

**3<sup>RD</sup> ADDENDUM**  
**FINAL ENVIRONMENTAL IMPACT REPORT**  
**HARBOR-UCLA MEDICAL CENTER CAMPUS MASTER PLAN**  
**2022 REVISION**  
**(SCH No. 2014111004)**

**UPDATED SITE PLAN AND CONSTRUCTION SCHEDULE**

**Prepared for**

**County of Los Angeles**

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# 1. INTRODUCTION

## A. Background

### 2016 Master Plan EIR

The Los Angeles County Board of Supervisors (Board), acting on behalf of the County of Los Angeles (County), certified on December 20, 2016, the Harbor-UCLA Medical Center Campus Master Plan Final Environmental Impact Report (EIR), State Clearinghouse Number 2014111004, which consists of the Draft EIR and Appendices dated August 2016, and the Final EIR, including Responses to Comments, dated December 2016, and found that the Final EIR was completed in compliance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000, et seq.). The Board certified that it received, reviewed, and considered the information contained in the Final EIR. Having been certified by the Board, the Final EIR is herein referred to as the 2016 Master Plan FEIR or the 2016 Master Plan EIR. At the time of certification, the Board adopted a Mitigation Monitoring and Reporting Program, Findings of Fact and a Statement of Overriding Considerations.

The 2016 Master Plan FEIR analyzed the Harbor-UCLA Medical Center Campus Master Plan that was completed in June 2012, herein referred to as “2012 Master Plan,” after meetings with stakeholders, community leaders, residents, and businesses surrounding the Harbor-UCLA Medical Center Campus (Medical Center Campus or Campus). The 2012 Master Plan included the development of the 72-acre Medical Center Campus, located in the unincorporated County of Los Angeles community of West Carson. The existing Campus contained approximately 1,279,284 square feet of developed floor area (in 2012). The 2012 Master Plan included construction of a new hospital tower (2012 Hospital Tower), renovation of the existing hospital tower (Existing Hospital Tower), reconfiguration of vehicular and pedestrian access, and implementation of a cohesive site design to enhance the experience of staff, patients, and visitors. The 2012 Master Plan Campus-wide floor area would increase to approximately 2,457,355 square feet.

The Board determined, based on the 2016 Master Plan EIR, that the 2012 Master Plan would have the following types of impacts:

- No impacts or less-than-significant impacts: aesthetics, hydrology and water quality, land use and planning, and utilities and service systems.
- Impacts for which project design features (PDFs) and mitigation measures will reduce project-specific impacts to less-than-significant levels: air quality, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, population and housing, and public services.
- Impacts for which PDFs and mitigation measures will reduce impacts, but not feasibly or effectively to less-than-significant levels (significant and unavoidable): noise and vibration and transportation and traffic.
- The Board approval package for the 2016 EIR included a Mitigation Monitoring and Reporting Program (MMRP), the CEQA Findings and Facts in Support of Findings for the Final EIR (Findings), and a Statement of Overriding Considerations.

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Mitigation Monitoring and Reporting Plan

The MMRP, prepared pursuant to PRC Section 21081.6 and State CEQA Guidelines Section 15097, identified the implementation phase for each PDF and mitigation measure in the 2016 Master Plan EIR (pre- construction, construction, prior to occupancy, post-occupancy); the enforcement, monitoring, and reporting agency—in all cases, the Los Angeles County Public Works [LACPW]; and compliance verification columns.

CEQA Findings and Facts

The 2016 Board approval included the Findings, pursuant to PRC Section 21081 and State CEQA Guidelines Section 15091. This document provided specific information regarding the significant environmental effects associated with the 2012 Master Plan. The document identified three possible findings, as follows, and rationale for each finding:

1. Changes or alterations were required in, or incorporated into, the project that avoided or substantially lessened the significant environmental effect as identified in the Final EIR.
2. Such changes or alterations were within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes were adopted by such other agency or could and should be adopted by such other agency.
3. Specific economic, legal, social, technological, or other considerations, including provision for employment opportunities for highly trained workers, made infeasible the mitigation measures or project alternatives identified in the Final EIR.

The Findings provided evidence to support the findings, identified significant effects that cannot be mitigated to below the level of significance, and provided findings for each of the alternatives considered in the EIR. The Findings identified potentially significant impacts on biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, fire protection and emergency services, sheriff protection, and transportation. Feasible mitigation was identified to reduce these effects to levels considered less than significant, except for noise and transportation, where the Findings found that these impacts would be significant and unavoidable. These impacts included noise associated with construction, noise associated with the temporary helistop, construction traffic impacts from worker vehicles and truck trips, and operational traffic impacts at 12 intersections and freeway mainline segments, where mitigation is not within the control of the County and no fair share contributions programs were available to address the specific impacts identified.

Statement of Overriding Considerations

Effects that could not be reduced to less-than-significant levels were addressed in the Statement of Overriding Considerations. For these significant and unavoidable impacts identified in the Findings the Board found that economic, legal, social, technological, and other considerations for the 2012 Master Plan outweighed the significant and unavoidable impacts. The Statement of Overriding Considerations identified the following specific benefits the Board considered in its decision to approve the project:

1. The 2012 Master Plan goals, as a foundational document for the realization of the project, could be implemented with project approval bringing multiple benefits, specifically the realization of an inclusive planning effort to develop a coherent physical

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master plan to enhance the unique and highly interactive relationship between the clinical, educational, and research components of the Campus.

2. The 2012 Master Plan's overarching goal could be implemented with project approval bringing multiple benefits, specifically the development of the County-owned Campus to support a modern integrated health care delivery system.
3. Project approval would implement the project objectives and realize the following specific benefits:
  - a) Secure timely compliance with the Alquist Hospital Facilities Seismic Safety Act to maintain critical trauma services in the South Bay service region of the County, which required replacement of the current tertiary acute care Existing Hospital Tower and other essential supporting facilities with upgrades/replacement before January 1, 2030.
  - b) Support the renovation of existing healthcare facilities to implement the County's strategy to respond to the Affordable Care Act of 2010 and modernize and integrate healthcare delivery and update facilities to modern standards by constructing new buildings and repurposing/ remodeling existing buildings on the Campus to improve operational efficiencies, resolve existing deferred maintenance issues, and consolidate inpatient and outpatient services in dedicated buildings, to optimize the quality of care and operational effectiveness while reducing administrative, operational, and maintenance costs.
  - c) Provide for a fundamental reorganization, expansion, and integration of outpatient services with the specific goals of being (a) more community-based and patient-centered, (b) more efficient, and (c) configured to include clear wayfinding and pedestrian walkways.
  - d) Plan renovation and appropriate new medical campus construction for a mix of inpatient, outpatient, and supporting facilities to respond to healthcare needs in the South Bay service region, based on the project's current services and market projections for the planning horizon.
  - e) Provide opportunities for development up to 250,000 square feet of new Bioscience Tech Park uses and support facilities, as well as up to 225,000 square feet of expanded LA BioMed facilities.
  - f) Encourage a vibrant, mixed-use setting that supports the continuing Harbor-UCLA mission of clinical care, education, and research as well as the provision of modernized facilities for existing and future tenants of the Medical Center Campus.
  - g) Achieve optimum public utilization of land and buildings under the ownership and control of the County and maintain flexibility to respond to future shifts in medical care and technology.
  - h) Develop the Campus in ways that do not compromise environmental quality, social equity, or economic opportunity for future generations by: (a) creating durable, adaptable green infrastructure and buildings, promoting resource-efficient transportation solutions, and seeking climate-positive outcomes, (b)

establishing goals to reduce net greenhouse gas emissions, including: energy, buildings and land use, transportation, water and waste, and (c) accommodating changing sustainable design practices, from current standards to a future vision for a “Regenerative Campus.”

### Previous Master Plan Changes and Prior Addendums

On November 10, 2020 the County Board of Supervisors approved a revision to the Harbor-UCLA Medical Center Campus Master Plan that included a reduction in new development, a slight increase in the parking count, revised Campus circulation and reconfiguration layout of the buildings. The Board also certified an Addendum to the 2016 Master Plan EIR for the approved revisions; the Addendum concluded:

*The Proposed Revision is essentially the same as the 2012 Master Plan as it relates to environmental impacts. The Proposed Revision represents a slightly smaller project, with marginal reductions to building area (in square feet), resulting in minor reductions in employees, patients, and visitors. The Proposed Revision would have the same uses proposed in the 2012 Master Plan. Some of the buildings have been reconfigured to allow for more efficiencies and to provide additional open space opportunities. These minor changes in the Proposed Revision are not substantial changes proposed that require major revisions of the previous EIR due to a new significant environmental effect or a substantial increase in the severity of previously identified significant effects.*

Also, on November 10, 2020, the Board of Supervisors approved the Medicine Substation Revision to the Harbor-HUCLA Medical Center Campus Master Plan for a proposed new 66KV substation constructed by the Southern California Edison Company required to provide sufficient electrical power to meet the eventual power demand of the Harbor-UCLA Medical Center Master Plan. The Board certified an Addendum to the 2016 Master Plan EIR to address this change and concluded that the proposed substation would not result in substantial changes that would require major revisions to the 2016 Master Plan EIR.

## **B. Purpose of this Addendum**

The purpose of this third Addendum is to provide analysis and to document that the Proposed Harbor-UCLA Medical Center Campus Master Plan Revision (currently proposed 2022 Master Plan) would not result in substantial changes to the project or to the circumstances under which is being undertaken due to any significant environmental impacts that were not identified in the original 2016 Master Plan EIR, or result in substantially more severe environmental effects. This document has been prepared in accordance with CEQA, specifically State CEQA Guidelines (Title 14, Cal. Code Regs., 15000 et seq.) Sections 15162 and 15164. The currently proposed 2022 Master Plan addresses the retention of a design-builder and the potential for components of the project to be refined and relocated on the Campus; in addition, this Addendum evaluates changes to the proposed construction schedule. It is anticipated that components of the Master Plan will become smaller through the design-build process as result of design refinements and County-determined need, but in order to present a conservative analysis this Addendum does not address changes in size of Master Plan uses.

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### C. CEQA Requirements

An Addendum to an EIR is the appropriate tool to evaluate the environmental effects associated with changes or additions consisting of *minor modifications* to previously approved projects. It is appropriate when modifications would not result in new or increased significant adverse impacts.

According to Section 15164(a) of the CEQA Guidelines, “the lead agency or a 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.” An addendum may be prepared if only minor technical changes or additions are necessary. A brief explanation of the decision not to prepare a subsequent EIR must also be provided in the addendum, findings or the public record.

Section 15162 of the Guidelines lists the conditions that would require the preparation of a subsequent EIR or negative declaration rather than an addendum. These include 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
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 the 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 measures 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.

Unlike a subsequent EIR, per Section 15162, a supplement to an EIR may be prepared per Section 15163 under the following conditions.

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- (a) The Lead or Responsible Agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:
- (1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and
  - (2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

A supplement to an EIR may be distinguished from a subsequent EIR by the following: a supplement augments a previously certified EIR to the extent necessary to address the conditions described in section 15162 and to examine mitigation and project alternatives accordingly. It is intended to revise the previous EIR through supplementation. A subsequent EIR, in contrast, is a complete EIR, which focuses on the conditions described in section 15162.

The currently proposed 2022 Master Plan is described in **Section 2** of this Addendum and would be within the assumptions for construction and operation analyzed in the 2016 Master Plan EIR. The currently proposed 2022 Master Plan has been reviewed by the County of Los Angeles in light of Sections 15162 and 15163 of the Guidelines. As the CEQA Lead Agency, the County of Los Angeles has determined, based on the analysis presented herein, that none of the conditions apply which would require preparation of a subsequent or supplemental EIR and that an Addendum to the certified Harbor-UCLA Medical Center Master Plan Final EIR is the appropriate environmental documentation under CEQA for the currently proposed 2022 Master Plan. **Section 3** discusses issue-by-issue how the impacts anticipated for the currently proposed 2022 Master Plan would be within those previously identified in the 2016 Master Plan EIR. The Mitigation Monitoring and Reporting Program (MMRP) adopted with the 2016 Master Plan EIR would continue to apply to the currently proposed 2022 Master Plan to ensure that all significant impacts remain less than significant where it is feasible to mitigate such impacts.

#### **D. Project Design Features and Mitigation Measures**

The 2016 Master Plan FEIR identifies Project Design Features (PDFs) that would ensure certain impacts are less than significant and Project Design Features (PDFs) and mitigation measures that would reduce the potentially significant impacts of the 2012 Master Plan. These PDFs and mitigation measures were required as part of the 2012 Master Plan approval process. These PDFs and mitigation measures are listed in **Table 1**. These PDFs and mitigation measures will continue to be implemented as applicable and appropriate to each individual building/construction activity undertaken pursuant to the Harbor-UCLA Medical Center Campus Master Plan.

PDFs are specific design elements that have been incorporated into the project, or standard procedures, and are reflected in the construction specifications and final plans implemented in accordance with County protocol that would prevent the occurrence of or minimize the significance of potential environmental effects. While PDFs do not constitute mitigation measures, because they are committed as part of the project, would serve to reduce the potential for impacts, to allow tracking, they are included in the MMRP and in **Table 1** below.

**Table 1**  
**Project Design Features and Mitigation Measures**

**Air Quality**

**PDF AQ-1, Green Building Measures:** The project would be designed and operate to meet or exceed the applicable green building, energy, water, and waste requirements of the State of California Green County Green Building Ordinance and meet the standards of the U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) Silver Certification level or its equivalent. Green building measures would include, but are not limited to the following:

- The project would implement a construction waste management plan to recycle and/or salvage a minimum of 75 percent of nonhazardous construction debris.
- The project would be designed to optimize energy performance and reduce building energy cost by 5 percent or more for new construction and 3 percent or more for major renovations compared to American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2010, Appendix G and the Title 24 (2013) Building Standards Code.
- The project would reduce indoor and outdoor water use by a minimum of 20 percent compared to baseline standards by installing water fixtures that exceed applicable standards. The reduction in potable water would be achieved through the installation of high-efficiency water faucets, high-efficiency toilets, flushless urinals, water-efficient irrigation systems, planting native or drought-tolerant plant species, using recycled water for landscaping, or other similar means.
- The project would include lighting controls with occupancy sensors to take advantage of available natural light.
- The project shall install cool roofs for heat island reduction and strive to meet the California Green Building Standards Code (CALGreen) Tier 1 Solar Reflectance Index (SRI) or equivalent.
- Project buildings shall be constructed with solar-ready rooftops that provide for the installation of on-site solar photovoltaic (PV) or solar water heating (SWH) systems. The building design documents shall show an allocated Solar Zone and the pathway for interconnecting the PV or SWH system with the building electrical or plumbing system. The Solar Zone is a section of the roof that has been specifically designated and reserved for the installation of a solar PV system, SWH system, and/or other solar generating system. The Solar Zone must be kept free from roof penetrations and have minimal shading.
- The project would be design and operated with mechanically ventilated areas that would utilize air filtration media for outside and return air prior to occupancy that provides at least a Minimum Efficiency Reporting Value (MERV) of 15 as required for hospital inpatient care.
- To encourage carpooling and the use of electric vehicles by project employees and visitors, the County shall designate a minimum of 8 percent on on-site parking for carpool and/or alternative fueled vehicles and shall pre-wire, or install conduit and panel capacity for, electric vehicle charging stations for a minimum of 5 percent of on-site parking spaces.
- The project shall appropriate incorporate bicycle infrastructure including bicycle parking and “end-of-trip” facilities in compliance with the applicable portions of the County’s Healthy Design Ordinance (HDO) (Los Angeles County Code, Title 22, Section 22.52.1225)

**PDF AQ-2, Construction Measures:** The project shall implement the following measures during construction activities:

- The project shall require construction contractor(s) to utilize off-road diesel powered construction equipment that meets or exceeds the California Air Resources Board (CARB) and U.S. Environmental Protection Agency (USEPA) Tier 4 off-road emissions standard for equipment rated at 50 horsepower (hp) or greater during project construction.
- To the extent possible, pole power will be made available for use with electric tools, equipment, lighting, etc. These requirements shall be included in applicable bid documents and successful contractor(s) must demonstrate the ability to supply such equipment. A copy of each unit’s certified tier specification or model year specification and CARB or South Coast Air Quality Management District (SCAQMD) operating permit (if applicable) shall be available upon request at the time of mobilization of each applicable unit of equipment.
- The project shall encourage construction contractors to apply for SCAQMD Surplus Off-road Opt- in for Nitrogen Oxides (NOX) (SOON) funds, which provides funds to accelerate the clean-up of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website: <http://www.aqmd.gov/tao/Implementation/SOONProgram.htm>.
- In accordance with Section 2485 in Title 13 of the California Code of Regulations, the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to five minutes at any location.

**Table 1**  
**Project Design Features and Mitigation Measures**

- The County shall prohibit heavy-duty construction equipment and truck queuing and staging in front of on-site building entrances and exits.
- The project shall comply with the applicable provisions of SCAQMD Rule 403 to minimize generation of fugitive dust. Active demolition or grading construction areas and unpaved roads shall be controlled by temporary covers or wetted sufficiently to reduce dust.
- Enhanced watering shall be required for soil moving activities within 100 feet of the existing patient tower, such as ensuring that water is applied not more than 15 minutes prior to soil excavation.
- On-site vehicles shall be limited to 15 miles per hour on unpaved roadways.
- Haul trucks carrying dirt, soil, sand, or other loose material shall be covered and maintain a freeboard height of 12 inches.
- Prior to leaving areas of active construction, haul trucks would be inspected and put through procedures as necessary to remove loose debris from tire wells and on the truck exterior to prevent track out.
- Construction areas shall install temporary fencing, if necessary, to prevent debris and material movement on the site and into patient care buildings or to off-site areas.
- The County shall ensure building air filtration media and heating, ventilation, and air conditioning (HVAC) systems are serviced, maintained, and replaced per manufacturers specifications and are not compromised from the accumulation of particulate matter and fugitive dust.
- All coatings used on-site shall comply with SCAQMD Rule 1113, as applicable. The project will strive to utilize material which is pre-primed or pre-painted. Additionally, the project shall limit daily application of architectural coatings applied on-site to 170 gallons per day with an average of 50 grams volatile organic compounds (VOCs) per liter of coating, less water and less exempt compounds, or equivalent usage resulting in similar or less VOC emissions. For example, stains, specialty primers, and industrial maintenance coatings allowed by Rule 1113 that contain VOCs at a level of 100 grams per liter of coating, less water and less exempt compounds would be limited to 85 gallons per day on site Management Plan and to actively monitor the soils and excavations for evidence of contamination.

**Biological Resources**

**BIO-1:** If the nesting season cannot be avoided and construction or vegetation removal occurs between March 1st to September 15th (January 1st to July 31st for Raptors), the County shall do one of the following to avoid and minimize impacts to nesting birds<sup>1</sup>:

- a) Implement a 300-foot minimum avoidance buffers for all passerine birds and 500-foot minimum avoidance buffer for all raptors species. The breeding habitat/nest site shall be fenced and/or flagged in all directions. The nest site area shall not be disturbed until the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, and the young will no longer be impacted by the project.<sup>2</sup>
- b) Develop a project specific Nesting Bird Management Plan. The site-specific nest protection plan shall be submitted to CDFW for review. The Plan should include detailed methodologies and definitions to enable a CDFW-qualified avian biologist to monitor and implement nest-specific buffers based upon the life history of the individual species; species sensitivity to noise, vibration, and general disturbance; individual bird behavior; current site conditions (screening vegetation, topography, etc.), ambient levels of human activity; the various project-related activities necessary to construct the Project, and other features. This Nesting Bird Management Plan shall be supported by a Nest Log, which tracks each nest and its outcome. The Nest Log will be submitted to CDFW at the end of each week.
- c) The County may propose an alternative plan for avoidance of nesting birds for submittal to CDFW.

**Cultural Resources**

**CULT-1:** If any archaeological materials are encountered during the course of the project development, work in the area shall cease and deposits shall be treated in accordance with Federal, State, and local guidelines, including those set forth in California Public Resources Code Section 21083.2. As part of this effort, the services of an archaeologist meeting the Secretary of the Interior Professional Qualification Standards for Archaeology shall be secured by contacting the California Historical Resources Information System South Central Coastal Information Center (CHRIS-SCCIC) at Cal State University Fullerton, or a member of the Register of Professional Archaeologists (RPA) to assess the resources and evaluate the impact. In addition, if it is determined that an archaeological site is a

<sup>1</sup> Qualified avian biologist shall establish the necessary buffers to avoid take of nest as defined in FGC 3503 and 3503.5

<sup>2</sup> NOTE: Buffer area may be increased if any endangered, threatened, or CDFW species of special concern are identified during protocol or pre-construction presence/absence surveys.

**Table 1**  
**Project Design Features and Mitigation Measures**

historic resource, the provisions of Section 21084.1 of the Public Resources Code and CEQA Guidelines Section 15064.5 would be implemented.

**CULT-2:** If any archaeological materials are encountered during the course of the project development, a report on the archaeological findings shall be prepared by the qualified archaeologist. A copy of the report shall be submitted to the CHRIS-SCCIC.

**CULT-3:** If any archaeological materials are encountered during the course of the Project development, recovered archaeological materials shall be curated at an appropriate accredited curation facility. If the materials are prehistoric in nature, affiliated Native American groups (identified by the Native American Heritage Commission) may be consulted regarding selection of the curation facility.

**CULT-4:** If any paleontological materials are encountered during the course of Project development, work in the area shall be halted. The services of a qualified paleontologist shall be secured by contacting the Los Angeles County Natural History Museum to assess the resources. In addition, a report on the paleontological findings shall be prepared by the qualified paleontologist and a copy of the paleontological report shall be submitted to the Los Angeles County Natural History Museum.

#### **Geology and Soils**

**MM-GEO-1:** All recommendations included in the Preliminary Geotechnical Evaluation prepared for the project (provided in Appendix C of this Draft EIR [i.e., 2016 Draft EIR]) shall be followed. A detailed subsurface geotechnical evaluation shall be performed to address site-specific conditions at the locations of the planned improvements and provide detailed recommendations for design and construction. The geotechnical evaluation shall include the following measures to mitigate potential fault rupture, seismic ground shaking, and liquefaction hazards identified under Impact GEO-1:

- *Seismicity:* Structural elements of future improvements shall be designed to resist or accommodate appropriate site-specific ground motions and conform to the current seismic design standards.
- *Liquefaction:* An assessment of the liquefaction potential and seismically induced dynamic settlement shall be made prior to detailed design and construction of the proposed project. Structural design and mitigation techniques, such as in-situ ground modification or supporting foundations with piles at depths designed specifically for liquefaction, shall be included. To evaluate the potential liquefaction hazard for the project, a subsurface evaluation could be performed. Site-specific geotechnical evaluations that assess the liquefaction and dynamic settlement characteristics of the on-site soils shall include the drilling of exploratory borings, evaluation of groundwater depths, and laboratory testing of soils. Methods for construction in areas with a potential for liquefaction hazard may include in-situ ground modification, removal of liquefiable layers and replacement with compacted fill, or support of project improvements on piles at depths designed specifically for liquefaction. Pile foundations can be designed for a liquefaction hazard by supporting the piles in dense soil or bedrock located below the liquefiable zone or other appropriate methods as evaluated during the site-specific evaluation. Additional recommendations for mitigation of liquefaction may include densification by installation of stone columns, vibration, deep dynamic compaction, and/or compaction grouting.

**MM-GEO-2:** All recommendations included in the Preliminary Geotechnical Evaluation prepared for the project (provided in Appendix C of this Draft EIR [i.e., 2016 Draft EIR]) shall be followed. A detailed subsurface geotechnical evaluation shall be performed to address site specific conditions at the locations of the planned improvements and provide detailed recommendations for design and construction. The geotechnical evaluation shall include the following measures to mitigate unstable soil hazards identified under Impacts GEO-3:

- *Compressible/Collapsible Soils and Settlement:* An assessment of the potential for soils that are prone to settlement shall be made prior to detailed design and construction of project improvements, and mitigation techniques shall be developed, as appropriate, to reduce impacts related to settlement to low levels. During the detailed design phase of the project components, surface reconnaissance and site-specific geotechnical evaluations shall be performed to assess the settlement potential of the on-site natural soils and undocumented fill. This may include detailed surface reconnaissance to evaluate site conditions, drilling of exploratory borings or test pits, and laboratory testing of soils, where appropriate, to evaluate site conditions. Prescribed mitigation measures for soils with the potential for settlement include removal of compressible/collapsible soil layers and replacement with compacted fill; surcharging to induce settlement prior to construction of new fills; and specialized foundation design, including the use of deep foundation systems to support structures. Varieties of in-situ soil improvement techniques are also available, such as dynamic compaction (heavy tamping) or compaction grouting.

**Table 1**  
**Project Design Features and Mitigation Measures**

- *Shallow Groundwater:* A subsurface exploration shall be performed during the detailed design phase of future improvements to evaluate the presence of groundwater, seepage, and/or perched groundwater at the site and the potential impacts on design and construction of project improvements. Assessment of the potential for shallow groundwater would be evaluated during the design phase of the project and mitigation techniques would be developed, as appropriate, to reduce the impacts related to shallow groundwater to low levels. Therefore, potential impacts due to groundwater would be reduced with incorporation of techniques such as construction dewatering.

**MM-GEO-3:** All recommendations included in the Preliminary Geotechnical Evaluation prepared for the project (provided in Appendix C [of the 2016 Draft EIR]) shall be followed. A detailed subsurface geotechnical evaluation shall be performed to address site-specific conditions at the locations of the planned improvements and provide detailed recommendations for design and construction. The geotechnical evaluation shall include the following measures to mitigate expansive soils hazards identified under Impacts GEO-4.

- *Expansive Soils:* An assessment of the potential for expansive soils will be conducted during the detailed design and construction phases of the project. Mitigation techniques such as over excavation and replacement with nonexpansive soil, soil treatment, moisture management, and/or specific structural design for expansive soil conditions would reduce the impact from expansive soils to low levels.
- *Corrosive Soils:* An assessment of the potential for corrosive soils will be conducted during the detailed design phase of the project through a subsurface evaluation including soil testing and analysis of soils at foundation design depths. Laboratory tests would include corrosivity tests to evaluate the corrosivity of the subsurface soils. Data will be reviewed by a corrosion engineer and mitigation techniques suitable for the proposed project will be implemented as appropriate. Mitigation of corrosive soil conditions could include the use of concrete resistant to sulfate exposure. Corrosion protection for metals used in underground foundations or structures in areas where corrosive groundwater or soil could potentially cause deterioration could include epoxy and metallic protective coatings, the use of alternative (corrosion resistant) materials, and selection of the appropriate type of cement and water/cement ratio. Specific measures to reduce the potential effects would be developed in the design phase and would reduce impacts related to corrosive soils to low levels.

#### **Hazards and Hazardous Materials**

**MM-HAZ-1:** The abatement of asbestos-containing materials (ACMs), lead-based paint (LBP), and polychlorinated biphenyls (PCBs) in existing on-site buildings shall be conducted in accordance with the recommendations of the Hazardous Building Materials Survey prepared for the Harbor-UCLA Campus, which are as follows:

- The identified ACMs and surfaces containing LBP should not be disturbed. Prior to renovation or demolition activities which would disturb identified ACMs, and lead-containing surfaces (LCSs), a licensed abatement removal contractor shall remove the ACMs and LCS, and perform paint stabilization activities as needed. The licensed abatement contractor shall maintain current licenses as required by applicable state or local jurisdictions for the removal, transporting, disposal, or other regulated activities.
- The identified surface containing LBP shall not be disturbed. Any LBP in a nonintact condition shall be abated or the component properly removed or encapsulated. Lead containing ceramic tiles shall be removed prior to demolition activities. Any lead related removal activities shall be performed in accordance with the Occupational Safety and Health Administration (OSHA) Lead in Construction Standard, Title 8 California Code of Regulations (CCR) 1532.1.
- Proper LBP waste stream categorization is required. Prior to any demolition activities, a composite sample of the representative LBP material (ceramic tiles and loose and flaking paint) shall be analyzed for total lead for comparison with the Total Threshold Limit Concentration in accordance with USEPA reference method SW-846. If the concentration of total lead is greater than or equal to 1,000 milligrams per kilogram (mg/kg), the LBP waste material shall be disposed at a landfill which can receive such wastes. If the concentration is less than 50 mg/kg the sample may be disposed as construction debris, if it is to remain in California. If the total lead result is greater than or equal to 50 mg/kg and less than 1,000 mg/kg, the sample shall be further analyzed for soluble lead by the Waste Extraction Test for comparison with the Soluble Threshold Limit Concentration as described in Title 22 CCR 66261.24a. Additionally, if the result is greater than or equal to 100 mg/kg the sample shall be further analyzed for leachable lead by the Toxicity Characteristic Leaching Procedure for comparison with the Resource Conservation and Recovery Act (RCRA) limits. Based on the results of the soluble and leachable analysis the waste material may require disposal as a RCRA-Hazardous waste or non-RCRA- (California-) Hazardous waste.
- Miscellaneous hazardous building materials shall be removed and properly recycled or disposed by the licensed abatement contractor prior to renovation or demolition activities. Contractor shall provide proper manifesting for all hazardous materials removed and recycled to prove the disposal of all materials was

**Table 1**  
**Project Design Features and Mitigation Measures**

completed in accordance with local, state, and federal requirements.

- Abatement monitoring consulting services shall be performed by a third-party environmental consultant, to include oversight of abatement contractor activities to be performed in accordance with the abatement specifications, daily air monitoring, clearances (asbestos and lead), verification of complete removal of hazardous materials, and preparation of a closeout report summarizing the abatement activities.

**MM-HAZ-2:** Prior to initiation of excavation and grading activities in the areas identified in the Phase I Assessment as containing potential soil closure is not confirmed (from either on- or off-site underground storage tanks/leaking underground storage tanks [USTs/LUSTs] or aboveground storage tanks [ASTs]), Harbor-UCLA shall retain a qualified environmental consultant to prepare a Soils Management Plan for each development phase to be submitted to the Los Angeles County Fire Department for review and approval. *[This Soils Management Plan would actually be reviewed and approved by the Environmental Programs Division (EPF).]* The Soils Management Plan shall be implemented during excavation and grading activities for proposed improvements in the areas identified in the Phase I assessment as containing potential soil contamination to ensure that site closure is properly implemented and any contaminated soils encountered are properly identified, removed and disposed of offsite. The plan shall include the following:

- A qualified environmental consultant shall be present as necessary during grading and excavation activities to monitor compliance with the Soils Management Plan and to actively monitor the soils and excavations for evidence of contamination.
- Any soil encountered during excavation or grading activities that appears to have been affected by hydrocarbons or any other contamination shall be evaluated, based upon appropriate laboratory analysis, by a qualified environmental consultant prior to off-site disposal at a licensed facility.
- All identified contaminated soils shall be properly removed, handled and transported to an appropriately licensed disposal facility, in accordance with the Soils Management Plan prepared for each respective development phase.

