563	45.6563	1.2600e-003	0.0000	45.6877
Total	0.0248	0.1898	0.2141	9.8000e-004	0.0594	7.5000e-004	0.0601	0.0161	7.0000e-004	0.0168	0.0000	91.3463	91.3463	3.9900e-003	0.0000	91.4460

### 3.8 Building Construction - 2023

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383
Total	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.5700e-003	0.3131	0.1004	1.0800e-003	0.0278	3.7000e-004	0.0282	8.0400e-003	3.5000e-004	8.3900e-003	0.0000	104.6136	104.6136	5.7000e-003	0.0000	104.7561
Worker	0.0429	0.0310	0.3624	1.1500e-003	0.1239	9.6000e-004	0.1249	0.0329	8.9000e-004	0.0338	0.0000	103.9660	103.9660	2.6800e-003	0.0000	104.0329
Total	0.0525	0.3441	0.4628	2.2300e-003	0.1518	1.3300e-003	0.1531	0.0410	1.2400e-003	0.0422	0.0000	208.5796	208.5796	8.3800e-003	0.0000	208.7890

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380
Total	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.5700e-003	0.3131	0.1004	1.0800e-003	0.0261	3.7000e-004	0.0264	7.6000e-003	3.5000e-004	7.9500e-003	0.0000	104.6136	104.6136	5.7000e-003	0.0000	104.7561
Worker	0.0429	0.0310	0.3624	1.1500e-003	0.1143	9.6000e-004	0.1152	0.0305	8.9000e-004	0.0314	0.0000	103.9660	103.9660	2.6800e-003	0.0000	104.0329
Total	0.0525	0.3441	0.4628	2.2300e-003	0.1403	1.3300e-003	0.1417	0.0381	1.2400e-003	0.0394	0.0000	208.5796	208.5796	8.3800e-003	0.0000	208.7890

## 3.8 Building Construction - 2024

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0648	0.5915	0.7113	1.1900e-003		0.0270	0.0270		0.0254	0.0254	0.0000	102.0136	102.0136	0.0241	0.0000	102.6167
Total	0.0648	0.5915	0.7113	1.1900e-003		0.0270	0.0270		0.0254	0.0254	0.0000	102.0136	102.0136	0.0241	0.0000	102.6167

### Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1600e-003	0.1056	0.0329	3.6000e-004	9.4200e-003	1.2000e-004	9.5500e-003	2.7200e-003	1.2000e-004	2.8400e-003	0.0000	35.2666	35.2666	1.9000e-003	0.0000	35.3142
Worker	0.0138	9.5500e-003	0.1142	3.8000e-004	0.0420	3.2000e-004	0.0423	0.0111	3.0000e-004	0.0114	0.0000	34.0974	34.0974	8.3000e-004	0.0000	34.1182
<b>Total</b>	<b>0.0169</b>	<b>0.1151</b>	<b>0.1472</b>	<b>7.4000e-004</b>	<b>0.0514</b>	<b>4.4000e-004</b>	<b>0.0518</b>	<b>0.0139</b>	<b>4.2000e-004</b>	<b>0.0143</b>	<b>0.0000</b>	<b>69.3641</b>	<b>69.3641</b>	<b>2.7300e-003</b>	<b>0.0000</b>	<b>69.4323</b>

### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0648	0.5915	0.7113	1.1900e-003		0.0270	0.0270		0.0254	0.0254	0.0000	102.0135	102.0135	0.0241	0.0000	102.6166
<b>Total</b>	<b>0.0648</b>	<b>0.5915</b>	<b>0.7113</b>	<b>1.1900e-003</b>		<b>0.0270</b>	<b>0.0270</b>		<b>0.0254</b>	<b>0.0254</b>	<b>0.0000</b>	<b>102.0135</b>	<b>102.0135</b>	<b>0.0241</b>	<b>0.0000</b>	<b>102.6166</b>

### **Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1600e-003	0.1056	0.0329	3.6000e-004	8.8200e-003	1.2000e-004	8.9500e-003	2.5700e-003	1.2000e-004	2.6900e-003	0.0000	35.2666	35.2666	1.9000e-003	0.0000	35.3142
Worker	0.0138	9.5500e-003	0.1142	3.8000e-004	0.0387	3.2000e-004	0.0390	0.0103	3.0000e-004	0.0106	0.0000	34.0974	34.0974	8.3000e-004	0.0000	34.1182
<b>Total</b>	<b>0.0169</b>	<b>0.1151</b>	<b>0.1472</b>	<b>7.4000e-004</b>	<b>0.0475</b>	<b>4.4000e-004</b>	<b>0.0480</b>	<b>0.0129</b>	<b>4.2000e-004</b>	<b>0.0133</b>	<b>0.0000</b>	<b>69.3641</b>	<b>69.3641</b>	<b>2.7300e-003</b>	<b>0.0000</b>	<b>69.4323</b>

## **3.9 Paving - 2024**

### **Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0115	0.1076	0.1589	2.5000e-004		5.1800e-003	5.1800e-003		4.7900e-003	4.7900e-003	0.0000	21.2944	21.2944	6.6900e-003	0.0000	21.4617
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0115</b>	<b>0.1076</b>	<b>0.1589</b>	<b>2.5000e-004</b>		<b>5.1800e-003</b>	<b>5.1800e-003</b>		<b>4.7900e-003</b>	<b>4.7900e-003</b>	<b>0.0000</b>	<b>21.2944</b>	<b>21.2944</b>	<b>6.6900e-003</b>	<b>0.0000</b>	<b>21.4617</b>

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	6.5000e-004	7.7600e-003	3.0000e-005	2.8500e-003	2.0000e-005	2.8700e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.3159	2.3159	6.0000e-005	0.0000	2.3173
Total	9.3000e-004	6.5000e-004	7.7600e-003	3.0000e-005	2.8500e-003	2.0000e-005	2.8700e-003	7.6000e-004	2.0000e-005	7.8000e-004	0.0000	2.3159	2.3159	6.0000e-005	0.0000	2.3173

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0115	0.1076	0.1589	2.5000e-004		5.1800e-003	5.1800e-003		4.7900e-003	4.7900e-003	0.0000	21.2944	21.2944	6.6900e-003	0.0000	21.4617
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0115	0.1076	0.1589	2.5000e-004		5.1800e-003	5.1800e-003		4.7900e-003	4.7900e-003	0.0000	21.2944	21.2944	6.6900e-003	0.0000	21.4617

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	6.5000e-004	7.7600e-003	3.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.3159	2.3159	6.0000e-005	0.0000	2.3173
Total	9.3000e-004	6.5000e-004	7.7600e-003	3.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.3159	2.3159	6.0000e-005	0.0000	2.3173

### 3.10 Architectural Coating - 2024

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1136					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e-003	0.0158	0.0235	4.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	3.3192	3.3192	1.9000e-004	0.0000	3.3239
<b>Total</b>	<b>0.1159</b>	<b>0.0158</b>	<b>0.0235</b>	<b>4.0000e-005</b>		<b>7.9000e-004</b>	<b>7.9000e-004</b>		<b>7.9000e-004</b>	<b>7.9000e-004</b>	<b>0.0000</b>	<b>3.3192</b>	<b>3.3192</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>3.3239</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9000e-004	5.5000e-004	6.5900e-003	2.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	1.9685	1.9685	5.0000e-005	0.0000	1.9697
<b>Total</b>	<b>7.9000e-004</b>	<b>5.5000e-004</b>	<b>6.5900e-003</b>	<b>2.0000e-005</b>	<b>2.4200e-003</b>	<b>2.0000e-005</b>	<b>2.4400e-003</b>	<b>6.4000e-004</b>	<b>2.0000e-005</b>	<b>6.6000e-004</b>	<b>0.0000</b>	<b>1.9685</b>	<b>1.9685</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.9697</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1136					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3500e-003	0.0158	0.0235	4.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	3.3192	3.3192	1.9000e-004	0.0000	3.3239
<b>Total</b>	<b>0.1159</b>	<b>0.0158</b>	<b>0.0235</b>	<b>4.0000e-005</b>		<b>7.9000e-004</b>	<b>7.9000e-004</b>		<b>7.9000e-004</b>	<b>7.9000e-004</b>	<b>0.0000</b>	<b>3.3192</b>	<b>3.3192</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>3.3239</b>

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.9000e-004	5.5000e-004	6.5900e-003	2.0000e-005	2.2300e-003	2.0000e-005	2.2500e-003	6.0000e-004	2.0000e-005	6.1000e-004	0.0000	1.9685	1.9685	5.0000e-005	0.0000	1.9697
Total	7.9000e-004	5.5000e-004	6.5900e-003	2.0000e-005	2.2300e-003	2.0000e-005	2.2500e-003	6.0000e-004	2.0000e-005	6.1000e-004	0.0000	1.9685	1.9685	5.0000e-005	0.0000	1.9697

### 3.11 Finishing and Landscaping - 2024

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1700e-003	9.1200e-003	0.0212	3.0000e-005		4.5000e-004	4.5000e-004		4.1000e-004	4.1000e-004	0.0000	2.9499	2.9499	9.5000e-004	0.0000	2.9738
Total	1.1700e-003	9.1200e-003	0.0212	3.0000e-005		4.5000e-004	4.5000e-004		4.1000e-004	4.1000e-004	0.0000	2.9499	2.9499	9.5000e-004	0.0000	2.9738

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.8000e-004	0.0000	2.1000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1737	0.1737	0.0000	0.0000	0.1738
Total	7.0000e-005	5.0000e-005	5.8000e-004	0.0000	2.1000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1737	0.1737	0.0000	0.0000	0.1738

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1700e-003	9.1200e-003	0.0212	3.0000e-005		4.5000e-004	4.5000e-004		4.1000e-004	4.1000e-004	0.0000	2.9499	2.9499	9.5000e-004	0.0000	2.9738
Total	1.1700e-003	9.1200e-003	0.0212	3.0000e-005		4.5000e-004	4.5000e-004		4.1000e-004	4.1000e-004	0.0000	2.9499	2.9499	9.5000e-004	0.0000	2.9738

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.8000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1737	0.1737	0.0000	0.0000	0.1738
Total	7.0000e-005	5.0000e-005	5.8000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1737	0.1737	0.0000	0.0000	0.1738

## 3.12 Demolition 2024/2025 - 2024

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1223	1.1379	1.0741	2.1200e-003		0.0523	0.0523		0.0486	0.0486	0.0000	185.2785	185.2785	0.0518	0.0000	186.5744
Total	0.1223	1.1379	1.0741	2.1200e-003		0.0523	0.0523		0.0486	0.0486	0.0000	185.2785	185.2785	0.0518	0.0000	186.5744

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3000e-004	7.6900e-003	2.4000e-003	3.0000e-005	6.9000e-004	1.0000e-005	7.0000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	2.5696	2.5696	1.4000e-004	0.0000	2.5730

Worker	2.9400e-003	2.0400e-003	0.0244	8.0000e-005	8.9600e-003	7.0000e-005	9.0300e-003	2.3800e-003	6.0000e-005	2.4400e-003	0.0000	7.2818	7.2818	1.8000e-004	0.0000	7.2862
Total	3.1700e-003	9.7300e-003	0.0268	1.1000e-004	9.6500e-003	8.0000e-005	9.7300e-003	2.5800e-003	7.0000e-005	2.6500e-003	0.0000	9.8513	9.8513	3.2000e-004	0.0000	9.8592

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1223	1.1379	1.0741	2.1200e-003		0.0523	0.0523		0.0486	0.0486	0.0000	185.2782	185.2782	0.0518	0.0000	186.5742
Total	0.1223	1.1379	1.0741	2.1200e-003		0.0523	0.0523		0.0486	0.0486	0.0000	185.2782	185.2782	0.0518	0.0000	186.5742

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3000e-004	7.6900e-003	2.4000e-003	3.0000e-005	6.4000e-004	1.0000e-005	6.5000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	2.5696	2.5696	1.4000e-004	0.0000	2.5730
Worker	2.9400e-003	2.0400e-003	0.0244	8.0000e-005	8.2600e-003	7.0000e-005	8.3300e-003	2.2100e-003	6.0000e-005	2.2700e-003	0.0000	7.2818	7.2818	1.8000e-004	0.0000	7.2862
Total	3.1700e-003	9.7300e-003	0.0268	1.1000e-004	8.9000e-003	8.0000e-005	8.9800e-003	2.4000e-003	7.0000e-005	2.4700e-003	0.0000	9.8513	9.8513	3.2000e-004	0.0000	9.8592

## 3.12 Demolition 2024/2025 - 2025

### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0241	0.2208	0.2233	4.5000e-004		9.8100e-003	9.8100e-003		9.1100e-003	9.1100e-003	0.0000	39.0973	39.0973	0.0109	0.0000	39.3702
Total	0.0241	0.2208	0.2233	4.5000e-004		9.8100e-003	9.8100e-003		9.1100e-003	9.1100e-003	0.0000	39.0973	39.0973	0.0109	0.0000	39.3702



### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	1.6100e-003	4.9000e-004	1.0000e-005	1.4000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5393	0.5393	3.0000e-005	0.0000	0.5400
Worker	5.9000e-004	3.9000e-004	4.7800e-003	2.0000e-005	1.8900e-003	1.0000e-005	1.9000e-003	5.0000e-004	1.0000e-005	5.2000e-004	0.0000	1.4770	1.4770	3.0000e-005	0.0000	1.4779
Total	6.4000e-004	2.0000e-003	5.2700e-003	3.0000e-005	2.0300e-003	1.0000e-005	2.0500e-003	5.4000e-004	1.0000e-005	5.6000e-004	0.0000	2.0163	2.0163	6.0000e-005	0.0000	2.0179

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0241	0.2208	0.2233	4.5000e-004		9.8100e-003	9.8100e-003		9.1100e-003	9.1100e-003	0.0000	39.0973	39.0973	0.0109	0.0000	39.3702
Total	0.0241	0.2208	0.2233	4.5000e-004		9.8100e-003	9.8100e-003		9.1100e-003	9.1100e-003	0.0000	39.0973	39.0973	0.0109	0.0000	39.3702

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	1.6100e-003	4.9000e-004	1.0000e-005	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5393	0.5393	3.0000e-005	0.0000	0.5400
Worker	5.9000e-004	3.9000e-004	4.7800e-003	2.0000e-005	1.7400e-003	1.0000e-005	1.7600e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.4770	1.4770	3.0000e-005	0.0000	1.4779
Total	6.4000e-004	2.0000e-003	5.2700e-003	3.0000e-005	1.8800e-003	1.0000e-005	1.9000e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	2.0163	2.0163	6.0000e-005	0.0000	2.0179

### 3.13 Demolition Haul 2024 - 2024

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	6.7800e-003	2.3700e-003	3.0000e-005	7.0000e-004	1.0000e-005	7.1000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	2.9104	2.9104	2.0000e-004	0.0000	2.9153
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.1000e-004</b>	<b>6.7800e-003</b>	<b>2.3700e-003</b>	<b>3.0000e-005</b>	<b>7.0000e-004</b>	<b>1.0000e-005</b>	<b>7.1000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.9104</b>	<b>2.9104</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.9153</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.4900e-003	5.3000e-004	1.0000e-005	1.4000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.6432	0.6432	4.0000e-005	0.0000	0.6443
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.0000e-005	1.4900e-003	5.3000e-004	1.0000e-005	1.4000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.6432	0.6432	4.0000e-005	0.0000	0.6443

## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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### Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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## Construction Localized Significance Thresholds: Demolition and Demolition Haul

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	1.00	25	82	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625		0
NOx	91	Graders	0.5	0.0625		0
CO	664	Dozers	0.5	0.0625	8	1
PM10	5.00	Scrapers	1	0.125		0
PM2.5	3.00				Acres	1.00

	Acres	25	50	100	200	500
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75
Southwest Coastal LA County						
1.00 Acres						
	25	50	100	200	500	
NOx	91	93	107	139	218	
CO	664	785	1156	2228	7269	
PM10	5	14	28	56	140	
PM2.5	3	5	9	21	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Site Preparation

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	3.50	25	82	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	8	4	2
NOx	164	Graders	0.5	0.0625			0
CO	1,368	Dozers	0.5	0.0625	8	3	1.5
PM10	11.49	Scrapers	1	0.125			0
PM2.5	6.50					Acres	3.50

	Acres	25	50	100	200	500
NOx	3	153	148	160	184	248
	4	175	169	181	203	262
		164	159	171	194	255
CO	3	1234	1433	1934	3228	8584
	4	1502	1709	2271	3674	9218
		1368	1571	2103	3451	8901
PM10	3	10	31	45	73	156
	4	13	38	52	80	163
		12	35	49	77	160
PM2.5	3	6	8	14	28	86
	4	7	10	17	32	91
		7	9	16	30	89
Southwest Coastal LA County						
3.50 Acres						
	25	50	100	200	500	
NOx	164	159	171	194	255	
CO	1368	1571	2103	3451	8901	
PM10	12	35	49	77	160	
PM2.5	7	9	16	30	89	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	3	3	4
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Grading

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	2.50	25	82	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	8	3	1.5
NOx	142	Graders	0.5	0.0625	8	1	0.5
CO	1,101	Dozers	0.5	0.0625	8	1	0.5
PM10	9.16	Scrapers	1	0.125			0
PM2.5	5.50					Acres	2.50

	Acres	25	50	100	200	500
NOx	2	131	128	139	165	233
	3	153	148	160	184	248
		142	138	150	175	240
CO	2	967	1158	1597	2783	7950
	3	1234	1433	1934	3228	8584
		1101	1296	1766	3006	8267
PM10	2	8	23	37	65	148
	3	10	31	45	73	156
		9	27	41	69	152
PM2.5	2	5	7	12	25	81
	3	6	8	14	28	86
		6	8	13	27	84
Southwest Coastal LA County						
2.50 Acres						
	25	50	100	200	500	
NOx	142	138	150	175	240	
CO	1101	1296	1766	3006	8267	
PM10	9	27	41	69	152	
PM2.5	6	8	13	27	84	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	2	3	3
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Utilities Relocation

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	0.00	25	82	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625		0
NOx	91	Graders	0.5	0.0625		0
CO	664	Dozers	0.5	0.0625		0
PM10	5.00	Scrapers	1	0.125		0
PM2.5	3.00				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75
Southwest Coastal LA County						
0.00 Acres						
	25	50	100	200	500	
NOx	91	93	107	139	218	
CO	664	785	1156	2228	7269	
PM10	5	14	28	56	140	
PM2.5	3	5	9	21	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008



## Construction Localized Significance Thresholds: Building Construction

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	1.31	25	82	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	3	1.3125
NOx	103	Graders	0.5	0.0625		0
CO	759	Dozers	0.5	0.0625		0
PM10	5.93	Scrapers	1	0.125		0
PM2.5	3.62				Acres	1.31

	Acres	25	50	100	200	500
NOx	1	91	93	107	139	218
	2	131	128	139	165	233
		104	104	117	147	223
CO	1	664	785	1156	2228	7269
	2	967	1158	1597	2783	7950
		759	902	1294	2401	7482
PM10	1	5	14	28	56	140
	2	8	23	37	65	148
		6	17	31	59	143
PM2.5	1	3	5	9	21	75
	2	5	7	12	25	81
		4	6	10	22	77
Southwest Coastal LA County						
1.31 Acres						
	25	50	100	200	500	
NOx	104	104	117	147	223	
CO	759	902	1294	2401	7482	
PM10	6	17	31	59	143	
PM2.5	4	6	10	22	77	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	1	3	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Paving

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	0.50	25	82	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	1	0.5
NOx	91	Graders	0.5	0.0625		0
CO	664	Dozers	0.5	0.0625		0
PM10	5.00	Scrapers	1	0.125		0
PM2.5	3.00				Acres	0.50

	Acres	25	50	100	200	500
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75
Southwest Coastal LA County						
0.50 Acres						
	25	50	100	200	500	
NOx	91	93	107	139	218	
CO	664	785	1156	2228	7269	
PM10	5	14	28	56	140	
PM2.5	3	5	9	21	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Architectural Coating

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	0.00	25	82	4.75

Source Receptor Distance (meters)	Southwest Coastal LA Coun Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	25	Tractors	0.5	0.0625	0
CO	91	Graders	0.5	0.0625	0
PM10	664	Dozers	0.5	0.0625	0
PM2.5	5.00	Scrapers	1	0.125	0
	3.00			Acres	0.00

	Acres	25	50	100	200	500
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75
Southwest Coastal LA County						
0.00 Acres						
	25	50	100	200	500	
NOx	91	93	107	139	218	
CO	664	785	1156	2228	7269	
PM10	5	14	28	56	140	
PM2.5	3	5	9	21	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Architectural Coating

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	0.00	244	800	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
Distance (meters)	244	Tractors	0.5	0.0625		0
NOx	151	Graders	0.5	0.0625		0
CO	2,965	Dozers	0.5	0.0625		0
PM10	68.28	Scrapers	1	0.125		0
PM2.5	28.89				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75
Southwest Coastal LA County						
0.00 Acres						
	25	50	100	200	500	
NOx	91	93	107	139	218	
CO	664	785	1156	2228	7269	
PM10	5	14	28	56	140	
PM2.5	3	5	9	21	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
200			
Distance Increment Above			
500			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Finishing and Landscaping

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	0.00	25	82	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625		0
NOx	91	Graders	0.5	0.0625		0
CO	664	Dozers	0.5	0.0625		0
PM10	5.00	Scrapers	1	0.125		0
PM2.5	3.00				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75
Southwest Coastal LA County						
0.00 Acres						
	25	50	100	200	500	
NOx	91	93	107	139	218	
CO	664	785	1156	2228	7269	
PM10	5	14	28	56	140	
PM2.5	3	5	9	21	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Demolition and Demolition Haul

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	1.00	244	800	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
Distance (meters)	244	Tractors	0.5	0.0625		0
NOx	151	Graders	0.5	0.0625		0
CO	2,965	Dozers	0.5	0.0625	8	1
PM10	68.28	Scrapers	1	0.125		0
PM2.5	28.89				Acres	1.00

	Acres	25	50	100	200	500
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75
Southwest Coastal LA County						
1.00 Acres						
	25	50	100	200	500	
NOx	91	93	107	139	218	
CO	664	785	1156	2228	7269	
PM10	5	14	28	56	140	
PM2.5	3	5	9	21	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
200			
Distance Increment Above			
500			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Site Preparation

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	3.50	244	800	4.75

Source Receptor Distance (meters)	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	244	Tractors	0.5	0.0625	4	2
CO	202	Graders	0.5	0.0625		0
PM10	4,247	Dozers	0.5	0.0625	3	1.5
PM2.5	88.63	Scrapers	1	0.125		0
	38.55				Acres	3.50

	Acres	25	50	100	200	500
NOx	3	153	148	160	184	248
	4	175	169	181	203	262
		164	159	171	194	255
CO	3	1234	1433	1934	3228	8584
	4	1502	1709	2271	3674	9218
		1368	1571	2103	3451	8901
PM10	3	10	31	45	73	156
	4	13	38	52	80	163
		12	35	49	77	160
PM2.5	3	6	8	14	28	86
	4	7	10	17	32	91
		7	9	16	30	89
Southwest Coastal LA County						
3.50 Acres						
	25	50	100	200	500	
NOx	164	159	171	194	255	
CO	1368	1571	2103	3451	8901	
PM10	12	35	49	77	160	
PM2.5	7	9	16	30	89	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	3	3	4
Distance Increment Below			
200			
Distance Increment Above			
500			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Grading

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	2.50	244	800	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres	
Distance (meters)	244	Tractors	0.5	0.0625	8	3	1.5
NOx	184	Graders	0.5	0.0625	8	1	0.5
CO	3,775	Dozers	0.5	0.0625	8	1	0.5
PM10	80.96	Scrapers	1	0.125			0
PM2.5	34.97					Acres	2.50

	Acres	25	50	100	200	500
NOx	2	131	128	139	165	233
	3	153	148	160	184	248
		142	138	150	175	240
CO	2	967	1158	1597	2783	7950
	3	1234	1433	1934	3228	8584
		1101	1296	1766	3006	8267
PM10	2	8	23	37	65	148
	3	10	31	45	73	156
		9	27	41	69	152
PM2.5	2	5	7	12	25	81
	3	6	8	14	28	86
		6	8	13	27	84
Southwest Coastal LA County						
2.50 Acres						
	25	50	100	200	500	
NOx	142	138	150	175	240	
CO	1101	1296	1766	3006	8267	
PM10	9	27	41	69	152	
PM2.5	6	8	13	27	84	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	2	3	3
Distance Increment Below			
200			
Distance Increment Above			
500			

Updated: 10/21/2009 - Table C-1. 2006 – 2008



## Construction Localized Significance Thresholds: Utilities Relocation

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	0.00	244	800	4.75

Source Receptor Distance (meters)	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
NOx	244	Tractors	0.5	0.0625		0
CO	151	Graders	0.5	0.0625		0
PM10	2,965	Dozers	0.5	0.0625		0
PM2.5	68.28	Scrapers	1	0.125		0
	28.89				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75
Southwest Coastal LA County						
0.00 Acres						
	25	50	100	200	500	
NOx	91	93	107	139	218	
CO	664	785	1156	2228	7269	
PM10	5	14	28	56	140	
PM2.5	3	5	9	21	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
200			
Distance Increment Above			
500			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Building Construction

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	1.31	244	800	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
Distance (meters)	244	Tractors	0.5	0.0625	3	1.3125
NOx	158	Graders	0.5	0.0625		0
CO	3,144	Dozers	0.5	0.0625		0
PM10	71.04	Scrapers	1	0.125		0
PM2.5	30.23				Acres	1.31

	Acres	25	50	100	200	500
NOx	1	91	93	107	139	218
	2	131	128	139	165	233
		104	104	117	147	223
CO	1	664	785	1156	2228	7269
	2	967	1158	1597	2783	7950
		759	902	1294	2401	7482
PM10	1	5	14	28	56	140
	2	8	23	37	65	148
		6	17	31	59	143
PM2.5	1	3	5	9	21	75
	2	5	7	12	25	81
		4	6	10	22	77
Southwest Coastal LA County						
1.31 Acres						
	25	50	100	200	500	
NOx	104	104	117	147	223	
CO	759	902	1294	2401	7482	
PM10	6	17	31	59	143	
PM2.5	4	6	10	22	77	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	1	3	2
Distance Increment Below			
200			
Distance Increment Above			
500			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Paving

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	0.50	244	800	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
Distance (meters)	244	Tractors	0.5	0.0625	1	0.5
NOx	151	Graders	0.5	0.0625		0
CO	2,965	Dozers	0.5	0.0625		0
PM10	68.28	Scrapers	1	0.125		0
PM2.5	28.89				Acres	0.50

	Acres	25	50	100	200	500
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75
Southwest Coastal LA County						
0.50 Acres						
	25	50	100	200	500	
NOx	91	93	107	139	218	
CO	664	785	1156	2228	7269	
PM10	5	14	28	56	140	
PM2.5	3	5	9	21	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
200			
Distance Increment Above			
500			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Construction Localized Significance Thresholds: Finishing and Landscaping

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
3	0.00	244	800	4.75

Source Receptor	Southwest Coastal LA Coun	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
Distance (meters)	244	Tractors	0.5	0.0625		0
NOx	151	Graders	0.5	0.0625		0
CO	2,965	Dozers	0.5	0.0625		0
PM10	68.28	Scrapers	1	0.125		0
PM2.5	28.89				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	91	93	107	139	218
	1	91	93	107	139	218
		91	93	107	139	218
CO	1	664	785	1156	2228	7269
	1	664	785	1156	2228	7269
		664	785	1156	2228	7269
PM10	1	5	14	28	56	140
	1	5	14	28	56	140
		5	14	28	56	140
PM2.5	1	3	5	9	21	75
	1	3	5	9	21	75
		3	5	9	21	75
Southwest Coastal LA County						
0.00 Acres						
	25	50	100	200	500	
NOx	91	93	107	139	218	
CO	664	785	1156	2228	7269	
PM10	5	14	28	56	140	
PM2.5	3	5	9	21	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
3	1	3	1
Distance Increment Below			
200			
Distance Increment Above			
500			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

## Appendix B    Historic Resources Evaluation for Los Angeles Harbor College

## Appendix

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# **HISTORIC RESOURCES EVALUATION FOR LOS ANGELES HARBOR COLLEGE, LOS ANGELES COUNTY, CALIFORNIA**

**Prepared for:**

PlaceWorks

3 MacArthur Place, Suite 1100  
Santa Ana, CA 92707

**Principal Investigator:**

Shannon Lopez, M.A.

**Date**

February 2020

***Cogstone Project Number:*** 4869

***Type of Study:*** Historic Resources Evaluation Report

***Sites:*** None in Project Area

***USGS Quadrangle:*** Torrance

***Area:*** 1111 Figueroa Pl, Wilmington, CA. 90744

***Key Words:*** Los Angeles Harbor College, Old Administration Building, General Classrooms, Special Program Services

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## **SUMMARY OF FINDINGS**

This study was conducted to determine the potential impacts to cultural resources at the Los Angeles Harbor College (LAHC), City of Los Angeles, County of Los Angeles, California (Project). The proposed Project Area is located within the city of Los Angeles, which is the lead agency under the California Environmental Quality Act (CEQA).

The Project Area is located at 1111 Figueroa Pl., Wilmington, CA 90744 (APN: 7412-012-902). Four campus buildings in the western portion of the Project Area are located within the APN: 7412-012-903 (associated address: 1700 W. L St., Los Angeles, CA 90744). The LAHC encompasses 65 acres and includes multiple administration and educational facilities, parking lots, sports facilities, and fields. LAHC proposes to demolish five buildings, renovate three buildings, and newly construct one building. Three of the buildings scheduled for demolition are considered historic in age and require evaluation for potential significance under the California Environmental Quality Act (CEQA). These buildings are the Old Administration Building, General Classrooms, and Special Program Services.

Cogstone Resource Management, Inc. (Cogstone) architectural historian Shannon Lopez conducted a search of the California Historic Resources Information System (CHRIS), located at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton on January 28, 2020. The record search included the entire proposed Project Area as well as a 0.25-mile search radius. Results of the record search indicate three previous studies within the Project Area and three previous studies within the 0.25-mile search radius. The records search also determined no previously recorded resources are located within the Project boundaries.

As part of Cogstone's historical society outreach, a request for information was sent to the Los Angeles Conservancy in February 2020. A series of emails and phone calls were made between Cogstone's architectural historian Shannon Lopez and the LA Conservancy's Preservation Coordinator, Erik Van Breene. The Los Angeles conservancy confirmed that no additional documentation regarding the recommendation of eligibility of the Old Administration Building could be located and likely do not exist. On March 5, 2020, the Los Angeles Conservancy sent a response letter to Cogstone's initial request for information. In addition to providing information regarding the history of the LAHC campus, associated architects, and building history, the Conservancy acknowledged the potential adverse impacts the proposed project would have on potential historic resources on the LAHC campus. In addition to recommending a full historic resource assessment of both the Old Administration Building and the General Classrooms, the Conservancy would like to discuss the project in person with the Los Angeles Community College District (LACCD) representatives. The conservancy recommends that such a meeting will better help the lead agency find alternatives to demolition and to ensure the retention of LAHC's historic resources.

On February 14, 2020, Cogstone Architectural Historian Shannon Lopez visited LAHC. Ms. Lopez met with project contractor Mr. Edward LopezLavalle who escorted Ms. Lopez through the campus as part of her survey. Ms. Lopez collected photo documentation of the General Classrooms building, Old Administration Building, and the Special Program Services building. Cogstone conducted its own historic resource evaluation for all three buildings and found them not eligible for listing on the California Register of Historical Resources (CRHR). Demolition of the Administration Building, General Classrooms, and Special Program Services building does not require any mitigation due to lack of significance.