**Noise**

**PDF NOISE-1:** The project contractor(s) will equip all construction equipment, fixed and mobile, with properly operating and maintained noise mufflers, consistent with manufacturers' standards.

**PDF NOISE-2:** On-site construction equipment staging area shall be located as far as feasible from sensitive uses/hospital patient buildings.

**PDF NOISE-3:** Engine idling from construction equipment such as bulldozers and haul trucks shall be limited near sensitive uses/patient buildings.

**PDF NOISE-4:** Engine idling from construction equipment such as bulldozers and haul trucks shall be limited, to the extent feasible.

**PDF NOISE-5:** Effective noise barriers will be designed and erected as needed to shield on-site uses from excessive construction-related noise.

**PDF NOISE-6:** To reduce the potential for serious construction-related vibration effects to on-site operating rooms or other vibration sensitive medical uses (such as laboratories), the project contractor(s) shall perform appropriate study of the potential for peak particle velocities to reach or exceed 0.008 inches per second peak particle velocity (PPV) whenever construction involving the use of heavy-duty equipment is planned within 125 feet of such an on-site medical use. If, based on site- specific conditions, this study indicates potential for detrimental effects, strategies to minimize the effects shall be incorporated into the construction plan.

**PDF-NOISE-7:** As required by Los Angeles County Code (LACC), an acoustical analysis of the mechanical plans of the proposed buildings will be prepared by a qualified acoustical engineer, prior to issuance of building permits, to ensure that all mechanical equipment would be designed to meet noise limits in Table 4.1-10 (listed erroneously in the 2016 EIR as 4.1-6) and Phase LA Biomed.

**MM-NOISE-1:** Temporary noise barriers shall be used to block the line-of-site between the construction equipment and noise-sensitive receptors during project construction, as follows:

- Provide a temporary 15-foot-tall noise barrier capable of achieving a 15-decibel (dB) reduction ~~along the~~ throughout the project construction site to reduce construction noise for residential noise-sensitive receptors during all phases of construction-

*(As a result of phasing changes this measure was previously revised in the 2020 Addendum on the 2020 Master Plan Revision to apply to all phases and locations near sensitive receptors, and therefore the last two bullets of this*

**Table 1**  
**Project Design Features and Mitigation Measures**

*measure are unnecessary and deleted. The word residential is added to clarify the original intent of the measure; it does not change the meaning of the language or how the measure would be implemented or its effectiveness.)*

**Public Services**

**PDF-FIRE-1:** The designers, construction contractors, and tenants for/of development under the project will implement the conditions of approval identified by Los Angeles County Fire Department (LACFD) in its November 2014, July 2015, and January 2016 correspondence, which are included in Appendix J-1, Fire Department Correspondence, of this Draft EIR. The LACFD conditions of approval referenced above are summarized below and include, but are not limited to, the following:

- Provide multiple ingress/egress access for circulation of traffic and emergency response vehicles.
- Every building constructed shall be accessible to Fire Department apparatus by way of Fire Apparatus Access Roads of not less than the minimum widths prescribed in Fire Code Section 503.2.1, with roadways extending to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.
- Fire Apparatus Access Roads shall be a minimum unobstructed width of 28 feet exclusive of shoulders and have unobstructed vertical clearance “clear to sky.”
- Dead-end Fire Apparatus Access Roads in excess of 150 feet in length shall be provided with an approved Fire Department turnaround.
- Provide approved signs or other approved notices or markings that include the words “NO PARKING – FIRE LANE.”
- Fire Apparatus Access Roads must be installed and maintained in a serviceable manner prior to and during the time of construction.
- Approved building address numbers, building numbers, or approved building identification shall be provided and maintained so as to be plainly visible and legible from the street fronting the property.
- The method of gate control shall be subject to review by the Fire Department prior to approval, and shall meet specified width, positioning, emergency power, and emergency access requirements.
- The development may require fire flows up to 8,000 gallons per minute (gpm) at 20 pounds per square inch (psi) residual pressure for up to a five-hour duration. Final fire flows will be based on the size of buildings, the installation of an automatic fire sprinkler system, and type(s) of construction used.
- Fire hydrant spacing shall be every 300 feet for both the public and the on-site hydrants, with no portion of a lot frontage more than 200 feet via vehicular access from a public hydrant, and no portion of a building exceeding 400 feet via vehicular access from public fire hydrant.
- All required public fire hydrants shall be installed, tested, and accepted prior to beginning construction. Provide a Fire Department-approved fire sprinkler system in all proposed buildings.
- Provide a Fire Department approved fire sprinkler system in all proposed buildings.

**MM FIRE-1:** The project construction contractors will regularly notify and coordinate with the LACFD concerning project construction activities, including any on- and off-Campus lane closures and other construction activities that could affect emergency access and emergency response times.

**PDF-SHER-1:** The County Department of Public Works shall provide the Los Angeles County Sheriff Department (LACSD) County Services Bureau (CSB) with the on-site satellite station space, locker space, and associated parking spaces, required to serve the project. This shall include, at a minimum, the existing amount of satellite station space (927 square feet [sf]), locker room space (1,672 sf), and associated parking spaces, plus an additional 36 percent (approximately 1,000 sf) of this operational space and associated parking to serve the net increase in on-site employees and patients under the project.

**PDF-SHER-2:** Project design shall adhere to the Crime Prevention Through Environmental Design (CPTED) principles. This shall include, but not be limited to, the provision of physical design features that discourage crime such as defensible space, territoriality, surveillance, lighting, landscaping, and physical security. The CPTED features shall be identified on the design plans for the Project which shall be provided to the LACSD for review and approval.

**MM SHER-1:** During project construction, construction sites will be fully fenced, lighted with security lighting, and patrolled by either the LACSD on-site satellite station personnel (either sworn officers or contract security guards) or private security hired by LACDHS.

**MM SHER-2:** Emergency access to the LACSD will be provided and maintained to existing and new uses on-site uses, and to off-site uses, throughout construction.

**Table 1  
Project Design Features and Mitigation Measures**

**MM SHER-3:** The project construction contractors will regularly notify and coordinate with the LACSD concerning project construction activities, including any on- and off-Campus lane closures and other construction activities that could affect emergency access or emergency response times.

**MM SHER-4:** The Security Management Plan for the Harbor-UCLA Campus will be updated by LACDHS, in consultation with the LACSD, to address the proposed physical and operational changes to the Campus under the project. At a minimum, the primary security features and measures currently in place at the Campus under the Security Management Plan will be carried forward under the project.

**PDF-LIBRARIES-1:** The A.F. Parlow Library of Health Sciences, an existing Los Angeles County Department of Health Services (LACDHS)-operated library on the project site available for use by doctors, medical students, fellows, faculty, nurses, and allied health professionals affiliated with the medical center, will be retained and relocated to other building space on the Harbor-UCLA Campus.

**Traffic**

**PDF TRAF-1, Construction Traffic Management Plan:** A detailed Construction Traffic Management Plan including street closure information, detour plans, haul routes, and staging plans would be prepared and submitted to the County for review and approval. The Construction Traffic Management Plan would formalize how construction would be carried out and identify specific actions that would be required to reduce effects on the surrounding community. The Construction Traffic Management Plan shall be based on the nature and timing of the specific construction activities and other projects in the vicinity of the project site, and shall include, but not be limited to, the following elements as appropriate:

- Prohibition of construction worker parking on nearby residential streets.
- Prohibition of construction-related vehicles parking or staging on surrounding public streets.
- Temporary pedestrian and vehicular traffic controls (i.e., flag persons) during all construction activities adjacent to public rights-of-way to improve traffic flow on public roadways.
- Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers shall be implemented as appropriate.
- Scheduling of construction-related deliveries, haul trips, etc., so as to occur outside the commuter peak hours to the extent feasible.

**PDF TRAF-2: Pedestrian Safety:** The construction contractor(s) would plan construction and construction staging as to maintain pedestrian access on adjacent sidewalks throughout all construction phases. The contractor(s) would maintain adequate and safe pedestrian protection, including physical separation (including utilization of barriers such as K-Rails or scaffolding, etc.) from workspace and vehicular traffic and overhead protection, due to sidewalk closure or blockage, at all times. Temporary pedestrian facilities would be adjacent to the project site and provide safe, accessible routes that replicate as nearly as practical the most desirable characteristics of the existing facility. Covered walkways would be provided where pedestrians are exposed to potential injury from falling objects. The contractor would keep sidewalks open during construction except when it is absolutely required to close or block the sidewalks for construction staging. Sidewalks shall be reopened as soon as reasonably feasible taking construction and construction staging into account.

**MM TRAF-1:** I-110 Southbound Ramps & Carson Street (Intersection #9) - Subject to approval by the California Department of Transportation (Caltrans), the existing southbound approach on the Interstate I-110 off-ramp shall be restriped to convert the existing left-turn lane to a left-/right-turn lane.

**MM TRAF-2:** 220th Street/I-110 Northbound Ramps & Figueroa Street (Intersection #15) - Subject to approval by Caltrans and the City of Carson, an additional northbound through lane shall be striped and the existing through lane shall be restriped as a through/right-turn lane. The eastbound approach shall be restriped from the existing through/left-turn lane and right to a left-turn lane and through/right-turn lane.

**MM TRAF-3:** I-110 Southbound Ramps & 223rd Street (Intersection #20) - Subject to the approval by Caltrans, the southbound approach would be restriped from the existing left-turn/through and right- turn/through lanes to a right-turn lane and left-turn/through/right-turn lane. The eastbound approach shall be restriped to change the existing right-turn lane to a through/right-turn lane. Under this mitigation, parking shall be removed on 223rd between the Interstate I-110 bridge and Figueroa Street and converted to a dedicated right-turn lane.

**SOURCE:** 2016 Harbor-UCLA Medical Center Master Plan Final EIR and 2020 Harbor-UCLA Medical Center Master Plan Revision Addendum

**E. Summary Comparison of Significant Impacts Identified in 2016 Master Plan EIR Compared to Impacts of Currently Proposed 2022 Master Plan**

Unavoidable significant adverse environmental impacts identified for the 2016 Master Plan FEIR as compared to impacts of the currently proposed 2022 Master Plan – consisting of an updated site plan and revised construction schedule are summarized in **Table 2** below:

<p align="center"><b>Table 2 Comparison of Significant Impacts 2016 Master Plan EIR Compared to Impacts of Currently Proposed 2022 Master Plan</b></p>		
<b>Issue Area</b>	<b>2016 Master Plan EIR Harbor-UCLA Medical Center Campus Master Plan</b>	<b>Currently Proposed 2022 Master Plan</b>
<b>Noise -- Construction</b>	<p><b>Construction</b> -- On-site construction noise associated with the project would increase noise levels at nearby residential uses in excess of established thresholds.</p> <p>Mitigation Measure MM-NOISE-1 and Project Design Features PDF-NOISE-1 through PDF-NOISE-5 and PDF-NOISE-7 – would reduce impacts but not to a less than significant level.</p>	<p>Construction of the proposed 2022 Master Plan Revision would require the use of the same type of mobile heavy equipment and methods in the same general locations, although phasing would be different. Increased noise levels at sensitive receivers (both on-site and off-site) is expected to be generally the same and would continue to exceed established thresholds even with mitigation.</p>
<b>Noise -- Operation</b>	<p>Project implementation would increase noise levels at adjacent noise-sensitive receptors in the Project area as the result of temporary helicopter activity during use of the proposed interim helistop. Project-related noise from helicopter activity would only be significant when using the temporary interim helistops. Project-related noise from helicopter activity when using the permanent helistop after it is built will be less than significant. Therefore, the temporary interim helistops would result in a temporary and periodic significant impact, but the permanent helistop would result in a less than significant permanent impact.</p>	<p>The proposed 2022 Master Plan Revision currently includes use of one of the locations evaluated in the 2016 Master Plan FEIR (Interim Helistop 2) as a temporary helistop during construction, but use of Interim Helistop 1 remains an option. Therefore, noise impacts for use of this helistop would be the same as analyzed in the 2016 Master Plan EIR, resulting in significant impacts. There are no feasible mitigation measures to reduce the noise impacts of the interim helistop(s); impacts would continue to be significant and unavoidable.</p>
<b>Traffic -- Construction</b>	<p><b>Construction</b> -- With the implementation of PDF TRAF- 1, Construction Traffic Management Plan, and PDF TRAF- 2, Pedestrian Safety, potential construction impacts associated with hauling, deliveries and worker vehicles would be reduced. Scheduling of construction-related traffic to avoid peak hours, prohibited on-street parking, temporary traffic controls, and the use of safety precautions, such as alternate routing and protection barriers in accordance with the two Project Design Features would minimize the potential for the Project to result in substantial disruption of traffic flow, intersection operational impacts, conflicts with pedestrians and/or bicyclists, or loss of on-street parking in the Project area's commercial zones and residential neighborhoods. However, given the potential addition of construction-related vehicle trips during peak construction periods, transportation and parking impacts related to construction would be considered significant and unavoidable, though such impacts would only occur on a temporary basis while construction activities are occurring on-site.</p>	<p>Since net new construction would be less than analyzed in the 2016 Master Plan EIR, vehicle trips and associated miles travelled (VMT) -- the primary metric that is now used to evaluate traffic impacts -- would also be less than in the 2016 Master Plan EIR and therefore VMT impacts would be less or similar. Impacts to intersections and levels of service are no longer considered significant under CEQA. In addition, the project is located within the West Carson Transit Oriented District (TOD) Specific Plan area (approved October 2019). Projects within TOD areas have fewer impacts with respect to VMT because of their proximity to transit. Conservatively, despite changes to CEQA to remove delay and levels of service as impacts under CEQA, construction traffic impacts of the 2022 Master Plan are still considered significant and unavoidable for the purposes of this addendum.</p>

<b>Table 2 Comparison of Significant Impacts 2016 Master Plan EIR Compared to Impacts of Currently Proposed 2022 Master Plan</b>		
<b>Issue Area</b>	<b>2016 Master Plan EIR Harbor-UCLA Medical Center Campus Master Plan</b>	<b>Currently Proposed 2022 Master Plan</b>
<b>Traffic -- Operation</b>	Implementation of the 2012 Master Plan would result in a net increase in traffic generation on the Project Site of 6,598 daily trips at Full Buildout (2030). Project-related operational traffic impacts on study area intersections were considered potentially significant. The project would increase traffic on the nearby Caltrans facilities. With regard to freeway segments (three segments were considered significantly impacted) and the one intersection under the jurisdiction of Caltrans that was considered significantly impacted, while the County would make a fair-share contribution to offset increases in trips that would occur as a result of project traffic, the project was still considered to have a significant impact on Caltrans facilities.	Similar to construction traffic impacts, since the total building area would be less than analyzed in the 2016 Master Plan EIR, vehicle trips and associated miles travelled would also be less than analyzed in the 2016 Master Plan EIR and therefore VMT impacts would be less or similar. As for construction traffic, impacts to intersections and levels of service are no longer be considered significant under CEQA. As noted above, the project is located within the West Carson Transit Oriented District (TOD) Specific Plan area. Projects within TOD areas have fewer impacts with respect to VMT because of their proximity to transit. Conservatively, despite changes to CEQA to remove delay and levels of service as impacts under CEQA, operational traffic impacts are still considered significant and unavoidable for the purposes of this addendum.

Other impacts analyzed in the 2016 Master Plan FEIR, aesthetics; air quality; energy; geology and soils; greenhouse gas emissions, hazards and hazardous materials; hydrology and water quality; land use and planning; mineral resources; noise (operational noise other than interim helipad use); population and housing; public services (fire, sheriff, parks and recreation, schools, libraries, other public facilities); traffic and transportation; and utilities and service systems (water supply, wastewater, solid waste), were determined to be less than significant (see **Table 5** below for a summary comparison of all impacts analyzed in the 2016 Master Plan FEIR compared to impacts of the currently proposed 2022 Master Plan). As discussed in the detailed analyses below, the mitigation measures identified in the 2016 Master Plan FEIR would reduce impacts to a less than significant level for the same issues that are reduced to a less than significant level in the 2016 Master Plan FEIR.

**F. Incorporation by Reference**

The following documents were referenced in the preparation of this Addendum, and are incorporated herein by reference, consistent with Section 15150 of the *Guidelines*:

- County of Los Angeles, Harbor-UCLA Medical Center Master Plan, certified Final Environmental Impact Report, certified December 20, 2016. Referred to herein as the 2016 Master Plan EIR.
- County of Los Angeles Harbor-UCLA Medical Center Master Plan Revision, Final Environmental Impact Report Addendum, certified November 10, 2020

These documents are available for review at the Los Angeles County Public Works (DPW) Project Management Division I, 900 South Fremont Avenue, Alhambra, California, 91803

## **G. Summary of Effects**

Section 3 of this Addendum includes a detailed evaluation of any potential change in effects associated with development of the currently proposed 2022 Master Plan for each CEQA environmental issue area, organized consistent with the Appendix G of the State CEQA Guidelines. As summarized above, impacts would either be comparable or reduced as compared to those identified in the certified EIR. Therefore, as discussed in this Addendum, the currently proposed 2022 Master Plan would not trigger any of the conditions that require the preparation of a Subsequent or Supplemental EIR in Sections 15162 and 15163 of the CEQA Guidelines, and therefore an Addendum to the 2016 Master Plan FEIR is the appropriate CEQA document to address these changes.

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## 2. DESCRIPTION OF CURRENTLY PROPOSED PROJECT

### A. Project Location and Background

The project site is a County-owned 72-acre property at 1000 West Carson Street in Torrance, California, called the Medical Center Campus (see **Figure 1**). The site is in the unincorporated County of Los Angeles community of West Carson, which roughly encompasses the 2.3-square-mile area between the Harbor Freeway (Interstate [I-] 110) on the east and Normandie Avenue on the west, and Del Amo Boulevard on the north and Lomita Boulevard on the south. The Medical Center Campus is bordered by Carson Street on the north, 220th Street on the south, Vermont Avenue on the east, and Normandie Avenue on the west. The Harbor Freeway (I-110) is one block (approximately 800 feet) east of the Medical Center Campus and the San Diego Freeway (I-405) is approximately 2 miles to the north and northeast.

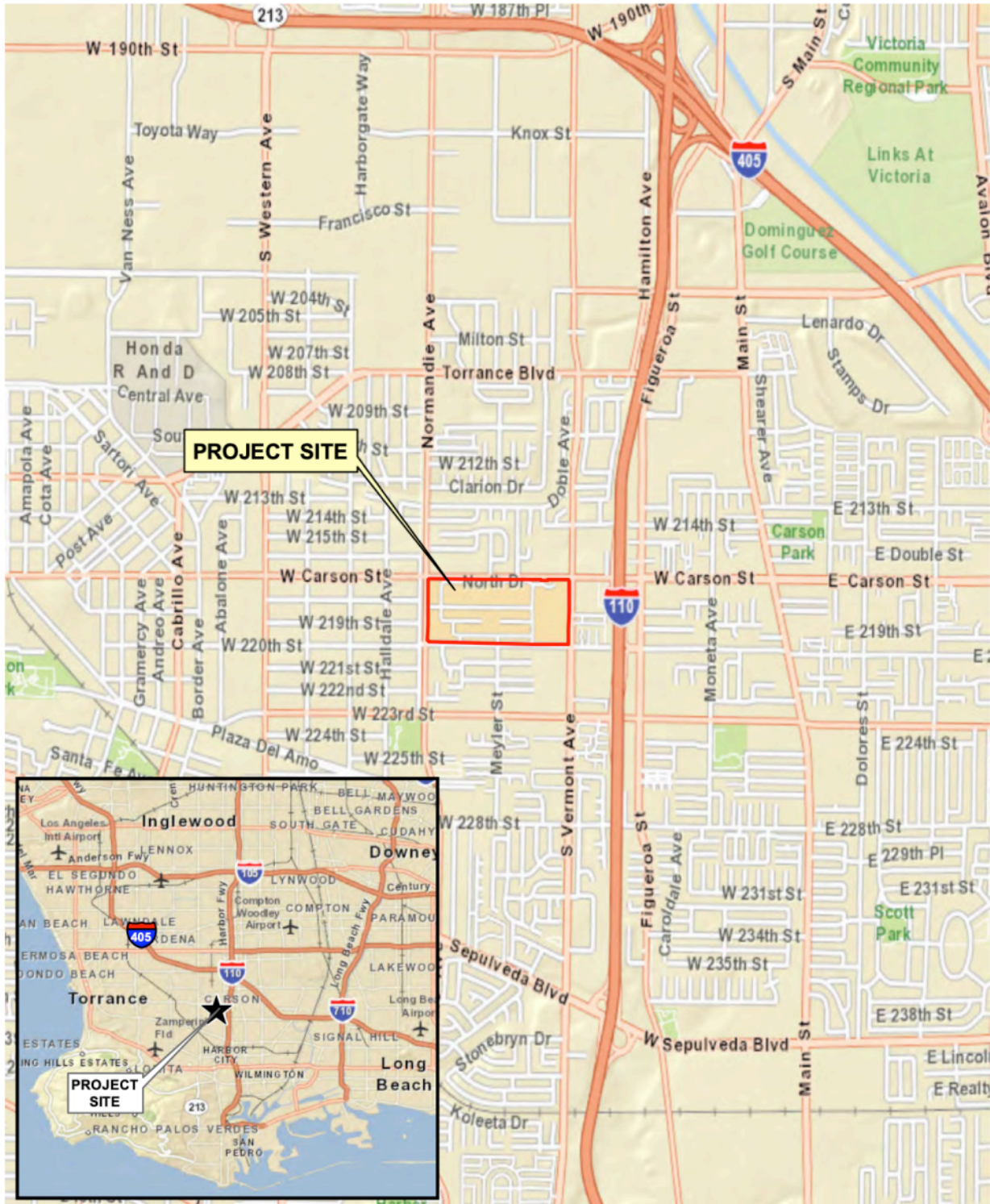
### B. 2012 Master Plan (Analyzed in the 2016 Master Plan FEIR)

**Figure 2** shows the site plan analyzed in the 2016 FEIR – the 2012 Master Plan; as noted in the 2016 Master Plan FEIR, this plan was conceptual and representative of the proposed buildout (i.e., it was anticipated that the Master Plan would be refined). In 2012, the existing Medical Center Campus contained approximately 1,279,284 square feet of developed floor area and a hospital with 453 licensed beds (of which 373 beds were budgeted/staffed). The 2012 Master Plan encompassed construction of a new eight-level hospital tower with 446 licensed beds (379 budgeted/staffed beds), renovation of the existing Hospital building, and implementation of a cohesive site design that enhances the experience of staff, patients, and visitors. The 2012 Master Plan was proposed to increase the Campus-wide floor area to approximately 2,457,801 square feet.

The 2012 Master Plan consolidated outpatient facilities located near the new Hospital tower, into three buildings: Building A with four levels, Building B with three levels, and Building C with three levels. These buildings were proposed to be located near the new hospital tower in the north-central portion of the Medical Center Campus. The 2012 Master Plan oriented hospital-related services used by the community along Carson Street. Courtyards, landscaped areas, and paths and sidewalks for pedestrian circulation formed the core of the Medical Center Campus and connected the new hospital tower and outpatient facilities with the other major tenants on the Medical Center Campus. A small retail building was proposed to be located on the Campus at the corner of Carson Street and Vermont Avenue. A central plant and emergency generator were proposed to be located along 220th Street, on the southeast side of the Campus. The 2012 Master Plan included parking structures and lots throughout the Campus. The main entrance drive for the 2012 Master Plan was from Carson Street at the existing location. A second entrance from Carson Street west of the main entrance provided access to tenant facilities. Three entrances were proposed from 220th Street, accessing tenant facilities, staff parking, and the central plant. The existing entrances from Normandie Avenue and Vermont Avenue were to remain.

### C. 2020 Master Plan

**Figure 3** shows the site plan analyzed in the 2020 FEIR Addendum – the 2020 Master Plan.



Source: 2016 Master Plan Final EIR

**Figure 1**  
**Project Location**



Note: Plans shown are conceptual and representative of planned buildout of the Harbor-UCLA Medical Center Campus,



**Figure 2**  
**2012 Master Plan**



Figure 3  
2020 Master Plan Revision

The 2020 Master Plan Revision included reductions in building areas, reducing the total increase in building area from an increase of 1,178,517 square feet under the 2012 Master Plan to an increase of 846,545 square feet. The total building area was proposed to be increased to 2,125,829 square feet (as compared to 2,457,801 square feet under the 2012 Master Plan).<sup>3</sup>

The 2020 Master Plan Revision consolidated outpatient facilities into one building, in approximately the same location as the 2012 Master Plan, in the north-central portion of the Medical Center Campus, near the new hospital building. This building would be six stories tall (plus a below-ground level), with 261,000 square feet and 247 exam rooms. A six-story, 215,000-square-foot support building for the hospital and outpatient facilities would also be provided in this area. The retail building at the corner of Carson Street and Vermont Avenue was eliminated in the 2020 Master Plan Revision. The 2020 Master Plan included a hospital tower of eight stories tall (with a below-ground level) and 501,000 square feet, with 379 beds (reduced from 446 licensed beds – 379 budgeted/staffed beds -- in the 2012 Master Plan). The southeast side of the Campus was refined to house the power plant (20,000 square feet), information technology equipment and shops in one building (22,000 square feet), and a warehouse (11,000 square feet) in a separate building. The emergency generator (6,700 square feet) would also be in this area. The 2020 Master Plan Revision was proposed to include parking structures and lots throughout the Campus. **Table 3** compares major component areas of the 2012 Master Plan with those proposed in the 2020 Master Plan.

The 2012 Master Plan increases in floor area were due largely to the development of a new hospital tower, a new outpatient building, and outpatient support building, as well as the Bioscience Tech Park. Campus-wide parking was proposed to increase from 3,186 spaces (including 281 spaces in an off-site parking lot) to 4,457 spaces (including Bioscience Tech Park and the off-site parking lot), due largely to the replacement of several on-site surface parking lots with three- to six-level parking structures. The Bioscience Development Area was (and continues to be) in the conceptual design phase; no changes were proposed in the 2020 Master Plan (nor are any proposed in the 2022 Master Plan).

#### **D. Proposed 2022 Master Plan Revision**

As noted above, the County is retaining a design-builder to finalize design and construction for the Harbor-UCLA Medical Center Campus Master Plan. The nature of a design-build contract allows the design-builder flexibility in final design in implementing the overall concept. Therefore, while buildings are anticipated to be refined and areas reduced as part of the 2022 Master Plan design process, this Addendum, in the interests of presenting a conservative analysis, continues to evaluate building areas as identified in the 2020 Master Plan. Similar to the 2016 Master Plan FEIR, this Addendum also continues to evaluate conceptual designs (two plans are presented to illustrate potential configurations) that are anticipated to be further refined through the design-build process.

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<sup>3</sup> The 2016 Harbor-UCLA Medical Center Final identifies the Master Plan as having 2,457,355 total square feet, however, the sum of the values in the tables was 2,457,801 square feet. The 2020 Final EIR Addendum identifies the 2020 Master Plan as including 2,125,450 total square feet, however, the sum of the values in the tables was 2,125,829 square feet.

**Table 3  
Building Areas  
2012 Master Plan Compared to 2020/2022 Master Plans**

<b>Facility / Building</b>	<b>2012 Master Plan (2016 Master Plan EIR)</b>	<b>2020 Master Plan (and Max 2022 Master Plan)</b>
Administrative Office	130,635	463,000
Day-Care Center	4,360	4,360
Central Utilities/Industrial/Infrastructure	129,205	62,535
Hospital/Inpatient	1,202,655	771,000
Hospital Beds	446 <sup>/a/</sup>	379
Library	0	0
Medical Office/Outpatient	480,500	338,555
Biomedical Research & Development LA Biomed (Lundquist)	225,000	225,000
Bioscience Park	250,000	250,000
Warehouse/Storage	0	11,000
Retail	35,000	0 <sup>/b/</sup>
<b>Total</b>	<b>2,457,801</b>	<b>2,125,829</b>
<b>Net New Construction</b>	<b>1,178,517</b>	<b>846,545</b>

<sup>/a/</sup> The 2012 Master Plan included 446 licensed beds and 379 (85%) budgeted/staffed beds.

<sup>/b/</sup> There would be retail restaurant within one or more buildings but areas have not been determined.

SOURCE: County of Los Angeles, Harbor-UCLA Medical Center Replacement Program, EIR Addendum, November 10, 2020, <http://file.lacounty.gov/SDSInter/bos/supdocs/150272.pdf>.

**Figures 4A and 4B** shows two potential conceptual layouts of the 2022 Master Plan. The new hospital building would continue to be in approximately the same location as identified in the 2012 and 2020 Master Plan. It would be up to nine floors (as compared to eight floors in the 2020 Master Plan), plus penthouse, elevator towers, and rooftop helipad, and would include up to 379 beds. As with 2012 and 2020 Master Plans, the 2022 Master Plan Revision would have a cohesive site design that would enhance the experience of staff, patients, and visitors. The proposed 2022 Master Plan Revision would continue to increase the Campus-wide floor area from approximately 1,279,284 square feet of existing space by up to approximately 846,545 square feet, for a total of up to 2,125,829 square feet (i.e., the same as the 2020 Master Plan). As noted above, it is anticipated that the total area would be less than this as each component is refined through the design process. (As noted above, the total analyzed in the 2016 Master Plan FEIR for the 2012 Master Plan was 2,457,801 square feet.)

The 2022 Master Plan Revision would consolidate outpatient and support facilities into one building, in approximately the same location as the 2012 Master Plan, in the north-central portion of the Medical Center Campus. This building would be up to nine stories tall (plus a below-ground level), plus penthouse and elevator towers, with up to approximately 476,000 square feet and up to 247 exam rooms. The new hospital tower also would be up to nine stories tall (with a below-ground level), plus penthouse, elevator towers, and rooftop helipad, and up to approximately 501,000 square feet, with up to 379 licensed beds.



Note: The site plan is being refined as part of the design-build process. Changes included in the final project will be reviewed to confirm that they are within the scope of the analysis in the 2016 Master Plan FEIR and this Addendum.

**Figure 4A**  
**2022 Master Plan**  
**Conceptual Site Plan 1**



Note: The site plan is being refined as part of the design-build process. Changes included in the final project will be reviewed to confirm that they are within the scope of the analysis in the 2016 Master Plan FEIR and this Addendum.