## INTRODUCTION

### PURPOSE OF STUDY

This study was conducted to determine the potential impacts to cultural resources at the Los Angeles Harbor College (LAHC), City of Los Angeles, County of Los Angeles, California (Project) (Figure 1). The proposed Project Area is located within the city of Los Angeles, which is the lead agency under the California Environmental Quality Act (CEQA).

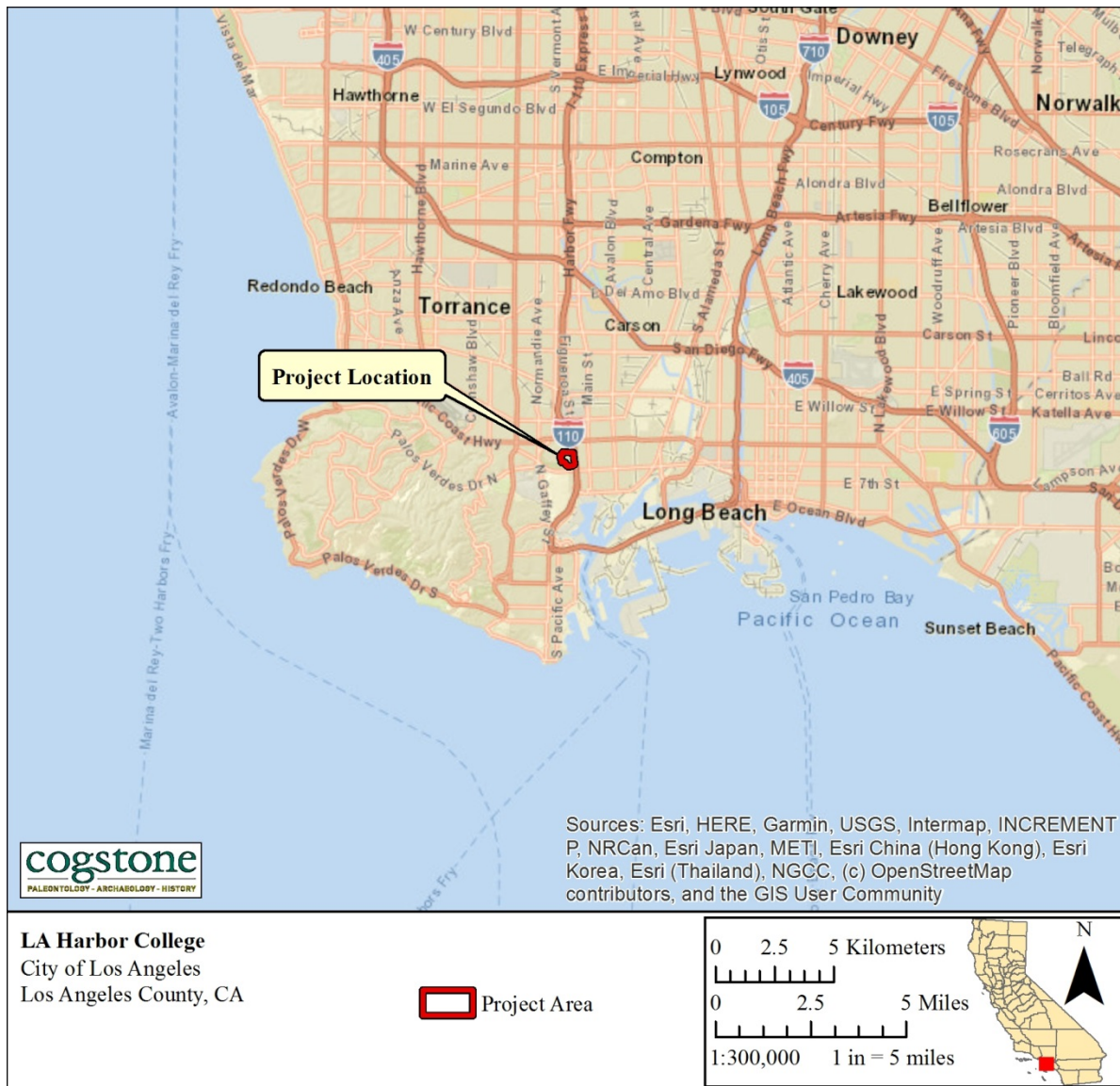


Figure 1. Project vicinity map

## **PROJECT LOCATION AND DESCRIPTION**

The Project Area is located at 1111 Figueroa Pl., Wilmington, CA 90744 (APN: 7412-012-902). Four campus buildings in the western portion of the Project Area are located within the APN: 7412-012-903 (associated address: 1700 W. L St., Los Angeles, CA 90744) (Figures 2 and 3). The LAHC encompasses 65 acres and includes multiple administration and educational facilities, parking lots, sports facilities, and fields. LAHC proposes to demolish five buildings, renovate three buildings, and newly construct one building. Three of the buildings scheduled for demolition are considered historic in age and require evaluation for potential significance under the California Environmental Quality Act (CEQA). These buildings are the Old Administration Building, General Classrooms, and Special Program Services.



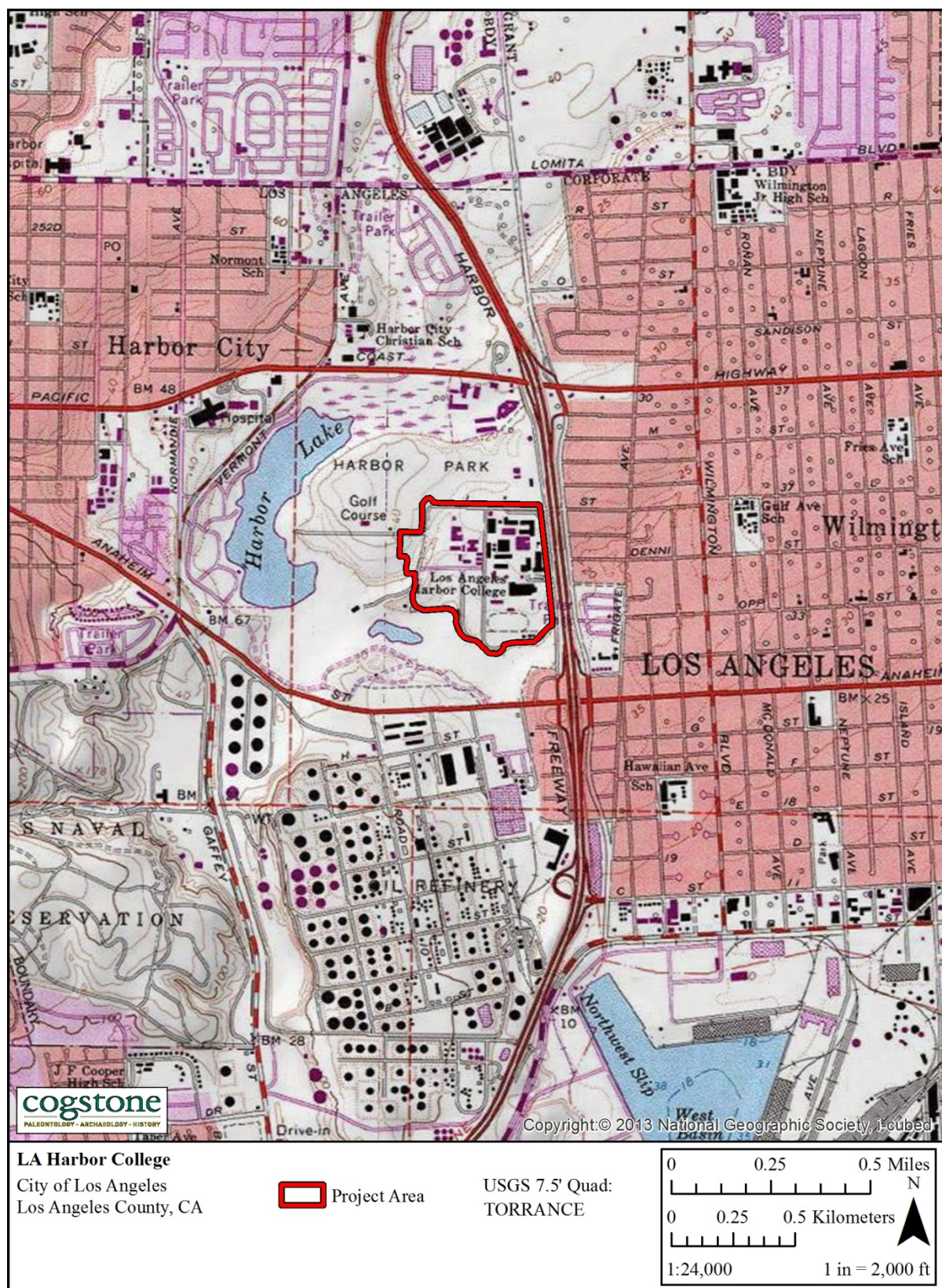


Figure 2. Project location





Figure 3. Project aerial

## **REGULATORY ENVIRONMENT**

### **STATE LAWS AND REGULATIONS**

#### **CALIFORNIA ENVIRONMENTAL QUALITY ACT**

CEQA states that: It is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required are intended to assist public agencies in systematically identifying both the significant effects of proposed project and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.

CEQA declares that it is state policy to: "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered.

#### **TRIBAL CULTURAL RESOURCES**

As of 2015, CEQA established that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Pub. Resources Code, § 21084.2). In order to be considered a "tribal cultural resource," a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource.

To help determine whether a project may have such an effect, the lead agency must consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code §20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources.



### **PUBLIC RESOURCES CODE**

Section 5097.5: No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands (lands under state, county, city, district or public authority jurisdiction, or the jurisdiction of a public corporation), except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

### **CALIFORNIA REGISTER OF HISTORICAL RESOURCES**

The California Register of Historical Resources (CRHR) is a listing of all properties considered to be significant historical resources in the state. The California Register includes all properties listed or determined eligible for listing on the National Register, including properties evaluated under Section 106, and State Historical Landmarks number No. 770 and above. The California Register statute specifically provides that historical resources listed, determined eligible for listing on the California Register by the State Historical Resources Commission, or resources that meet the California Register criteria are resources which must be given consideration under CEQA (see above). Other resources, such as resources listed on local registers of historic registers or in local surveys, may be listed if they are determined by the State Historic Resources Commission to be significant in accordance with criteria and procedures to be adopted by the Commission and are nominated; their listing in the California Register, is not automatic.

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historical integrity and are historically significant at the local, state or national level under one or more of the following four criteria:

- 1) It is associated with 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;
- 2) It is associated with the lives of persons important to local, California, or national history;
- 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 to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a

historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance.

Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

#### **NATIVE AMERICAN HUMAN REMAINS**

Sites that may contain human remains important to Native Americans must be identified and treated in a sensitive manner, consistent with state law (i.e., Health and Safety Code §7050.5 and Public Resources Code §5097.98), as reviewed below:

In the event that human remains are encountered during project development and in accordance with the Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods.

#### **CALIFORNIA ADMINISTRATIVE CODE, TITLE 14, SECTION 4307**

This section states that "No person shall remove, injure, deface or destroy any object of paleontological, archeological or historical interest or value."

## **BACKGROUND**

### **HISTORIC SETTING**

#### **EARLY CALIFORNIA HISTORY**

Juan Cabrillo was the first European to sail along the coast of California in 1542 and was followed in 1602 by Sebastian Vizcaino (Bean and Rawls 1993). Between 1769 and 1822 the Spanish had colonized California and established missions, presidios and pueblos (Bean and Rawls 1993).

In 1821 Mexico won its independence from Spain and worked to lessen the wealth and power held by the missions. The Secularization Act was passed in 1833, giving the vast mission lands to the Mexican governor and downgrading the missions' status to that of parish churches. The governor then redistributed the former mission lands, in the form of grants, to private owners. Ranchos in California numbered over 500 by 1846, all but approximately 30 of which resulted from land grants (Bean and Rawls 1993; Robinson 1948).

Following the signing of the Treaty of Guadalupe Hidalgo on February 2, 1848, effectively ceasing American/Mexican hostilities, so began the American Period of California. In 1850, California was granted statehood and although the United States promised to honor the land grants, the process of defining rancho boundaries and proving legal ownership became time consuming and expensive. Legal debts led to bankruptcies followed by the rise in prices of beef, hide, and tallow. This combined with flooding and drought was detrimental to the cattle industry. Ranchos were divided up and sold inexpensively (Robinson 1948).

#### **NEIGHBORHOOD OF HARBOR CITY**

Harbor City is a neighborhood within the Los Angeles Harbor region of the City of Los Angeles. It was originally part of Rancho Los Palos Verdes granted to Juan Jose Dominguez by Spanish Emperor Carlos III in 1784 (Figure 4). During the Spanish and American Periods the rancho was divided and sold off. After the end of the Mexican-American war in 1848, many of the rancho lands were purchased by American settlers (GPA 2012).

The history of Harbor City is closely integrated with the development of the Harbor Gateway located directly to the north. Through the 19<sup>th</sup> century the land was heavily utilized for agriculture, specifically grain cultivation. Annexed in 1906, the western most section of Harbor City was then part of the "shoestring strip" (now known as Harbor Gateway). Harbor City intended to construct its own port in order to provide Los Angeles direct access to the waterfront. This plan failed, however, with the consolidation of San Pedro and Wilmington in 1909 resulting in the division of coastal land between Wilmington and San Pedro (GPA 2012).

By the 1920s, Harbor City is moderately populated with many homes spaced between open lots. The majority of residential development occurred in the 1950s, 1960s, and 1970s during the building boom of Los Angeles. Institutional development within Harbor City is defined by Harbor Regional Park and LA Harbor College; both were developed in the beginning of the 1950s. The undeveloped marshland was then known as Bixby Slough and served as a natural flood plain for the surrounding area. Los Angeles purchased the land in 1953 and developed the park over period spanning nearly 20 years (GPA 2012).

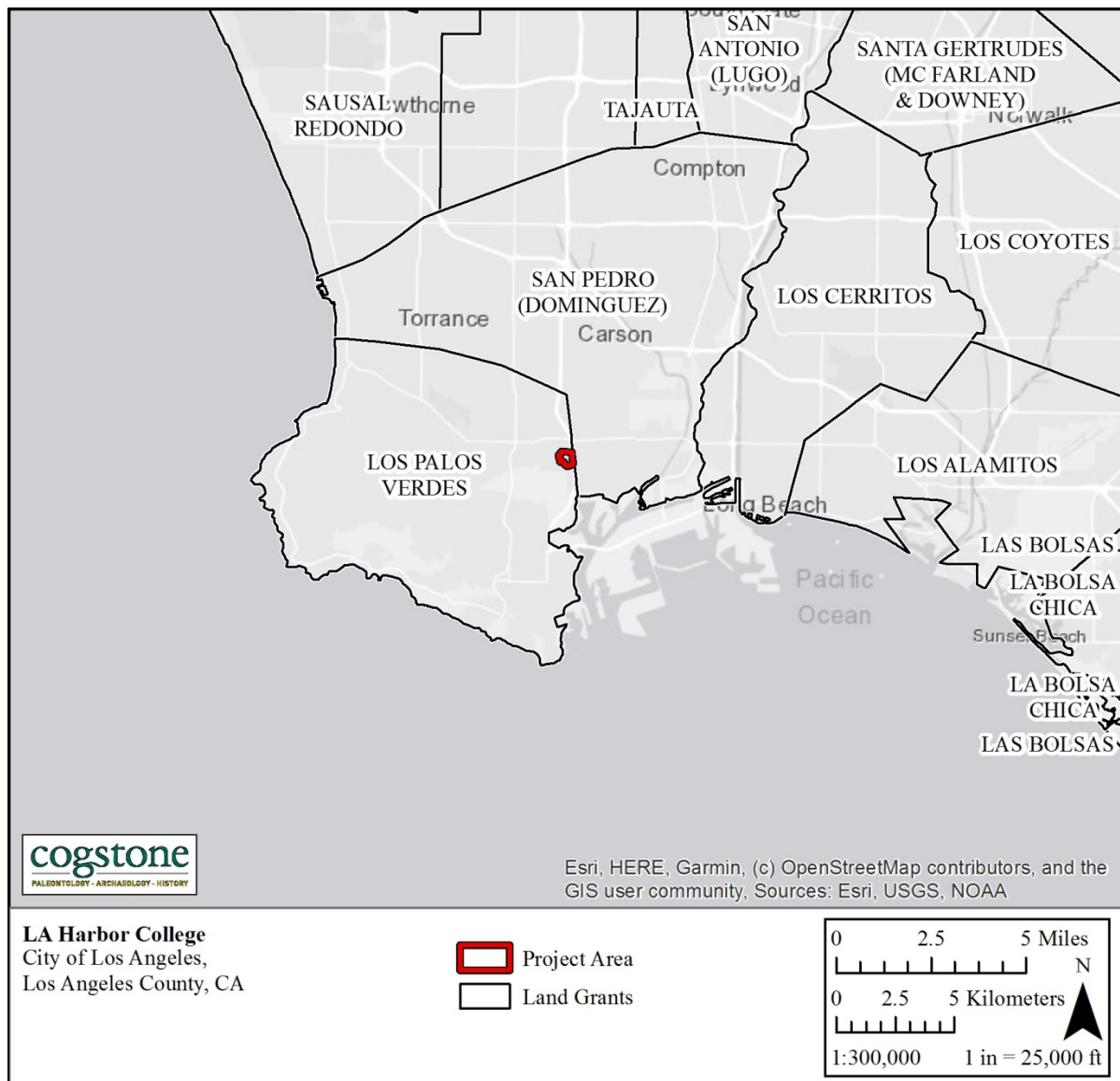
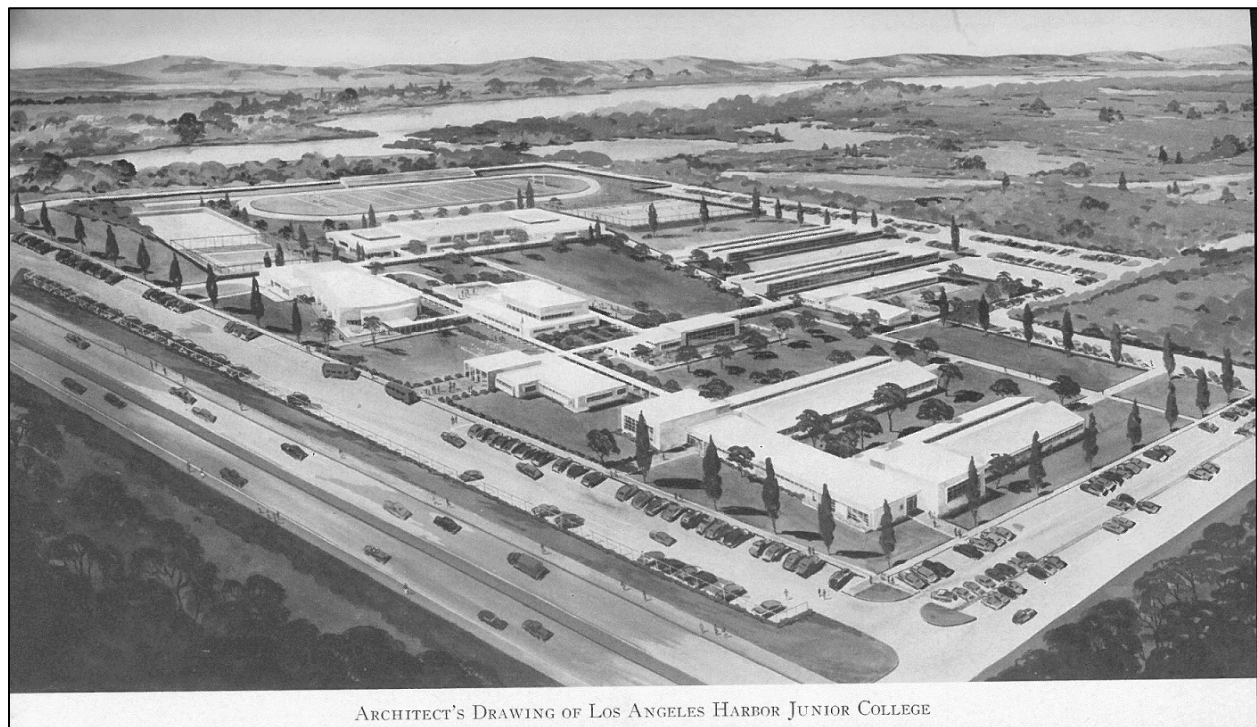


Figure 4. Spanish land grant map

### PROJECT AREA HISTORY

Per the earliest historic aerial of the Project Area, in 1941, the area consists of a road, two farmsteads, and large swaths of agricultural fields. In August of 1945, the Los Angeles Board of Education announced its decision to build a Harbor Junior College in the Harbor area. The chosen site was located near Pacific Coast Highway next to a section of the Bixby Slough (a marshy area near the western border of Wilmington). In 1946, preliminary plans for the new campus designed by architects A.C. Zimmerman and James R. Friend were approved with an estimated cost of construction of approximately \$1.6 million (Figure 5). Construction began in 1948, with a formal dedication of the new campus held the following year on November 18<sup>th</sup>. The school became officially known as Los Angeles Harbor Junior College in January 1950. Upon completion of the school's construction, the site's original address was changed from 1117 South Figueroa Street to 1111 Figueroa Place (Gneere 2017).



**Figure 5. Proposed plan for Los Angeles Harbor Jr. College. *Drawn by Zimmerman and Friend.***

By November 1949, 615 students were enrolled in Harbor Junior College. In addition to the expansion of new math and science courses, classes in police science were added per requests from the Los Angeles Police Department. Sometime during the 1950s, the “Junior” was dropped from the school’s name and by 1958 student enrollment had increased to 3,506. With the increase in the college’s student body new buildings and structures were added (Figure 6). In

1958, the Harbor Park Municipal Golf Course was constructed directly west of the campus (Gneere 2017).



**Figure 6. 1966 aerial photograph of campus. *Courtesy of Los Angeles Harbor College.***

In 1969, the Los Angeles Community College District (LACCD) was formed per voter approval, thus transferring control of Los Angeles's nine community colleges from the Los Angeles Unified School District (LAUSD) to the LACCD. Student enrollment would continue to increase from 8,500 by 1989 to over 10,000 by 1991 (Gneere 2017).

In 2001 and 2003, the LACCD passed two bond measures for the purpose of updating the school's now outdated facilities. Construction on campus began in 2004 and over the course of five years resulted in the multiple new building such as a student services center, technology and academic buildings, a relocated operations center, improved athletics facilities, and a new physical education building. In 2013 a \$60 million, 3-story science complex was opened (Gneere 2017).

## RECORDS SEARCH

### CALIFORNIA HISTORIC RESOURCES INVENTORY SYSTEM

Cogstone Resource Management, Inc. (Cogstone) architectural historian Shannon Lopez conducted a search of the California Historic Resources Information System (CHRIS), located at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton on January 28, 2020. The record search included the entire proposed Project Area as well as a 0.25-mile search radius. Results of the record search indicate three previous studies within the Project area and three previous studies within the 0.25-mile search radius (Table 1).

**Table 1. Previous Cultural Resource Studies**

<b>Report No. (LA-)</b>	<b>Author(s)</b>	<b>Title</b>	<b>Year</b>
00959	Rice, Glen E.	Archaeological Survey in the City of Wilmington on Five Potential Sites for Drilling Oil Wells.	1976
01336	Colby, Susan M. and David Geiger	An Archaeological Resource Survey and Impact Assessment of the Harbor Lake Restoration Project Area, Los Angeles County, California.	1984
05211	Wlodarski, Robert J.	A Phase I Archaeological Study for the Proposed LA Harbor College Roller Rink 1111 South Figueroa Place, Wilmington, Los Angeles County, California.	2001
05991	Harris, Nina M.	Archaeological Survey Report Los Angeles Harbor College Los Angeles County, California.	2002
11964	Robinson, Mark	Archaeological Survey Report Machado Lake Ecosystem Rehabilitation Project and Wilmington Drain Multi-Use Project.	2010
12808	Chasteen, Carrie, Tiffany Clark, Richard Hanes, and Michael Mirro	Cultural Resources Study of the Wilmington Oil and Gas Field, Los Angeles County, California in Support of Analysis of Oil and Gas Well Stimulation Treatments in California Environmental Impact Report.	2014

The records search also determined no previously recorded resources are located within the Project boundaries. In addition, 3 other cultural resources are located within a 0.25-mile radius of the Project Area. These include 2 prehistoric sites and one multi-component site (Table 2). One additional prehistoric site is recorded within the 0.25-mile search radius (LAN-120); however, this site was destroyed in 1984 due to modern development (Table 2).

**Table 2. Cultural Resource Sites**

Primary (P-19)	Trinomial No.	Resource Type	Resource Description	Year Recorded	Distance from PA
120	LAN-120	Prehistoric site	Unknown site, destroyed in 1984 due to modern development.	1952	PA-0.25
125	LAN-125	Prehistoric site	Scattered shell fragments.	1965	PA-0.25
126	LAN-126	Prehistoric site	Scattered shell fragments.	1965	PA-0.25
2135	LAN-2135H	Multi-component site	Oil refinery and small portion of prehistoric component in southwestern corner of property (not in Project Area), "Los Angeles Union Oil Refinery," 1917.	1993	PA-0.25

## OTHER SOURCES

In addition to the SCCIC records search a variety of sources were consulted in January 2020 to obtain information regarding the cultural context of the Project Area (Table 4). Sources included the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), California Historical Resources Inventory (CHRI), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI). Specific information about the Project area, obtained from historic-era maps and aerial photographs, is presented in the Project area history section.

**Table 4. Additional Sources Consulted**

Source	Results
National Register of Historic Places (NRHP; 1979-2002 & supplements)	Negative



Source	Results
Historic USGS Topographic Maps	<p>Per the earliest topographic map from 1896 (Redondo; 1:62500), the Project Area (PA) appears largely undeveloped with a road possible traversing through the eastern section of the PA. By 1923 (Wilmington; 1:24000), a road is present running across the northern boundary of the PA. A single structure (farmstead) is marked south of the road within the western section of the PA. In 1951 (Torrance; 1:24000), the PA is heavily developed and labeled “Los Angeles Harbor Junior Coll.” By 1964 (Torrance; 1:24000), additional building development occurs within the PA as well as alterations to the preexisting road alignment. Additional development to the northwest of the PA is present by 1972 (Torrance; 1:24000). Multiple building additions are present throughout the PA by 1981 (Torrance; 1:24000).</p>
Historic US Department of Agriculture Aerial Photographs	<p>Per the earliest historic aerial of the PA, in 1941, the PA consists of a road and two farmsteads. The majority of the PA is agricultural fields. In 1952, the farmsteads are gone, with the exception of two large barns/storage buildings at the western area of the PA. The agricultural fields are built over by various large buildings and a track (at the southern end of the PA). In 1960, there are additions to buildings at the southern section of the PA and development of additional buildings at the west section of the campus near the old farmstead barns/storage buildings. In 1967, large sections of dirt lots and fields at the western side of campus are paved and converted to parking lots. The old farmstead’s barn/storage building are demolished and built over by multiple buildings. Also at the southwest section of the campus a baseball field appears. By 1971 and 1976, further building development is visible at the western section of the campus. Between 2005 and 2009 there is significant development at the northern section of the campus. Buildings dating from the 1950s are demolished and replaced by modern buildings including North East Academic, Student Service &amp; Administration, and the Child Development Center. In 2010, the Science Complex is constructed. A large parking structure is constructed at the northwest section of the campus by 2012. The New Library is constructed by 2014.</p>

Source	Results
California Register of Historical Resources (CRHR; 1992-2014)	Negative
Built Environment Resource Directory (BERD; 2019-)	Negative
California Historical Landmarks (CHL; 1995 & supplements to 2014)	Negative
California Points of Historical Interest (CPHI; 1992 to 2014)	Negative
Bureau of Land Management (BLM) General Land Office Records	Positive; 1858: Aquina, Jose, Dominguez, Andres, Dominguez, Esteban, Dominguez, Feliciano, Dominguez, Jose, Dominguez, Madalina, Dominguez, Manuel, Dominguez, Maria, Dominguez, Maria Jesus, And Dominguez, Pedro. 1880; Sepulveda, Jose Lorebo.
Historic Society Request for Information	Multiple attempts were made to contact the Los Angeles Conservancy and the Los Angeles Historical Society. On Feb 27, 2020, contact was made with Erik Van Breene, a Preservation Coordinator at the Los Angeles Conservancy via telephone. See below for further information.
Survey LA	Positive; the Los Angeles Harbor Junior College Administration Building is recommended eligible for state (3CS) and local listing (5S3) under Criteria C/3/3.

## SURVEY LA

In July 2012, Galvin Preservation Associates (GPA) prepared a Historic Resources Survey Report for the City of Los Angeles titled “Historic Resources Survey Report: Wilmington-Harbor City Community Plan Area.” Per GPA’s findings, the Harbor College Administration Building (constructed in 1963) was recommended as eligible for state (3CS) and local (5S3) listing under Criterion C/3/3 (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). There is no evidence of any in-depth analysis or research to support GPA’s recommendation of eligibility beyond what limited information is presented in the 2012 Survey LA report. Consultation with the Los Angeles Conservancy confirms that no additional documentation or evaluation associated with this recommendation of eligibility can be located and likely does not exist.

## **HISTORICAL SOCIETY CONSULTATION**

As part of Cogstone's historical society outreach, a request for information was sent to the Los Angeles Conservancy in February 2020. A series of emails and phone calls were made between Cogstone's architectural historian Shannon Lopez and the LA Conservancy's Preservation Coordinator, Erik Van Breene. The Los Angeles conservancy confirmed that no additional documentation regarding the recommendation of eligibility of the Old Administration Building could be located and likely do not exist. On March 5, 2020, the Los Angeles Conservancy sent a response letter to Cogstone's initial request for information. In addition to providing information regarding the history of the LAHC campus, associated architects, and building history, the Conservancy acknowledged the potential adverse impacts the proposed project would have on potential historic resources on the LACH campus. In addition to recommending a full historic resource assessment of both the Old Administration Building and the General Classrooms building, the Conservancy would like to discuss the project in person with LACCD representatives. The conservancy recommends that such a meeting will better help the lead agency find alternatives to demolition and to ensure the retention of LAHC's historic resources.

## HISTORIC CONTEXT

The Historic Contexts and associated themes within the Project Area are:

- Context: Architecture and Engineering, 1850-1980
  - Sub context: L.A. Modernism, 1919-1980
  - Theme: Post-War Modernism, 1946-1976
  - Sub theme: Mid-Century Modernism, 1945-1970
  
- Public and Private Institutional Development: 1949-1975
  - Theme: Public Schools and the LAUSD: 1949-1969
  - Theme: Public Schools and the LACCD: 1969-1975

The historic context of the Old Administration Building is Architecture and Engineering (1850-1980) with the theme of Post-War Modernism (1946-1976). This historic context and setting was assigned to the Old Administration Building in 2012 per a Historic Resources Survey Report of the Wilmington-Harbor City Community Plan Area for SurveyLA. LAHC (originally named Los Angeles Harbor Junior College) and was founded in 1949 as a direct result of the growing demand for higher education facilities following the end of the Second World War. Built in 1962, the Old Administration Building is good example of a Mid-Century Modern building constructed between 1945 and 1970.

Constructed in 1968, the General Classrooms falls under the historic context of Public and Private Institutional Development: 1949-1975 with the theme of Public Schools and the LAUSD: 1949-1969. This associated context and theme is assigned to the General Classrooms as its build date occurs *before* the establishment of the LACCD in 1969.

The historic context of the Special Program Services building is Public and Private Institutional Development: 1949-1975 with the theme of Public Schools and the LACCD: 1969-1975. The associated context and theme is assigned to the Special Program Services building as its build date (1971/1972) occurs *after* the establishment of the LACCD in 1969.