**Figure 4B**  
**2022 Master Plan**  
**Conceptual Site Plan 2**

The southeast side of the Campus would continue to house the power plant (increased slightly from 20,000 square feet in the 2020 Master Plan to approximately 24,000 square feet), information technology equipment and shops (increased slightly from 22,000 square feet in the 2020 Master Plan to approximately 23,000 square feet), and a regional laboratory or a warehouse (approximately 11,000 square feet) as a separate building (up to two floors). The existing emergency generator building (6,700 square feet) would remain and be retrofitted as indicated the 2012 Master Plan.

The 2022 Master Plan would continue to orient hospital-related services used by the community along Carson Street. Courtyards, landscaped areas, and paths and sidewalks for pedestrian circulation would continue to form the core of the Medical Center Campus, slightly reconfigured to connect the new hospital tower and outpatient facilities with the Bioscience Tech Park (County tenants) on the Medical Center Campus.

As analyzed in the 2016 Master Plan FEIR and the 2020 Addendum, the proposed 2022 Master Plan Revision would include parking structures and lots throughout the Campus. As contemplated in the 2012 and 2020 Master Plans, the increase in floor area compared to existing conditions continues to be largely due to the development of a new hospital tower, a new outpatient/support building, as well as the Bioscience Tech Park.

Campus-wide parking would be similar to the 2020 Master Plan (4,457 spaces including Bioscience Tech Park and a 281-space off-site parking lot), due largely to the replacement of several on-site surface parking lots with up to four parking structures of up to nine levels each plus rooftop photovoltaic panels.

The main Campus entrance for the proposed 2022 Master Plan Revision would continue to be from Carson Street, at the same location as the existing entrance and included in the 2012 Master Plan. As under the 2020 Master Plan, this entrance drive would provide a landscaped entrance drive, terminating into traffic lanes with drop-offs for the new hospital building, the new outpatient/support building and the existing surgery/emergency department building. There would continue to be three other entrances along Carson Street: one at the existing location east of the main entrance, one west of the main entrance (same as the 2012 and 2020 Master Plans), and one farther west in the Bioscience Tech Park. As with the previous Master Plans, the existing Normandie Avenue entrance would remain and would connect to an east/west vehicular corridor, providing a more direct connection between the Harbor-UCLA facilities and the tenant facilities. As with the 2020 Master Plan, access from 220th Street would continue to be provided at four locations (rather than three with the 2012 Master Plan but similar to the existing entrances), allowing alternative access to the tenant facilities, as well as direct access to the power plant, emergency generator building, information technology and shops building, staff parking, and regional laboratory or warehouse. The Vermont Avenue entrance would remain at the same location as the previous Master Plans.

As noted above, the Bioscience Development Area continues to be in the conceptual design phase; no changes are proposed in the 2022 Master Plan.

## **E. Implementation of Master Plan to Date**

Prior to the 2016 Board approval of the 2012 Master Plan and the certification of the EIR, a Mitigated Negative Declaration (MND) was approved by the Board in September 2014 for the

LA BioMed Development Project on the Harbor-UCLA Medical Center Campus as a separate project.

A number of smaller buildings have been demolished on the Campus (totaling approximately 130,563 square feet of the more than 600,000 square feet of total demolition evaluated in the 2016 Master Plan FEIR). One building (approximately 80,000 square feet) on the LA BioMed portion of the Campus has been completed (as covered by the 2014 LA BioMed MND).

#### F. 2016 Master Plan FEIR Changed Assumptions

The County has made conservative assumptions regarding construction activities – including the potential for overlapping construction of the hospital and outpatient towers. Compared to the analysis in the 2016 Master Plan FEIR, the 2022 Master Plan would result in less demolition debris and less soil import, due to consolidation of facilities, but slightly greater soil export. However, overall, the 2022 Master Plan would result in reduced number of demolition and soil haul truck trips compared to the 2012 Master Plan -- in part because some demolition has already occurred. A comparison of the demolition and soil volumes analyzed in the 2016 Master Plan FEIR and the demolition and soil volumes that would occur under the 2022 Master Plan are provided in **Table 4**.

<b>Table 4</b>		
<b>Remaining Demolition and Soil Export and Import Volumes</b> (cubic yards)		
<b>Facility / Building</b>	<b>2016 Master Plan EIR</b>	<b>2022 Master Plan</b>
Demolition	294,738	258,794
Soil Export	154,153 <sup>/a/</sup>	204,841
Soil Import	274,241	182,621

/a/ This number does not account for soil import in Phases 2 and 6 of the 2012 Master Plan and therefore was artificially low.

SOURCE: County of Los Angeles, 2021.

The schedule for construction phases has been updated as follows:

- Phase M (2017–2018): demolition is substantially complete, but the temporary relocation of users is not complete.
- Phase C (late 2018–early 2023): demolition and construction. The SCE service yard, the direct bury utility ductbank being installed in lieu of utility tunnel and the surface lots are underway. This phase is complete and/or underway with the exception of construction of the Central Plant and central information technology (IT) building. The Central Plant and IT Building are included as part of Phase 2 construction. The SCE service yard, the direct bury utility ductbank and SCE Service Yard are now included as part of Phase 1.
- Phase 1 (2018–2025): demolition, temporary relocation of uses, and construction. This phase has not occurred; some of the demolition is already completed and the remainder will take place in 2023 and 2025. Construction is anticipated to start in 2022. This phase previously included a parking structure. Additional activities have been added to this phase including the SCE service yard and service building, and Outpatient/Support Building. This phase is anticipated to start in 2022 with completion in 2025.)
- Phase 2 (2021–2023): construction. This phase previously included the Outpatient Tower and DMH Outpatient Building. The Outpatient Tower has been moved to Phase 1

and the DMH Outpatient Building has been moved to its own phase. This phase now includes the Central Plant Building, IT/Shops Building, a temporary helipad, and surface parking. This phase now includes demolition of D buildings previously included in phases C, 1 and 3. This phase is anticipated to start in 2023 with completion in 2027.)

- Phase 3 (early 2023–2028): demolition, temporary and permanent relocation of uses, and construction (This phase previously included a temporary helipad and staff parking. The temporary helipad has been moved to Phase 2. This phase now includes the Patient Bed Tower and Diagnostic Treatment Center, regional lab or warehouse building, and connector building. This phase is anticipated to start in 2023 with completion in 2028.)
- Phase 4 (2028–2030): reconfiguration, construction (including the permanent helistop atop the Inpatient Tower), and removal of the temporary helistop. (This phase previously included the Patient Bed Tower and Diagnostic Treatment Center, which have been moved to Phase 3. This phase now includes renovation of the existing Hospital Tower and PCDC and new parking structures and surface parking. This phase is anticipated to start in 2028 with completion in 2030.)
- Phase 5 (combined with other phases): demolition, construction, remodeling of existing buildings, and infrastructure reconfiguration. (This phase previously included the renovation of the existing Hospital Tower, a retail building, and parking structures and surface parking. The retail building is not being constructed and the other activities have been moved to Phase 4.)
- Phase 6 (combined with other phases): demolition, permanent relocations, removal of temporary modular building, and construction. (This phase previously included the Bioscience Building, parking structure, and Outpatient Building B. Phase 6 demolitions have been moved to Phase 4 and the Bioscience Building has been moved to a new Bioscience Park phase.)
- Phase DMH Outpatient Building (2022 - 2023): grading and construction. This phase includes the DMH Outpatient Building that was previously in Phase 2.
- Phase Bioscience Park (2024 - 2026): grading and construction. This phase includes the Bioscience Park Buildings and parking.

### 3. ENVIRONMENTAL SETTING AND IMPACT ANALYSIS

The 2016 Master Plan FEIR and the associated Findings of Fact and Statement of Overriding Considerations determined that the proposed Master Plan would result in significant and unavoidable impacts in the issue areas identified below. The following discussion also compares impacts of the currently proposed 2022 Master Plan Revision to the conclusions of the 2016 FEIR.

- 1) Construction Noise – Section 4I, Noise, of the 2016 Master Plan FEIR identified and evaluated the anticipated significant impacts related to on-site construction noise at nearby residential uses in excess of established thresholds (60 dBA, Leq at single-family residences; 65 dBA, Leq at multi-family residences; or 70 dBA, Leq at transient lodging). Mitigation Measure MM-NOISE-1 and Project Design Features (PDF-NOISE-1 through PDF-NOISE-5 and PDF-NOISE-7) would reduce impacts but not to a less than significant level.

Construction of the proposed 2022 Master Plan Revision would require the use of the same type of mobile heavy equipment and methods in the same general locations, although phasing would be different. Increased noise levels at sensitive receivers (both on-site and off-site) are expected to be generally the same and would continue to exceed established thresholds even with mitigation.

- 2) Operational Noise -- Section 4I, Noise also addresses operational noise and indicates that project implementation would temporarily increase noise levels at adjacent noise-sensitive receptors in the project area as a result of temporary helicopter activity during use of the proposed interim helistops. Project-related noise from helicopter activity would only be significant when using the temporary interim helistops. Project-related noise from helicopter activity when using the permanent helistop after it is built will be less than significant. Therefore, the temporary interim helistops would result in a temporary and periodic significant impact, but the permanent helistop would result in a less than significant permanent impact.

The proposed 2022 Master Plan Revision currently includes use of one of the locations evaluated in the 2016 Master Plan FEIR (Interim Helistop 2) as a temporary helistop during construction. But use of Interim Helistop 1 remains an option. Therefore, noise impacts for use of this helistop would be the same, resulting in significant impacts. There are no feasible mitigation measures to reduce the noise impacts of the interim heli-stops, impacts would continue to be significant and unavoidable.

- 3) Construction Traffic – Section 4L, Transportation and Traffic, of the 2016 Master Plan FEIR identified and evaluated significant impacts related to traffic during construction. With the implementation of PDF TRAF- 1, Construction Traffic Management Plan, and PDF TRAF- 2, Pedestrian Safety, potential construction impacts associated with hauling, deliveries and worker vehicles would be reduced. Scheduling of construction-related traffic to avoid peak hours, prohibited on-street parking, temporary traffic controls, and the use of safety precautions, such as alternate routing and protection barriers in accordance with the two Project Design Features would minimize the potential for the project to result in substantial disruption of traffic flow, intersection operational impacts, conflicts with pedestrians and/or bicyclists, or loss of on-street parking in the project area's commercial zones and residential neighborhoods. However, given the potential addition of construction-related vehicle trips during peak construction periods, transportation and parking impacts related to construction were considered significant and unavoidable in the 2016 Master Plan FEIR, though such

impacts would only occur on a temporary basis while construction activities are occurring on-site.

Since net new construction would be less than analyzed in the 2016 Master Plan EIR, vehicle trips and associated miles travelled (VMT) -- the primary metric that is now used to evaluate traffic impacts -- would be less than the 2012 Master Plan and therefore VMT impacts would be less or similar. Impacts to intersections and levels of service are no longer considered significant under CEQA. In addition, the project is located within the West Carson Transit Oriented District (TOD) Specific Plan area (approved October 2019). Projects within TOD areas have fewer impacts with respect to VMT because of their proximity to transit. Conservatively, despite changes to CEQA to remove delay and levels of service as impacts under CEQA, construction traffic impacts of the 2022 Master Plan are still considered significant and unavoidable for the purposes of this addendum.

- 4) Operational Traffic – Section 4L, Transportation and Traffic of the 2016 Master Plan FEIR identified and evaluated the anticipated significant impacts related to operational traffic. Implementation of the Master Plan would result in a net increase in traffic generation on the Project Site of 6,598 daily trips at Full Buildout (2030). The 2016 Master Plan FEIR identified operational traffic impacts on study area intersections as significant.

The 2012 Master Plan would increase traffic on the nearby Caltrans facilities. With regard to freeway segments (three segments were considered significantly impacts) and the one intersection under the jurisdiction of Caltrans that was considered significantly impacted, while the County would make a fair-share contribution to offset increases in trips that would occur as a result of project traffic, the 2016 Master Plan FEIR still identified a significant impact on Caltrans facilities.

Similar to construction traffic impacts, since the total building area would be less under the proposed 2022 Master Plan Revision, vehicle trips and associated miles travelled would also be less than would occur under the 2022 Master Plan and therefore VMT impacts would be less or similar. As for construction traffic, impacts to intersections and levels of service are no longer be considered significant under CEQA. As noted above, the project is located within the West Carson Transit Oriented District (TOD) Specific Plan area. Projects within TOD areas have fewer impacts with respect to VMT because of their proximity to transit. Conservatively, despite changes to CEQA to remove delay and levels of service as impacts under CEQA, operational traffic impacts are still considered significant and unavoidable for the purposes of this addendum.

The Statement of Overriding considerations indicates that the County Board of Supervisors found that economic, legal, social, technological, and other considerations for the 2012 Master Plan outweighed the significant and unavoidable impacts. The Statement of Overriding Considerations identified specific benefits the Board considered in its decision to approve the project (see Section 1 Introduction for more details).

These overriding considerations are applicable to the currently proposed 2022 Master Plan as the facilities would continue to provide all the benefits identified in the Statement of Overriding Considerations including meeting the healthcare needs of the South Bay service region and providing for development of a Bioscience Tech Park and expanded LA BioMed facilities.

All remaining impacts were found to be no impact, less than significant or less than significant with mitigation incorporated as summarized in **Table 5** below. Under the 2022 Master Plan, with

the mitigation measures previously included in the 2016 Master Plan FEIR and Project Design Features committed as part of the 2012 Master Plan, impacts previously identified as significant would not be worsened, and no new significant or potentially significant impacts to the physical environment would occur. Accordingly, the analyses included herein support the County’s conclusion, pursuant to State CEQA Guidelines Section 15164, that an Addendum is appropriate, and supports a determination by the County that no subsequent EIR is required.

<b>Table 5 Summary of Impacts – 2016 Master Plan FEIR Compared to Impacts of the Currently Proposed 2022 Master Plan Revision</b>		
<b>Impact</b>	<b>Level of Significance 2016 Master Plan FEIR</b>	<b>Level of Significance Currently Proposed 2022 Master Plan<sup>1/</sup></b>
<b>Aesthetics</b>		
Degradation of visual character; obstruction of scenic views.	<i>Less than significant.</i> Construction impacts would be temporary and not substantial. On completion visual character would be enhanced by high quality architecture and landscaping. Project would be consistent with General Plan policies. The project would not obstruct focal or panoramic views. Building setbacks and landscaping would reduce visibility of tallest buildings.	<i>Less than significant.</i> The proposed structures could be taller than analyzed in the 2016 Master Plan FEIR (now up to 9 stories). But would continue to be located towards the center of the Campus with landscaping enhancing the overall visual character.
Increase in light and glare.	<i>Less than significant.</i> New wayfinding signage and light spill from taller buildings could increase ambient lighting, but lights would be low-level, directed downward to maintain source lighting consistent with the hospital use and therefore would not substantially alter the character of off-site areas. It is not anticipated that expanses of reflective glass and metals would be implemented in building design. As such, the project would not cause adverse glare impacts.	<i>Less than significant.</i> The currently proposed 2022 Master Plan would be required to comply with mitigation measures identified in the 2016 Master Plan FEIR that would reduce impacts from light and glare to a less than significant level.
<b>Agricultural and Forest Resources</b>		
There are no agricultural or forest resources on-site.	<i>No impact.</i> These issues were dismissed in the 2016 Master Plan FEIR Initial Study.	<i>No Impact.</i> There are no agricultural or forest resources in the project vicinity.
<b>Air Quality</b>		
Air emissions during construction and operation.	<i>Less than significant. Project Design Features are included.</i> Construction of the project would not exceed the applicable SCAQMD thresholds for VOC, NOX, CO, SOX, PM10, or PM2.5. The incremental change in interim operational emissions, when combined with on-going construction emissions, would not exceed the thresholds of significance. The incremental change in operational at full build-out of the project would not exceed the SCAQMD daily thresholds. As a result, construction and operations of the project would not violate any air quality standard or contribute substantially to an existing or projected air quality	<i>Less than significant. Project Design Features are included.</i> The 2022 Master Plan would result in less new construction and less total development area and therefore would result in less of an increase in emissions as compared to the 2012 Master Plan. The 2022 Master Plan (construction and operation) was modeled assuming conservative assumptions and daily emissions continued to be less than significant without the need for mitigation assuming the same PDFs as the 2012 Master Plan.

<b>Table 5 Summary of Impacts – 2016 Master Plan FEIR Compared to Impacts of the Currently Proposed 2022 Master Plan Revision</b>		
<b>Impact</b>	<b>Level of Significance 2016 Master Plan FEIR</b>	<b>Level of Significance Currently Proposed 2022 Master Plan<sup>1/1</sup></b>
	violation and impacts would be less than significant. Construction and operation of the project would not exceed SCAQMD localized significance thresholds for NOX, CO, PM10, or PM2.5 at nearby sensitive receptors.	
<b>Biological Resources</b>		
There are minimal biological resources on the campus.	<i>Less than significant impact with mitigation.</i> Minimal biological resources present on the campus; compliance with existing regulations is required. These issues were dismissed in the 2016 Master Plan FEIR Initial Study; a mitigation measure addressing compliance with regulations that protect nesting birds is required.	<i>Less than significant impact with mitigation.</i> The County must comply with regulatory requirements to protect nesting birds as well as the nesting bird mitigation measure included in the Initial Study.
<b>Cultural Resources</b>		
Historic Resources, Archaeological Resources and human remains impacts.	<i>Less than significant impact with mitigation.</i> No historic resources were identified on the Campus. As a result of previous site disturbance impacts to archeological, paleontological resources and human remains are not anticipated. These issues were dismissed in the 2016 Master Plan FEIR Initial Study; mitigation measures addressing unanticipated archeological finds are required.	<i>Less than significant impact with mitigation.</i> No impacts to historical resources or human remains. Less than significant impacts to archeological and paleontological resources with the mitigation included in the Initial Study.
<b>Energy</b>		
Wasteful, inefficient or unnecessary energy consumption.	<i>Less than significant. Project Design Features (for Air Quality that would also address Energy) are included.</i> The project includes green building measures that would ensure efficient energy use.	<i>Less than significant. Project Design Features are included.</i> The project continues to include green building measures that would ensure efficient energy use. The project would be designed to LEED Gold standards (as compared to LEED Silver for the 2012 Master Plan).
<b>Geology and Soils</b>		
Seismicity, erosion, unstable soils. (Paleontology addressed under Cultural Resources.)	<i>Less than significant with mitigation.</i> As a result of compliance with existing regulations and mitigation impacts related to being located in a seismically active region and any potential for unstable soils would be less than significant.	<i>Less than significant with mitigation.</i> Similar impacts due to the same site conditions and compliance with existing regulations and required mitigation measures. (CEQA has been clarified to indicate that impacts of the environment on the project are not considered impacts under CEQA as long as the project does not exacerbate the condition.)
<b>Greenhouse Gas Emissions</b>		
GHG emissions as a result of construction and operational activities and consistency with applicable plans.	<i>Less than significant. Project Design Features (for Air Quality that would also address GHG) are included.</i> The net increase in annual GHG emissions, directly and indirectly, would be	<i>Less than significant. Project Design Features (for Air Quality that would also address GHG emissions) are included.</i> The project continues to include green building measures that would ensure efficient energy use. The project would

<b>Table 5 Summary of Impacts – 2016 Master Plan FEIR Compared to Impacts of the Currently Proposed 2022 Master Plan Revision</b>		
<b>Impact</b>	<b>Level of Significance 2016 Master Plan FEIR</b>	<b>Level of Significance Currently Proposed 2022 Master Plan<sup>1/1</sup></b>
	consistent with the Los Angeles County Community Climate Action Plan.	be designed to LEED Gold standards (as compared to LEED Silver for the 2012 Master Plan) which would reduce GHG emissions consistent with applicable plans and policies.
<b>Hazards and Hazardous Materials</b>		
On-site hazardous materials associated with former uses of the property including older buildings with asbestos and lead based paint.	<i>Less than significant with mitigation.</i> Project construction involves the demolition of existing buildings, grading, and excavation, which could result in the potential release into the environment of hazardous materials during removal and/or remediation of existing on-site USTs, ASTs, PCBs, ACMs, and LBP, or the disturbance of on-site soil that may be contaminated by past USTs on the Campus or underlying groundwater that may be contaminated by nearby off-site LUSTs. Project operations would require the storage, use, and disposal of limited quantities of hazardous materials and waste routinely used in hospitals and related facilities, in a manner consistent with manufacturer’s recommendations and applicable regulatory requirements. Mitigation requires proper treatment of hazardous materials to ensure less than significant impacts.	<i>Less than significant with mitigation.</i> Compliance with existing regulations and mitigation measures would result in similar impacts to those identified in the 2016 Master Plan FEIR.
<b>Hydrology and Water Quality</b>		
Increased impervious surfaces resulting in increased runoff. Construction activities and polluted runoff and sedimentation.	<i>Less than significant.</i> With compliance with regulatory requirements governing stormwater management and water quality during construction and following buildout of the Master Plan project components, impacts on water quality or related to waste discharge (i.e., construction dewatering) would be less than significant.	<i>Less than significant.</i> The 2022 Master Plan would not increase impervious surfaces compared to the 2012 Master Plan. The project would continue to be required to comply with existing regulations and impacts would continue to be less than significant as described in the 2016 Master Plan FEIR.
<b>Land Use and Planning</b>		
Potential to divide a community and consistency with applicable plans.	<i>Less than significant impact.</i> Development of the Harbor-UCLA Campus would be continuation of an existing use. The Project would be substantially consistent with applicable land use plans, policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect.	<i>Less than significant impact.</i> The proposed 2022 Master would also represent a continuation of the existing use and would be substantially consistent with applicable plans and policies.
<b>Mineral Resources</b>		
Loss of mineral resources.	<i>No impact.</i> Since there are no mineral resources known to exist on the Campus. This issue was dismissed in the 2016 Master Plan FEIR Initial Study.	<i>No impact.</i> No mineral resources are known to exist in the vicinity of the Campus.

<b>Table 5 Summary of Impacts – 2016 Master Plan FEIR Compared to Impacts of the Currently Proposed 2022 Master Plan Revision</b>		
<b>Impact</b>	<b>Level of Significance 2016 Master Plan FEIR</b>	<b>Level of Significance Currently Proposed 2022 Master Plan<sup>1/1</sup></b>
<b>Noise</b>		
<p>Construction noise and vibration impacts to adjacent uses.</p> <p>Operational noise from interim helicopter stops.</p>	<p><i>Significant. Project Design Features included; mitigation required.</i> Based on anticipated construction equipment and distance to sensitive receptors on-site construction impacts would be significant. Mitigation would reduce noise but not below a level of significance. Vibration impacts would be less than significant.</p> <p>Interim operation of a temporary heli-stop would result in significant impacts until the permanent heli-pad is completed.</p> <p>As a result of increased vehicle trips operational noise would increase but by a less than significant amount.</p>	<p><i>Significant and Unavoidable. Project Design Features included; mitigation required.</i> Demolition, site preparation, grading and construction activities would occur in a similar manner as described in the 2016 Master Plan FEIR. The 2016 Master Plan FEIR evaluated construction noise impacts at similar distances to sensitive receptors as would be impacted with the proposed 2022 Master Plan and therefore impacts would be similar. In the prior Addendum for the 2020 Master Plan the County has committed to 15-foot temporary noise barriers near noise sensitive receptors for all phases of construction. Use of one or both of the interim heli-stop locations would continue under the 2022 Master Plan and impacts would remain significant.</p>
<b>Population and Housing</b>		
<p>Induce population growth displace housing or people.</p>	<p><i>Less than significant.</i> Construction jobs are anticipated to draw from the local labor pool and not have a notable impact on housing demand. Operational employment would be consistent with SCAG forecasts. No housing would be displaced.</p>	<p><i>Less than significant.</i> The proposed 2022 Master Plan would create construction jobs and would not displace housing. Impacts would be similar to those described in the 2016 Master Plan FEIR (employment could be less due to the reduced size of the project).</p>
<b>Public Services</b>		
<p>Impact to emergency access, police services, library services and parks.</p>	<p><i>Less than significant with mitigation. Project Design Features included.</i> Based on the size of proposed development and increased vehicle trips, the 2016 Master Plan FEIR concludes impacts to Public Services would be less than significant with mitigation. Project design features are included, and mitigation required to address impacts to fire and sheriff protection. PDFs are included for library impacts.</p>	<p><i>Less than significant with mitigation. Project Design Features included.</i> The 2022 Master Plan would include less construction activity and result in less total development. Impacts would be similar to or less than those analyzed in the 2016 Master Plan FEIR.</p>
<b>Recreation</b>		
<p>Impact on recreational facilities.</p>	<p><i>Less than significant.</i> Project construction and operation would not create a demand for parks and recreational facilities and the project would not include new recreational facilities.</p>	<p><i>Less than significant.</i> The 2022 Master Plan would include less construction activity and result in less total development. Impacts would be similar to or less than those analyzed in the 2016 Master Plan FEIR.</p>
<b>Transportation and Traffic</b>		
<p>Traffic impacts during construction and operation.</p>	<p><i>Significant. Project Design Features included; mitigation required.</i> Project construction and operation are anticipated to significantly increase trips on local roadways.</p>	<p><i>Potentially significant and unavoidable. Project Design Features included; mitigation required.</i> Since the total building area would be less under the proposed 2022 Master Plan, vehicle trips</p>

<b>Table 5 Summary of Impacts – 2016 Master Plan FEIR Compared to Impacts of the Currently Proposed 2022 Master Plan Revision</b>		
<b>Impact</b>	<b>Level of Significance 2016 Master Plan FEIR</b>	<b>Level of Significance Currently Proposed 2022 Master Plan<sup>/1/</sup></b>
		and associated miles travelled would also be less than would occur under the 2022 Master Plan and therefore VMT impacts would be less or similar. The project is within the West Carson TOD Specific Plan area; projects within TOD areas tend to have fewer VMT impacts because of their proximity to transit. Conservatively, despite changes to CEQA to remove delay and levels of service as impacts under CEQA, construction and operational traffic impacts of the 2022 Master Plan are still considered significant and unavoidable for the purposes of this addendum. The County has committed to continuing to implement the mitigation measures identified in the 2016 Master Plan FEIR.
<b>Utilities and Service Systems</b>		
Impacts to water, wastewater, storm water and solid waste.	<i>Less than significant.</i> Based on developed area and compliance with existing regulations, the 2016 Master Plan FEIR concludes less than significant impacts to utilities.	<i>Less than significant.</i> The proposed 2022 Master Plan would result in less construction and less developed area as compared to the 2012 Master Plan. Impacts would be similar to or less than those identified in the 2016 Master Plan FEIR.
<sup>/1/</sup> Project Design Features of the 2022 Master Plan are the same as those previously approved.		

## A. AESTHETICS

The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts to aesthetics was evaluated in relation to the 2016 Master Plan FEIR analysis.

<b>(a) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to substantial adverse effects on a scenic vista?</b>		
	<b>Yes</b>	<b>No</b>
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

The 2016 Master Plan FEIR found that the 2012 Master Plan would not have a substantial adverse effect on a scenic vista or obstruct a scenic vista. There are no recognized valued publicly available views or scenic vistas across the Medical Center Campus. The Medical Center Campus is visible from Carson Street overcrossing over the Harbor Freeway and adjacent streets (Carson Street, Normandie and Vermont Avenues, and 220th Street). The Harbor Freeway itself is below the surrounding ground level in this area, so there are no views of the site from the freeway. Impacts related to views and view resources would be less than significant.

## 2022 Master Plan

### *Construction and Operation*

There are no recognized valued publicly available views or scenic vistas across the Medical Center Campus. Therefore, as discussed for the 2012 Master Plan, the 2022 Master Plan would not have a substantial adverse effect on a scenic vista or obstruct a scenic vista. Compared to the 2012 Master Plan, the tallest building, the new hospital building, would have a different layout but would be in approximately the same location and of similar height (up to nine floors as compared to eight floors under the 2012 Master Plan).

### *Conclusion*

There would be no new or substantially greater impacts than those identified in the 2016 Master Plan FEIR.

(b) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to substantially damaging scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

The Notice of Preparation (NOP)/Initial Study (IS) for the 2012 Master Plan project found that the closest state highways to the Medical Center Campus include the Harbor Freeway, less than 0.10 mile to the east, and the San Diego Freeway, approximately 2.0 miles to the north and east. Neither has been designated as an official scenic highway by Caltrans on the California Scenic Highway Mapping System. The Medical Center Campus is therefore not visible from or located within the corridor of a designated state scenic highway.

**2022 Master Plan**

*Construction, Operation and Conclusion*

Conditions have not changed with respect to state-designated scenic highways, therefore, there would be no new or greater impacts than those identified in the 2016 Master Plan FEIR.

(c) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to: In non-urbanized areas, substantially degrading 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). In an urbanized area, project conflict with applicable zoning and other regulations governing scenic quality?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2012 Master Plan**

Public views of the Medical Center Campus are from Carson Street, Normandie and Vermont Avenues, and 220th Street; the Carson Street overcrossing over the Harbor Freeway; and some bordering land uses. The Campus is also open to the public, so views within the Campus are also public view. The 2016 Master Plan FEIR found that development of the 2012 Master Plan would substantially alter the existing visual character of the Medical Center Campus as a result of the denser and taller development than the existing Medical Center Campus. The area as a whole is undergoing a transition to greater urbanization.

*Construction*

Construction of the 2012 Master Plan would involve demolition of existing buildings, parking lots, and sidewalks; clearance of some existing vegetation; hauling of debris; grading and excavation; and use of cranes, excavators, large trucks, and trailers. However, most construction activities would be shielded by existing walls, buildings, and landscaping. Construction activities would occur over the course of several years and within specific areas of the half-mile-long Medical Center Campus, as well as in limited off-site areas related to infrastructure and utility improvements necessary to serve the 2012 Master Plan Project. As such, visual character impacts experienced at any single viewing location, for both on-site and off-site construction activities, would be intermittent and temporary. Because adverse visual effects would be temporary and would be confined to portions of the Medical Center Campus or distinct off-site areas at any one time, such effects would not be experienced by nearby viewers continually during the buildout of the 2012 Master Plan; furthermore, because construction activities would not be dissimilar to building projects that have occurred within the Medical Center Campus in recent years (i.e., the Surgery and Emergency Room Replacement Project), visual impacts were not found to substantially alter, degrade, or eliminate the visual character or quality of the area. Therefore, construction activities would have a less-than-significant effect with respect to visual character.

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*Operation.*

New buildings on the Campus would be required to implement the 2012 Harbor-UCLA Master Plan Design Guidelines, in which individual buildings must complement each other and the character of surrounding spaces, streets, and walks; view corridors, both to and from buildings, must be maintained; and axes, corner lines, and features of neighboring buildings and spaces must be aligned. Under the Design Guidelines, overall heights, massing, styles, and materials of neighboring buildings within the Medical Center Campus must be compatible. Views of service areas and mechanical equipment located both on grade and on building roofs must be screened. With these Design Guidelines, the massing of buildings within the site would create a visually pleasant skyline effect (cluster) that would contribute to the visual character of the community.