## **HISTORIC BUILT ENVIRONMENT SURVEY**

### **METHODS**

On February 14, 2020, Cogstone Architectural Historian Shannon Lopez visited LAHC. Ms. Lopez met with project contractor Mr. Edward LopezLavallo who escorted Ms. Lopez through the campus as part of her survey. Ms. Lopez collected photo documentation of the General Classrooms building, Old Administration Building, and the Special Program Services building. See Appendix B for associated DPRs.

### **RESULTS**

#### **OLD ADMINISTRATION BUILDING**

This Mid-Century Modern administration building is one-story, with a flat roof, and a T-shaped building footprint. With the exception of the north façade, the upper third of the building's exterior consists of concrete, the middle third of the building is comprised of ribbon windows, and the lower third of the building is clad in tan and crème colored bricks laid in a stretcher bond. The windows are a series of rectangular, aluminum framed units each with three fixed glass panes. Louvered metal sun shades are fixed under the eaves of the west and east facades (sections of which appear damaged or missing). Under the eaves of the west, east, and south façades are evenly spaced round concrete columns. While both the west and east façades share the same materials and similar design, these elevations are not symmetrical. At the building's north façade, the exterior is clad in concrete with the eastern half of the façade clad in aluminum vents running up the lower 2/3rds of the building (Figures 7-10).

The building's main entrance is located at the southern end of the east elevation and consists of double sliding glass doors. This primary entrance is sheltered under a flat concrete overhang supported by three round concrete pillars. Located in front of the main entrance is a concrete wall with a large decorative stone mosaic. Directly parallel to the east entrance is a secondary set of sliding glass doors at the building's western façade (Figure 7).

At the south elevation, a section of the east end of the façade is recessed, creating a large patio area sheltered by flat roofed metal covering supported by two round concrete pillars (three matching square holes are cut into the overhang). The crème and tan brick layer running directly below the façade's windows extends past the recessed section of the façade and reconnects with the end of the eastern wall, blocking outside access to the patio area (Figure 11).

Access to the building's interior was limited at the time of Cogstone's site visit; however, photographs of the court at the southern interior of the building were taken. This court area is located at the T-intersection between the two main bodies of the building. Near the center of this space is a large oval oculus cut into the flat roof above. The interior is supported by eight round concrete columns clad in small, square, dark grey, glazed tile. The southern wall of this space is comprised of large glass windows and doors (Figure 12).



**Figure 7. Main entrance, east façade**





**Figure 8. East façade**



**Figure 9. South façade**





**Figure 10. West façade**



**Figure 11. South façade**





**Figure 12. Court at the southern end of Administration building**

### **GENERAL CLASSROOMS**

The General Classrooms are Mid-Century modern in style, two stories, with a rectangular footprint, and flat roof with wide overhanging eaves. The General Classrooms consists of a north and a south building divided by a 2-3 foot gap running west/east. Both buildings are physically connected by exterior brick stairwells (laid in a stretcher bond) at the west and east façades. Access to the stairwell from the ground floor consists of two flush pedestrian doors with a wire mesh transom. Both the exterior of the building and the covered eaves of the overhanging roof are clad in stucco. Set directly above the flush pedestrian doors at the first and second floor levels (north and south façades) are ribbon windows running the entire length of the elevation. While the window pattern and location are original to the building, the aluminum frames and glass are replacements (c. 2005). At the second floor level is iron security railing. At the time of documentation, only the first floor is utilized for classroom space while the second floor is restricted to storage space only (Figures 13-21).



**Figure 13. South elevation (left) and east elevation (right)**



**Figure 14. East elevation walkthrough; classrooms (left) stairwell (right)**





**Figure 15. East elevation stairwell**



**Figure 16. East elevation (left), south elevation (right)**



**Figure 17. North elevation**



**Figure 18. North elevation**





**Figure 19. West elevation (left) and south elevation (right)**



**Figure 20. West elevation stairwell**



**Figure 21. Restroom (left), gap dividing north and south halves of building (right), west elevation**

### **SPECIAL PROGRAM SERVICES**

This portable utilitarian building is single-storied, flat roofed, with a rectangular footprint, and overhanging eaves at the north and south elevations. The building's fenestration pattern at the north and south façades consists of matching rectangular, one-by-one, sliding windows (five at the north elevation and eight at the south elevation). The building's two identical flush pedestrian doors are located at the west façade (one each at the northern and southern most end of the elevation). Both doors are flanked by a single square one-by-one sliding window. Three identical air-conditioning units are fixed to the exterior of the north façade and two at the south façade. Near the middle of this façade is a fixed, three-paned, rectangular window. Wrapping along the north and west façade is a concrete wheelchair access ramp. A power box and security light are present at the building's east elevation (Figures 22-25).





**Figure 22. North and west elevation**



**Figure 23. West elevation**



**Figure 24. South elevation (right) and east elevation (left)**



**Figure 25. East elevation**



## **STUDY FINDINGS AND CONCLUSIONS**

### **THE OLD ADMINISTRATION BUILDING**

In July of 2012, Galvin Preservation Associates (GPA) prepared a Historic Resources Survey Report for the City of Los Angeles titled “Historic Resources Survey Report: Wilmington-Harbor City Community Plan Area.” Per GPA’s findings, the Harbor College Administration Building (constructed in 1963) was recommended as eligible for state (3CS) and local (5S3) listing under Criterion C/3/3 (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). There is no evidence of any in-depth analysis or research to support GPA’s recommendation of eligibility beyond what limited information is presented in the 2012 Survey LA report. Consultation with the Los Angeles Conservancy confirms that no additional documentation or evaluation associated with this recommendation of eligibility can be located and likely does not exist. Therefore, Cogstone prepared the appropriate Department of Parks and Recreation (DPR) forms and conducted its own evaluation of the building. The following is Cogstone’s recommendation of eligibility informed by both independent research and consultation.

#### **Criterion A/1**

This building is not associated with 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 and, therefore, not recommended as eligible for listing under Criterion 1/A.

#### **Criterion B/2**

This building is not associated with the lives of persons important to local, California or national history and, therefore, not recommended as eligible for listing under Criterion 2/B.

#### **Criterion C/3**

This building is associated with notable California architect Archie C. Zimmerman (1894-1970). The majority of Mr. Zimmerman’s work was located within Los Angeles County with few examples still in existence. While the Harbor College Administration Building is a good example of Mid-Century Modernism it is not exemplary and not the best representative of Mr. Zimmerman’s work. According to the Los Angeles Conservancy, this building appears to be part of the original 1940s campus plan but was not constructed until the 1960s. The function and association of this building is directly tied to LAHC and would be considered as a contributor if the campus was recommended as a historic district. However, significant alterations to the LAHC campus involving the demolition of original and historic aged buildings and addition of new modern buildings result in significant loss of integrity for the campus and, by extension, the

Old Administration Building. Therefore, this building is not recommended eligible for listing under Criterion 3/C.

**Criterion D/4**

This building has not yielded, nor has the potential to yield, information important to the prehistory or history of the local area, California or the nation and, therefore, not recommended as eligible for listing under Criterion 4/D.

**Integrity**

The Old Administration Building maintains its integrity of *Location, Design, Workmanship, and Feeling*. Due to recent alteration of the surrounding area, this building has lost its integrity of *Setting*. This building is no longer used for administrative purposes (it is currently utilized as a surplus storage building), thus, it has lost its integrity of *Association*.

**GENERAL CLASSROOMS**

**Criterion A/1**

This building is not associated with 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 and, therefore, not recommended as eligible for listing under Criterion 1/A.

**Criterion B/2**

This building is not associated with the lives of persons important to local, California or national history and, therefore, not recommended as eligible for listing under Criterion 2/B.

**Criterion C/3**

This building does not embody the distinctive characteristics of a type, period, region or method of construction or represent the work of a master or possess high artistic values and, therefore, not recommended as eligible for listing under Criterion 3/C.

**Criterion D/4**

This building has not yielded, nor has the potential to yield, information important to the prehistory or history of the local area, California or the nation and, therefore, not recommended as eligible for listing under Criterion 4/D

**Integrity**

The General Classrooms maintains its integrity of *Location, Design, Workmanship, Feeling, and Association*. Due to recent alteration of the surrounding area, this building has lost its integrity

of *Setting*. The replacement of the building's ribbon windows, while similar in style, results in a loss of the building's integrity of *Materials*.

## **SPECIAL PROGRAM SERVICES**

### **Criterion A/1**

This building is not associated with 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 and, therefore, not recommended as eligible for listing under Criterion 1/A.

### **Criterion B/2**

This building is not associated with the lives of persons important to local, California or national history and, therefore, not recommended as eligible for listing under Criterion 2/B.

### **Criterion C/3**

This building does not embody the distinctive characteristics of a type, period, region or method of construction or represent the work of a master or possess high artistic values and, therefore, not recommended as eligible for listing under Criterion 3/C.

### **Criterion D/4**

This building has not yielded, nor has the potential to yield, information important to the prehistory or history of the local area, California, or the nation and, therefore, not recommended as eligible for listing under Criterion 4/D.

### **Integrity**

This building still retains its integrity of *Location*. Due to significant alterations to the surrounding area, this building has lost its integrity of *Setting*. Use of this building has changed in past decades and has lost its integrity of *Association*. With the exception of the exterior wheelchair ramp addition, this building appears to maintain its integrity of *Design*, *Workmanship*, and *Materials*.

## **RECOMMENDATIONS**

Cogstone conducted its own historic resource evaluation for the Administration Building, General Classrooms, and Special Program Services and found them not eligible for listing on the California Register of Historical Resources (CRHR). No further work is required. Demolition of the Administration Building, General Classrooms, and Special Program Services does not require any mitigation due to lack of significance.

## REFERENCES CITED

Bean, W. and J.J. Rawls

1993 *California: An Interpretive History*. 4th Edition. McGraw Hill, New York.

FrameFinder

1941 *Flight C*, 6972, *Frame 32*. [http://mil.library.ucsb.edu/ap\\_indexes/FrameFinder/](http://mil.library.ucsb.edu/ap_indexes/FrameFinder/)

1952 *Flight AXJ*, *Frame 7K-138*. [http://mil.library.ucsb.edu/ap\\_indexes/FrameFinder/](http://mil.library.ucsb.edu/ap_indexes/FrameFinder/)

1960 *Flight C*, 23870, *Frame 561*. [http://mil.library.ucsb.edu/ap\\_indexes/FrameFinder/](http://mil.library.ucsb.edu/ap_indexes/FrameFinder/)

1967 *Flight AMI*, 1373, *Frame 67*. [http://mil.library.ucsb.edu/ap\\_indexes/FrameFinder/](http://mil.library.ucsb.edu/ap_indexes/FrameFinder/)

1971 *Flight TG*, 2755, *Frame 3-11*. [http://mil.library.ucsb.edu/ap\\_indexes/FrameFinder/](http://mil.library.ucsb.edu/ap_indexes/FrameFinder/)

1976 *Flight TG*, 7600, *Frame 3-13*. [http://mil.library.ucsb.edu/ap\\_indexes/FrameFinder/](http://mil.library.ucsb.edu/ap_indexes/FrameFinder/)

Gneere, Sam

2017 "Los Angeles Harbor College in Wilmington has Filled a Crucial Educational Need Since 1949." *The Daily Breeze*. <http://blogs.dailybreeze.com/history/2017/09/08/los-angeles-harbor-college-in-wilmington-has-filled-a-crucial-educational-need-since-1949/>.

Accessed February 27, 2020.

GPA (Galvin Preservation Associates)

2012 *Historic Resources Survey Report Wilmington-Harbor City Community Plan Area*. Survey LA: Los Angeles Historic Resources Survey.

NETROnline

1963 Historic Aerials. <https://www.historicaerials.com/viewer>

1972 Historic Aerials. <https://www.historicaerials.com/viewer>

2005 Historic Aerials. <https://www.historicaerials.com/viewer>

2009 Historic Aerials. <https://www.historicaerials.com/viewer>

2010 Historic Aerials. <https://www.historicaerials.com/viewer>

2012 Historic Aerials. <https://www.historicaerials.com/viewer>

2014 Historic Aerials. <https://www.historicaerials.com/viewer>

Robinson, W.W.

1948 *Land in California: The Story of Mission Lands, Ranchos, Squatters, Mining Claims, Railroad Grants, Land Scrip, Homesteads*. University Press, Berkeley.

USGS Historical Topographic Map Explorer

1896 *Redondo*. U.S. Geological Survey, 1:62500, Reston, VA.

1923 *Wilmington*. U.S. Geological Survey, 1:24000, Reston, VA.

1951 *Torrance*. U.S. Geological Survey, 1:24000, Reston, VA.

1964 *Torrance*. U.S. Geological Survey, 1:24000, Reston, VA.

1972 *Torrance*. U.S. Geological Survey, 1:24000, Reston, VA.

1981 *Torrance*. U.S. Geological Survey, 1:24000, Reston, VA.

## **APPENDIX A. HISTORICAL SOCIETY CONSULTATION**



February 26, 2020

Los Angeles Conservancy  
523 West Sixth Street, Suite 826  
Los Angeles, CA. 90014

RE: Information Request for the Historic Resources Evaluation Report for the Los Angeles Harbor College, Los Angeles County, California

To Whom It May Concern:

The Los Angeles Harbor College (LAHC) proposes to demolish five buildings, renovate three buildings, and newly construct one building. The Project area is located at 1111 Figueroa Pl, Wilmington, CA. 90744 (APN: 7412-012-902). The Los Angeles Harbor College encompasses 65 acres and included multiple administration and educational facilities, parking lots, sports facilities, and fields. (Figure 1-3)

We are contacting you because we would like to invite members of Los Angeles Conservancy to provide input regarding the redevelopment of the Project area. In particular, we would like to know if your organization possesses any information regarding any person or persons associated with the Project area that would be considered important to local, California, or national history. We appreciate your providing any comments, issues, and/or concerns relating to the history of the Project area. Please contact me at [slopez@cogstone.com](mailto:slopez@cogstone.com) or at (714) 974-8300. Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink that reads "Shannon Lopez". The signature is fluid and cursive, with the first name "Shannon" and last name "Lopez" clearly distinguishable.