The existing pedestrian experience along Carson Street, Vermont Avenue, Normandie Avenue, and 220th Street would be improved by landscaping and streetscape, including the installation of canopy trees, provision of a landscaped parkway between the sidewalk and Carson Street, the removal of chain link fencing and walls along Vermont and Normandie Avenues and 220th Street, and other improvements in visual character and safety along 220th Street. Under the streetscape program, perimeter trees would be centered in a hedged parkway with a second hedge at the back of the walk. The low hedge in the parkway along Carson Street would buffer vehicle traffic to further improve pedestrian comfort. At present, no sidewalk trees are present along the four street frontages.

Within the Medical Center Campus, many of the existing high-quality tree specimens would be relocated on Campus. The western sector and southwestern edge of the Campus would be more lushly landscaped than under existing conditions, which would improve the visual character of the Medical Center Campus as experienced by adjacent residential neighborhoods to the south and west.

The 2016 Master Plan FEIR found the 2012 Master Plan would result in adverse visual character and quality impacts on public views resulting from construction, landscaping, and off-site infrastructure improvement improvements. Construction would occur in specified phases that would be temporary in nature and not encompass the entire site at any one time; therefore, construction was found not to substantially degrade the existing visual character or quality of the site and surrounding area. After construction, the visual character and quality of the Medical Center Campus would be enhanced by high-quality architecture and landscaping, including landscaping improvements along the public sidewalks. Therefore, impacts related to the visual character and quality of public views would be less than significant.

## **2022 Master Plan**

*Construction.*

Construction activities would be similar to those evaluated in the 2016 Master Plan FEIR and would similarly have less-than-significant impacts with respect to visual character and quality of public views.

*Operation*

While the 2022 Master Plan could include two structures up to nine stories (as compared to a maximum height of eight stories under the 2012 Master Plan), public views of the Medical Center Campus would be similar to those described for the 2012 Master Plan, that is, from adjacent streets and land uses, from a nearby highway overcrossing, and from internal locations within the site, which is open to the public. The area as a whole is continuing to undergo a transition to greater urbanization. Like the 2012 Master Plan, the 2022 Master Plan would substantially alter the existing visual character of the Medical Center Campus as a result of the denser and taller development than the existing Medical Center Campus. However, under the 2022 Master Plan, the consolidation of buildings, a potential reorientation of the new hospital tower, and the overall reduction in development and increase in open spaces would slightly lessen density of the Campus compared to the 2012 Master Plan. Landscaping and streetscape improvements would be similar to those under the 2012 Master Plan (revised to accommodate the reorientation of buildings and internal circulation and altered entrances). The high- quality tree specimens on site would be relocated or replaced with comparable trees on the Campus.

Like the 2012 Master Plan, the 2022 Master Plan would create a more aesthetic public environment than under existing conditions. Because it would introduce similar elements that would enhance the public interface along all adjacent streets, as well as public access to gardens, public art, and other benefits, and maintain a high architectural standard, the 2022 Master Plan would not substantially degrade the visual character or quality of the site or its surroundings because of height, bulk, pattern, scale, character, and other features.

*Conclusion*

The 2022 Master Plan would be substantially consistent with the goals of the General Plan related to aesthetic values. Impacts with respect to visual character and quality would be less than significant and similar to those of the 2012 Master Plan.

(d) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to creating a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2012 Master Plan**

Light-sensitive land uses in the area include residential uses to the west of Normandie Avenue, to the east of Vermont Avenue, and to the south of 220th Street. The 2016 Master Plan FEIR found that the 2012 Master Plan would not substantially affect daytime or nighttime views through the creation of substantial new sources of light or glare. The 2012 Master Plan had the potential to introduce new point source lighting, including architectural lighting, security and wayfinding lights, landscape lighting, and visible interior light emanating from the windows of the new multi-story buildings. Emergency service locations would be interior to the Medical Center Campus and shielded by intervening buildings and landscaping from adjacent residential neighborhoods. Any

illuminated identification or wayfinding signs would be located on Carson Street near the main entry areas and would not be visible from the residential neighborhoods. These signs are not expected to be as bright as existing commercial signs that are located along Carson Street and in the surrounding areas.

### *Construction*

The 2016 Master Plan FEIR indicates that construction lighting would take place in specific locations within the approximately 72-acre site and would not be experienced by any sensitive, off-site receptors for a long duration. Any construction lighting would be limited and directed onto specific locations within construction sites to avoid affecting on-site medical patients. Similarly, with regard to off-site construction activities that may be necessary to address infrastructure improvements, such activities would be temporary, would only occur in one given location for a limited time, and would occur primarily during daylight hours. Because artificial light associated with construction activities would be limited to security lighting and specific construction tasks, it would not be expected to cause any significant off-site spillage or glare, particularly in the context of the highly urbanized nature of the surrounding area and associated existing light sources. As such, construction lighting would not adversely affect off-site sensitive receptors. Such lighting would not substantially alter the character of off-site areas surrounding the Medical Center Campus. Therefore, artificial light impacts associated with construction were found to be less than significant. Construction activities are not anticipated to include flat, shiny surfaces that would reflect sunlight or cause other natural glare. As such, construction glare impacts were found to be less than significant.

### *Operation*

Security lighting and landscape lighting would be located at ground level, low-level, and generally shielded from adjacent uses by landscaping. Lighting would be directed downward to avoid glare at on-site occupied hospital rooms and to maintain a calm ambience for on-site visitors and employees. Landscaping and rooftop garden lighting would be low-level consistent with the proposed hospital use. Any illumination associated with rooftop gardens would be located in the center of the Medical Center Campus and shielded from off-site residential areas by intervening buildings. Light spillage from the multi-story components would not be dissimilar from existing conditions and would not be disruptive of off-site residential uses, the nearest of which would be more than 200 feet to the south of the New Hospital Tower.

The 2012 Master Plan included no signage, flood lighting, or other strong point source lighting on the south side of the building interfacing residential uses to the south of 220th Street. The lighting would not significantly intensify ambient or point source lighting that currently occurs during the evening hours along 220th Street. The removal of surface parking lots visible from residential uses to the east and south would reduce vehicle light sources and security lights currently visible from these residential areas. Direct headlight glare from vehicles leaving the new parking structures would not be visible from residential neighborhoods or adjacent residential uses. Therefore, the 2016 Master Plan FEIR found that the 2012 Master Plan would not be expected to substantially increase ambient light or cause light spill onto adjacent light-sensitive receptors, and impacts would be less than significant.

Under the Master Plan Design Guidelines for the 2012 Master Plan, building materials, massing, and styles must be consistent with neighboring buildings, including the Existing Hospital Tower, and to complement the character of the surrounding Medical Center Campus buildings. Buildings using expanses of metals and reflective glass would not meet these criteria, nor would such materials be consistent with the overall use of the site as a medical campus. As such, the 2016 Master Plan EIR found that the 2012 Master Plan would not generate glare from reflected sunlight, and glare impacts would be less than significant.

All light sources would be low level and directed downward to maintain ambient and point-source lighting consistent with the on-site hospital use. As such, the 2012 Master Plan would not substantially alter the character of off-site areas surrounding the Medical Center Campus or result in substantial light spill and/or glare onto adjacent light-sensitive residential uses. The Harbor-UCLA Master Plan Design Guidelines would require that buildings be compatible with the style, materials, and massing of other Medical Center Campus buildings, the function of which is to serve as a medical campus. The 2016 Master Plan FEIR did not anticipate that expanses of reflective glass and metals would be implemented in building design. As such, the 2012 Master Plan would not cause adverse glare impacts. Therefore, potential impacts associated with nighttime illumination and/or glare from reflected sunlight would be less than significant.

## **2022 Master Plan**

### *Construction*

The lighting needed during construction of the 2022 Master Plan would generate a similar amount of minor light spillover in the vicinity of the Medical Center Campus as the 2012 Master Plan, including residential uses to the south, east, and west. Any construction-related nighttime illumination would be used for safety and security purposes only, would be in specific locations within the site, and would not be experienced by any sensitive, off-site receptors for a long duration. Construction lighting would be limited and directed onto specific locations within construction sites to avoid affecting on-site medical patients. Off-site construction activities that may be necessary to address infrastructure improvements would be the same as for the 2012 Master Plan, would be temporary, would only occur in one given location for a limited time, and would occur during daylight hours. Construction lighting would not adversely affect off-site sensitive receptors. Therefore, artificial light impacts associated with construction of the 2022 Master Plan would be less than significant. As with the 2012 Master Plan, construction activities for the 2022 Master Plan would not result in flat, shiny surfaces that would reflect sunlight or cause other natural glare. As such, construction glare impacts would be the same, less than significant.

### *Operation*

Similar to the 2012 Master Plan, the 2022 Master Plan has the potential to introduce new point source lighting, including architectural lighting, security and wayfinding lights, landscape lighting, and visible interior light emanating from the windows of the new multi-story buildings (potentially up to one story taller than the 2012 Master Plan). Emergency service locations would be interior to the Medical Center Campus and shielded from adjacent residential neighborhoods. Illuminated identification or wayfinding signs would be located on Carson Street near the main entry areas and not visible from the residential neighborhoods. The same type of security lighting and landscape lighting would be used for the 2022 Master Plan as the 2012 Master Plan and would be similar to the existing lighting. As with the 2012 Master Plan, the 2022 Master Plan would contain no signage, flood lighting, or other strong point source lighting on the south side of the building interfacing residential uses to the south of 220th Street. Therefore, the 2022 Master Plan would not be expected to substantially increase ambient light or cause light spill onto adjacent light-sensitive receptors and impacts would be less than significant, the same as the 2012 Master Plan. Similar to the 2012 Master Plan, the 2022 Master Plan would not generate substantial glare from reflected sunlight, and glare impacts would be less than significant, the same as the 2012 Master Plan.

*Conclusion*

Impacts of the 2022 Master Plan with respect to light and glare would be less than significant, the same as those of the 2012 Master Plan.

**B. AGRICULTURAL AND FOREST RESOURCES**

The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts to agricultural and forest resources compared to the 2016 Master Plan FEIR was evaluated in relation to five questions recommended for consideration by the State CEQA Guidelines.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to any of the following:		
(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) Conflict with existing zoning for agricultural use, or a Williamson Act contract?		
(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))?		
(d) Result in the loss of forest land or conversion of forest land to non-forest use?		
(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?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2012 Master Plan**

*Construction and Operation*

The Medical Center Campus and surrounding areas do not contain agricultural uses or related operations. The Campus is not located on designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). The Medical Center Campus is located in the C-3 Unlimited Commercial Zone and is designated for Public and Semi-Public use in the Los Angeles County General Plan. Agricultural uses are not permitted within the C-3 zone and the Medical Campus is not within a designated Agricultural Opportunity Area or under a Williamson Act contract or zoned for forest uses. The NOP/IS for the 2012 Master Plan found that the project would not conflict with existing zoning for agricultural use within a designated Agricultural Opportunity Area nor would it conflict with a Williamson Act contract nor would the 2012 Master plan conflict with forest uses or zoning for forestry or timberland uses.

## 2022 Master Plan

### *Construction, Operation and Conclusion*

The land uses on the Medical Center Campus and surrounding area have not changed since the 2016 Master Plan FEIR. The Campus is not located on designated Farmland or forest land. The 2022 Master Plan would not convert farmland or forest land, nor would it conflict with existing zoning for agricultural or forestry uses or a Williamson Contract. As under the 2012 Master Plan, the 2022 Master Plan would have no impacts with respect to agricultural and forest resources.

### C. AIR QUALITY

Air quality impacts of the currently proposed 2022 Master Plan were evaluated with regard to the 2016 Master Plan FEIR. ESA completed new air quality modeling to evaluate impacts of the updated construction schedule including conservative assumptions with respect to the potential for overlapping construction activities; this analysis is contained in **Appendix A**. The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts to air quality was evaluated in relation to four questions recommended for consideration by the State CEQA Guidelines.

(a) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to conflict with or the potential to obstruct implementation of the applicable air quality plan?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

The 2016 Master Plan EIR found that construction and operation of the 2012 Master Plan would not conflict with the growth projections in the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP) and would comply with applicable control measures. As a result, the 2012 Master Plan would not conflict with or obstruct implementation of the AQMP, and impacts would be less than significant.

### *Construction*

Construction jobs would pull from the local labor pool and would be consistent with AQMP employment assumptions. The 2012 Master Plan construction would comply with control strategies in the AQMP intended to reduce emissions from construction equipment with potential applicability to short-term emissions from construction activities. Additionally, the 2012 Master Plan construction would comply with California Air Resources Board (CARB) requirements to minimize short-term emissions from on-road and off-road diesel equipment. It would also comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403. Therefore, the 2012 Master Plan would comply with the AQMP, and impacts would be less than significant during construction.

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### *Operation*

Projects that are considered consistent with the AQMP would not interfere with attainment because the growth represented by the project would be included in the projections used in the formulation of the AQMP. The Medical Center Campus is designated “P” (Public and Semi-Public) by the County of Los Angeles 2035 General Plan Update. This designation permits a broad range of public and semi-public facilities and community-serving uses at a maximum floor-area ratio of 3:1. The 2012 Master Plan is consistent with the growth projections in the County’s general plan and thus is consistent with the growth projections in the AQMP.

The AQMP includes Transportation Control Measures intended to reduce regional mobile source emissions. The 2016 Master Plan EIR found that the 2012 Master Plan would be supportive of measures related to reducing vehicle trips for patrons and employees and increasing commercial density near public transit because of PDF AQ-1. Because the 2012 Master Plan would be consistent with the growth projections in the AQMP and would be supportive of relevant Transportation Control Measures aimed at reducing vehicle trips, the 2016 Master Plan EIR found that impacts related to consistency with the AQMP would be less than significant.

### **2022 Master Plan**

While total new construction is proposed to decrease under the 2022 Master Plan, accelerated construction could lead to more overlapping construction activities. As noted above ESA undertook new air quality modeling to evaluate impacts of the 2022 Master Plan; the results of this new modeling are included in **Appendix A**. The results of that modeling indicate that the 2022 Master Plan with conservative assumptions regarding overlapping construction activities would not result in construction (or operation) exceeding SCAQMD thresholds of significance.

### *Construction*

Construction of the 2022 Master Plan would have similar impacts to the 2012 Master Plan. Reduced construction would result in reduced employment and reduced total emissions over the entire construction period; daily emissions would continue to be below thresholds. The 2022 Master Plan would continue to comply with all CARB and SCAQMD requirements and impacts would continue to be less than significant.

### *Operation*

The 2022 Master Plan would continue to be consistent with the growth projections in the County’s General Plan and thus is consistent with the growth projections in the AQMP. The 2022 Master Plan would generate marginally less growth than the 2012 Master Plan due to the reduced building area. The 2022 Master Plan would continue to be supportive of the AQMP Transportation Control Measures related to reducing vehicle trips for patrons and employees and increasing commercial density near public transit because of PDF AQ-1. Because the 2022 Master Plan would be consistent with the growth projections in the AQMP and would be supportive of relevant Transportation Control Measures aimed at reducing vehicle trips, the 2022 Master Plan would have the same operational impacts related to consistency with the AQMP as the 2012 Master Plan, which would be less than significant.

*Conclusion*

Impacts related to consistency with the AQMP would be similar to or less than impacts described in the 2016 Master Plan FEIR.

(b) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the potential to result in a cumulatively considerable net increase of any criteria pollutant for which the project region air basin is non-attainment under an applicable federal or state ambient air quality standard?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Los Angeles County portion of the South Coast Air Basin is designated nonattainment for the National Ambient Air Quality Standards for ozone and particulate matter less than 2.5 micrometers (PM2.5) and designated nonattainment for the California Ambient Air Quality Standards for ozone, nitrogen dioxide, particulate matter less than 10 micrometers (PM10), and PM2.5.

*Construction*

The 2016 Master Plan EIR found that the maximum daily emissions from construction of the 2012 Master Plan would not exceed the thresholds of significance for any of nonattainment pollutants nor their precursors. Compliance with CARB and SCAQMD control measures and implementation of PDF AQ-1 would minimize and reduce construction emissions. Therefore, the 2016 Master Plan FEIR found that the 2012 Master Plan would not result in a cumulatively considerable net increase of a criteria pollutant for which the region is nonattainment. Consequently, construction impacts would be less than significant.

*Operation*

The 2016 Master Plan FEIR found that operation of the 2012 Master Plan would not result in daily emissions of criteria pollutants exceeding the SCAQMD threshold of significance. During interim operations that overlap with construction emissions and at full buildout, operation of the 2012 Master Plan would not exceed the applicable thresholds of significance. Therefore, the 2016 Master Plan FEIR found that operational impacts would be less than significant.

**2022 Master Plan**

*Construction*

The new modeling indicates that maximum daily emissions from construction of the 2022 Master Plan would not exceed the thresholds for any criteria pollutants. The 2022 Master Plan would also comply with CARB and SCAQMD control measures and PDF AQ-1. Therefore, the 2022 Master Plan would not result in a cumulatively considerable net increase of a criteria

pollutant. Consequently, construction impacts would be less than significant, the same as under the 2012 Master Plan.

During interim operations that overlap with construction emissions, criteria pollutant emissions would be similar to those evaluated in the 2016 Master Plan EIR because the amount of overlap would be similar and would not exceed the applicable thresholds of significance.

*Operation*

The 2022 Master Plan would result in reduced building area as compared that analyzed in the 2016 Master Plan and therefore would result in less building energy consumption and fewer trips. Therefore, emissions from operation of the 2022 Master Plan would be similar to or less than those of the 2012 Master Plan and would not exceed the thresholds of significance for any criteria pollutant. Therefore, the 2022 Master Plan’s operational impacts would be less than significant.

*Conclusion*

Criteria pollutant emissions associated with the 2022 Master Plan would be similar to those evaluated for the 2012 Master Plan and would be less than significant.

(c) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the potential to expose sensitive receptors to substantial pollutant concentrations?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sensitive land uses close to the Medical Center Campus (sensitive receptors) include the following:

- The Harbor-UCLA Medical Center Employee Children’s Center and a multifamily residential apartment complex, Harbor Cove Villa, located on Carson Street just west of the intersection with Vermont Avenue.
- The area north of Carson Street, which is a predominantly single-family residential neighborhood.
- Vermont Avenue, the southern half of the block facing the Medical Center Campus, at 219th Street, with a condominium complex, Torrance Park Villas, and mobile home parks, Starlite Trailer Park and Rainbow Mobile Home Park.
- Single-family and multi-family residential neighborhoods that border the Medical Center Campus to the south, across 220th Street, as well as to the west, across Normandie Avenue within the Harbor City community of Los Angeles.
- Halldale Avenue Elementary School located to the northwest of the Medical Center Campus west of Normandie Avenue and north of 216th Street.
- White Middle School located to the southeast of the Medical Center Campus east of I-110 and Figueroa Street and south of 220th Street.

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## 2012 Master Plan

### *Construction*

The 2016 Master Plan FEIR found that maximum localized emission concentrations during construction activities would not exceed the allowable thresholds at the closest sensitive receptors for the relevant standards. Therefore, with respect to localized construction emissions, the 2016 Master Plan FEIR found that impacts would be less than significant.

The 2016 Master Plan FEIR found that the greatest potential for toxic air contaminant (TAC) emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during demolition, grading and excavation, and building construction activities for the 2012 Master Plan. In addition, incidental amounts of toxic substances such as oils, solvents, and paints would be used. These products would comply with all applicable SCAQMD rules for their manufacture and use. The 2012 Master Plan is subject to several SCAQMD rules designed to limit exposure to TACs during construction activities. It would be required to comply with the CARB Air Toxics Control Measure that limits diesel-powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction. The 2012 Master Plan would also comply with the requirements of SCAQMD Rule 1403 if asbestos is found during the renovation and construction activities. Furthermore, the 2012 Master Plan would voluntarily implement the construction control measures described in PDF-AQ-2.

Health risk impacts (cancer risk) were assessed in the 2016 Master Plan FEIR for nearby existing and future off-site sensitive receptors (residential and school uses). For carcinogenic exposures, the cancer risk from DPM emissions from construction of the 2012 Master Plan was estimated to result in a maximum carcinogenic risk of 4.1 per 1 million (without any sort of mechanical filtration). The maximum impact would occur at sensitive land uses (residences) directly south of the site. As the maximum impact would be less than the risk threshold of 10 in 1 million, the 2016 Master Plan FEIR found that these impacts would be less than significant.

Potential non-cancer effects of chronic (i.e., long-term) DPM exposures were evaluated in the 2016 Master Plan FEIR. A hazard index equal to or greater than 1.0 represents a significant chronic health hazard. The maximum non-cancer chronic impact from construction of the 2012 Master Plan was estimated to range from 0.001 to 0.007, well below the hazard index. Therefore, non-cancer chronic impacts were found to be less than significant in the 2016 Master Plan FEIR.

### *Operation*

The 2016 Master Plan FEIR evaluated operational phases of the 2012 Master Plan. For some pollutants, existing operational emissions are greater than the emission levels with the 2012 Master Plan (an improvement over existing conditions). Maximum localized operational emissions for sensitive receptors would not exceed the localized thresholds for nitrogen oxides (NOX), CO, PM10, and PM2.5. Therefore, with respect to localized operational emissions, the 2016 Master Plan FEIR found that impacts of the 2012 Master Plan would be less than significant.

The 2016 Master Plan FEIR found that the 2012 Master Plan would generate minor amounts of diesel emissions from delivery trucks and incidental maintenance activities. Trucks would comply with the applicable provisions of the CARB Truck and Bus regulation to minimize and reduce PM and NOX emissions from existing diesel trucks. Because the 2012 Master Plan would not generate diesel emissions equivalent to 100 or more truck trips per day, the Master Plan FEIR found that the project would not be considered a substantial source of diesel particulates.

Typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes, automotive repair facilities, and dry-cleaning facilities. The 2012 Master Plan would not include these activities on site. Minimal emissions of air toxics may result from maintenance, such as from the use of architectural coatings and other products. Toxic or carcinogenic air pollutants are not expected to occur in any meaningful amounts in conjunction with operation of the land uses in the 2012 Master Plan. The 2016 Master Plan FEIR found that potential long-term operational impacts associated with the release of TACs from the 2012 Master Plan uses would be less than significant.

## **2022 Master Plan**

### *Construction*

The construction activities for the 2022 Master Plan would be similar to those of the 2012 Master Plan. Maximum localized emission concentrations during construction activities would be similar to the 2012 Master. Therefore, the 2022 Master Plan would not exceed the allowable thresholds at the closest sensitive receptors for the relevant standards and impacts would be less than significant, the same as under the 2012 Master Plan.

TAC emissions would be similar to those associated with the 2012 Master Plan construction. The 2022 Master Plan would also implement PDF AQ-2 that would reduce TAC emissions.

Because construction methods and amounts for the 2022 Master Plan would be generally similar to the 2012 Master Plan, the maximum cancer risk impact also would be similar to the 2012 Master Plan and less than the risk threshold of 10 in 1 million; impacts would continue to be less than significant. The same applies to potential non-cancer effects of chronic DPM exposure which would also be similar to the 2012 Master Plan and less than significant.

### *Operation*

The 2022 Master Plan would result in similar or fewer operational emissions as compared to the 2012 Master Plan emissions. As for the 2012 Master Plan localized operational emissions for sensitive receptors would not exceed the localized thresholds for NOX, CO, PM10, and PM2.5. Therefore, with respect to localized operational emissions, impacts of the 2022 Master Plan would be less than significant, the same as those of the 2012 Master Plan.

As for the 2012 Master Plan, the 2022 Master Plan would generate minor amounts of diesel emissions from delivery trucks and incidental maintenance activities. These trucks would also comply with the applicable provisions described for the 2012 Master Plan. As with the 2012 Master Plan, the 2022 Master Plan would not generate diesel emissions equivalent to 100 or more truck trips per day and therefore would not be considered a substantial source of diesel particulates. The 2022 Master Plan would have generally the same uses and activities as the

2012 Master Plan. The same minimal emissions of air toxics could result from maintenance activities. As for the 2012 Master Plan, toxic or carcinogenic air pollutants are not expected to occur in any meaningful amounts in conjunction with operation of the land uses in the 2022 Master Plan. Potential long-term operational impacts associated with the release of TACs from the 2022 Master Plan uses would be similar to those from the 2012 Master Plan uses and would be less than significant.

The traffic generated under the 2022 Master Plan would be similar to that generated under the 2012 Master Plan and impacts would also be generally the same. Therefore, the 2022 Master Plan would not cause or contribute to the formation of CO hotspots, and CO concentrations at nearby intersections would remain well below the ambient air quality standards, the same as under the 2012 Master Plan.

*Conclusion*

Emissions associated with the 2022 Master Plan would be similar to those evaluated for the 2012 Master Plan and impacts would be less than significant.

(d) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to other emissions such as those leading to odors adversely affecting a substantial number of people?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2012 Master Plan**

*Construction*

Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents. SCAQMD Rule 1113 limits the allowable amount of volatile organic compounds from architectural coatings and solvents. Because compliance with SCAQMD rules governing these compounds is mandatory, no construction activities or materials are proposed that would create objectionable odors. Therefore, the 2016 Master Plan FEIR found that no significant impact would occur.

### *Operation*

Land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding, none of which are proposed under the 2012 Master Plan. The project does not include any uses identified by SCAQMD as being typically associated with objectionable or nuisance odors. Waste collection areas and disposal for the 2012 Master Plan would be covered and situated away from the property line and sensitive off-site uses. Medical waste would be properly sealed and stored in accordance with applicable rules to ensure that no objectionable medical waste-related odors would be created. The 2016 Master Plan EIR found that best management and good housekeeping practices would be sufficient to prevent nuisance odors. Therefore, potential odor impacts of the 2012 Master Plan would be less than significant.

### **2022 Master Plan**

#### *Construction*

The 2022 Master Plan would include the same construction activities as the 2012 Master Plan and would not create or introduce objectionable odors affecting a substantial number of people. Therefore, impacts related to construction odors would be the same as those of the 2012 Master Plan; impacts would be less than significant.

#### *Operation*

The 2022 Master Plan would include generally the same operational uses as the 2012 Master Plan and would not create or introduce objectionable odors affecting a substantial number of people. Therefore, impacts related to operational odors would be the same as those of the 2012 Master Plan; impacts would be less than significant.

#### *Conclusion*

The 2022 Master Plan would have similar emissions, including odor emissions, as compared to the 2012 Master Plan and impacts would continue to be less than significant.

## **D. BIOLOGICAL RESOURCES**

The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts to biological resources than analyzed in the 2016 Master Plan FEIR was evaluated in relation to six questions recommended for consideration by the State California Environmental Quality Act Guidelines.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (USFWS)?		
(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		
(c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		
(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?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

The Medical Center Campus is located in a highly urbanized area surrounded by residential uses and commercial development. The Medical Center Campus contains several landscaped courtyards with mature specimen trees, but landscaping is generally sparse. The Campus does not contain native trees that are regulated by the County, nor are other candidate, sensitive plant, or special-status plant species present on site. Mature trees on the Campus may serve as habitat for migratory birds, which are not considered sensitive species but are regulated under the federal Migratory Bird Treaty Act.

The Medical Center Campus does not contain any riparian habitat, coastal sage scrub, oak woodlands, wetlands, or other sensitive natural communities as indicated by the County or in regulations by CDFW or U.S. Fish and Wildlife Service (USFWS). The Campus is not within a Significant Ecological Area (SEA) or coastal resource area.

The Campus and the surrounding area do not act as a migratory corridor or support resident terrestrial wildlife movement, as the completely urban area extends for miles. No aquatic habitat is present on or adjacent to the Medical Center Campus to support fish species. The highly developed conditions of the Campus and surrounding area preclude its use as a native wildlife nursery site. The Medical Center Campus contains ornamental trees, several of which are mature. These mature trees could potentially provide nesting sites for migratory birds.

### *Construction and Operation*

The NOP/IS for the 2012 Master Plan found that the project would have less-than-significant impacts on candidate, sensitive, or special-status species because of absence of suitable habitat. Tree removal during construction could result in adverse impacts on potential habitat for migratory birds. These impacts would be reduced to less-than-significant levels with the implementation of Mitigation Measure BIO-1.

The NOP/IS for the 2012 Master Plan project found that the project would have no impacts related to wetlands, riparian habitats or other sensitive natural communities identified in local or regional plans, policies, or regulations or by CDFW or USFWS during construction or operation.

The NOP/IS for the 2012 Master Plan found that the project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species or use of any native wildlife nursery site, but that the removal of on-site mature trees during construction could result in a potentially significant impact on migratory birds that may be nesting in these trees; Mitigation Measure BIO-1 would address this impact resulting in less than significant impacts.

## 2022 Master Plan

### *Construction and Operation*

The 2022 Master Plan is on the same site as the 2012 Master Plan. There is no new suitable habitat for candidate, sensitive, or special-status species since the 2016 Master Plan EIR. Therefore, impacts of the 2022 Master Plan on candidate, sensitive, or special-status species would be the same as the 2012 Master Plan impacts, less than significant, because of lack of suitable habitat. The 2022 Master Plan would have similar impacts on migratory birds due to the removal of on-site trees. Mitigation Measure BIO-1, would continue to apply to the 2022 Master Plan. Therefore, there would be no change in the impacts related to migratory birds; impacts would continue to be less than significant with implementation of mitigation.

Since the 2016 Master Plan EIR was certified, no wetlands, riparian habitat, or other sensitive natural community has been established on the site or in the vicinity of the site. The 2022 Master Plan would have no impacts related to riparian habitats or other sensitive natural communities identified in local or regional plans, policies, or regulations or by CDFW or USFWS during construction or operation.

### *Conclusion*

Impacts to biological resources would be the same for the 2022 Master Plan as evaluated for the 2012 Master Plan in the 2016 Master Plan FEIR.

(e) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

The Medical Center Campus and the surrounding area are completely developed and urbanized. No locally protected biological resources, such as Wildflower Reserve Areas, SEAs, sensitive environmental resource areas, or oak trees protected under the Oak Tree Permits (Chapter 22.56 – Part 16) of the County Municipal Code, exist on site. The 2012 Master Plan would incorporate a landscape plan, which would include the planting of various species of trees (evergreen/semi- evergreens, palm trees, and flowering deciduous trees) and other ornamental plantings, including shrubs, turf, and groundcover, in courtyards, gardens, and other open space features. Therefore, the NOP/IS found that the 2012 Master Plan would not conflict with local policies or ordinances protecting biological resources during construction or operation.

## 2022 Master Plan

### *Construction and Operation*

No land use changes have occurred on the Medical Center Campus or the surrounding area. No locally protected biological resources exist on site. The landscape plan incorporated into the 2022 Master Plan would be essentially the same as under the 2012 Master Plan. Therefore, like the 2012 Master Plan, the 2022 Master Plan would not conflict with local policies or ordinances protecting biological resources during construction or operation.