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Federal Certifications EDWOSB, SDB  
State Certifications DBE, WBE, SBE, UDBE

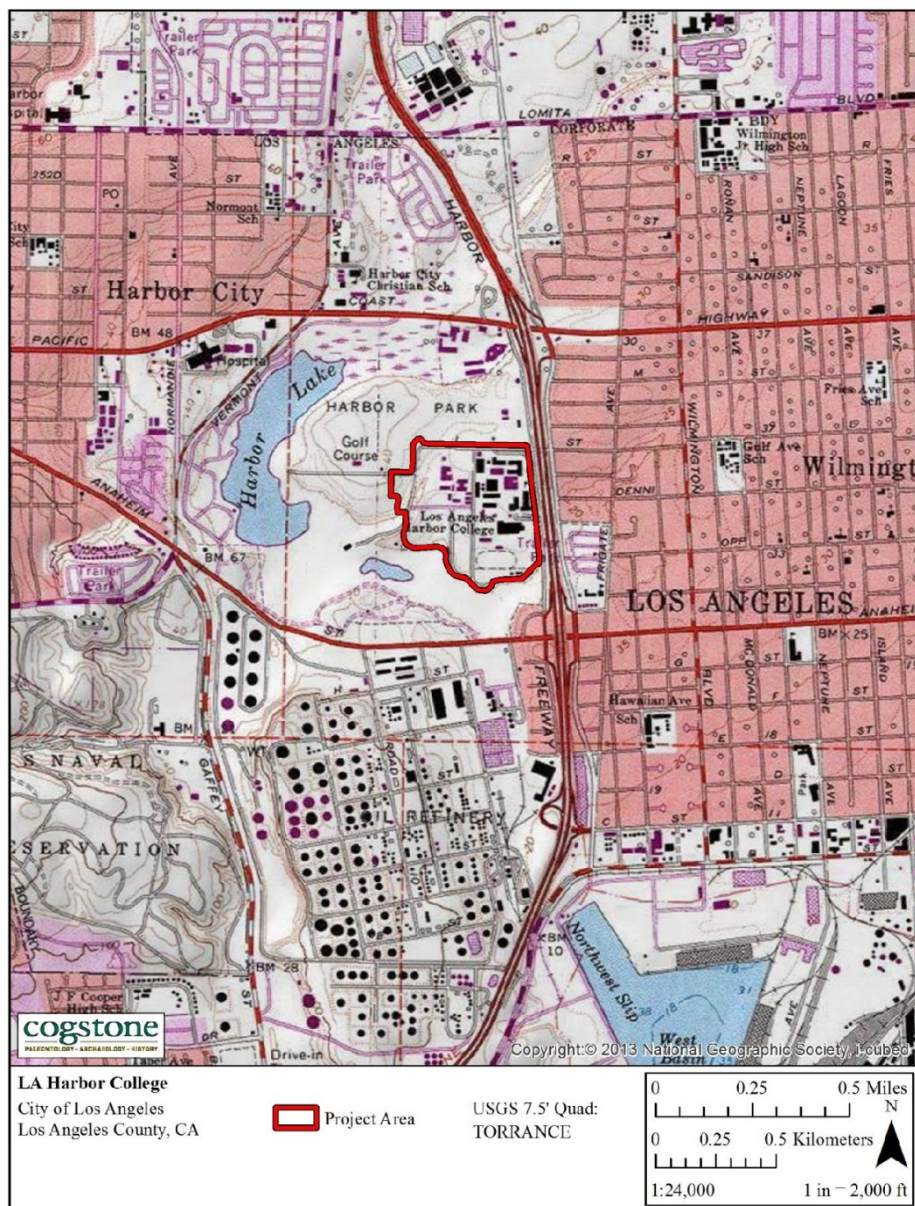
[cogstone.com](http://cogstone.com)  
Toll free (888) 333-3212



Figure 1. Project Vicinity

cogstone.com





cogstone.com



Figure 3. Project aerial

cogstone.com





LOS ANGELES  
CONSERVANCY

523 West Sixth Street, Suite 826  
Los Angeles, CA 90014

213 623 2489 OFFICE  
213 623 3909 FAX  
[laconservancy.org](http://laconservancy.org)

March 5, 2020

Shannon Lopez, M.A.  
Architectural Historian  
Cogstone Resource Management, Inc.  
1518 West Taft Avenue  
Orange, CA 92865  
Email: [slopez@cogstone.com](mailto:slopez@cogstone.com)

**Re:** Information Request for the Historic Resources Evaluation Report for the  
Los Angeles Harbor College, Los Angeles County, California

Dear Ms. Lopez:

On behalf of the Los Angeles Conservancy, thank you for notifying us of possible adverse impacts to potentially eligible historic resources. The Conservancy believes two of the three structures being proposed for demolition by the Los Angeles Community College District (LACCD) may qualify as historic resources for purposes of the California Environmental Quality Act (CEQA). Therefore we have questions about the scope of work and its impact on the campus environment.

We submit the following comments to ensure that the Draft Environmental Impact Report (DEIR) considers a range of preservation alternatives that could accomplish the goals of the project while retaining the Los Angeles Harbor College's historic resources.

#### **I. Los Angeles Harbor College History**

Located in the Wilmington neighborhood, Los Angeles Harbor College is one of LACCD's earliest post-WWII community colleges. The City of Los Angeles secured the campus site in 1945 and hired architects A.C. Zimmerman and James R. Friend in the same year. In 1946, preliminary designs were approved, and in 1948, construction began on the campus. Construction lasted through the 1960s and into the early 1970s, accommodating the campus's growing class sizes. Both the Old Administration and General Classrooms Buildings appear to part of the original Zimmerman and Friend plan but were not completed until the 1960s.

##### *Architects*

Architect A.C. Zimmerman is listed as a member of the American Institute of Architects (AIA) from 1922 until his death in 1971. Zimmerman worked independently and in partnership. His partnerships include Edelman & Zimmerman, Zimmerman & Michael, and Zimmerman & Murray. Zimmerman is best known as an architect of institutional buildings that include 52<sup>nd</sup> Street School



(1925 AIA award winner), Horace Mann Junior High, and Breed Street Synagogue. Additionally, he was involved with several public housing projects that include Rancho San Pedro and Harbor Hills Garden Apartments.

Architect James R. Friend, AIA, was a Long Beach-based architect. His projects include the Harbor Boat Building Company, Pan-Pacific Fisheries, Central Church of Christ in Long Beach, San Pedro Library, a tract of Storybook Houses in West Covina, and the First Baptist Church in Bellflower.<sup>1</sup> While Friend worked independently, he completed several projects in collaboration with partners. Collaborative projects include the Jordan Downs and Rancho San Pedro public housing projects. Friend is credited as a consultant on Richard Neutra's Hall of Records in downtown Los Angeles, but it is unclear how much influence he had on the design.

## II. Impacts to Historic Resources

The proposed project may have potentially adverse impacts to historic resources on the Los Angeles Harbor College campus. The project calls for the demolition of three buildings. Two of these, the Old Administration and General Classroom buildings, appear to qualify as historic resources under CEQA. The third building housing the Special Programs Services was intended for temporary use in the 1970s.

Constructed in 1963, the Old Administration Building is located on the east side of the campus along Figueroa Place. SurveyLA identified the building as eligible for local and state designation. Additionally, a similar building appears in the initial Zimmerman & Friend renderings. Therefore, under CEQA, the Old Administration Building requires a full historic resource assessment before any demolition plans are submitted.

The General Classrooms Building, constructed in the late 1960s, is two-stories in height. The building is located on the interior of the campus and not visible from the right of way. Due to its location, SurveyLA did not identify this resource as it is not seen from the public right of way. However, the building appears to be extremely intact and warrants a historic resource assessment.

## III. Draft EIR Must Evaluate a Range of Potentially Feasible Preservation Alternatives

CEQA "requires public agencies to deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects."<sup>3</sup> If less harmful alternatives are identified that meet most project objectives, the lead agency should not approve the proposed project.<sup>4</sup> To ensure fair consideration of environmentally superior alternatives, the DEIR should also examine the feasibility of the proposed project in terms of the current capacity of existing infrastructure, cumulative impacts in conjunction with sustainability goals, and overall Master Plan objectives for LA Harbor College.

<sup>1</sup> *Jordan Downs Historic Significance Evaluation*, Page & Turnbull for the City of Los Angeles, August 24, 2011.

<sup>3</sup> *Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 41 italics added; also see Public Resources Code §§ 21002, 21002.1.

<sup>4</sup> "The fact that an alternative may be more expensive or less profitable is not sufficient to show that alternative is financially infeasible. What is required is evidence that the additional costs or lost profitability are sufficiently severe as to render it impractical to proceed with the project." *Citizens of Goleta Valley v. Board of Supervisors* (1998) 197 Cal.App.3d 1167, 1181.



- **No Project Alternative:** As required under CEQA, the DEIR must include a “no project” alternative that considers the viability of retaining the Old Administration and General Classrooms Buildings as is.
- **Standards-Compliant Project:** As required under CEQA, the DEIR must include an alternative that complies with the Secretary of the Interior’s Standards for Rehabilitation. This option would rehabilitate the existing buildings to meet contemporary and future programming needs. In assessing the viability of a Standards-compliant alternative, the DEIR should include a detailed accounting of projected rehabilitation costs, incorporating regulatory relief provided under the California Historical Buildings Code.

In evaluating the feasibility of these options LACCD should include alternative programming options, expansion of current programming to occupy underutilized space, and potential partnerships.

Given the potential loss of two historic resources, the Conservancy would like to discuss the project in person with LACCD representatives. Such a meeting will better help the lead agency find alternatives to demolition and to ensure the retention of LA Harbor College’s historic resources.

**About the Los Angeles Conservancy:**

The Los Angeles Conservancy is the largest local historic preservation organization in the United States, with nearly 6,000 members throughout the Los Angeles area. Established in 1978, the Conservancy works to preserve and revitalize the significant architectural and cultural heritage of Los Angeles County through advocacy and education.

Thank you for the opportunity to respond to Cogstone’s Request for Information for the proposed demolitions at Los Angeles Harbor College. Please do not hesitate to contact me at (213) 430-4203 or [afine@laconservancy.org](mailto:afine@laconservancy.org) should you have any questions or concerns.

Sincerely,



Adrian Scott Fine  
Director of Advocacy



## **APPENDIX B. DPRS**

State of California & The Resources Agency  
DEPARTMENT OF PARKS AND RECREATION  
**PRIMARY RECORD**

Primary #  
HRI #  
Trinomial  
NRHP Status Code

Other Listings  
Review Code

Reviewer

Date

Page 1 of 10

\*Resource Name or #: Old Administration Building

**P1. Other Identifier:** \_\_\_\_\_

\*P2. Location: ☐ Not for Publication ☐ Unrestricted

\*a. County Los Angeles and (P2c, P2e, and P2b or P2d.

\*b. USGS 7.5' Quad Torrance Date \_\_\_\_\_ T 4S; R 13W; \_\_\_\_\_ of \_\_\_\_\_ of Sec 31S; \_\_\_\_\_ B.M.

c. Address 111 Figueroa Pl. City Wilmington Zip 90744

d. UTM: Zone \_\_\_\_\_ mE/ \_\_\_\_\_ mN

e. Other Locational Data:

**\*P3a. Description:**

This Mid-Century Modern administration building is one-story, with a flat roof, and a T-shaped building footprint. With the exception of the north façade, the upper third of the building's exterior consists of concrete, the middle third of the building is comprised of ribbon windows, and the lower third of the building is clad in tan and crème colored bricks laid in a stretcher bond. The windows are a series of rectangular, aluminum framed units each with three fixed glass panes. Louvered metal sun shades are fixed under the eaves of the west and east facades (sections of which appear damaged or missing). Under the eaves of the west, east, and south facades are evenly spaced round concrete columns. While both the west and east facades share the same materials and similar design, these elevations are not symmetrical. At the building's north facade, the exterior is clad in concrete with the eastern half of the facade clad in aluminum vents running up the lower 2/3rds of the building. (See Continuation Sheet)

\*P3b. Resource Attributes: HP15. Educational Building

P5a.



\*P4. Resources Present: ☒

Building ☐ Structure ☐ Object ☐ Site ☐  
District ☐ Element of District ☐ Other  
(Isolates, etc.)

P5b. Description of Photo: Main entrance at east elevation; Feb. 10, 2020

\*P6. Date Constructed/Age and Source: ☒ Historic ☐ Prehistoric  
☐ Both  
Circa 1963, (LA Conservancy)

\*P7. Owner and Address:

LA Harbor College

1111 Figueroa Pl.,

Wilmington, CA 90744

\*P8. Recorded by: Shannon Lopez  
Cogstone Resource Management, Inc.  
1518 W. Taft Ave, Orange, CA 9286

\*P9. Date Recorded: Feb. 14, 2020

\*P10. Survey Type:

Intensive Pedestrian Survey

\*P11. Report Citation: Historic Resources Evaluation for the Los Angeles Harbor College, Los Angeles County, California

\*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record

☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List): \_\_\_\_\_



## BUILDING, STRUCTURE, AND OBJECT RECORD

\*Resource Name or # Old Administration Building  
Page 2 of 10\*NRHP Status Code 6ZB1. Historic Name: Administration Building B2. Common Name: Administration BuildingB3. Original Use: Administration Building B4. Present Use: Surplus storage\*B5. Architectural Style: Mid-Century Modernism

\*B6. Construction History:

According to Survey LA, this building was constructed in 1963.

\*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features:

B9a. Architect: Archie C. Zimmerman & F.D. Howell b. Builder: Not known\*B10. Significance: Theme Postwar Modernism Area LA Harbor College, CA  
Period of Significance 1946-1976 Property Type HP15. Educational Building Applicable Criteria N/A

This building is not associated with 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 and, therefore, not recommended as eligible for listing under Criterion 1/A. This building is not associated with the lives of persons important to local, California or national history and, therefore, not recommended as eligible for listing under Criterion 2/B. This building is associated with notable California architect Archie C. Zimmerman (1894-1970). The majority of Mr. Zimmerman's work was located within Los Angeles County with few examples still in existence. While the Harbor College Administration Building is a good example of Mid-Century Modernism it is not exemplary and not the best representative of Mr. Zimmerman's work. According to the Los Angeles Conservancy, this building appears to be part of the original 1940s campus plan but was not constructed until the 1960s. The function and association of this building is directly tied to LA Harbor College and would be considered as a contributor if the campus was recommended as a historic district. However, significant alterations to the LA Harbor College Campus involving the demolition of original and historic aged buildings and addition of new modern buildings result in significant loss of integrity for the campus and, by extension, the Old Administration Building. Therefore, this building is not recommended eligible for listing under Criterion 3/C. This building has not yielded, nor has the potential to yield, information important to the prehistory or history of the local area, California or the nation and, therefore, not recommended as eligible for listing under Criterion 4/D. (See Continuation Sheet)

B11. Additional Resource Attributes: \_\_\_\_\_

\*B12. References:

FrameFinder

1960 *Flight C, 23870, Frame 561.* [http://mil.library.ucsb.edu/ap\\_indexes/FrameFinder/](http://mil.library.ucsb.edu/ap_indexes/FrameFinder/)1967 *Flight AMI, 1373, Frame 67.* [http://mil.library.ucsb.edu/ap\\_indexes/FrameFinder/](http://mil.library.ucsb.edu/ap_indexes/FrameFinder/)

NETROnline

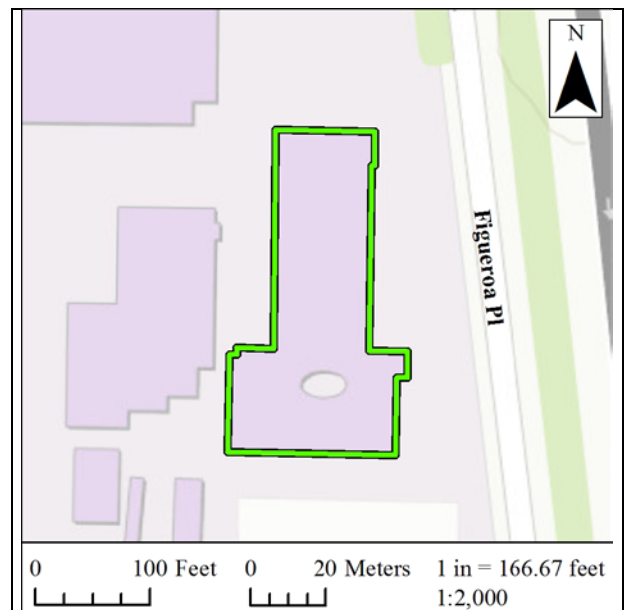
1963 Historic Aerials. <https://www.historicaerials.com/viewer>

The Los Angeles Conservancy

B13. Remarks:

\*B14. Evaluator: Shannon Lopez\*Date of Evaluation: February 18, 2020

(This space reserved for official comments.)





## CONTINUATION SHEET

Page 3 of 10

Property Name: Old Administration Building

**\*P3a. Description cont.**

The building's main entrance is located at the southern end of the east elevation and consists of double sliding glass doors. This primary entrance is sheltered under a flat concrete overhang supported by three round concrete pillars. Located in front of the main entrance is a concrete wall with a large decorative stone mosaic. Directly parallel to the east entrance is a secondary set of sliding glass doors at the building's western façade.

At the south elevation, a section of the east end of the façade is recessed, creating a large patio area sheltered by a flat roofed metal covering supported by two round concrete pillars (three matching square holes are cut into the overhang). The crème and tan brick layer running directly below the façade's windows extends past the recessed section of the facade and reconnects with the end of the eastern wall, blocking outside access to the patio area (see page 6, south façade).

Access to the building's interior was limited at the time of Cogstone's site visit; however, photographs of the court at the southern interior of the building were taken. This court area is located at the T-intersection between the two main bodies of the building. Near the center of this space is a large oval oculus cut into the flat roof above. The interior is supported by eight round concrete columns clad in small, square, dark grey, glazed tile. The southern wall of this space is comprised of large glass windows and doors.

**B10. Continued...**

The Old Administration Building maintains its integrity of *Location, Design, Workmanship, and Feeling*. Due to recent alteration of the surrounding area, this building has lost its integrity of *Setting*. This building is no longer used for administrative purposes (it is currently utilized as a surplus storage building), thus, it has lost its integrity of *Association*.

**Note:**

In July 2012, Galvin Preservation Associates (GPA) prepared a Historic Resources Survey Report for the City of Los Angeles titled "Historic Resources Survey Report: Wilmington-Harbor City Community Plan Area." Per GPA's findings, the Harbor College Administration Building (constructed in 1963) was recommended as eligible for state (3CS) and local (5S3) listing under Criterion C/3/3 (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). There is no evidence of any in-depth analysis or research to support GPA's recommendation of eligibility beyond what limited information is presented in the 2012 Survey LA report. Consultation with the Los Angeles Conservancy confirms that no additional documentation or evaluation associated with this recommendation of eligibility can be located and likely does not exist. Therefore, Cogstone prepared the appropriate Department of Parks and Recreation (DPR) forms and conducted its own evaluation of the Old Administration building. The aforementioned is Cogstone's recommendation of eligibility informed by both independent research and consultation.

## CONTINUATION SHEET

Page 4 of 10

Property Name: Old Administration Building

P5a. Cont.



Main entrance, east façade



East façade



## CONTINUATION SHEET

Page 5 of 10

Property Name: Old Administration Building



North façade



West façade



## CONTINUATION SHEET

Page 6 of 10

Property Name: Old Administration Building



West façade



South façade

## CONTINUATION SHEET

Page 7 of 10

Property Name: Old Administration Building



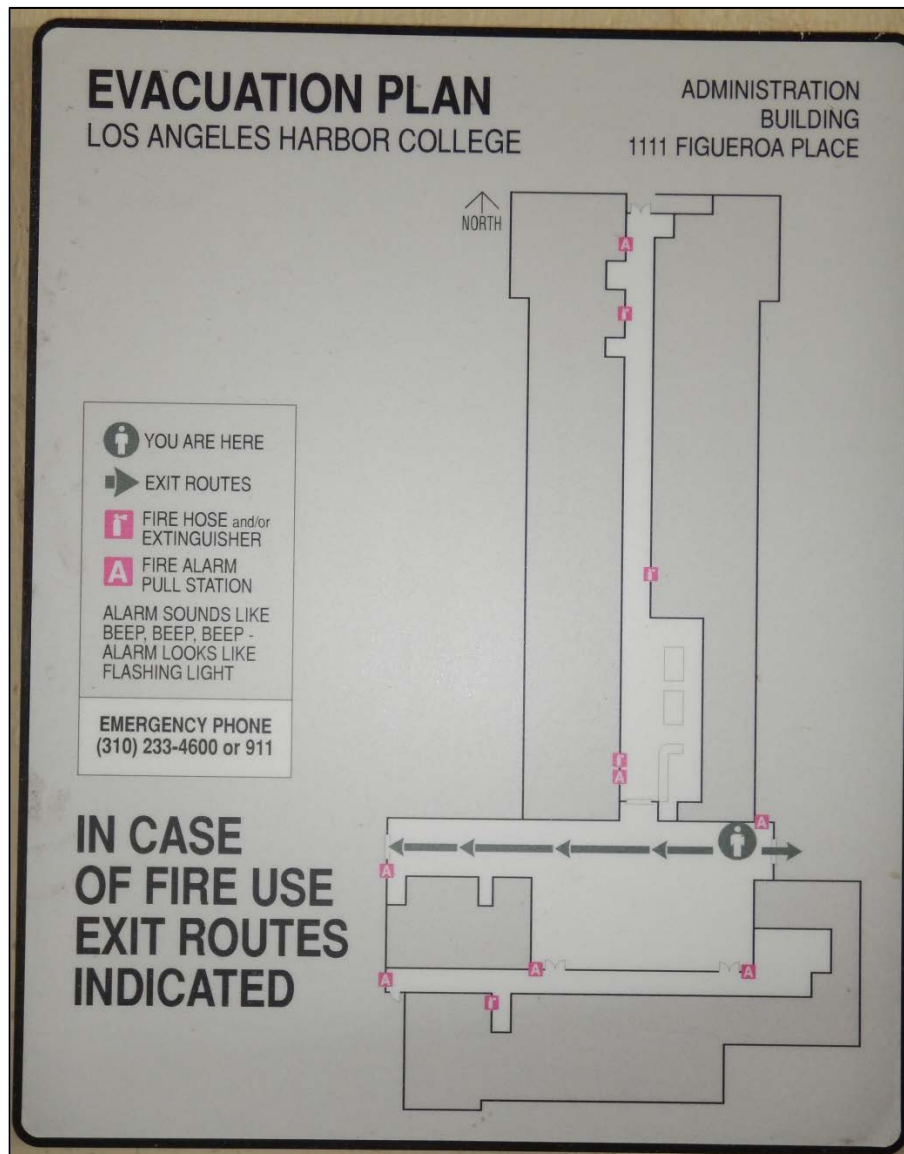
Court at southern end of building



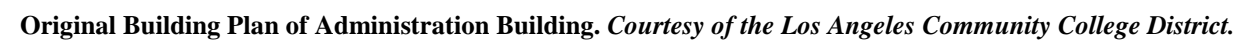
## CONTINUATION SHEET

Page 8 of 10

Property Name: Old Administration Building



Building layout

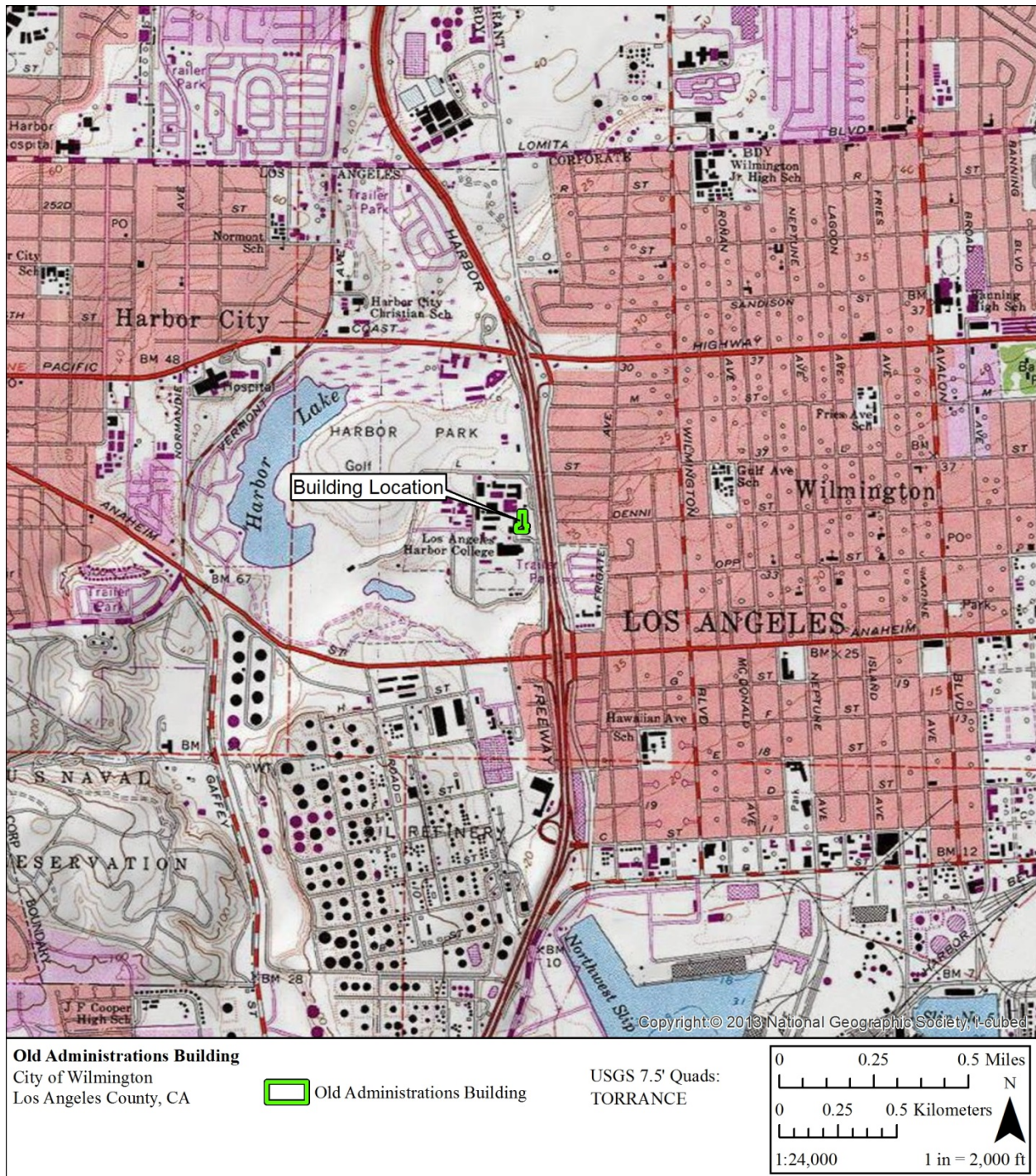




Page 10 of 10

\*Resource Name or # Old Administration Building

\*Map Name: Torrance \*Scale: 1:24000 \*Date of map: 1981





State of California & The Resources Agency  
DEPARTMENT OF PARKS AND RECREATION  
**PRIMARY RECORD**

Primary #  
HRI #  
Trinomial  
NRHP Status Code

Other Listings  
Review Code

Reviewer

Date

Page 1 of 9

\*Resource Name or #: General Classrooms

**P1. Other Identifier:** \_\_\_\_\_

\*P2. Location: ☐ Not for Publication ☐ Unrestricted

\*a. County Los Angeles and \_\_\_\_\_

\*b. USGS 7.5' Quad Torrance Date \_\_\_\_\_ T \_\_\_\_; R \_\_\_\_; \_\_\_\_ of \_\_\_\_ of Sec \_\_\_\_; \_\_\_\_ B.M.

c. Address 1111 Figueroa Pl. City Wilmington Zip 90744

d. UTM: Zone \_\_, \_\_\_\_ mE/ \_\_\_\_ mN

e. Other Locational Data: \_\_\_\_\_

**\*P3a. Description:**

The General Classrooms are Contemporary in Style, two stories, with a rectangular footprint, and flat roof with wide overhanging eaves. The General Classrooms consists of a north and a south building divided by a 2-3 foot gap running west/east. Both buildings are physically connected by exterior brick stairwells (laid in a stretcher bond) at the west and east facades. Access to the stairwell from the ground floor consists of two flush pedestrian doors with a wire mesh transom. Both the exterior of the building and the covered eaves of the overhanging roof are clad in stucco. Set directly above the flush pedestrian doors at the first and second floor levels (north and south facades) are ribbon windows running the entire length of the elevation. While the window pattern and location are original to the building, the aluminum frames and glass are replacements (c. 2005). At the second floor level is iron security railing. At the time of documentation, only the first floor is utilized for classroom space while the second floor is restricted to storage space only.

\*P3b. Resource Attributes: HP15. Educational Building

P5a.



\*P4. Resources Present: ☒

Building ☐ Structure ☐ Object ☐ Site ☐  
District ☐ Element of District ☐ Other  
(Isolates, etc.)

**P5b. Description of Photo:** West and southern elevations; Feb. 14, 2020

**6. Date Constructed/Age and**

**Source:** ☒ Historic ☐ Prehistoric

☐ Both

Circa 1967-1971 (per Historic Aerials)

**\*P7. Owner and Address:**

LA Harbor College

1111 Figueroa Pl.,

Wilmington, CA 90744

**\*P8. Recorded by:** Shannon Lopez

Cogstone Resource Management, Inc.

1518 W. Taft Ave, Orange, CA 92865

**\*P9. Date Recorded:** Feb. 14, 2020

**\*P10. Survey Type:** Intensive Pedestrian Survey

**\*P11. Report Citation:** Historic Resources Evaluation for the Los Angeles Harbor College, Los Angeles County, California

**\*Attachments:** ☐ NONE ☐ Location Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record

☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List): \_\_\_\_\_

## BUILDING, STRUCTURE, AND OBJECT RECORD

\*Resource Name or # General Classrooms  
Page 2 of 9

\*NRHP Status Code 6Z

B1. Historic Name: General Classrooms B2. Common Name: General Classrooms  
B3. Original Use: Classrooms B4. Present Use: 1<sup>st</sup> floor- classrooms, 2<sup>nd</sup> floor- storage  
\*B5. Architectural Style: Contemporary style  
\*B6. Construction History:

According to historic aerials, this building was constructed sometime between 1967 and 1971. The ribbon windows were originally clear double strength glass with a rectangular fixed pane atop a rectangular glass pane which projected outwards via a special crank and pole. Circa 2005, the ribbon windows of the General Classrooms were replaced with fixed aluminum frames and glass panes.

\*B7. Moved? ☒No ☐Yes ☐Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features:

B9a. Architect: Franklin D. Howell and Carleton M. Winslow b. Builder: Not known  
\*B10. Significance: Theme Public Schools and the LACCD Area LA Harbor College, CA  
Period of Significance c. 1967-1975 Property Type HP15. Educational Building Applicable Criteria N/A

This building is not associated with 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 and, therefore, not recommended as eligible for listing under Criterion 1/A. This building is not associated with the lives of persons important to local, California or national history and, therefore, not recommended as eligible for listing under Criterion 2/B. This building does not embody the distinctive characteristics of a type, period, region or method of construction or represent the work of a master or possess high artistic values and, therefore, not recommended as eligible for listing under Criterion 3/C. This building has not yielded, nor has the potential to yield, information important to the prehistory or history of the local area, California or the nation and, therefore, not recommended as eligible for listing under Criterion 4/D.

The General Classrooms maintains its integrity of *Location, Design, Workmanship, Feeling, and Association*. Due to recent alteration of the surrounding area, this building has lost its integrity of *Setting*. The replacement of the building's ribbon windows, while similar in style, results in a loss of the building's integrity of *Materials*.

B11. Additional Resource Attributes: \_\_\_\_\_

\*B12. References:

FrameFinder

1960 *Flight C, 23870, Frame 561.* [http://mil.library.ucsb.edu/ap\\_indexes/FrameFinder/](http://mil.library.ucsb.edu/ap_indexes/FrameFinder/)

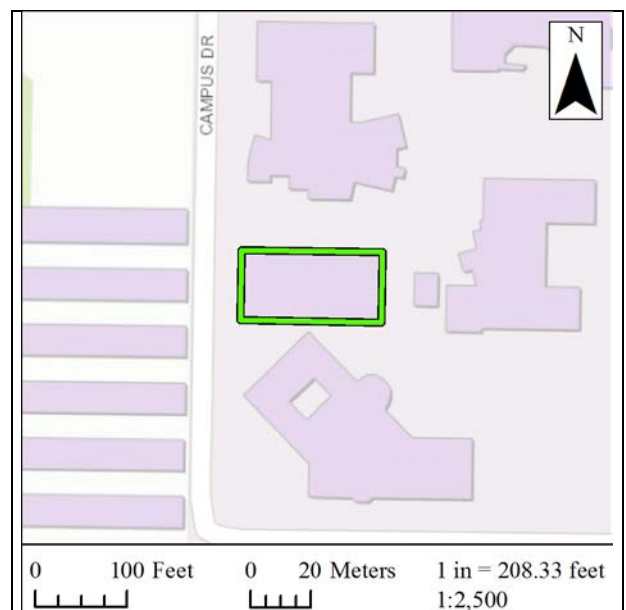
1967 *Flight AMI, 1373, Frame 67.* [http://mil.library.ucsb.edu/ap\\_indexes/FrameFinder/](http://mil.library.ucsb.edu/ap_indexes/FrameFinder/)

B13. Remarks:

\*B14. Evaluator: Shannon Lopez

\*Date of Evaluation: February 18, 2020

(This space reserved for official comments.)