### *Conclusion*

Impacts related to local policies or ordinances protecting biological resources would be the same for the 2022 Master Plan as evaluated for the 2012 Master Plan in the 2016 Master Plan FEIR.

(f) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

The Medical Center Campus and its surroundings are not in or near an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. (The nearest ones are in Rancho Palos

Verdes and Orange County.<sup>4</sup>) Therefore, the NOP/IS found that implementation of the 2012 Master Plan would not conflict with any such plans and no impacts would occur during construction or operation.

## 2022 Master Plan

### *Construction and Operation*

No Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan has been adopted covering the Medical Center or adjacent areas. Therefore, the 2022 Master Plan would not conflict with any such plans and no impacts would occur during construction or operation, the same as for the 2012 Master Plan.

### *Conclusion*

Impacts related to adopted habitat plans and natural community conservation plans would be the same for the 2022 Master Plan as evaluated for the 2012 Master Plan in the 2016 Master Plan FEIR.

## E. CULTURAL RESOURCES

The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts to cultural resources was evaluated in relation to the 2016 Master Plan FEIR, required mitigation measures and three questions recommended for consideration by the State CEQA Guidelines. The 2016 Master Plan FEIR did not separately address Tribal Cultural Resources (TCRs); TCRs are part of the evaluation of archeological resources.

(a) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to causing a substantial adverse change in the significance of a historical resource as defined in §15064.5?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

For the 2016 Master Plan FEIR, a comprehensive Historic Resource Report was prepared for the entire Medical Center Campus. The Medical Center Campus was initially founded and developed in 1943 by the U.S. Army to house the Los Angeles Port of Embarkation Station Hospital. Between 1943 and 1946, the property was developed with a central administrative facility and 77 wood-framed barracks buildings that housed 600 patient beds and patient services. At the end of the war in 1946, the property was sold to Los Angeles County. In 1947,

<sup>4</sup> California Department of Fish and Wildlife. 2019. California Natural Community Conservation Plans. April.

the County converted the existing facilities into the Los Angeles County Harbor General Hospital.

The Historic Resource Report defined the period of significance for the Medical Center Campus as 1943 to 1946, when it was used by the U.S. military. A total of 42 buildings of the original 77 remain on the Campus at the time of the report, primarily in the central portion of the property. The property as a whole was evaluated as a potential historic district and resources were evaluated for individual eligibility. At that time of the report, the Campus had not been evaluated or identified as significant, nor was it designated as a landmark at the national, state, or local levels.

The Historic Resource Report concluded that the property is significant in the context of World War II military history in Los Angeles. However, the property is lacking in integrity—the ability to convey its significance—because there are not enough buildings remaining from the period of significance; the remaining buildings have been altered to the point that they no longer contribute to an historic district; and enough new buildings have been added that the property no longer represents an intact historic environment. With respect to the individual eligibility of buildings, while some buildings retain integrity from the period of significance, they do not effectively convey the history or significance of the Station Hospital on their own.

As such, the property is not eligible for listing in the National Register of Historic Places or the California Register of Historical Resources as a historic district, and none of the buildings are individually eligible for listing in the National or California Registers.

#### *Construction and Operation*

Although construction of the 2012 Master Plan would remove all the buildings dating from the historical period of significance, based on the Historic Resource Report, the NOP/IS found that the removal of the buildings would result in less-than-significant impacts on historic resources.

### **2022 Master Plan**

#### *Construction and Operation*

The conditions relative to the significance of historical resources on the Campus have not changed since certification of the 2016 Master Plan FEIR. The 2022 Master Plan would remove the same buildings as the 2012 Master Plan, which the NOP/IS found would result in a less-than-significant impact on historic resources. Therefore, the 2022 Master Plan would have the same less-than-significant impact.

#### *Conclusion*

Impacts to historical resources would be the same for the 2022 Master Plan as evaluated for the 2012 Master Plan in the 2016 Master Plan FEIR.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		
(c) Disturb any human remains, including those interred outside of formal cemeteries?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

The Medical Center Campus is within a highly urbanized area and has been subject to physical disruption over the course of several decades since it was first developed in 1943. For this reason, it is likely that any resources that may have been present on the property have been disturbed or removed. Nonetheless, previously undiscovered buried archaeological resources could still exist on the property. No known traditional burial sites or cemeteries have been identified on the property.

### *Construction and Operation*

Construction of the project would require grading, excavation, and trenching into native soils. The NOP/IS found that this could result in direct impacts on undiscovered resources, which could be a significant impact. The NOP/IS identified three mitigation measures (CULT-1, CULT-2 and CULT-3) that would ensure that impacts on any previously un unknown archaeological resources (including Tribal Cultural Resources) discovered during construction would be less than significant.

While uncovering human remains is not anticipated during construction of the 2012 Master Plan, the NOP/IS found that compliance with state law (i.e., PRC Section 5097.98, State Health and Safety Code Section 7050.5, and CCR Section 15064.5(e)) would ensure potential impacts during construction would be less-than-significant.

## 2022 Master Plan

### *Construction and Operation*

The 2022 Master Plan would include the same type of ground-disturbing activities as the 2012 Master Plan, although the exact location and extent may vary. As for the 2012 Master Plan, the possible presence of unknown archaeological resources would result in the same potential for significant impacts to archaeological resources (including Tribal Cultural Resources) and would be subject to the same mitigation measures, CULT-1, CULT-2, and CULT-3, which would reduce these impacts to a less- than-significant level, the same as for the 2012 Master Plan.

Compliance with the same state laws described for the 2012 Master Plan would be required and would ensure the same less-than- significant impacts as the 2012 Master Plan.

*Conclusion*

Impacts to archeological resources (including Tribal Cultural Resources) would be the same for the 2022 Master Plan as evaluated for the 2012 Master Plan in the 2016 Master Plan FEIR.

**F. ENERGY**

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?		
(b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2012 Master Plan**

*Construction*

The 2016 Master Plan FEIR found that impacts regarding the wasteful, inefficient, and unnecessary consumption of energy during construction would be less than significant for the 2012 Master Plan.

Construction would utilize energy for necessary on-site activities and to transport buildings materials, soil, and debris to and from the Medical Center Campus. The amount of energy used would not represent a substantial fraction of the available energy supply in terms of equipment and transportation fuels. Furthermore, compliance with the anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful and unnecessary consumption of energy. The 2012 Master Plan would also meet or exceed the County’s waste diversion targets as specified in PDF AQ-1. Idling restrictions, the use of newer engines and equipment, and diverting waste would result in less fuel combustion and energy consumption. The 2012 Master Plan would also utilize newer equipment that meets stringent emissions standards and provide opportunities for future energy efficiency by using electric or alternatively fueled equipment as available and feasible. Therefore, the 2016 Master Plan FEIR found that construction of the 2012 Master Plan would not result in the wasteful, inefficient, and unnecessary consumption of energy and would not preempt future energy conservation. As a result, impacts related to construction energy use for the 2012 Master Plan would be less than significant.

The 2012 Master Plan that construction contractors to demonstrate compliance with applicable CARB regulations governing the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. Therefore, the 2012 Master Plan would meet or exceed the required level of waste recycling and reuse rate for construction and demolition debris.

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## Operation

Operation of the 2012 Master Plan would use energy for necessary on-site activities and off-site transportation associated with Medical Center Campus employees, patients, and visitors traveling to and from the site. The 2016 Master Plan EIR found that the amount of energy used would not represent a substantial fraction of the available energy supply in terms of equipment and transportation fuels. Furthermore, the 2012 Master Plan would meet or exceed energy standards by incorporating green building measures consistent with County policy that requires LEED Silver-level certification and the County's Community Climate Action Plan (CCAP). Overall, the 2012 Master Plan would replace aging facilities and infrastructure with new ones providing considerably higher efficiency in terms of energy and water demands; as such, while the 2012 Master Plan would increase the overall intensity of land uses on the Medical Center Campus, it would use less energy per square foot of development compared to existing conditions. The 2012 Master Plan would also provide opportunities for future energy efficiency by promoting solar power and electric or alternatively fueled vehicles. Therefore, the 2016 Master Plan FEIR found that operation of the 2012 Master Plan would not result in the wasteful, inefficient, and unnecessary consumption of energy and would not preempt future energy conservation. As a result, impacts would be less than significant.

The California Green Building Standards Code (CALGreen Code) establishes mandatory measures for new residential and non-residential buildings, which includes requirements for energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The 2012 Master Plan would comply with or exceed the applicable provisions of the Title 24 Building Standards Code and the California Green Building Standards in effect at the time of building permit issuance.

## 2022 Master Plan

### Construction

The 2022 Master Plan would use the same construction method as the 2012 Master Plan, though the energy usage would be slightly lower due to the smaller size of the project. As with the 2012 Master Plan, the amount of energy used for the 2022 Master Plan construction would not represent a substantial fraction of the available energy supply in terms of equipment and transportation fuels. The 2022 Master Plan would now be required to comply with LEED Gold certification standards. The 2022 Master Plan would also comply with the anti-idling and emissions regulations, which would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful and unnecessary consumption of energy. Like the 2012 Master Plan, the 2022 Master Plan would meet or exceed the County's waste diversion targets as specified in PDF AQ-1. The 2022 Master Plan would also utilize even newer equipment that meets more and more stringent emissions standards year by year and provide opportunities for future energy efficiency by using electric or alternatively fueled equipment as available and feasible. Therefore, as with the 2012 Master Plan, the 2022 Master Plan would not result in the wasteful, inefficient, and unnecessary consumption of energy and would not preempt future energy conservation. As a result, impacts related to construction energy use with the 2022 Master Plan would be the same or less than those of the 2012 Master Plan and would be less than significant.

The 2022 Master Plan would also use construction contractors who demonstrate compliance with applicable CARB regulations governing the accelerated retrofitting, repowering, or

replacement of heavy-duty diesel on- and off-road equipment. Therefore, the 2022 Master Plan would also meet or exceed the required level of waste recycling and reuse rate for construction and demolition debris.

### *Operation*

Operation of the 2022 Master Plan would utilize energy in the same way as the 2012 Master Plan, for necessary on-site activities and off-site transportation associated with Medical Center Campus employees, patients, and visitors traveling to and from the site. Just as with the 2012 Master Plan, the amount of energy used would not represent a substantial fraction of the available energy supply in terms of equipment and transportation fuels. The 2022 Master Plan would also meet or exceed energy standards by incorporating green building measures consistent with the County's CCAP; buildings would now be required to meet LEED Gold-level standards. Overall, the 2022 Master Plan would replace the same aging facilities and infrastructure with new ones providing considerably higher efficiency in terms of energy and water demands. The 2022 Master Plan would increase the overall intensity of land uses on the Medical Center Campus (to a slightly lesser extent than the 2012 Master Plan) but would use less energy per square foot of development compared to existing conditions. In fact, with the consolidation of buildings, such as one single outpatient/ support building, the 2022 Master Plan would be even more energy efficient than the 2012 Master Plan. The 2022 Master Plan would also provide opportunities for future energy efficiency by promoting solar power and electric or alternatively fueled vehicles. Therefore, operation of the 2022 Master Plan would not result in the wasteful, inefficient, and unnecessary consumption of energy and would not preempt future energy conservation. As a result, impacts would be the same as those of the 2012 Master Plan, less than significant.

The 2022 Master Plan would also comply with the mandatory measures for new non-residential buildings. The 2022 Master Plan would also meet or exceed the applicable provisions of Title 24 and the California Green Building Standards in effect at the time of the building permit issuance.

### *Conclusion*

Impacts to energy consumption, renewable energy and energy efficiency would be similar for the 2022 Master Plan as evaluated for the 2012 Master Plan in the 2016 Master Plan FEIR.

## **G. GEOLOGY AND SOILS**

Impacts with respect to geology and soils of the currently proposed 2022 Master Plan were evaluated with regard to the 2016 Master Plan FEIR and required mitigation measures. The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts to geology and soils was evaluated in relation to six questions recommended for consideration by the State CEQA Guidelines.

In 2015, the California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)*, held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of a project. However, if a project exacerbates a condition in the existing environment, the lead agency is required to analyze the impact of that exacerbated condition on the environment, which may include future residents and users within the Project Area. Analysis of the Appendix G questions takes in to account the decision from *CBIA v. BAAQMD*.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:

- (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.
  - ii) Strong seismic ground shaking?
  - iii) Seismic-related ground failure, including liquefaction?
  - iv) Landslides?
- (b) Result in substantial soil erosion or the loss of topsoil?
- (c) Being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed 2022 Master Plan, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
- (d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?
- (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 wastewater?
- (f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

#### Seismic Hazards

The 2016 Master Plan FEIR indicates that the Medical Center Campus is not transected by any known active fault or potentially active faults. The active Newport-Inglewood fault is approximately 3.4 miles northeast and the active Palos Verdes fault is approximately 3.7 miles southwest of the estimated center of the Medical Center Campus. The Campus is not within a designated Alquist-Priolo Earthquake Fault Zone. Therefore, the 2016 Master Plan FEIR found that the potential for surface rupture at the site is relatively low and is considered less than significant. However, lurching or cracking of the ground surface and ground shaking as a result of nearby seismic events is possible. The 2016 Master Plan FEIR found that this type of ground rupture and ground shaking is a potentially significant impact for the 2012 Master Plan. The 2016 Master Plan FEIR included mitigation measures to address one or more seismic hazards. Mitigation Measure GEO-1, would reduce impacts related to seismic hazards for the 2012 Master Plan to less-than-significant levels.

The 2016 Master Plan FEIR found that the Medical Center Campus is not in an area susceptible to liquefaction. Historical high groundwater depths of 48 to 60 feet in the Campus vicinity limit the potential for liquefaction that could adversely affect the buildings and structures proposed in

the 2012 Master Plan. However, the site could be subject to seismically induced soil settlement, which could have a significant impact on people and proposed buildings on the Medical Center Campus. Mitigation Measure GEO- 1 would reduce the potential settlement impact for the 2012 Master Plan to less-than-significant levels.

The Campus includes some graded slopes associated with landscaping, the tallest being an approximately 25-foot slope toward the existing Hospital Tower, with a drainage system at the base of the slope. There are no historical landslides on the site. The potential for future landslides or mudflows to affect the 2012 Master Plan development is not expected. Slopes created as part of the 2012 Master Plan would be designed to reduce the potential for landslides and mudflows. Therefore, the 2016 Master Plan FEIR found that impacts related to landslides and mudflows for the 2012 Master Plan would be less than significant.

### Soil Erosion

The 2016 Master Plan FEIR found that compliance with the County's National Pollutant Discharge Elimination System (NPDES) through implementation of a Storm Water Pollution Prevention Plan (SWPPP) for erosion control would be required during construction of the 2012 Master Plan. Compliance with the County's Low-Impact Development (LID) ordinance would be required during operations of the 2012 Master Plan. Therefore, impacts related to soil erosion and loss of soil would be less than significant.

BMPs related to ongoing drainage design and maintenance practices would be included in the SWPPP and implemented to reduce soil erosion during operation of the 2012 Master Plan. Soil erosion during operation would also be addressed through design procedures such as appropriate surface drainage design of roadways and facilities to provide for positive surface runoff. These design procedures would address reducing concentrated runoff conditions that could cause erosion and affect the stability of the 2012 Master Plan improvements.

Additionally, buildout of the 2012 Master Plan would increase the amount of pervious area on the Campus. However, the 2012 Master Plan would be built out in compliance with the County's LID ordinance, which requires new development to include features and practices that provide physical, biological, and chemical controls that remove pollutants from stormwater runoff generated on a project site. Compliance with County LID requirements would prevent erosion of soil on the Campus. Accordingly, the 2016 Master Plan EIR found that following buildout, operational impacts related to erosion of on-site soil would be less than significant.

### Soil Conditions

Historical subsidence is not known to have occurred on the Medical Center Campus and it does not lie within a mapped subsidence area according to the County of Los Angeles General Plan Safety Element. Therefore, the potential for subsidence on the Campus is relatively low and less-than-significant impact. Soils on the Medical Center Campus may be potentially compressible or collapsible resulting in the potential for differential settlement, which could cause damage to 2012 Master Plan improvements. Also, construction activities could encounter perched groundwater that could impact building foundations. Therefore, the 2016 Master Plan FEIR found that compressible/collapsible soils and/or saturated soil conditions could result in a potentially significant impact and required Mitigation Measure GEO-2 to reduce potential impacts of unstable and saturated soils on the site to a less-than-significant level.

The 2016 Master Plan FEIR found that buildout of the 2012 Master Plan could result in potentially significant impacts related to expansive and corrosive soils. The near-surface soils are generally clayey and sandy silt soils. Clayey soils are typically expansive when wetted and could have an adverse effect on buildings proposed in the 2012 Master Plan. The site is in a geologic environment that could potentially contain soil conditions that are corrosive to concrete and metal, which could cause premature deterioration of underground structures or foundations. The 2016 Master Plan FEIR found that the presence of these soil types would result in a potentially significant impact for the 2012 Master Plan that would be reduced to a less than significant level by Mitigation Measure GEO-3.

### Use of Septic Tanks

The Medical Center Campus is in an urbanized area with wastewater infrastructure already in place. The 2012 Master Plan would connect to existing off-site infrastructure and would not use septic tanks or alternative wastewater disposal systems. Therefore, the NOP/IS found that no impact would occur.

### Paleontological Resources

The Medical Center Campus has been fully developed for decades; there are no unique geological features on the site. The NOP/IS for the 2012 Master Plan found that it is likely that any paleontological resources once present on the property have been disturbed or removed. Nonetheless, previously undiscovered buried resources could still exist on the property and grading, excavation, and trenching into native soils could encounter undiscovered paleontological resources. Therefore, the NOP/IS found that construction may result in a potentially significant impact on paleontological resources. Mitigation Measure CULT-4<sup>5</sup> will reduce the potential impacts on paleontological resources resulting from construction to a less-than-significant level.

## **2022 Master Plan**

### *Construction and Operation*

#### Seismic Hazards and Soil Conditions

Potential impacts related to ground rupture, earth shaking and liquifiable or unstable soils are impacts of the environment on the project; the project would not exacerbate this impact. Mitigation Measures GEO-1, GEO-2 and GEO-3 would continue to be implemented – they are generally required by existing regulations.

The 2022 Master Plan would include slopes designed to reduce the potential for landslides and mudflows. Therefore, the impacts related to landslides and mudflows for the 2022 Master Plan would be less than significant, the same as for the 2012 Master Plan.

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<sup>5</sup> This mitigation measure from the NOP/IS is titled “CULT-4” because at the time of the 2016 Master Plan FEIR, paleontology was discussed in the Cultural Resources section, rather than in the Geology and Soils section.

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### Soil Erosion

The 2022 Master Plan would be required to comply with the County NPDES permit and implement the SWPPP for erosion control. It would also implement BMPs to address water- and wind-related erosion and would include relatively gentle slopes. Therefore, like the 2012 Master Plan, potential soil erosion impacts during construction would be less than significant. BMPs related to ongoing drainage design and maintenance practices would also be included in the SWPPP and implemented to reduce soil erosion during operation of the 2022 Master Plan. The design of the 2022 Master Plan would also address soil erosion through design procedures such as appropriate surface drainage design of roadways and facilities to provide for positive surface runoff, the same as included in the 2012 Master Plan. It would also comply with the County's LID ordinance. Therefore, impacts would be the same as those of the 2012 Master Plan; impacts related to soil erosion and loss of soil would be less than significant.

### Use of Septic Tanks

As for the 2012 Master Plan the 2022 Master Plan would connect to the existing sewer system and would have no impact related to septic tanks and alternative waste disposal systems.

### Paleontological Resources

Construction of the 2022 Master Plan could result in similar potentially significant impacts on paleontological resources and would be subject to the same mitigation measure (CULT-4), which would reduce these impacts to a less-than-significant level.

### *Conclusion*

Impacts related to seismic activity, soil conditions, slopes and erosion would be similar for the 2022 Master Plan as evaluated for the 2012 Master Plan in the 2016 Master Plan FEIR.

## **H. GREENHOUSE GAS EMISSIONS**

Greenhouse gas emissions associated with the currently proposed 2022 Master Plan were evaluated based on a review of the 2016 Master Plan FEIR. The potential for the currently proposed 2022 Master Plan to result in new significant impacts related to greenhouse gas emissions was evaluated in relation to two questions recommended for consideration by the State CEQA Guidelines.

There are no adopted CEQA thresholds for greenhouse gas (GHG) emissions as of the time of the 2016 Master Plan FEIR or this analysis. Under CEQA, project evaluation of GHG emissions can "tier off" a programmatic analysis of GHG emissions, such as Los Angeles County's CCAP, which meets the State CEQA Guidelines Section 15183.5 requirements for a qualifying programmatic analysis. The County has also adopted Title 31 of the County's Code of Ordinances (the Los Angeles County Green Building Code), which adopts by reference the CALGreen Code except as modified by Title 31. In addition, the County of Los Angeles General Plan provides recommendations for emission reduction strategies for GHG emissions. As such, if a project is designed in accordance with these policies and regulations, it would result in a less-than-significant impact, because it would be consistent with the overarching local and regional plans and regulations for reducing GHG emissions.

Does the proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?		
(b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

The 2016 Master Plan FEIR found that 2012 Master Plan construction GHG emissions would be consistent with all of the CCAP GHG reduction strategies applicable to the project. As a result, the 2016 Master Plan FEIR found that the 2012 Master Plan would be consistent with applicable measures and would therefore not conflict with achievement of the County’s GHG emissions reduction target. The 2012 Master Plan was required to comply with the portions of the County’s Green Building Standards applicable to health care facilities. It would incorporate PDF AQ-1 in a manner to achieve USGBC (LEED) Silver Certification or the equivalent.

The net annual operational emissions from the 2012 Master Plan were calculated to be approximately 0.09 percent of the County’s total estimated GHG emissions target for 2020 of 6,440 metric tons carbon dioxide equivalent (MTCO<sub>2e</sub>) compared to 7,104,621 MTCO<sub>2e</sub> for the County. Based on the 2016 Master Plan FEIR’s conservatively estimated GHG emissions, the 2012 Master Plan would result in a net increase in GHG emissions from 2010 levels, but the potential increase is extremely small compared to the County’s total inventory. The 2012 Master Plan would be consistent with applicable CCAP measures, which would minimize the increase in GHG emissions that would otherwise occur without implementation of the various sustainability, energy efficiency, water efficiency, solid waste, and transportation reduction measures and would not be expected to conflict with the County’s ability to achieve the CCAP target reduction.

The 2012 Master Plan FEIR found that construction of the 2012 Master Plan would not conflict with the applicable GHG emissions reduction plans, policies, or regulations listed below. In addition, incorporation of PDF AQ-1, Green Building Measures, would achieve the equivalent of LEED Silver Certification and PDF AQ-2, Construction Measures, described in Section 3.3.3, would reduce project-related GHG emissions.

- CALGreen Code Requirements
- Assembly Bill (AB) 1493 (Pavley Regulations)
- California Executive Order S-3-05 (codified in the 2006 Global Warming Solutions Act, AB 32)
- California Executive Order B-30-15 setting GHG emissions target for 2030 to 40 percent of 1990 levels

- Senate Bill 1368, Emission Performance Standards
- Los Angeles County's Green Building Ordinance
- California Low Carbon Fuel Standard
- Los Angeles County LID Standards
- Los Angeles County CCAP

Because the 2012 Master Plan, including the PDFs, would not conflict with any applicable plan, policy, or regulation to reduce GHG emissions, the 2016 Master Plan FEIR found that the project would result in less- than-significant impacts with respect to GHG emissions.

## 2022 Master Plan

### *Construction and Operation*

The 2022 Master Plan construction GHG emissions would be reduced as compared to the 2012 Master Plan as a result of less new construction and would be consistent with all of the CCAP GHG reduction strategies applicable to the project. As a result, the 2022 Master Plan would also be consistent with applicable measures and would therefore not conflict with achievement of the County's GHG emissions reduction target.

The net annual operational emissions from the 2022 Master Plan similarly would be less than under the 2012 Master Plan due to the reduction in building areas. Like the 2012 Master Plan, the 2022 Master Plan would be consistent with applicable CCAP measures, which would minimize the increase in GHG emissions that would otherwise occur without implementation of the various sustainability, energy efficiency, water efficiency, solid waste, and transportation reduction measures. Rather than LEED Silver for the 2012 Master Plan, the 2022 Master Plan would be designed to LEED Gold standards. Therefore, the 2022 Master Plan would not be expected to conflict with the County's ability to achieve the CCAP target reduction and would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. The 2022 Master Plan would incorporate the same PDFs as the 2012 Master Plan, which would serve to reduce project related GHG emissions.

### *Conclusion*

Impacts related to GHG emissions would be less for the 2022 Master Plan as compared to those for the 2012 Master Plan as identified in the 2016 Master Plan FEIR.

## **I. HAZARDS AND HAZARDOUS MATERIALS**

Hazards and hazardous materials of the currently proposed 2022 Master Plan were evaluated based on a review of the 2016 Master Plan FEIR. The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts related to hazards and hazardous materials was evaluated in relation to seven questions recommended for consideration by the State CEQA Guidelines.

Hazardous waste can pose a potential or substantial hazard to human health or the environment when improperly managed. Designated hazardous waste possesses at least one of four defined characteristics—ignitability, corrosivity, reactivity, or toxicity—or appears on special U.S. Environmental Protection Agency lists.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(a) Creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		
(b) Creating 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?		
(c) Emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		
(d) Being 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?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### Construction

The 2016 Master Plan FEIR found that construction of the 2012 Master Plan would involve the demolition of existing buildings, grading, and excavation, which could result in the potential release of hazardous materials into the environment. This could occur during removal and/or remediation of existing on-site underground storage tanks (USTs), above-ground storage tanks (ASTs), polychlorinated biphenyls (PCBs), asbestos-containing materials (ACMs), and lead-based paint (LBP), or the disturbance of on-site soil that may be contaminated by past USTs on the Medical Center Campus or underlying groundwater that may be contaminated by nearby off-site leaking underground storage tanks (LUSTs). These represent potential environmental concerns on the Medical Center Campus. Remediation of these materials would be conducted by qualified professionals in accordance with regulations governing these activities, including SCAQMD's Rule 1403 (ACMs); California Occupational Health and Safety Administration rules (LBP); the federal Toxic Substances Control Act (PCBs); and for USTs, Resource Conservation and Recovery Act (RCRA) Subtitle I, the State Health and Safety Code, and enforcement of the State's applicable CCR. Nonetheless, construction-related activities have the potential to result in accidental upset and release of hazardous materials into the environment, which the 2016 Master Plan EIR found to be a potentially significant impact for the 2012 Master Plan. The 2016 Master Plan FEIR also found that Mitigation Measures HAZ-1 and HAZ-2, would reduce these impacts to a less-than-significant level.

Should construction activities encounter hazardous materials in on-site soil and/or groundwater, if released into the environment, these materials could pose a significant hazard to construction workers or the public. Remediation of these materials would be conducted by qualified professionals in accordance with regulations governing these activities. Nonetheless, construction-related activities have the potential to result in accidental upset and release of hazardous materials into the environment, which the 2016 Master Plan FEIR found to be a potentially significant impact for the 2012 Master Plan. The 2016 Master Plan FEIR found that Mitigation Measures HAZ-1 and HAZ-2, would reduce these impacts to a less-than-significant level.

There are 11 public schools within a 3-mile radius of the Medical Center Campus, but no public or private schools within 0.25 mile. The Harbor-UCLA Medical Center Employee Children's Center is located along the north side of Carson Street approximately 200 feet north of the Medical Center Campus. Because 2012 Master Plan construction activities would have a limited potential to result in the incidental release of existing sources of contamination, and thus affect children and staff at the facility, the 2016 Master Plan FEIR found that impacts on the existing childcare facility would be considered potentially significant but that implementation of Mitigation Measures HAZ-1 and HAZ-2, would reduce these impacts to less-than-significant levels.

The Medical Center Campus is listed on several environmental databases due to inconclusive documentation regarding proper remediation and site closure following 1994 removal of five on-site USTs, as well as the presence of Large and Small Quantity Generators of hazardous waste on the Campus. Four adjacent off-site properties to the east were also listed due to the potential for LUST petroleum hydrocarbon contamination of underlying groundwater. Mitigation Measures HAZ-1 and HAZ-2 would reduce any impacts related to these sites to a less-than-significant level.

#### *Operation*

Operation of the 2012 Master Plan would require the routine storage, use, and disposal of limited quantities of hazardous materials and waste routinely used in hospitals and related facilities, in a manner consistent with manufacturers' recommendations and applicable regulatory requirements. Improper handling could expose employees, patients, visitors, and the general public to these hazardous materials. The 2016 Master Plan FEIR found that the potential for upset and accident conditions resulting in the release of these materials is low and related impacts are considered less than significant.

### **2022 Master Plan**

#### *Construction*

The 2022 Master Plan would use the same construction methods as the 2012 Master Plan. Therefore, demolition, grading, and excavation would result in the same potential impacts related to accidental upset and release of hazardous materials into the environment. For the 2022 Master Plan, these impacts would be potentially significant, the same as for the 2012 Master Plan. The 2022 Master Plan would continue to be required to implement Mitigation Measures HAZ-1 and HAZ-2, which would reduce impacts to less-than-significant levels, just as they would for the 2012 Master Plan.

#### *Operation*

Similar to the 2012 Master Plan, operation of the 2022 Master Plan would require the storage, use, and disposal of limited quantities of hazardous materials and waste routinely used in hospitals and related facilities. The potential for upset and accident conditions resulting in the release of these materials is low and related impacts are considered less than significant for the 2022 Master Plan, the same as for the 2012 Master Plan.

*Conclusion*

Impacts related to hazardous materials management, upsets and accidents, hazardous materials near schools and hazardous sites would be similar for the 2022 Master Plan as compared to those for the 2012 Master Plan as identified in the 2016 Master Plan FEIR.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(e) Being located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the Project Area?		
(f) Impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan?		
(g) Exposing people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2012 Master Plan**

*Construction and Operation*

The Medical Center Campus is not within an airport land use plan; the nearest public airports are between 4 and 11 miles away. The 2012 Master Plan proposed relocation of the existing helistop during construction to a temporary (two potential locations) and, ultimately, permanent location on the Medical Center Campus. The 2016 Master Plan FEIR found that helistop operations during construction and following buildout would not differ substantively from existing helistop operations in terms of the number of flights, composition of the helicopter fleet, or proposed flight paths. Therefore, the 2016 Master Plan FEIR found that 2012 Master Plan–related safety hazards due to airport or helistop operations would be less than significant.

The 2016 Master Plan FEIR found that there are no current or anticipated future conditions on the Medical Center Campus that would impair implementation of any existing emergency response plans or evacuation plans. The presence of potential and recognized environmental conditions such as PCBs, ACMs, and LBP in on-site buildings and the removal of ASTs and USTs and any associated soil or groundwater contamination would be adequately addressed through required compliance with regulations governing public health and safety. The 2012 Master Plan would not require the use of hazardous materials for construction, other than such materials as paint, surface coatings, and other materials during building finishing activities. The 2012 Master Plan would implement on-site provisions for public safety, including plans to address on-site emergency incidents.

Implementation of the 2012 Master Plan would not adversely affect existing emergency access routes. During construction, adjacent streets may be temporarily affected due to construction activity, such as temporary lane closures. Such occurrences would be implemented in accordance with a construction traffic management plan, as discussed below under Section Q

Transportation below. These 2012 Master Plan features, together with regulatory compliance, would avoid the need to generate new emergency plans beyond those that would normally be implemented to address on-site emergency situations during construction. The 2016 Master Plan FEIR found that they would avoid adverse impacts regarding the implementation of existing evacuation plans for the 2012 Master Plan.

With respect to 2012 Master Plan operations, the use and disposal of such hazardous materials as cleaning solvents, painting supplies, and pesticides, as well as medical waste and hazardous materials associated with biomedical operations, would take place in accordance with applicable federal, state, and local regulations governing health and safety. The 2016 Master Plan FEIR found that such activities are not anticipated to create a significant hazard to the public or environment and impacts would be less than significant. Implementation of the 2012 Master Plan would not adversely affect existing emergency access routes. Although Campus ingress and egress would be modified, vehicular access and circulation would avoid conflicts with traffic movements on local roadways and would facilitate the provision of on-site emergency services. The 2016 Master Plan FEIR found that the new 2012 Master Plan design would avoid adverse impacts regarding the implementation of existing evacuation plans.

## **2022 Master Plan**

### *Construction and Operation*

The nearest airports remain 4 and 11 miles away. The 2022 Master Plan's temporary helistop (Interim Helistop 2 in the 2016 Master Plan FEIR) and permanent helistop location would be very similar to the 2012 Master Plan locations. Project-related safety hazards due to airport or helistop operations would be the same as those of the 2012 Master Plan and would be less than significant.

The 2022 Master Plan would use the same construction methods on the same site as the 2012 Master Plan and the same regulations would continue to apply. As with the 2012 Master Plan, the 2022 Master Plan would implement on-site provisions for public safety, including plans to address on-site emergency incidents, and would not adversely affect existing emergency access routes. During construction, adjacent streets may be temporarily affected due to construction activity, such as temporary lane closures, as with the 2012 Master Plan. Such occurrences would be implemented in accordance with a construction traffic management plan, as discussed in Section Q Transportation below. Because the 2022 Master Plan would include the same safety features and regulatory compliance as the 2012 Master Plan, it also would avoid the need to generate new emergency plans beyond those that would normally be implemented to address on-site emergency situations during construction. Therefore, the 2022 Master Plan would avoid adverse impacts regarding the implementation of existing evacuation plans. Operation of the 2022 Master Plan would similarly comply with applicable regulations and would not be expected to create a significant hazard to the public or environment and impacts would be less than significant.

Implementation of the 2022 Master Plan would not adversely affect existing emergency access routes, just like the 2012 Master Plan. Although Campus ingress and egress would be modified, with slightly improved vehicular access and circulation than the 2012 Master Plan, it would avoid conflicts with traffic movements on local roadways and would facilitate the provision of on-site emergency services. Therefore, the 2022 Master Plan design would avoid adverse impacts

regarding the implementation of existing evacuation plans; impacts would be less than significant, the same as for the 2012 Master Plan.

*Conclusion*

Impacts related to airport safety and emergency response plans would be similar for the 2022 Master Plan as compared to those for the 2012 Master Plan as identified in the 2016 Master Plan FEIR.

The potential for wildland fires is discussed in Section T Wildfire below.

**J. HYDROLOGY AND WATER QUALITY**

Hydrology and water quality impacts of the currently proposed 2022 Master Plan were evaluated in relation to the 2016 Master Plan FEIR. The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts related to hydrology and water quality was evaluated in relation to five questions recommended for consideration by the State CEQA Guidelines.

In 2015, the California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District (CBIA v. BAAQMD)*, held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of a project. However, if a project exacerbates a condition in the existing environment, the lead agency is required to analyze the impact of that exacerbated condition on the environment, which may include future residents and users within the Project Area. Analysis of the Appendix G questions in this impact analysis will apply to the decision from *CBIA v. BAAQMD*. The following analysis recaps the 2016 Master Plan FEIR; potential impacts of the environment on a project are evaluated in light of the *CBIA v. BAAQMD* decision.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(a) Violation of any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		
(b) Substantially decreasing groundwater supplies or interfering substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2012 Master Plan**

The 2016 Master Plan EIR found that due to compliance with regulatory requirements governing stormwater management and water quality during construction and following buildout of the 2012 Master Plan components, impacts on water quality or related to waste discharge (i.e., construction dewatering) would be less than significant.

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## Construction

Construction activities would include the use of heavy equipment and construction-related chemicals, such as fuels, oils, grease, solvents, and paints, that would be stored in limited quantities on site. In the absence of proper controls, these construction activities could result in accidental spills or disposal of potentially harmful materials that could wash into and pollute surface waters or groundwater. During construction, the 2012 Master Plan would require ground-disturbing activities. These activities would expose soils for a limited time, allowing for possible erosion and sediments to enter into sheet flow runoff, which could enter the existing storm drain system untreated. Therefore, the 2016 Master Plan FEIR found that surface water quality could be temporarily affected by construction activities.

The 2012 Master Plan would be subject to existing regulations governing water quality. The project would require Construction General Permits for individual project components; NPDES requirements including implementation of a SWPPP with appropriate BMPs; and associated monitoring and reporting.

Compliance with the Construction General Permit, SWPPP, and NPDES requirements that require construction-phase BMPs is considered protective of water quality during construction and would, therefore, prevent a substantial violation of water quality standards and minimize the potential for contributing additional sources of polluted runoff during construction of the 2012 Master Plan. These existing regulations, programs, and policies would ensure that water- and wind-related erosion would be confined to the construction area and not transported off site, and therefore ensure construction activities would not degrade the surface water quality of receiving waters to levels below standards considered acceptable by the Los Angeles RWQCB and/or other regulatory agencies or affect the beneficial uses of receiving waters. Compliance with regulatory requirements would ensure that construction of 2012 Master Plan components would not result in the exceedance of water quality standards during construction, including total maximum daily load (TMDL) limits applicable to the Dominguez Channel (the receiving water for the Campus).

The potential for any spill or release of construction-related chemicals during 2012 Master Plan construction would be generally small because of the localized, short-term nature of the releases. The NPDES Construction General Permit and SWPPP also require measures regarding the handling of these types of materials and action protocols if a spill or release does occur. Therefore, the 2016 Master Plan FEIR found that potential soil erosion and sedimentation impacts during construction would be less than significant.

Based on the depths to groundwater within the within the Medical Center Campus (48 to 60 feet with historically high levels at 30 feet deep), construction dewatering is not anticipated to be required for the construction of the 2012 Master Plan. Should groundwater be encountered that would require dewatering, the County would require contractors for individual project components to apply for coverage from RWQCB and adhere to the monitoring and reporting. The 2016 Master Plan FEIR found that compliance with these regulatory requirements would ensure that dewatering activities would not result in the exceedance of water quality standards during construction of the 2012 Master Plan, including TMDL limits applicable to Dominguez Channel. Therefore, the 2016 Master Plan FEIR found that construction-related dewatering impacts would be less than significant.

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## Operation

During operation of the 2012 Master Plan, rainfall runoff from land and impervious surfaces would include pollutants of concern, including sediment, hydrocarbons, oil, grease, heavy metals, nutrients, herbicides, pesticides, fecal coliform bacteria, and trash. This runoff can flow directly into storm drains and continue through pipes until it is released, untreated, into the Dominguez Channel. Untreated stormwater runoff degrades water quality in surface waters and groundwater and can affect drinking water, human health, and plant and animal habitats.

By utilizing landscape in strategic ways, the 2012 Master Plan reduces dependency on natural resources by reducing water demands, capturing and cleaning stormwater runoff, and shading buildings to help reduce cooling demands. The 2012 Master Plan would increase the amount of pervious areas on the Campus, reducing the peak flow of stormwater runoff. In addition, the 2012 Master Plan would incorporate LID measures as a substantial element of the project, meeting the requirements of the County's Low-Impact Development Standards Manual.

Operation of 2012 Master Plan would require materials such as fuels or solvents to be stored on site, similar to existing conditions. The 2016 Master Plan FEIR found that this is not anticipated to be a source of polluted stormwater runoff or dry-weather runoff. As under existing conditions, the Campus would continue to adhere to all applicable regulations.

Accordingly, the 2016 Master Plan FEIR found that operation of the 2012 Master Plan would not result in a violation of any water quality standards or waste discharge requirements, would not create substantial additional sources of polluted runoff, and would not substantially degrade water quality, and impacts would be less than significant.

Under the 2012 Master Plan, water demand is projected to increase as the result of intensified use of facilities, increased number of employees and patients, and a greater amount of landscaping on the Campus. However, increased regional water demand is primarily a function of population growth, and as the 2012 Master Plan would not directly or indirectly result in substantial population growth in the area, it would not significantly increase demand for water supplies, including groundwater serving the Campus. Additionally, indoor fixtures would comply with applicable municipal code requirements related to reducing indoor water consumption through maximum flow rates for indoor water fixtures.

The Medical Center Campus receives its water supplies from California Water Service, which draws on a combination of local groundwater and water purchased from Metropolitan Water District. At buildout, the amount of pervious area on the Campus would be increased, which may incrementally increase recharge of the West Basin through infiltration based on the 2012 Master Plan's LID features implemented to reduce off-site discharge of stormwater and dry weather runoff. However, the increase in landscaped area on the Campus is expected to increase the need for irrigation over existing conditions, although much of the landscaping would be California native and drought-tolerant plants. The 2012 Master Plan would not involve any groundwater extraction or other activities that could result in direct withdrawal or depletion of groundwater supplies.

The 2016 Master Plan FEIR found that the 2012 Master Plan would not directly affect groundwater resources, and indirect demands on local groundwater supplies would not exceed available supplies. Therefore, it found that the impacts on groundwater resources related to the 2012 Master Plan would be less than significant.

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## 2022 Master Plan

### *Construction*

The 2022 Master Plan would use the same construction methods as the 2012 Master Plan and construction activities could result in accidental spills or disposal of potentially harmful materials that could wash into and pollute surface waters or groundwater. These activities would expose soils for a limited time, allowing for possible erosion and sediments to enter into sheet flow runoff, which could enter the existing storm drain system untreated. The 2022 Master Plan would be required to obtain the same permits as the 2012 Master Plan. Compliance with these permits and requirements would prevent a substantial violation of water quality standards and minimize the potential for contributing additional sources of polluted runoff during construction, just as it would for the 2012 Master Plan.

As with the 2012 Master Plan, the existing regulations, programs, and policies would ensure that water- and wind-related erosion from 2022 Master Plan construction would be confined to the construction area and not transported off site. They would therefore ensure construction activities would not degrade the surface water quality of receiving waters to levels below standards considered acceptable by the Los Angeles RWQCB and/or other regulatory agencies or affect the beneficial uses of receiving waters. This would also result in no exceedance of water quality standards during construction of the 2022 Master Plan, including TMDL limits applicable to the Dominguez Channel, in the same way as the 2012 Master Plan.

The potential for any spill or release of construction-related chemicals during construction of the 2022 Master Plan would be the same as under the 2012 Master Plan, that is, generally small because of the localized, short-term nature of the releases. The same NPDES Construction General Permit and SWPPP measures required for the 2012 Master Plan would ensure that these types of materials would prevent a spill or release from the 2022 Master Plan. Therefore, the potential soil erosion and sedimentation impacts during construction of the 2022 Master Plan would be less than significant, just like the 2016 Master Plan EIR found for the 2012 Master Plan.

As for the 2012 Master Plan, only temporary dewatering is anticipated for some building construction. The County would require contractors for individual project components to apply for coverage from RWQCB and adhere to the monitoring and reporting in the same way as under the 2012 Master Plan. Therefore, construction-related impacts related to dewatering, groundwater supplies and groundwater recharge would be the same as those of the 2012 Master Plan, less than significant.

### *Operation*

Operation of the 2022 Master Plan would be similar to conditions under the 2012 Master Plan. It would use the same landscaping strategies, reduce the amount of impervious surfaces (to a greater extent due to the expanded open space uses), incorporate LID measures, and adhere to the same regulations regarding runoff. Accordingly, operation of the 2022 Master Plan would not result in a violation of any water quality standards or waste discharge requirements, would not create substantial additional sources of polluted runoff, and would not substantially degrade water quality.

As with the 2012 Master Plan, the 2022 Master Plan would increase water demand compared to existing conditions due to the intensified use of facilities, increased number of employees and patients, and greater amount of landscaping on the Campus. The 2022 Master Plan would result in slightly less demand for indoor uses as compared to the 2012 Master Plan (due to a slightly smaller size of the project) and a similar water demand for outdoor uses. The same kind of code-compliant water fixtures and the same type of LID features would be included, and the same kind of drought-resistant and California native plants would be used for the 2022 Master Plan. As such, the 2022 Master Plan would increase groundwater recharge on the site and reduce off-site discharge of stormwater to an even greater extent. The 2022 Master Plan would not require any substantial additional withdrawal of groundwater to meet water demand directly on site, the same as described for the 2012 Master Plan. Impacts would be less than significant for 2022 Master Plan, just as they would be for the 2012 Master Plan.

*Conclusion*

Impacts related to water quality, waste discharge and groundwater would be similar for the 2022 Master Plan as compared to those for the 2012 Master Plan as identified in the 2016 Master Plan FEIR.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(c) Substantially altering 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?		
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?		
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		
(iv) impede or redirect flood flows?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2012 Master Plan**

*Construction and Operation*

The 2016 Master Plan FEIR found that the 2012 Master Plan would redevelop the already fully developed Medical Center Campus. Grading and excavation would be required for building foundations, which could affect drainage on the sites of specific components but would not substantially alter the existing drainage pattern of the site or result in substantial erosion or siltation. Standard construction-phase BMPs for compliance with NPDES requirements would decrease the potential for any significant erosion or sedimentation from soil disturbance associated with construction. Any potential impacts on water quality arising from erosion and sedimentation are expected to be localized and temporary. NPDES compliance would require contractors to implement measures to minimize and contain erosion and sedimentation. In

addition, an NPDES Construction General Permit would be required for any disturbance of more than an acre. The permit would require a SWPPP and compliance with County requirements to meet state water quality objectives. With the implementation of the SWPPP and the BMPs required to control erosion and sedimentation, the 2016 Master Plan FEIR found that construction-related erosion and sedimentation impacts resulting from soil disturbance would be less than significant.

The 2012 Master Plan would redevelop the already fully developed Medical Center Campus and would not substantially alter existing topography or affect the course of any streams or rivers. Neither construction nor operations would increase surface runoff in a manner that would result in flooding. Therefore, the 2016 Master Plan FEIR found that impacts on existing drainage patterns of the 2012 Master Plan site would be less than significant.

The amount of landscaped area would increase following the 2012 Master Plan buildout over existing conditions. For each project component, the County would be required to identify and implement appropriate LID compliance features and practices and structural BMPs. Therefore, the 2016 Master Plan FEIR found that the 2012 Master Plan operations would have less-than-significant impacts related to erosion and sedimentation.

The 2016 Master Plan FEIR found that, with adherence to County connection permit requirements and compliance with County LID requirements, the volumes of runoff discharge to the County's storm drain system following buildout of the 2012 Master Plan would be similar or reduced compared to the existing condition. The 2012 Master Plan would not provide additional sources of polluted runoff; impacts would be less than significant.

The backbone of the drain system serving the Medical Center Campus is the County-owned and operated 208<sup>th</sup> Street Storm Drain, an 8-foot by 4-foot culvert that runs beneath the Campus in a north-south 15-foot-wide easement, daylighting into an open culvert that parallels 220<sup>th</sup> Street and discharges to the underground network at Normandie Avenue to the west. New storm drain may be required by the County with a connection permit from the County Flood Control District. The County will require stormwater detention if the calculated peak flow rate exceeds the facilities' design peak flow rate. Stormwater management infrastructure constructed for the 2012 Master Plan's individual project components would be constructed in compliance with permit and LID requirements and include upgraded infrastructure sized for future stormwater volumes.

With the increase in pervious area, an integrated stormwater management approach, and the implementation of the County LID standards, the requirements to detain flows to meet existing design flow rates will be minimized. Peak flow rates and runoff volumes from the Campus with the 2012 Master Plan would be the same or lower compared to existing rates and volumes and would not affect the capacity or hydraulic integrity of the existing County storm drain system. Therefore, the 2016 Master Plan FEIR found that impacts related to the volume of runoff from the Campus on the capacity of the County's storm drain infrastructure would be less than significant with the 2012 Master Plan.

## 2022 Master Plan

### *Construction and Operation*

The 2022 Master Plan would require similar grading and excavation for building foundations as the 2012 Master Plan, which could affect drainage on the sites of specific components but would not substantially alter the existing drainage pattern of the site or result in substantial erosion or siltation. The same standard construction-phase BMPs for compliance with NPDES requirements, including a Construction General Permit and SWPPP, would decrease the potential for any significant erosion or sedimentation from soil disturbance associated with construction, so any erosion and sedimentation would be localized and temporary. With the implementation of these measures to control erosion and sedimentation, construction-related erosion and sedimentation impacts resulting from soil disturbance would be less than significant for the 2022 Master Plan, the same as for the 2012 Master Plan.

For each project component, the County would be required to identify and implement appropriate LID compliance features and practices and structural BMPs. Therefore, 2022 Master Plan operations would have less-than-significant impacts related to erosion and sedimentation, the same as for the 2012 Master Plan.

As with the 2012 Master Plan, neither construction nor operations would substantially alter existing topography, affect the course of any streams or rivers, or increase surface runoff in a manner that would result in flooding. Therefore, the impacts on existing drainage would be less than significant, the same as for the 2012 Master Plan.

Like the 2012 Master Plan, the 2022 Master Plan would increase the pervious area (slightly more than the 2012 Master Plan), include an integrated stormwater management approach, and implement County LID requirements, thereby minimizing the need to detain flows on site. The volumes of runoff discharge to the County's storm drain system following buildout of the 2022 Master Plan would be similar or reduced compared to the 2012 Master Plan and the existing condition because of the smaller size of the project and the increased amount of pervious area. Therefore, impacts of the 2022 Master Plan related to stormwater capacity and quality would be the same as under the 2012 Master Plan, less than significant.

### *Conclusion*

Impacts related to erosion and siltation, runoff and flooding, and stormwater capacity and quality would be similar for the 2022 Master Plan as compared to those for the 2012 Master Plan as identified in the 2016 Master Plan FEIR.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?		
(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

The Medical Center Campus is not in areas subject to seiches, tsunamis, or mudflows. Therefore, the NOP/IS found that the 2012 Master Plan would result in no impact.

The 2016 Master Plan FEIR found that the 2012 Master Plan would not directly affect groundwater resources, and indirect demands on local groundwater supplies would not exceed available supplies; the 2012 Master Plan would comply with LID regulations and would not obstruct implementation of a water quality control plan or sustainable groundwater management plan and therefore impacts would be less than significant.

## 2022 Master Plan

### *Construction, Operation and Conclusion*

Because of the site location, the 2022 Master Plan would have no impacts with respect to flood hazard, tsunami, seiche, or risk of release of pollutants the same as the 2012 Master Plan.

As with the 2012 Master Plan, the 2022 Master Plan would not directly affect groundwater resources, and indirect demands on local groundwater supplies would not exceed available supplies; the 2022 Master Plan also would comply with LID regulations and would not obstruct implementation of a water quality control plan or sustainable groundwater management plan and therefore impacts would be less than significant.

## K. LAND USE AND PLANNING

Land use and planning impacts of the currently proposed 2022 Master Plan were evaluated in light of the 2016 Master Plan FEIR. The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts related to land use and planning was evaluated in relation to two questions recommended for consideration by the State CEQA Guidelines.

(a) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the potential to physically divide an established community?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

The NOP/IS found that the 2012 Master Plan would have no impact related to physical division of an established community. The Medical Center Campus is in an urbanized area surrounded by residential uses and commercial development. The 2012 Master Plan would redevelop the site with uses similar to those within the existing Medical Center Campus boundaries, and therefore would not physically divide an established community.

## 2022 Master Plan

### *Construction, Operation and Conclusion*

The 2022 Master Plan would use the same site and would also redevelop the site with uses similar to those within the existing Medical Center Campus boundaries. Therefore, the 2022 Master Plan would not physically divide an established community and would result in no impact related to physical division of an established community, the same as the 2012 Master Plan.

(b) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to causing 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?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

The 2016 Master Plan FEIR found that the 2012 Master Plan would be substantially consistent with the applicable land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating environmental effects, including from the Southern California Association of Governments (Regional Comprehensive Plan, Compass Growth Visioning, and Regional Transportation Plan and Sustainable Communities Strategy) and Los Angeles County (2035 General Plan Update and General Plan Use Designations, and Planning and Zoning Code). The Medical Center Campus is not within an SEA, Habitat Conservation Plan, Natural Community

Conservation Plan, or other similar approved local, regional, or state plan. The 2012 Master Plan would not significantly change the land use on the Medical Center Campus. Therefore, land use impacts associated with the 2012 Master Plan’s consistency with applicable land use plans, policies, and regulations, would be less than significant.

**2022 Master Plan**

*Construction, Operation and Conclusion*

The 2022 Master Plan would have similar land uses as the 2012 Master Plan and the existing conditions. It would also be consistent with the plans analyzed in the 2016 Master Plan FEIR. Therefore, there would be no change in the impacts related to consistency with applicable land use plans, policies, and regulations; impacts would continue to be less than significant.

**L. MINERAL RESOURCES**

The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts to mineral resources was evaluated in relation to the 2016 Master Plan FEIR and two questions recommended for consideration by the State CEQA Guidelines.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?		
(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?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2012 Master Plan**

*Construction and Operation*

The Medical Center Campus is not within a known mineral resource area and no known designated locally important mineral resources are known to exist at the Medical Center Campus or in the surrounding area. Therefore, the 2016 Master Plan FEIR (NOP/IS) found that the 2012 Master Plan would have no impact on mineral resources of value to the region and the residents of the state.

**2022 Master Plan**

*Construction, Operation and Conclusion*

The 2022 Master Plan is in the same location as the 2012 Master Plan, with no known mineral resource on the Campus or in the surrounding areas. Therefore, the 2022 Master Plan impacts

would be the same as those of the 2012 Master Plan, with no impacts on mineral resources of value to the region and the residents of the state.

## M. NOISE

The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts related to noise was evaluated in relation to the 2016 Master Plan FEIR and three questions recommended for consideration by the State CEQA Guidelines. The proposed clarification of mitigation measure MM-NOISE\_1 (see Table 1) to add the word “residential” would not change the meaning or effectiveness of the measure.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(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) Generation of excessive groundborne vibration or groundborne noise levels?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2012 Master Plan

#### *Construction*

#### Impacts to Off-Site Receptors

Construction of the 2012 Master Plan would require the use of mobile heavy equipment with high noise level characteristics. Individual pieces of construction equipment that would be used for on-site produce maximum noise levels of 74 A-weighted decibels (dBA) to 85 dBA at a reference distance of 50 feet from the noise source at full power. Noise levels typically decrease by 6 decibels (dB) per doubling of distance (e.g., 68 to 79 at 100 feet). The noise standard for the sensitive receivers (residences) to the west and south of the Campus range from 60 to 65 dBA.

The 2016 Master Plan EIR found that on-site construction noise associated with the 2012 Master Plan would increase noise levels at nearby sensitive receivers in excess of established thresholds during every phase of the construction except Phases M and C, which include demolition and small-scale construction. Excess noise levels would range from 2 to 25 dBA above the thresholds. Therefore, the 2016 Master Plan EIR found that impacts during construction of the 2012 Master Plan would be significant without implementation of mitigation measures. Mitigation Measure NOISE-1 (as updated) would require temporary noise barriers to block the line of sight between construction equipment and noise-sensitive residential receptors during all phases of construction.

Even with implementation of this mitigation measure, the 2016 Master Plan EIR found that on-site construction noise associated with the 2012 Master Plan would still be above established

thresholds in some locations. No additional feasible mitigation measures are available because the noise barriers under Mitigation Measure NOISE-1 would break the line of sight but cannot attenuate noise levels and there is no method to reduce the construction noise (such as “half-power” operation) that could be utilized at all times on the site due to the scale of the construction. Therefore, the 2016 Master Plan EIR found that impacts related to on-site construction noise would be significant and unavoidable for the 2012 Master Plan.

2012 Master Plan construction would require material delivery truck trips throughout the construction period. Truck haul routes for the project would comply with the approved truck routes designated within the County. Trucks traveling to and from the Medical Center Campus must travel along the designated truck route. Trucks are expected to travel on Carson Street, 220<sup>th</sup> Street, Vermont Street, and Figueroa Street to access the Harbor Freeway. These truck trips would result in a total noise level (existing plus project trucks) of approximately 61.9 dBA along Carson Street, 62.8 dBA along 220<sup>th</sup> Street, 61.5 dBA along Vermont Street, and 61.9 dBA along Figueroa Street, all at a 25-foot distance from the closest travel lane. The noise levels by truck trips would be below the significance thresholds of 75 dBA at single-family residences and mobile homes, 80 dBA at multi-family residences, or 85 dBA at transit lodging. Therefore, the 2016 Master Plan EIR found off-site construction traffic impacts to be less than significant.

#### Impacts to On-Site Receptors

The on-site hospital uses are noise-sensitive receivers. At various times throughout construction of the 2012 Master Plan, use of heavy-duty construction equipment could be closer than 100 feet to occupied on-site patient rooms and it would increase the ambient noise levels at on-site noise-sensitive uses. PDF-NOISE-2, PDF-NOISE-3, and PDF-NOISE-4, described below, are designed to minimize the generation of on-site noise to the extent feasible. PDF NOISE-5, described below, has been included to shield existing on-site noise-sensitive uses to minimize effects on on-site hospital uses. However, the upper floors (i.e., above second floor) of the existing hospital buildings would not experience the same noise reductions as a result of the noise barriers because the proposed barriers would not block the line of sight between the construction site and upper floors of the existing hospital buildings. There are no feasible mitigation measures to reduce these upper-story noise impacts to less-than-significant levels. Therefore, impacts of 2012 Master Plan construction with respect to on-site sensitive land uses would be significant and unavoidable.

#### Vibration

Construction activities for the 2012 Master Plan could generate varying degrees of groundborne vibration during demolition, shoring, excavation, and large bulldozer operation. The maximum vibration velocities to which off-site sensitive receivers would be exposed range from 0.01 to 0.027 inch per second peak particle velocity (PPV). These levels are well below the threshold of 0.5 inch per second PPV for potential damage of older residential buildings. Therefore, the 2016 Master Plan EIR found that vibration impacts associated with construction would be less than significant at the nearest residential building.

Due to the sensitivity of on-site receptors, the potential for noise to affect on-site receptors was assessed in the 2016 Master Plan EIR. On-site hospital uses, such as surgical suites, are vibration sensitive. At various times throughout the construction of the 2012 Master Plan, use of heavy-duty construction equipment could be as close as 100 feet to occupied on-site operating

rooms. If a large bulldozer operates within 125 feet of an operating room, the operating room would be exposed to vibration levels of 0.008 inch per second PPV (the level established for the protection of operating rooms and other uses with sensitive equipment and systems). With implementation of PDF NOISE-6, described below, the 2016 Master Plan EIR found that construction-related impacts of the 2012 Master Plan would be less than significant even when construction is planned within 125 feet of on-site vibration-sensitive uses.

## **Operation**

### Traffic

Increases in traffic noise would occur due to more vehicular trips generated at full buildout of the 2012 Master Plan. The maximum increase in project-related traffic noise levels over existing traffic noise levels would be 0.7 dBA, which would occur along 220<sup>th</sup> Street between Myler Street and Vermont Avenue. This increase in would be well below a “clearly noticeable” increase of 5.0 dBA. The 2016 Master Plan EIR found that noise increases due to traffic generated by the 2012 Master Plan would be less than significant.

### Vibration

Operation of the 2012 Master Plan would include typical commercial-grade stationary mechanical and electrical equipment, which would produce vibration. In addition, the primary sources of transient vibration would include passenger vehicle circulation within the parking areas. Groundborne vibration generated at these sources would be similar to that of existing sources. Maximum potential vibration levels from all 2012 Master Plan operational sources at the closest off-site buildings would be up to 0.01 inch per second PPV and would be less than the significance threshold of 0.04 inch per second PPV for perceptibility. Therefore, the 2016 Master Plan EIR found that operational groundborne vibration impacts would be less than significant.

### Permanent Helistop

The 2012 Master Plan includes a new permanent helistop located at the roof level of the new hospital building. Noise from the new helistop would be very similar to the existing. Noise levels from the helistop would range from 35.1 to 49.8 dBA at off-site sensitive receivers, well below applicable thresholds. There would be no increase in noise levels over existing for the flight paths, which would be in the same locations as they are now. Therefore, the 2016 Master Plan EIR found that noise impacts from the 2012 Master Plan helistop would be less than significant.

### Interim Helistops

Temporary helistops would be provided by the 2012 Master Plan in the southwestern portion of the Medical Center Campus. (Although these helistops would be required because of construction, they would be in use for several years between demolition of the existing helistop and construction of the new permanent one on the roof of the new Hospital Tower. Therefore, they are treated as an operation impact.)

Interim Helistop 1 was located in the existing Harbor-UCLA Professional Building parking lot. Interim Helistop 2 was located in the LA BioMed surface parking lot. Both would be

approximately 10 feet above the adjacent ground surface. Flight paths for the helistops would be similar to the existing flight paths.

Noise levels at Interim Helistop 1 would range from 37.0 to 58.6 dBA at off-site sensitive receivers, with a maximum increase over existing conditions of 2.7 to 5.6 dBA (when factoring in nighttime flights). At one sensitive receiver location, this increase (5.6 dBA above ambient) would exceed the significance threshold of 5.0 dBA increase at this receiver location. Therefore, the 2016 Master Plan EIR found that the operation of the 2012 Master Plan Interim Helistop 1 would result in a significant impact. There are no feasible mitigation measures to reduce the increase at this receiver below the level of significance. Therefore, the impact would be significant and unavoidable.