## CONTINUATION SHEET

Page 3 of 9

Property Name: General Classrooms

### P5a. Photos Cont.



South elevation (left) and east elevation (right)



East elevation walkthrough; classrooms (left) stairwell (right)



## CONTINUATION SHEET

Page 4 of 9

Property Name: General Classrooms



East elevation stairwell



East elevation (left), south elevation (right)

## CONTINUATION SHEET

Page 5 of 9

Property Name: General Classrooms



North elevation



North elevation

Page 6 of 9

Property Name: General Classrooms



## CONTINUATION SHEET



West elevation (left) and south elevation (right)



West elevation stairwell

## CONTINUATION SHEET

Page 7 of 9

Property Name: General Classrooms



Restroom (left), gap dividing north and south halves of building (right), west elevation



Close up of ribbon windows

## CONTINUATION SHEET

Page 8 of 9

Property Name: General Classrooms



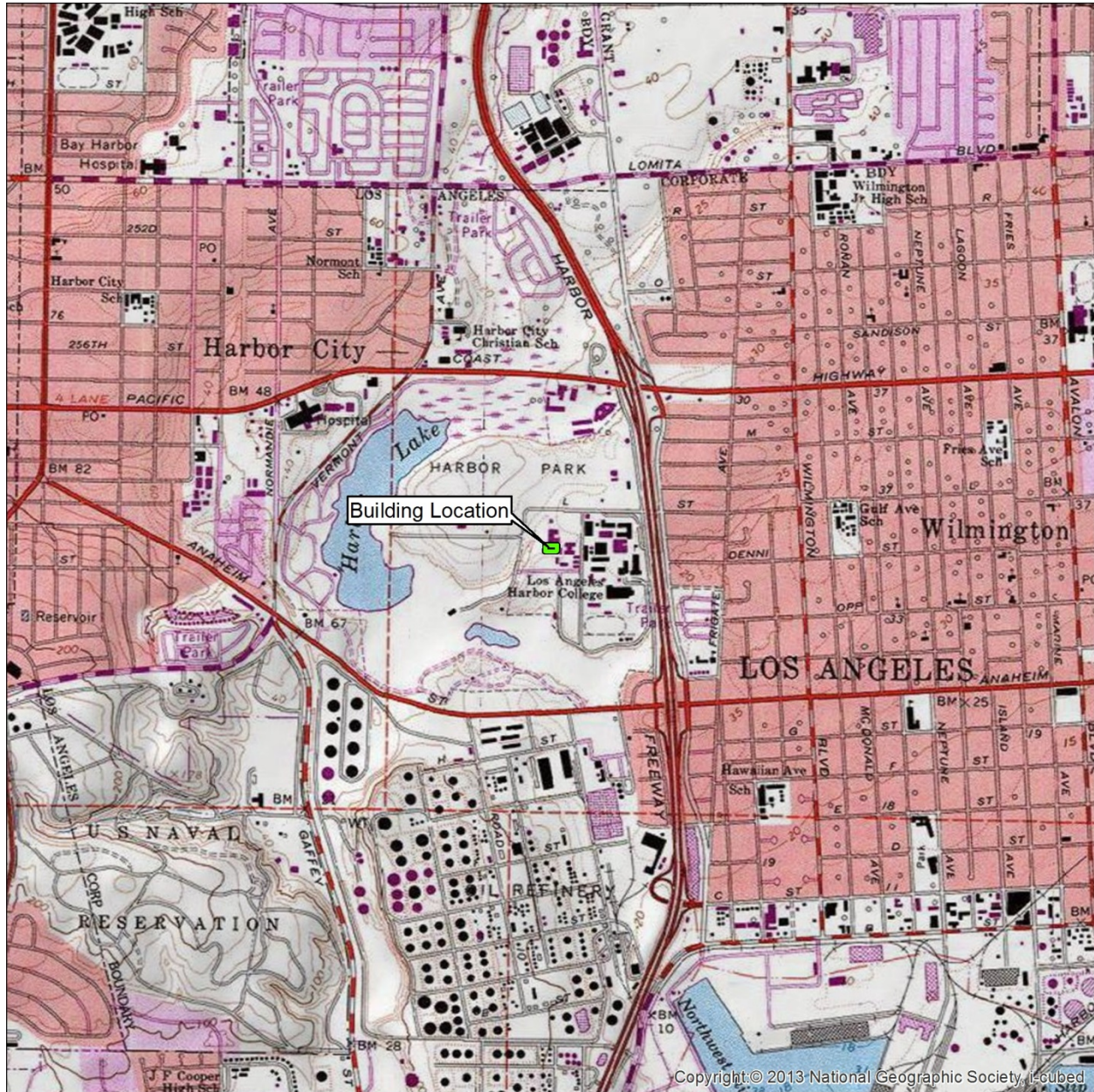
An example of the likely original materials and style of General Classroom's ribbon windows as seen on the south façade of the Fine Arts building (constructed c. 1963-1967).




Page 9 of 9

\*Resource Name or # General Classrooms

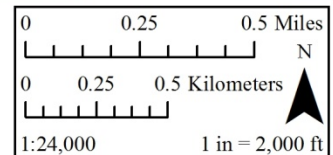
\*Map Name: Torrance \*Scale: 1:24,000 \*Date of map: 1981



**General Classrooms**  
City of Wilmington  
Los Angeles County, CA

 General Classrooms Building

USGS 7.5' Quads:  
TORRANCE





State of California & The Resources Agency  
DEPARTMENT OF PARKS AND RECREATION  
**PRIMARY RECORD**

Primary #  
HRI #  
Trinomial  
NRHP Status Code

Other Listings  
Review Code

Reviewer

Date

Page 1 of 5 \*Resource Name or #: Special Program Services Building

P1. Other Identifier: Career & Job Placement Center

\*P2. Location: ☐ Not for Publication ☐ Unrestricted

\*a. County Los Angeles and (P2c, P2e, and P2b or P2d.)

\*b. USGS 7.5' Quad Torrance Date \_\_\_\_\_ T \_\_\_\_; R \_\_\_\_; \_\_\_\_ of \_\_\_\_ of Sec \_\_\_\_; \_\_\_\_ B.M.

c. Address 1111 Figueroa Pl. City Wilmington Zip 90744

d. UTM: Zone \_\_, \_\_\_\_ mE/ \_\_\_\_ mN

e. Other Locational Data:

\*P3a. Description:

This portable utilitarian building is single-storied, flat roofed, with a rectangular footprint, and overhanging eaves at the north and south elevations. The building's fenestration pattern at the north and south facades consists of matching rectangular, one-by-one, sliding windows (five at the north elevation and eight at the south elevation). The building's two identical flush pedestrian doors are located at the west façade (one each at the northern and southern most end of the elevation). Both doors are flanked by a single square one-by-one sliding window. Three identical air-conditioning units are fixed to the exterior of the north façade and two at the south façade. Near the middle of this façade is a fixed, three-paned, rectangular window. Wrapping along the north and west façade is a concrete wheelchair access ramp. A power box and security light are present at the building's east elevation.

\*P3b. Resource Attributes: HP15. Educational Building

P5a.



\*P4. Resources Present: ☒ Building

☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: North and west elevations; Feb 14, 2020

\*P6. Date Constructed/Age and Source: ☒ Historic ☐ Prehistoric

☐ Both

Circa 1971/1972 (via Historic Aerials)

\*P7. Owner and Address:

LA Harbor College

1111 Figueroa Pl.,

Wilmington, CA 90744

\*P8. Recorded by: Shannon Lopez  
Cogstone Resource Management, Inc.  
1518 W. Taft Ave, Orange, CA 92865

\*P9. Date Recorded: Feb, 14, 2020

\*P10. Survey Type:

Intensive Pedestrian Survey

\*P11. Report Citation: Historic Resources Evaluation for the Los Angeles Harbor College, Los Angeles County, California

\*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record

☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record

☐ Artifact Record ☐ Photograph Record ☐ Other (List): \_\_\_\_\_

# BUILDING, STRUCTURE, AND OBJECT RECORD

\*Resource Name or # Special Program Services  
Page 2 of 5

\*NRHP Status Code 6Z

B1. Historic Name: Not known B2. Common Name: Special Program Services

B3. Original Use: Special Program Services B4. Present Use: Career & Job Placement Center

\*B5. Architectural Style: Utilitarian Style

\*B6. Construction History: Per historic aerials, this building was constructed sometime between 1971 and 1972. According to aerials, a concrete wheelchair access ramp was added to the north and west elevations sometime before c. 2002.

\*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date: \_\_\_\_\_ Original Location: \_\_\_\_\_

\*B8. Related Features:

B9a. Architect: Not known b. Builder: Not known

\*B10. Significance: Theme Public Schools and the LACCD Area LA Harbor College, CA  
Period of Significance c. 1971- 1975 Property Type HP15. Educational Building Applicable Criteria N/A

This building is not associated with 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 and, therefore, not recommended as eligible for listing under Criterion 1/A. This building is not associated with the lives of persons important to local, California or national history and, therefore, not recommended as eligible for listing under Criterion 2/B. This building does not embody the distinctive characteristics of a type, period, region or method of construction or represent the work of a master or possess high artistic values and, therefore, not recommended as eligible for listing under Criterion 3/C.

This building has not yielded, nor has the potential to yield, information important to the prehistory or history of the local area, California, or the nation and, therefore, not recommended as eligible for listing under Criterion 4/D.

This building still retains its integrity of *Location*. Due to significant alterations to the surrounding area, this building has lost its integrity of *Setting*. Use of this building has changed in past decades and has lost its integrity of *Association*. With the exception of the exterior wheelchair ramp addition, this building appears to maintain its integrity of *Design*, *Workmanship*, and *Materials*.

B11. Additional Resource Attributes: \_\_\_\_\_

\*B12. References:

FrameFinder

1971 *Flight TG, 2755, Frame 3-11.* [http://mil.library.ucsb.edu/ap\\_indexes/FrameFinder/](http://mil.library.ucsb.edu/ap_indexes/FrameFinder/)

NETROnline

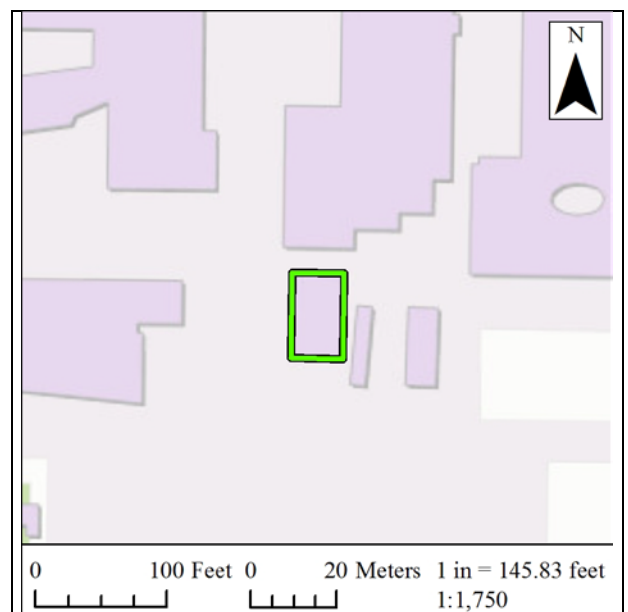
1972 Historic Aerials. <https://www.historicaerials.com/viewer>

B13. Remarks:

\*B14. Evaluator: Shannon Lopez

\*Date of Evaluation: February 18, 2020

(This space reserved for official comments.)



## CONTINUATION SHEET

Page 3 of 5

Property Name: Special Program Services



West elevation



South elevation (right) and east elevation (left)



## CONTINUATION SHEET

Page 4 of 5

Property Name: Special Program Services



East elevation



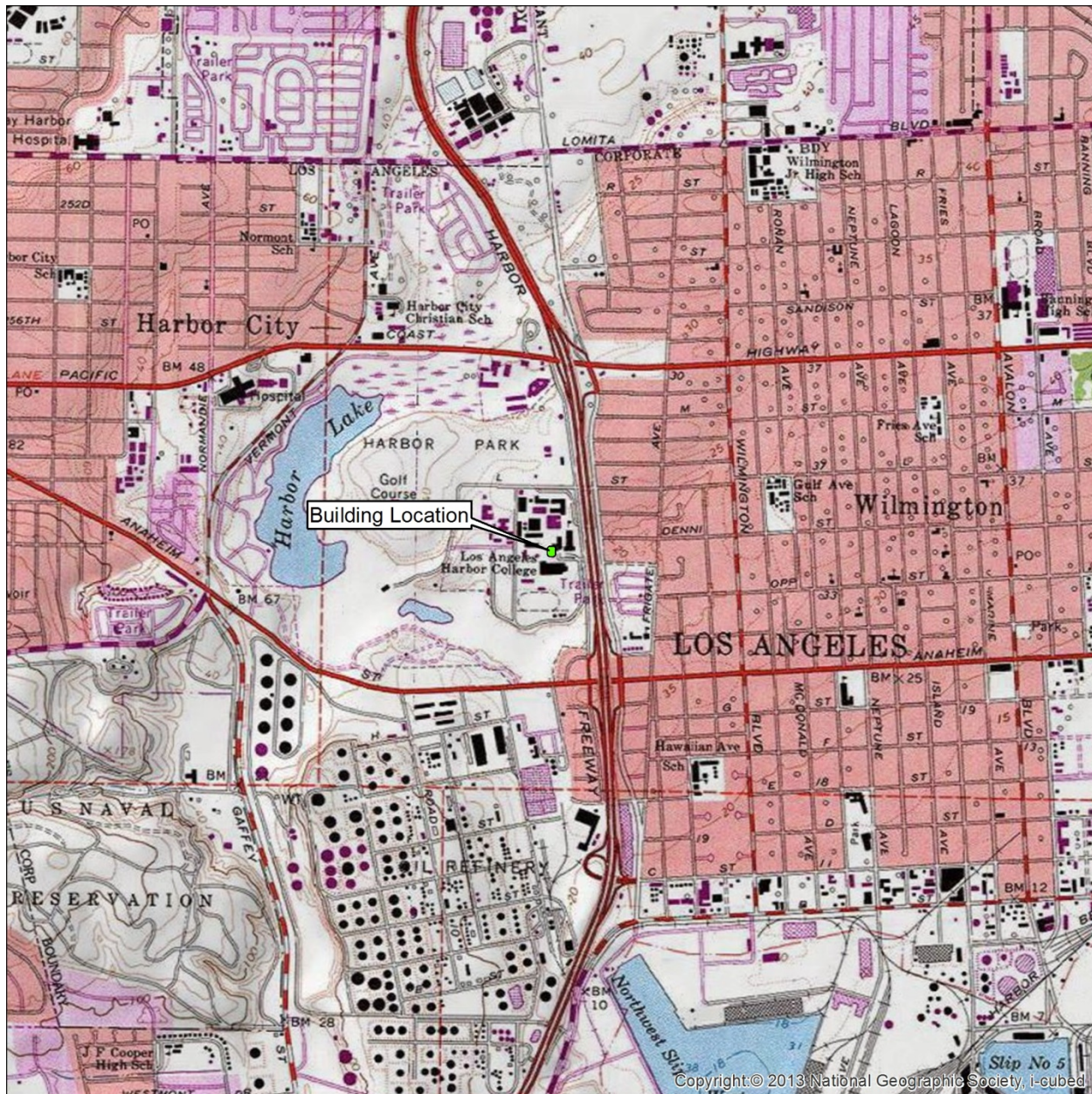
State of California & Natural Resources Agency  
DEPARTMENT OF PARKS AND RECREATION  
**LOCATION MAP**

Primary #  
HRI#  
Trinomial


Page 5 of 5

\*Resource Name or # Special Program Service

\*Map Name: Torrance \*Scale: 1:24000 \*Date of map: 1981



**Special Programs and Service Building**  
City of Wilmington  
Los Angeles County, CA

 Special Programs and Service Building

USGS 7.5' Quads:  
TORRANCE