Noise levels at Interim Helistop 2 would range from 36.6 to 63.7 dBA, with a maximum increase over existing conditions of 0.2 to 2.7 dBA (when factoring in nighttime flights). At one sensitive receiver location, this increase (2.7 dBA above ambient) would exceed the significance threshold of 1.5 dBA increase. Therefore, the 2016 Master Plan EIR found that the operation of the 2012 Master Plan Interim Helistop 2 would result in a significant impact. There are no feasible mitigation measures to reduce the increase at this receiver below the level of significance. Therefore, the impact would be significant and unavoidable.

#### Fixed Mechanical Equipment

The operation of mechanical equipment such as air conditioners, fans, and related equipment for the 2012 Master Plan may generate audible noise levels. Mechanical equipment would typically be located on rooftops or within buildings, shielded from nearby land uses to attenuate noise and avoid conflicts with adjacent uses. In addition, PDF-NOISE-7, described below, would be incorporated into the project to ensure compliance with Los Angeles County Code (LACC) noise limitation requirements.

With incorporation of PDF-NOISE-7, the 2016 Master Plan EIR found that operation of mechanical equipment would not exceed the project thresholds of significance and impacts would be less than significant.

#### Loading Dock and Refuse Collection Areas

The 2012 Master Plan would incorporate new materials and waste management facilities, including a loading dock located at the back of the new Hospital Tower. Loading dock and refuse service-related activities would generate noise levels that have a potential to adversely affect adjacent land uses. Delivery trucks (at the loading dock) and trash compactors (from refuse collection) would generate noise levels of approximately 71 dBA and 66 dBA at a 50-foot distance, respectively. The nearest noise-sensitive use is approximately 200 feet south of the proposed loading dock and waste management center. Accounting for the noise reduction over distance, noise levels at this location would be 53 dBA and 48 dBA and would not exceed the significance threshold of the ambient noise level of 66 dBA at the receptor location. Therefore, the 2016 Master Plan EIR found that noise impacts from the 2012 Master Plan loading dock and refuse collection areas would be less than significant.

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## 2022 Master Plan

### Construction

#### Off-Site Receptors

Construction of the 2022 Master Plan would require the use of the same type of mobile heavy equipment and methods in the same general locations, although phasing would be different. Increased noise levels at sensitive receivers are expected to be generally the same and would exceed established thresholds. Therefore, impacts during construction of the 2022 Master Plan would be significant without implementation of mitigation measures.

Mitigation Measure NOISE-1 was previously modified to be more comprehensive and apply to all phases of construction. Because this mitigation measure would be expanded to all phases, the change does not represent a considerable difference from the mitigation measure in the 2016 Master Plan EIR.

Even with implementation of this mitigation measure, on-site construction noise associated with the 2022 Master Plan would still be above established thresholds in some locations, the same ones as under the 2012 Master Plan. As discussed for the 2012 Master Plan, no other feasible mitigation is available. Therefore, impacts related to on-site construction noise would be significant and unavoidable for the 2022 Master Plan.

The 2022 Master Plan would use the same type of material delivery and the trucks delivering the materials would be the same and use the same approved truck routes. As described for the 2012 Master Plan, noise levels by truck trips would be below the significance thresholds along these routes. Therefore, off-site construction traffic impacts from the 2022 Master Plan truck trips would be less than significant, the same as those of the 2012 Master Plan.

#### On-Site Receptors

Construction of the 2022 Master Plan near the existing on-site hospital users would use the same equipment and methods and be in the same location as under the 2012 Master Plan. The building styles and configuration would be different but would be roughly the same size and require the same amount of time to construct. PDF-NOISE-2, PDF-NOISE-3, PDF-NOISE-4, and PDF-NOISE-5, described above for the 2012 Master Plan, would also be incorporated into the 2022 Master Plan, but would not shield the upper floors of the existing hospital building from line-of-sight noise levels, as with the 2012 Master Plan. Because there are no feasible mitigation measures to reduce these upper-story noise impacts to less-than-significant levels, impacts on on-site sensitive land uses resulting from the 2022 Master Plan would be significant and unavoidable, the same as for the 2012 Master Plan.

#### Vibration

Groundborne vibration levels would be expected to be approximately the same for the 2022 Master Plan and the 2012 Master Plan, which would be well below the threshold for off-site older residential buildings. Just as the 2016 Master Plan FEIR found that the 2012 Master Plan would have less-than-significant impacts, the 2022 Master Plan's groundborne vibration impacts on off-site sensitive receivers would be less than significant.

In the same way as the 2012 Master Plan, the 2022 Master Plan could include the use of heavy-duty construction equipment as close as 100 feet to occupied on-site operating rooms, exposing them to vibration levels of 0.008 inch per second PPV (the level established for the protection of operating rooms and other uses with sensitive equipment and systems). The 2022 Master Plan would also incorporate PDF-NOISE-6, described above for the 2012 Master Plan. With implementation of this PDF, construction-related vibration impacts of the 2022 Master Plan would be less than significant even when construction is planned within 125 feet of on-site vibration-sensitive uses, the same as found in the 2016 Master Plan FEIR for the 2012 Master Plan.

## **Operation**

### Operational Traffic

Operational traffic for the 2022 Master Plan would be the same as under the 2012 Master Plan, or marginally lower due to the reduced size of the 2022 Master Plan. The 2016 Master Plan EIR found that the increase in noise related to project-generated traffic would be well below the levels that would be “clearly noticeable” (5.0 dBA), which would be the same for the 2022 Master Plan. Therefore, 2022 Master Plan operational traffic noise impacts would be less than significant, the same as those for the 2012 Master Plan.

### Permanent Helistop

The 2022 Master Plan also includes a new permanent helistop on the roof of the new hospital building interior to the Campus in a similar location to the existing helistop and the helistop location for the 2012 Master Plan. The noise levels would be approximately the same for off-site sensitive receivers, which would be well below the applicable thresholds. The flight paths would also be the same as the existing flight paths and the 2012 Master Plan, with no increase in noise levels. Therefore, like the finding in the 2016 Master Plan FEIR, noise impacts for the 2022 Master Plan permanent helistop would be less than significant.

### Interim Helistop

The 2022 Master Plan includes use of one of the locations evaluated in the 2016 Master Plan EIR as a temporary helistop during construction -- Interim Helistop 2. However, use of Interim Helistop 1 remains an option. Noise impacts due to helistop use would be the same as evaluated in the 2016 Master Plan EIR, resulting in significant impacts for at least one sensitive receiver at each helistop location. The 2016 Master Plan FEIR found that there are no feasible mitigation measures to reduce the increase in noise; similarly, impacts for the 2022 Master Plan would be significant and unavoidable.

### Fixed Mechanical Equipment

The operation of mechanical equipment such as air conditioners, fans, and related equipment for the 2022 Master Plan would be the same as for the 2012 Master Plan, which may generate audible noise levels at the same levels as found in the 2016 Master Plan FEIR. The 2022 Master Plan would also incorporate PDF-NOISE-7, described for the 2012 Master Plan. With this PDF and the shielding of the equipment due to location, noise levels for fixed mechanical equipment for the 2022 Master Plan would not exceed project thresholds and impacts would be less than significant, as reported in the 2016 Master Plan FEIR.

Vibration

Stationary mechanical and electrical equipment and passenger vehicle circulation would be the same for the 2022 Master Plan as for the 2012 Master Plan. Like the 2012 Master Plan, vibrations generated from these sources would be similar to that of existing sources, with maximum potential vibration levels from all operational sources at the closest off-site buildings up to 0.01 inch per second PPV and would be less than the significance threshold of 0.04 inch per second PPV for perceptibility. Therefore, as found in the 2016 Master Plan FEIR, operational groundborne vibration impacts for operation of the 2022 Master Plan would be less than significant.

Loading Dock and Refuse Collection Areas

The new configuration of the Hospital Tower would result in the loading dock and waste management facilities being further from off-site sensitive receivers and it would be further shielded by a multi-level parking structure and other structures. Therefore, the noise impacts from the 2022 Master Plan’s loading dock and waste management facilities would be less than significant, the same as found in the 2016 Master Plan FEIR.

Conclusion

Impacts related to noise and groundborne vibration would be similar for the 2022 Master Plan as compared to those for the 2012 Master Plan as identified in the 2016 Master Plan FEIR.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(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?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2012 Master Plan**

*Construction and Operation*

There are no public or private airports in the vicinity of the Medical Center Campus. Therefore, the NOP/IS found that 2012 Master Plan would not expose people residing or working in the project area to excessive noise levels from public or private airports and there would be no impacts. See discussion above for impacts related to the permanent and interim helistops that are part of the 2012 Master Plan.

## 2022 Master Plan

### Construction, Operation and Conclusion

The same as the 2012 Master Plan, the 2022 Master Plan would have no impacts related to private and public airport noise, the same as found for the 2012 Master Plan in the NOP/IS. See above discussion related to the permanent and interim helistops that are part of the 2022 Master Plan.

## N. POPULATION AND HOUSING

Population and housing impacts of the project were evaluated with regard to the 2016 Master Plan FEIR. The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant was evaluated in relation to two questions recommended for consideration by the State CEQA Guidelines.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(a) Inducing 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) Displacing substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### Construction and Operation

The 2016 Master Plan FEIR found that, given the temporary nature of the construction activity, the mobility of construction workers, and availability of a labor pool to draw upon in the area, 2012 Master Plan construction workers would not have a notable impact on the demand for housing or affect general housing occupancy and population patterns. Therefore, the 2016 Master Plan FEIR found that construction activities would not cause growth (i.e., new housing or employment generators) or accelerate development that exceeds projected/planned levels for the year of the 2012 Master Plan occupancy/buildout, as compared to growth otherwise occurring; impacts would be less than significant.

Operation of the 2012 Master Plan would create new employment opportunities. The project's contributions to employment would be consistent with Southern California Association of Governments' short-term and long-term growth projections for the South Bay Cities Subregion, unincorporated Los Angeles County communities, and all of Los Angeles County, and would help the County meet or exceed its economic development objectives per the General Plan Economic Development Element and housing allocation established in Southern California Association of Governments' Regional Housing Needs Assessment. Overall, construction-

related and long-term operational impacts regarding the relationship of the 2012 Master Plan to growth projections would be less than significant.

The NOP/IS found that the 2012 Master Plan would have no impacts related to displacement of housing or people because no housing or population would be removed.

## 2022 Master Plan

### *Construction, Operation and Conclusion*

The 2022 Master Plan would be similar to the 2012 Master Plan, with less-than-significant impacts related to the construction worker population. Therefore, the 2022 Master Plan would have the same less-than-significant impacts related to population growth during construction as found in the 2016 Master Plan FEIR.

The 2022 Master Plan would have similar operational population growth and employment and economic opportunities as the 2012 Master Plan. The slightly smaller size of the 2022 Master Plan would lead to marginally lower population growth and marginally fewer employment and economic opportunities than the 2012 Master Plan, but the impacts would be the same as found in the 2016 Master Plan FEIR, less than significant. The 2022 Master Plan would have no impacts related to displacement of housing or people because no housing or population would be removed.

Impacts related to population and housing would be similar for the 2022 Master Plan as compared to those for the 2012 Master Plan as identified in the 2016 Master Plan FEIR.

## O. PUBLIC SERVICES

Public Services impacts of the currently proposed 2022 Master Plan were evaluated based on a review of the 2016 Master Plan FEIR and one question (relevant to each public service) recommended for consideration by the State CEQA Guidelines.

(a) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: (i) Fire protection? (ii) Police protection? (iii) Schools (iv) Parks (v) Other public facilities		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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## **FIRE AND EMERGENCY SERVICES**

### **2012 Master Plan**

The 2016 Master Plan FEIR found that the 2012 Master Plan would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing fire station to maintain service. The 2012 Master Plan would comply with County Code and Los Angeles County Fire Department (LACFD) requirements and implement PDF FIRE-1,

#### *Construction*

During construction, the 2012 Master Plan would generate construction traffic, require off-site utility and roadway improvements, and potentially require temporary lane closures along one or more of the four streets bordering the Medical Center Campus. The 2016 Master Plan FEIR found that this construction may result in significant impacts related to emergency access and response times. The 2016 Master Plan FEIR found that implementation of Mitigation Measure FIRE- 1 would reduce impacts on emergency access and response times to less-than-significant levels.

#### *Operation*

The 2012 Master Plan would increase the net floor area, employee population, and annual patient visits to the Medical Center Campus. These increases could potentially result in an increase in calls for LACFD fire protection and emergency medical services, resulting in a potentially significant impact. However, several factors would minimize any such increase. First, because the 2012 Master Plan would replace many aging on-site buildings that were not constructed to current Fire Code standards with new buildings constructed to such standards, calls for fire protection service resulting from dangerous or flammable conditions would be expected to decrease. Second, because a portion of the new on-site employees would be expected to be derived from the existing local labor pool, and because patients visiting the Medical Center Campus would already reside in the area, many of the additional employees and most, if not all, of the additional patients already generate a demand for service from local LACFD Fire Stations 36 and 127. Third, the Medical Center Campus is already fully developed and already generates service calls from LACFD such that the 2012 Master Plan would not generate service demand in an area where service demand does not already exist. Fourth, the 2012 Master Plan would include an increase in hospital and other medical uses, such that it is reasonable to assume that a portion of the on-site emergency medical services needs under the project would be provided by the proposed uses themselves rather than by LACFD. With these factors in mind, significant impacts on emergency services could still occur. The 2016 Master Plan FEIR found that implementation of Mitigation Measure FIRE-2 would reduce the 2012 Master Plan's impacts on emergency services to less-than-significant levels.

### **2022 Master Plan**

The 2022 Master Plan has the same uses as the 2012 Master Plan, although reduced in size. The 2022 Master Plan would also comply with County Code and LACFD requirements and implement PDF-FIRE-1, described above for the 2012 Master Plan. Like the 2012 Master Plan, it would not require the addition of a new fire station or the expansion, consolidation, or relocation of an existing fire station to maintain service.

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## Construction

As found in the 2016 Master Plan FEIR, impacts of the 2022 Master Plan on emergency access and response times could still be significant (despite the reduction in size). The 2022 Master plan would implement Mitigation Measure FIRE-1, described for the 2012 Master Plan, to reduce this impact. With this measure, the construction-related impacts on fire and emergency services would be reduced to a less-than-significant level, the same as for the 2012 Master Plan.

## Operation

Compared to pre-Master Plan conditions, the 2022 Master Plan would increase the net floor area, employee population, and annual patient visits to the Medical Center Campus, though to a lesser extent than the 2012 Master Plan, due to its reduced size. Impacts on emergency services would be similar to those described for the 2012 Master Plan and could be significant. The 2022 Master Plan would implement Mitigation Measure FIRE-2 which would reduce impacts to a less-than-significant level, the same as for the 2012 Master Plan.

## Conclusion

Impacts related to fire and emergency services would be similar for the 2022 Master Plan as compared to those for the 2012 Master Plan as identified in the 2016 Master Plan FEIR.

## **POLICE PROTECTION**

### **2012 Master Plan**

#### *Construction*

Construction activities associated with the 2012 Master Plan would include demolition, site preparation, and construction of new buildings and street/sidewalk improvements in various phases. These periodic construction activities could temporarily increase demand for police protection associated with patrolling the construction site, which could be a significant impact.

The 2016 Master Plan FEIR found that implementation of Mitigation Measure SHER-1 would reduce the 2012 Master Plan's impacts on police protection during construction to less-than-significant levels.

Regarding police access and response times during construction, construction staging and construction worker parking associated with the 2012 Master Plan would be accommodated on the Medical Center Campus. Furthermore, the 2012 Master Plan would generate construction traffic, require off-site utility and roadway improvements, and potentially require temporary lane closures along one or more of the four streets bordering the Medical Center Campus. The 2016 Master Plan FEIR found that these impacts could be significant, but that implementation of Mitigation Measures SHER-2 and SHER-3 would reduce impacts on police access and response times to less-than-significant levels.

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*Operation*

Regarding police protection during operation, the 2012 Master Plan would result in a net increase in building square footage, floor area, Campus-wide employees, and annual patient visits. Based on the existing officer to daytime-population ratio and the existing annual crimes per capita, the 2012 Master Plan would result in an increase in demand for additional officers (both LACSD sworn officers and non-LACSD security guards) and an increase in on-site crimes. This, in turn, would create the need for additional space at LACSD's on-site satellite station to accommodate the additional officers. The implementation of PDF-SHER-2 would also reduce this impact.

In addition, although the 2012 Master Plan design would adhere to the Crime Prevention Through Environmental Design (CPTED) principles, the 2016 Master Plan FEIR found that impacts related to increased crime would be potentially significant but that that implementation of Mitigation Measure SHER-4 would reduce impacts related to increased crime to less-than-significant levels.

**2022 Master Plan**

*Construction*

The 2022 Master Plan would result in similar impacts as the 2012 Master Plan with regard to police protection. The smaller size of the 2022 Master Plan construction would not result in a change in the level of impact. Construction activities could temporarily increase demand for police protection, which would be a potentially significant impact, the same as for the 2012 Master Plan. Police access and response times could be affected, which the 2016 Master Plan FEIR found would be a significant impact for the 2012 Master Plan. The 2022 Master Plan would also be required to implement Mitigation Measures SHER-1, SHER-2, and SHER-3. These measures would reduce impacts on police protection during construction to less-than-significant levels, just like the 2012 Master Plan.

*Operation*

Operational impacts on police protection would be similar to less for the 2022 Master Plan as for the 2012 Master Plan. These impacts would result in an increase in demand for additional officers and an increase in on-site crimes, as described for the 2012 Master Plan. The 2022 Master Plan would also incorporate into the project PDF-SHER-1. The 2022 Master Plan would adhere to CPTED principles, but like the 2012 Master Plan, potentially significant impacts related to crime levels could occur. Therefore, the 2022 Master Plan would also implement Mitigation Measure SHER-4 that would reduce impacts related to increased crime to less-than-significant levels, the same as for the 2012 Master Plan.

*Conclusion*

Impacts related to police protection would be similar for the 2022 Master Plan as compared to those for the 2012 Master Plan as identified in the 2016 Master Plan FEIR.

## **SCHOOLS**

### **2012 Master Plan**

#### *Construction and Operations*

The 2016 Master Plan FEIR found that construction and operation of the 2012 Master Plan would not create a demand for schools that would require new or physically altered public schools, the construction of which would result in a substantial adverse physical impact. Therefore, impacts on schools would be less than significant.

### **2022 Master Plan**

#### *Construction, Operations and Conclusion*

Similar to the 2012 Master Plan, the 2022 Master Plan would not create a demand for schools that would require new or physically altered public schools. Therefore, there would be no change in the impacts related to schools; impacts would be less than significant, the same as for the 2012 Master Plan.

## **PARKS**

### **2012 Master Plan**

#### *Construction and Operations*

The 2016 Master Plan FEIR found that construction and operation of the 2012 Master Plan would not create a demand for park and recreational facilities that would require new or physically altered park and recreational facilities or result in substantial physical deterioration of such facilities. The 2012 Master Plan would not include new recreational facilities or require the construction or expansion of existing facilities. Therefore, impacts on parks and recreation would be less than significant.

### **2022 Master Plan**

#### *Construction, Operations and Conclusion*

Similar to the 2012 Master Plan, the 2022 Master Plan would not create a demand for park and recreational facilities, result in substantial physical deterioration of existing parks or recreational facilities, include new recreational facilities, or require new or expanded facilities. Therefore, there would be no change in the impacts related to parks and recreation; impacts would be less than significant, the same as for the 2012 Master Plan. See the discussion in Section P. Recreation below.

**LIBRARIES**

**2012 Master Plan**

*Construction and Operations*

The 2016 Master Plan FEIR found that construction and operation of the 2012 Master Plan would not create a demand for libraries that would require new or physically altered public libraries, the construction of which would result in a substantial adverse physical impact. Therefore, impacts on libraries would be less than significant.

**2022 Master Plan**

*Construction, Operations and Conclusion*

Similar to the 2012 Master Plan, the 2022 Master Plan would not create a demand for libraries that would require new or physically altered public libraries. Therefore, there would be no change in the impacts related to libraries; impacts would be less than significant, the same as for the 2012 Master Plan.

**P. RECREATION**

The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts to recreation was evaluated in relation to the 2016 Master Plan FEIR and two questions recommended for consideration by the State CEQA Guidelines.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(a) Increased 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) Inclusion of on-site recreational facilities or requirement for the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2012 Master Plan**

*Construction and Operation*

The 2016 Master Plan FEIR found that construction activities for the 2012 Master Plan would be phased and would require construction workers intermittently during each construction phase. It is not known exactly how many workers would be employed at any one time but given the availability of construction workers in the Los Angeles area, it is unlikely that a substantial number of construction workers would relocate to the area and use local parks and recreational facilities such that it would cause substantial or accelerated physical deterioration of the facility.

Therefore, the 2016 Master Plan FEIR found that impacts on existing recreational facilities would be less than significant for the 2012 Master Plan.

The 2012 Master Plan is a commercial and public services project with no residential use proposed. Therefore, the 2016 Master Plan FEIR found that the operation of the 2012 Master Plan would not create a direct demand for recreational facilities. The increased number of employees, patients, and visitors would not be expected to result in a substantial increase in the demand for recreational facilities for two reasons. First, the 2012 Master Plan includes on-site landscaped open space (landscaped promenades and pathways, courtyards and plazas, roof gardens, etc.) for use by employees, patients, and visitors. Second, any increased usage by these populations of existing recreation facilities would likely be split among the 11 public parks and recreational facilities located within a 2-mile radius of the Medical Center Campus.

The 2012 Master Plan would require approximately 2,000 new employees at full buildout. It is expected that most of these new on-site employees would be derived from the existing local labor pool, so it is unlikely that a substantial number of employees and their families would relocate from out of the area to fill these jobs. Therefore, the 2016 Master Plan FEIR found that the 2012 Master Plan would have less-than-significant impacts related to physical deterioration or accelerated deterioration of recreational facilities in the region.

The 2012 Master Plan would not include new recreational facilities, with the exception of the proposed on-site landscaped open spaces. This new construction could result in environmental effects (e.g., visual impacts, dust and other air emissions, noise, and traffic during the construction period). These impacts were analyzed as part of the general construction impacts for the 2012 Master Plan (4.A. Aesthetics, 4.B. Air Quality, 4.I. Noise, and 4.L., Transportation and Parking), of the EIR, and no additional substantial effects would occur. The 2016 Master Plan FEIR found that impacts would be less than significant.

## **2022 Master Plan**

### *Construction and Operation*

The 2022 Master Plan's impacts related to physical deterioration or accelerated deterioration to recreational facilities in the region would be similar to those of the 2012 Master Plan, with a minor reduction due to the smaller project size. Construction workers would be present intermittently over the multiple phases of the project and drawn primarily from the Los Angeles area, thereby resulting in less-than significant impacts, the same as under the 2012 Master Plan.

The 2022 Master Plan would include similar on-site recreational opportunities to the 2012 Master Plan, with even more open space than the previous plan. The required workforce at buildout would be incrementally smaller due to the reduced project size. Therefore, impacts related to physical deterioration or accelerated deterioration of recreational facilities in the region would be the same as those of the 2012 Master Plan, if not minimally reduced.

The impacts related to new recreational facilities would be the same for the 2022 Master Plan as for the 2012 Master Plan. This new construction of landscaped open space on site could result in environmental effects (e.g., visual impacts, dust and other air emissions, noise, and traffic during the construction period). These impacts are analyzed in this Addendum as part of the general construction impacts for the 2022 Master Plan (A. Aesthetics, B. Air Quality, M.

Noise and Q. Transportation). No additional substantial effects would occur, and, like the 2012 Master Plan, impacts would be less than significant.

*Conclusion*

Impacts related to recreation would be similar for the 2022 Master Plan as compared to those for the 2012 Master Plan as identified in the 2016 Master Plan FEIR.

**Q. TRANSPORTATION**

Transportation and traffic impacts of the project were evaluated in light of the 2016 Master Plan FEIR and the potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts related to transportation and traffic was evaluated in relation to four questions currently recommended for consideration by the State CEQA Guidelines.

Since preparation of the 2016 Master plan FEIR, State and County criteria for evaluating transportation impacts have changed to focus on impacts associated with vehicle trips and vehicle miles travelled. Impacts related to delay and level of service are no longer considered impacts under CEQA (although these issues are still considered as part of the overall planning process).

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?		
(b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2012 Master Plan**

*Construction*

The 2016 Master Plan FEIR traffic analysis evaluated the construction trips that would result from the 2012 Master Plan, the contributions those trips would make to the local traffic system, and ongoing activity in the project vicinity. The 2016 Master Plan FEIR found that, with implementation of PDF TRAF-1 and PDF TRAF-2, potential construction impacts associated with hauling, deliveries, and worker vehicles would be reduced by minimizing the potential for the 2012 Master Plan to result in substantial disruption of traffic flow, intersection operational impacts, conflicts with pedestrians and/or bicyclists, or loss of on-street parking in commercial zones and residential neighborhoods in the vicinity of the Medical Center Campus.

The 2016 Master Plan FEIR found that implementation of these PDFs would ensure impacts on traffic flow, vehicular access, pedestrian and bicycle access, and safety would be less than

significant; however, the Master Plan FEIR also found that, given the potential addition of construction-related vehicle trips during peak construction periods, transportation impacts related to construction would be considered significant and unavoidable for study area intersections. No feasible mitigation measures were available to reduce this impact.

### *Operation*

The 2016 Master Plan FEIR found that implementation of the 2012 Master Plan would result in a net increase in traffic generation on the Medical Center Campus. Implementation of the 2012 Master Plan would result in a net increase in traffic generation of 6,598 daily trips at full buildout.

Project-related operational traffic impacts on study area intersections were considered significant. The 2012 Master Plan was found to result in significant impacts at 31 intersections. For some of these intersections there were no feasible mitigation measures, for others, the County did not have the authority to impose the mitigation. Mitigation Measures TRAF-1, TRAF-2, and TRAF-3 would reduce impacts at three intersections in unincorporated Los Angeles County to less-than-significant levels, but these measures require coordination with Caltrans and are not entirely within the control of the lead agency. Therefore, the 2016 Master Plan FEIR found that 2012 Master Plan impacts related to intersection service levels were considered significant and unavoidable.

### CMP

The 2016 Master Plan FEIR found that the 2012 Master Plan would not meet the minimum peak hour trip numbers at Congestion Management Program (CMP) arterial stations or freeway monitoring stations to require further analysis and, therefore, would not result in a change in the volume to capacity ratio of 0.02 or greater. Impacts of the 2012 Master Plan on regional CMP transportation systems are considered to be less than significant.

### Caltrans Facilities

The 2016 Master Plan FEIR found that the 2012 Master Plan would increase traffic on Caltrans facilities. With regard to freeway segments and intersections, while the County would make a fair-share contribution to offset increases in trips that would occur as a result of 2012 Master Plan traffic, the project could have a significant impact on Caltrans facilities.

The surrounding freeways (I-405, I-710, State Route 91, and I-110) are operating at or near capacity during the peak periods under the Existing Condition. The 2012 Master Plan trips would result in adverse impacts on three freeway segments. Multiple mitigation scenarios were considered, but each was found to be infeasible. Therefore, impacts on Caltrans freeway mainline segments were found to be significant and unavoidable.

For Caltrans intersections, an impact would be considered adverse if the analyzed intersection were found to operate at level of service (LOS) F with the addition of project-related traffic and if the increase were equal to or greater than 50 trips. There is one Caltrans intersection within the study area, Western Avenue (State Route 213) and Carson Street. This intersection operates at LOS E under the Existing Condition and would operate at LOS E under the Existing plus Project Condition. Under Interim Development and Cumulative Conditions in both AM and PM peak hours, the intersection is projected to decline to LOS F with or without the addition of 2012 Master Plan traffic. Because the project would add more than 50 trips in both the AM and PM peak hours during the Cumulative Condition, the impact would be potentially significant.

Mitigation Measure TRAF-4 addresses the potentially significant impacts that were identified on the freeway mainline segments and the intersection that are under Caltrans' jurisdiction.

The 2016 Master Plan FEIR found that the 2012 Master Plan would not contribute traffic such that off-ramp queues would extend beyond the length of the ramp itself onto the mainline of the freeway during peak arrival periods. Therefore, impacts to off-ramps were found to be less than significant.

### Transit and Alternative Modes

The 2016 Master Plan FEIR found that transit ridership generated by the 2012 Master Plan would not exceed the residual capacity of the public transit. Therefore, impacts with respect to transit would be less than significant. With regard to other alternative transportation modes, the 2012 Master Plan would be supportive of and would not conflict with alternative transportation policies, plans, and programs. Therefore, impacts would be less than significant.

## **2022 Master Plan**

### *Construction*

The 2022 Master Plan would involve less construction activity overall as compared to the 2012 Master Plan because of the reduction in construction of new buildings. Overall total construction-related trips are anticipated to be less in total and total vehicle miles (VMT) travelled are anticipated to be less in total. But daily construction activity could still be similar due to changes in construction scheduling. The project is located within the West Carson Transit Oriented District (TOD) Specific Plan area (approved October 2019). Projects within TOD areas have fewer impacts with respect to VMT because of their proximity to transit. Conservatively, despite changes to CEQA to remove delay and levels of service as impacts under CEQA, construction traffic impacts of the 2022 Master Plan are still considered significant and unavoidable for the purposes of this addendum.

The 2022 Master Plan would implement the same construction methods as the 2012 Master Plan. The 2022 Master Plan would incorporate PDFs TRAF-1 and TRAF-2, as for the 2012 Master Plan. These PDFs would reduce potential construction traffic impacts, but potentially not to a less-than-significant level. Therefore, impacts continue to be considered significant and unavoidable.

### *Operation*

The 2022 Master Plan would result in less total building area as compared to the 2012 Master Plan and would therefore result in fewer net new trips. Mitigation Measures TRAF-1, TRAF-2, and TRAF-3 would still be implemented. The 2022 Master Plan would generate a net increase in trips and VMT at the project site but less than would have occurred under the 2012 Master Plan. Also as noted above, the project is located within the West Carson TOD Specific Plan area. Projects within TOD areas have fewer impacts with respect to VMT because of their proximity to transit. Conservatively, despite changes to CEQA to remove delay and levels of service as impacts under CEQA, operational traffic impacts are still considered significant and unavoidable for the purposes of this addendum.

CMP

With its reduced size, the 2022 Master Plan would also not meet the minimum peak hour trip numbers at CMP arterial stations or freeway monitoring stations to require further analysis. Therefore, impacts related to the regional CMP transportation systems would be less than significant.

Caltrans Facilities

The 2022 Master Plan would result in less building area and therefore fewer trips and therefore impacts to Caltrans facilities would be less. The 2022 Master would continue to implement Mitigation Measure TRAF-4. While impacts related to delay and level of service are no longer considered significant under CEQA, impacts of the 2022 Master Plan continue to be considered potentially significant and unavoidable due to the overall increase in vehicle trips and vehicle miles travelled.

Transit and Alternative Modes

With regard to public transit and alternative transportation modes, the 2022 Master Plan would have similar or less impact compared to the 2012 Master Plan. The ridership generated by the 2022 Master Plan would not exceed the residual capacity of the public transit system, and the 2022 Master Plan would be supportive of and would not conflict with alternative transportation policies, plans, and programs. Therefore, there would be no change in the impacts related to public transit and alternative transportation; impacts would be less than significant.

*Conclusion*

The 2016 Master Plan FEIR identified significant impacts with respect to construction and operations. While these impacts were related to intersections and delay-based criteria, the 2016 Master Plan did identify substantial increases in vehicle trips and these increases are still conservatively considered significant for purposes of this addendum. Because of the reduction in net new construction and total building area, vehicle trips and vehicle miles travelled would be less under the 2022 Master Plan than would have occurred under implementation of the 2012 Master Plan.

(c) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to substantially increasing hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

Construction traffic safety was addressed as part of the analysis of construction traffic. In the construction traffic analysis, the 2016 Master Plan FEIR found that the incorporation of PDF-TRAF-1 and PDF-TRAF-2, requiring a Construction Traffic Management Plan and Pedestrian Safety, would ensure impacts on traffic flow, vehicular access, pedestrian and bicycle access, and safety would be less than significant.

The Medical Center Campus is located in a highly urbanized area surround by residential uses and commercial development. The 2012 Master Plan would not include any uses that are incompatible with the existing street system and would not make any changes to the roadway network (except restriping of lanes as described in Mitigation Measure TRAF-1 and TRAF-2). The 2012 Master Plan Campus-wide circulation system would eliminate traffic hazards such as overly narrow streets and blind turns. Therefore, the 2012 Master Plan would have less-than-significant impacts related to traffic hazards.

## 2022 Master Plan

### *Construction, Operation and Conclusion*

The 2022 Master Plan would incorporate PDF-TRAF-1 and PDF-TRAF-2, requiring a Construction Traffic Management Plan and Pedestrian Safety. The PDFs would ensure impacts on traffic flow, vehicular access, pedestrian and bicycle access, and safety would be less than significant, the same as under the 2012 Master Plan.

Like the 2012 Master Plan, the 2022 Master Plan would not include any uses that are incompatible with the existing street system and would not make any changes to the roadway network (except restriping of lanes as described in Mitigation Measure TRAF-1 and TRAF-2). As for the 2012 Master Plan, the 2022 Master Plan would also include a Campus-wide circulation system that would eliminate traffic hazards. Therefore, the 2022 Master Plan would have less-than-significant impacts related to traffic hazards, the same as under the 2012 Master Plan.

(d) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to inadequate emergency access?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

This issue is addressed under impacts to emergency response plans in Section I Hazards above.

**R. TRIBAL CULTURAL RESOURCES**

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to causing a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impacts related to Tribal Cultural Resources were not separately addressed from Archeological Resources in the 2016 Master Plan FEIR and are addressed in the discussion of Cultural Resources (see Section E. Cultural Resources above).

**S. UTILITIES**

Utilities and service systems impacts of the currently proposed 2022 Master Plan were evaluated with regard to the 2016 Master Plan FEIR. The potential for the currently proposed 2022 Master Plan to result in new or substantially more adverse significant impacts to utilities and service systems was evaluated in relation to five questions recommended for consideration by the State CEQA Guidelines.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:

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

	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

The 2016 Master Plan FEIR found that the 2012 Master Plan would not require or result in the relocation or construction of new or expanded water or wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. The utility infrastructure on the Medical Center Campus may be relocated or replaced on site during construction, but no facilities on the Campus serve off-site areas. Therefore, the 2016 Master Plan FEIR found that 2012 Master Plan impacts on utility infrastructure would be less than significant.

After construction of the 2012 Master Plan, there would be no impacts on utility infrastructure. See Sections regarding water supply and wastewater treatment below and Section J Hydrology, above, regarding impacts on water, wastewater, and stormwater infrastructure capacity, respectively. The 2016 Master Plan FEIR found that impacts would be less than significant.

## 2022 Master Plan

### *Construction, Operation and Conclusion*

The 2022 Master Plan would also include relocation or replacement of on-site utility infrastructure. Impacts to utility infrastructure would be the same as those of the 2012 Master Plan, less than significant.

After construction of the 2022 Master Plan, there would be no impacts on utility infrastructure. See Sections regarding water supply and wastewater treatment below and Section J Hydrology, above, regarding impacts on water, wastewater, and stormwater infrastructure capacity, respectively. As under the 2012 Master Plan, the impacts would be less than significant.

(b) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to having sufficient water supplies available to serve the proposed 2022 Master Plan and reasonably foreseeable future development during normal, dry, and multiple dry years?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

The 2012 Master Plan would replace on-site domestic water and fire water conveyance facilities with those that will fully comply with more stringent and current County water conservation requirements. The 2012 Master Plan includes a substantial increase in landscaped areas when compared to the existing Medical Center Campus, which is minimally landscaped, but much of

this area would be planted with drought-tolerant and California native plants, as required by the County. (Recycled water is not available at the site.)

The Medical Center Campus is supplied with water by the Dominguez System. Based on the project's Water Supply Assessment, implementation of the 2012 Master Plan would not affect the ability of California Water Service to provide an adequate supply to meet water demands in the project's service area. The 2016 Master Plan FEIR therefore determined that the impacts on water supply would be less than significant.

## 2022 Master Plan

### *Construction, Operation and Conclusion*

Because the 2022 Master Plan would be slightly smaller than the 2012 Master Plan, its water supply demand would also be slightly reduced. Therefore, the 2022 Master Plan's impacts on water supply would also be less than significant.

(c) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to resulting in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

The 2016 Master Plan FEIR found that, although construction and operation of the 2012 Master Plan would result in an increase in wastewater generation that would increase the overall demand on wastewater conveyance and treatment facilities in the area, this increase would not exceed the available capacity of affected wastewater facilities. Therefore, the 2012 Master Plan would not directly or indirectly result in an exceedance of wastewater treatment requirements. It would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities. It would not result in a determination by the Los Angeles County Sanitation Districts that it has inadequate capacity to serve the 2012 Master Plan's projected demand in addition to the provider's existing commitments. Therefore, impacts related to wastewater would be less than significant.

## 2022 Master Plan

### *Construction, Operation and Conclusion*

Because the 2022 Master Plan would result in less total building area than the 2012 Master Plan, its increase in wastewater generation would also be reduced. Therefore, the 2022 Master Plan's impacts on wastewater would also be less than significant.

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the following:		
(d) Generating 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?		
(e) Compliance with federal, state, and local management and reduction statutes and regulations related to solid waste?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2012 Master Plan

### *Construction and Operation*

The 2016 Master Plan FEIR found that the 2012 Master Plan would generate construction debris due to demolition and removal of multiple buildings throughout the Medical Center Campus, grading and excavation, and construction of new buildings. Disposal of waste materials would achieve a minimum diversion or recycling rate of 50 percent, as required by County regulations. Adequate capacity for construction waste exists at the County's construction and demolition disposal sites. As such, impacts related to solid waste disposal capacity due to construction activities would be less than significant.

The 2016 Master Plan FEIR found that impacts on waste disposal facilities from 2012 Master Plan operations would be less than significant because the County has sufficient landfill capacity to accommodate residual waste generation. The 2012 Master Plan would generate solid waste as the result of operation of the project, but there would not be a substantial increase in operations and solid waste generation. Waste disposal would include design features and compliance with County waste disposal procedures for recycling and diversion of waste from County landfills.

The 2016 Master Plan FEIR found that the 2012 Master Plan would be implemented in compliance with all applicable federal, state, and local regulatory requirements regarding diversion of landfill materials and efficient use of County landfill facilities. Therefore, impacts would be less than significant.

## 2022 Master Plan

### Construction and Operation

The 2022 Master Plan would result in less new construction and less total building areas than the 2012 Master Plan, but a similar amount of demolition would be required. Therefore, its generation of solid waste as the result of operation would be similar to that of the 2012 Master Plan. The 2022 Master Plan would also comply with the minimum diversion or recycling rate of 50 percent, as required by County regulations. With adequate capacity for construction waste at the County’s construction and demolition disposal sites, impacts related to solid waste disposal capacity due to construction activities would be less than significant, the same as those of the 2012 Master Plan.

The reduced size of the 2022 Master Plan would result in reduced impact on waste disposal facilities from operations compared to the 2012 Master Plan. Waste disposal for the 2022 Master Plan would be similar to the 2012 Master Plan’s design features and compliance with County waste disposal procedures for recycling and diversion of waste from County landfills. With sufficient landfill capacity to accommodate residual waste generation, impacts of the 2022 Master Plan on waste disposal would be less than significant, the same as those of the 2012 Master Plan.

### Conclusion

Impacts related to solid waste disposal would be similar for the 2022 Master Plan as compared to those for the 2012 Master Plan as identified in the 2016 Master Plan FEIR.

## T. WILDFIRE

Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to being located in or near state responsibility areas or lands classified as very high fire hazard severity zones, and any of the following:		
(a) Substantially impairing an adopted emergency response plan or emergency evacuation plan?		
(b) Due to slope, prevailing winds, and other factors, exacerbating wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?		
(c) Requiring the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?		
(d) Exposing 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?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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## 2012 Master Plan

### *Construction and Operations*

The project site is located in a highly urbanized area and is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. The NOP/IS found that the Medical Center Campus is not located within an identified wildland fire hazard severity zone. Therefore, there would be no impacts related to wildfire emergency plans.

## 2022 Master Plan

### *Construction, Operation and Conclusion*

The 2022 Master Plan would have no impacts with respect to wildfire.

## **U. GROWTH INDUCING IMPACTS**

The 2016 Master Plan FEIR determined that the Harbor-UCLA Campus Redevelopment Project would not result in substantial growth inducing impacts.

Consistent with the 2016 Master Plan FEIR, the currently proposed 2022 Master Plan would not induce growth in an area that is not already developed with infrastructure to accommodate such growth. The currently proposed 2022 Master Plan would be located in an urban area within the unincorporated area of Los Angeles County consistent with permitted uses and densities called for by the General Plan designation of the site. Additionally, the project would be located in close proximity to various public transportation opportunities.

Overall, as indicated in the 2016 Master Plan FEIR, the currently proposed 2022 Master Plan would not result in an increase in the population that could tax existing community service facilities or encourage or facilitate other activities that could significantly affect the environment or the area, either individually or cumulatively. Thus, the currently proposed 2022 Master Plan would not result in significant growth-inducing impacts.

The currently proposed 2022 Master Plan would be built in an existing urban setting and served by existing infrastructure and adjacent streets. The currently proposed 2022 Master Plan would not provide through access to vacant undeveloped parcels whose development potential could otherwise be enhanced, nor would it require extending or improving infrastructure in a manner that would facilitate off-site growth.

Overall, the currently proposed 2022 Master Plan would not remove obstacles to population growth, result in an increase in the population that may tax existing community service facilities, or encourage or facilitate other activities that could significantly affect the environment or the area, either individually or cumulative. Thus, as discussed in the 2016 Master Plan FEIR, the currently proposed 2022 Master Plan would not result in significant growth-inducing impacts.

## V. MANDATORY FINDINGS OF SIGNIFICANCE

Mandatory Findings of Significance were evaluated with respect to the 2016 Master Plan FEIR, and the three questions recommended by the State CEQA Guidelines.

(a) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to the potential to substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2012 Master Plan

The 2012 Master Plan was found to not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

### 2022 Master Plan

The 2022 Master Plan also would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

(b) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to impacts, which are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of an individual 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.)		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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## 2012 Master Plan

Other than the four issue areas where project impacts alone were determined to be significant (see below), the 2016 Master Plan FEIR determined that the 2012 Master Plan would not have impacts that are *individually limited* but cumulatively considerable. All issue areas where impacts were found to be less than significant were determined to not contribute to any cumulatively considerable cumulative impact:

*Aesthetics.* The 2016 Master Plan EIR found that, because of the flat topography of the area, none of the related projects for the cumulative analysis would be visible from the Medical Center Campus. Related projects in combination with the 2012 Master Plan would not degrade the existing visual character or quality of the site and its surroundings, and visual character impacts would not be cumulatively significant. Related projects in combination with the 2012 Master Plan would not obstruct or alter an existing, recognized valued public view or scenic vista, and view impacts would not be cumulatively significant. The 2012 Master Plan in combination with related projects would not create a new source of light or glare that would substantially alter the character of the area or result in substantial light spill/or glare and impacts with respect to light and glare would not be cumulatively significant. No significant cumulative impacts were anticipated that would require mitigation.

*Agricultural Resources.* The NOP/IS found that the 2012 Master Plan would have no impact on agriculture and forestry resources; therefore, it would not result in or contribute to a cumulative impact for agriculture and forestry resources.

*Air Quality.* Construction of the 2012 Master Plan would comply with South Coast Air Quality Management District (SCAQMD) rules and mandates as well as the CEQA requirement that significant impacts be mitigated to the extent feasible. The same requirements would also be imposed on construction projects in the South Coast Air Basin. Regional and localized construction emissions associated with the 2012 Master Plan would not exceed the SCAQMD numeric indicators. As such, the 2012 Master Plan's contribution to cumulatively significant construction impacts on air quality would be less than significant. Operation of the 2012 Master Plan would not exceed the SCAQMD thresholds. Therefore, the 2016 Master Plan FEIR found that the 2012 Master Plan's incremental contribution to long-term emissions of nonattainment pollutants and ozone precursors, considered together with related projects, would not be cumulatively considerable, and impacts would be less than significant.

*Biological Resources.* Because the Medical Center Campus is in a highly urbanized area, the NOP/IS found that the 2012 Master Plan would have no or less-than-significant impacts on biological resources. The NOP/IS found that migratory bird nests could be disturbed during construction that involved removal of trees and large vegetation, but this impact would be prevented with incorporation of mitigation. Therefore, the 2012 Master Plan would not result in a considerable contribution to a cumulative impact related to biological resources.

*Cultural Resources.* The NOP/IS found that the Campus is not eligible for listing in the National Register of Historic Places or the California Register of Historical Resources as a historic district, and none of the buildings on the site are individually eligible for listing in the National or California Registers. The Medical Center Campus is within a highly urbanized area and has been subject to physical disruption over the course of several decades since it was first developed in 1943. For this reason, it is likely that any archaeological resources or traditional burial sites that may have been present on the property have been disturbed or removed. Nonetheless, previously undiscovered buried archaeological resources and human remains could still exist on the property. The NOP/IS found that the impacts on unknown resources and

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remains could be prevented with mitigation. Therefore, the 2012 Master Plan was found to not result in a considerable contribution to a cumulative impact related to cultural resources.

*Energy.* The 2016 Master Plan FEIR found that, because the 2012 Master Plan would adhere to the applicable state and County standards that would improve energy efficiency, it would not result in a considerable contribution to a cumulative impact related to energy.

*Geology and Soils.* Geologic and soil impacts are generally site-specific and there is little, if any, cumulative relationship between development projects. The 2012 Master Plan adherence to all relevant plans, codes, and regulations with respect to project design and construction would reduce project-specific and cumulative geologic impacts. Therefore, the 2012 Master Plan, considered together with related projects, would not result in a cumulatively considerable contribution to cumulatively significant geology and seismicity impacts.

*Greenhouse Gas Emissions.* The 2016 Master Plan FEIR found that the 2012 Master Plan would be consistent with applicable greenhouse gas (GHG) reduction strategies recommended by the County and state. In addition, it would support and be consistent with relevant and applicable GHG emission reduction strategies in Southern California Association of Governments' Sustainable Communities Strategy. As a result, the 2012 Master Plan would be consistent with the County and state goals. Therefore, the 2012 Master Plan's incremental contribution to GHG emissions was found to not be cumulatively considerable.

*Hazards and Hazardous Materials.* The 2012 Master Plan and all development in the vicinity would be subject to the same local, regional, state, and federal regulations pertaining to hazards and hazardous materials. Therefore, the 2016 Master Plan FEIR found that, with adherence to these regulations, the 2012 Master Plan's incremental contribution to hazard and hazardous waste impacts would not be cumulatively considerable.

*Hydrology and Water Quality.* Construction of the 2012 Master Plan would not result in a violation of any water quality standards or waste discharge requirements, would not provide substantial additional sources of polluted runoff, and would not substantially degrade water quality. Compliance with construction phase permits and standard construction phase best management practices (BMPs) would decrease the potential for any significant erosion or sedimentation from soil disturbance associated with construction of the 2012 Master Plan and related projects. During construction, the amount of stormwater runoff is also anticipated to be less than or equal to the amount under existing conditions. Therefore, the 2016 Master Plan FEIR found that contribution to cumulative impacts related to hydrology and water quality would not be considerable during construction. Compliance with County Low-Impact Development (LID) criteria as well as state and local regulations that require post-construction BMPs would ensure that operation of the 2012 Master Plan and related projects would not degrade the surface water quality of receiving waters to levels below standards considered acceptable by the Los Angeles Regional Water Quality Control Board or other regulatory agencies or impair the beneficial uses of the receiving waters. The 2012 Master Plan and related projects would also be required to comply with all applicable federal, state, and local requirements concerning handling, storage, and disposal of hazardous materials to reduce the potential for the release of contaminants into groundwater as a result of project operation. Therefore, the 2016 Master Plan FEIR found that operation activities would not result in a cumulatively considerable contribution with respect to degrading groundwater quality or interfering with recharge

*Land Use.* The 2016 Master Plan FEIR found that the 2012 Master Plan would be infill development on an already urbanized site that would constitute a densification and slight increase in the height of the existing on-site medical uses. The 2012 Master Plan would be consistent with adopted regional and local land use plans, including the existing County General Plan land use designation and zoning for the site. It would also result in less-than-significant impacts with respect to land use incompatibility with the existing adjacent off-site land uses. Because the 2012 Master Plan would be consistent with the adopted land use plans and zoning, it would not result in a cumulatively considerable contribution to land use impacts.

*Mineral Resources.* The NOP/IS found that the 2012 Master Plan would have no impact on mineral resources and therefore would not contribute to a cumulative impact on mineral resources.

*Noise.* Noise from construction of the 2012 Master Plan and related projects would be localized to within 500 feet of each of the construction sites. The 2016 Master Plan FEIR found that construction noise from one site would not result in a noticeable increase in noise at sensitive receptors near the other site, which would preclude a cumulative noise impact. As such, cumulative impacts associated with construction noise would be less than significant. Due to the rapid attenuation characteristics of groundborne vibration and distance of the related projects to the 2012 Master Plan, there is no potential for a cumulative construction-period impact with respect to groundborne vibration. Los Angeles County Code provisions limit stationary-source noise from items such as roof-top mechanical equipment; noise levels would be less than significant at the property line for the 2012 Master Plan and each related project. Noise produced by any related project would not be additive to 2012 Master Plan–related noise levels. As the project’s composite stationary-source impacts would be less than significant, the 2016 Master Plan FEIR found that composite stationary-source noise impacts attributable to cumulative development would also be less than significant. Due to the rapid attenuation characteristics of groundborne vibration and distance of the related projects to the 2012 Master Plan, there is no potential for a cumulative operation-period impact with respect to groundborne vibration. There are no facilities similar to the 2012 Master Plan (i.e., with helicopter traffic) proposed in proximity to the Medical Center Campus. As such, noise impacts due to cumulative helicopter air traffic would be less than significant.

*Population and Housing.* The 2016 Master Plan FEIR found that the 2012 Master Plan’s projected growth associated with cumulative housing and population would be within the 2040 Southern California Association of Governments’ projections and would not be cumulatively significant. The 2012 Master Plan’s development would not introduce unplanned infrastructure or accelerate development in an undeveloped area, and cumulative impacts regarding such unplanned development would be less than significant.

*Public Services.* The 2016 Master Plan FEIR found that, although there could be a cumulative demand from the 2012 Master Plan and related projects for Los Angeles County Fire Department (LACFD) fire protection and emergency medical services, this demand would be reduced through regulatory compliance. The 2012 Master Plan and all the related projects would be subject to review by LACFD (or the Cities of Los Angeles, Carson, and Torrance) for compliance with applicable fire and building code requirements. Based on this, the 2016 Master Plan FEIR found that the 2012 Master Plan would not result in a considerable contribution to cumulative impacts related to fire protection and emergency medical services. The 2016 Master Plan FEIR found that, while the 2012 Master Plan and the related projects together would generate additional demand for police services from the Los Angeles County Sheriff’s Department (LACSD), the 2012 Master Plan’s demand would not be expected to require new or

expanded LACSD facilities that would result in additional significant environmental effects because the 2012 Master Plan would provide the additional on-site operational space and parking required to accommodate its demand for additional officers; the project would be required to implement security features, such as those outlined in Crime Prevention Through Environmental Design, to reduce the demand for service from LACSD; the project would be subject to review by LACSD to ensure that required security features are incorporated; and the project would generate tax revenues for the County that the County could use to hire the additional LACSD officers. Therefore, the 2016 Master Plan FEIR found that the 2012 Master Plan would not result in a considerable contribution to cumulative impacts related to police services. The 2012 Master Plan and the related projects would pay property and other taxes and fees, a portion of which would go to paying for school facilities and services. Therefore, the 2016 Master Plan FEIR found that the 2012 Master Plan would not result in a considerable contribution to cumulative impacts related to schools. The 2016 Master Plan FEIR found that the 2012 Master Plan would not be expected to generate a demand for library facilities that would require new or expanded library facilities, such that it would not be expected to contribute substantially to cumulative demand for public libraries. Therefore, cumulative library impacts would be less than significant.

*Parks and Recreation.* The 2012 Master Plan would not be expected to generate a substantial demand for public parks and recreational facilities for several reasons, including the amount of usable open space provided by the project. The 2012 Master Plan and the related projects would pay property and other taxes and fees that could be used by the County and neighboring cities (for related projects) to develop new parks. Therefore, the 2016 Master Plan FEIR found that the 2012 Master Plan would not result in a considerable contribution to cumulative demand for public parks and recreational facilities, and cumulative parks and recreation impacts would be less than significant.

*Transportation.* The 2016 Master Plan FEIR found that the 2012 Master Plan would result in a project-specific significant impact with respect to vehicle delay and levels of service during construction and operation (see discussion of significant impacts below). Analysis of potential impacts of the 2012 Master Plan on the regional transportation system conducted in accordance with Congestion Management Program (CMP) requirements determined that the project would not have a significant impact on CMP monitoring intersections. Analysis of potential (delay-related) impacts on the regional transportation system in accordance with the California Department of Transportation (Caltrans) found 2012 Master Plan cumulative impacts on I-110 northbound and southbound in the AM peak hour. Given uncertainties regarding the timing of implementation of improvements, impacts were conservatively concluded to be significant and unavoidable in the 2016 Master Plan FEIR. Therefore, the 2012 Master Plan was found to contribute to a significant cumulative impact in this regard. The 2016 Master Plan FEIR found that the 2012 Master Plan would not have a significant impact on public transit, and the incremental impacts on the regional public transit system would not be cumulatively considerable. The 2016 Master Plan FEIR found that pedestrian and bicycle access and facilities and vehicular access and circulation would not result in a significant impact, and the 2012 Master Plan would not contribute to a significant cumulative impact with regard to these issues.

*Tribal Cultural Resources.* Addressed under Cultural Resources.

*Utilities.* The 2016 Master Plan FEIR found that the 2012 Master Plan and the related projects considered together would not be anticipated to have a cumulatively considerable contribution to impacts on water infrastructure. The 2016 Master Plan FEIR found that the 2012 Master Plan

and the related projects would not contribute to cumulative water demands on the California Water System Dominguez system. Because cumulative plus 2012 Master Plan water demand in 2030 would not exceed California Water Service's 2030 water supply projections, the contribution to cumulative water supply impacts of the 2012 Master Plan was found to not be cumulatively considerable. The 2016 Master Plan FEIR found that the projected cumulative wastewater generation from the 2012 Master Plan in conjunction with the related projects would not cause an increase in wastewater flows that would result in an exceedance of wastewater treatment requirements that require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, or result in a determination by the Los Angeles County Sanitation Districts that it has inadequate capacity to serve the project's projected demand. Therefore, cumulative wastewater impacts would be less than significant. The 2016 Master Plan FEIR found that during construction it is expected that all of the 2012 Master Plan's construction and demolition waste can be accommodated for the foreseeable future and cumulative impacts regarding the disposal of construction and demolition waste would not occur. For operations-related solid waste generation, the 2012 Master Plan in conjunction with related projects in the area would not generate solid waste in sufficient quantities to substantially reduce the County's existing estimated landfill capacity or otherwise limit the County's ability to address ongoing landfill capacity needs via existing capacity and other options for increasing capacity. Therefore, the 2016 Master Plan FEIR found that waste generation from the cumulative development would be less than significant.

*Wildfire.* The 2012 Master Plan is in a highly urbanized area and is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones, the 2012 Master Plan would have no impacts related to wildfire and would not contribute to cumulative impacts.

## **2022 Master Plan**

Since certification of the 2016 Master Plan FEIR, the West Carson Transit Oriented District (TOD) Specific Plan has been approved (October 2019); while it is anticipated this Specific Plan will lead to additional development in the area, no projects have been identified that would substantially change the cumulative analysis identified in the 2016 Master Plan FEIR. Like the 2012 Master Plan, other than the four issue areas determined to be significant, the 2022 Master Plan would not have impacts that are *individually limited* but cumulatively considerable. The 2016 Master Plan FEIR identified four issue areas where project impacts alone were significant (see below).

*Aesthetics.* No additional projects are known that would be visible from the Medical Center Campus. Therefore, the 2022 Master Plan would also not result in a considerable contribution to cumulative impacts related to visual character or quality, views, and light and glare.

*Agricultural Resources.* As for the 2012 Master Plan the 2016 Master Plan would have no impact and would not contribute to a cumulative impact related to agricultural resources.

*Air Quality.* The 2022 Master Plan would comply with the same rules, mandates, and requirements related to air quality as the 2012 Master Plan. As for the 2012 Master Plan, the 2022 Master Plan would not exceed SCAQMD Thresholds of significance and therefore would not result in a considerable contribution to a cumulative impact related to air quality.

*Biological Resources.* The 2016 Master Plan would also incorporate the same mitigation and as for the 2012 Master Plan would not result in a considerable contribution to a cumulative impact related to biological resources.

*Cultural Resources.* As for the 2012 Master Plan, the 2022 Master Plan would incorporate the same mitigation measures and therefore would not result in a considerable contribution to a cumulative impact related to cultural resources.

*Energy.* The 2022 Master Plan would also adhere to the applicable state and County standards that would improve energy efficiency and therefore would not result in a considerable contribution to a cumulative impact related to energy.

*Geology and Soils.* The 2022 Master Plan would adhere to all relevant plans, codes, and regulations with respect to project design and construction, which would reduce project-specific and cumulative geologic impacts. Therefore, the 2022 Master Plan, considered together with related projects, also would not result in a considerable contribution to a cumulative impact related to geology, seismicity and soils.

*Greenhouse Gas Emissions.* The 2022 Master Plan would also be consistent with applicable GHG reduction strategies by the County and state and its incremental contribution to cumulatively significant GHG emissions also would not be cumulatively considerable.

*Hazards and Hazardous Materials.* The 2022 Master Plan and all development in the vicinity would also be subject to the same local, regional, state, and federal regulations pertaining to hazards and hazardous materials. As a result, with adherence to these regulations, the 2022 Master Plan would not result in a considerable contribution with respect to hazards and hazardous materials.

*Hydrology and Water Quality.* The 2022 Master Plan would comply with the same County LID criteria and state and local regulations for post-construction BMPs as the 2012 Master Plan. Therefore, it would not result in a cumulatively considerable contribution to impacts related to hydrology and water quality.

*Land Use.* As for the 2012 Master Plan, the 2022 Master Plan result in similar land uses as today and would be consistent with the adopted land use plans and zoning, and the 2022 Master Plan would not result in a cumulatively considerable contribution to impacts related to land use.

*Mineral Resources.* As for the 2012 Master Plan, the 2022 Master Plan would not contribute to a cumulative impact on mineral resources.

*Noise.* The 2022 Master Plan would use the same construction methods in similar approximate locations as the 2012 Master Plan. As discussed below the project would result in project-specific significant impacts related to construction noise but these impacts are expected to be localized to the immediate vicinity. As for the 2012 Master Plan, impacts related to use of interim helistops would be significant, but these impacts are not expected to overlap with other helicopter activity. Like the 2012 Master Plan, there is no potential for a cumulative construction-period impact with respect to groundborne vibration. The 2022 Master Plan would have the same land uses in approximately the same places and use the same equipment as the 2012 Master Plan. As for the 2012 Master Plan composite stationary- source noise impacts, groundborne vibration impacts, and helicopter air traffic noise impacts would be the same as

those of the 2012 Master Plan, they would be less than significant, and their cumulative development would also be less than significant.

*Population and Housing.* The 2022 Master Plan would have the same land uses and a similar number or fewer employees as the 2012 Master Plan. Therefore, the 2022 Master Plan would not contribute to cumulatively significant growth.

*Public Services.* The 2022 Master Plan would have the same land uses and a similar number or fewer employees as the 2012 Master Plan. Therefore, the 2022 Master Plan also would not contribute to cumulatively significant demand for fire and emergency medical services, police protection, schools, and libraries.

*Parks and Recreation.* The 2022 Master Plan would have the same land uses and a similar number or fewer employees as the 2012 Master Plan, and it would provide even similar amounts of open space. Therefore, the 2022 Master Plan also would not contribute to cumulatively significant demand for parks and recreation.

*Transportation.* As discussed below, the 2012 Master Plan impacts on construction and operational traffic were considered significant primarily as a result of vehicle delay and level of service impacts. These impacts are no longer considered significant under CEQA, however, for purposes of this addendum the 2022 Master Plan is considered to have a significant impact on traffic during construction and operation; vehicle trips and VMT would be similar to or less than the 2022 Master Plan. Like the 2012 Master Plan, however, it would not contribute to significant cumulative impacts with regard to the regional public transit system, pedestrian and bicycle access and facilities, and vehicular access and circulation.

*Tribal Cultural Resources.* Addressed under Cultural Resources above.

*Utilities.* The 2022 Master Plan would result in less building area than the 2012 Master Plan, which would reduce impacts on water infrastructure and supply, wastewater generation, or solid waste disposal impacts. Therefore, like those of the 2012 Master Plan, the 2022 Master Plan's cumulative impacts would be less than significant.

*Wildfire.* The 2022 Master Plan is located on the same site as the 2012 Master Plan. Therefore, it also would have no impacts related to wildfire and would not contribute to cumulative impacts.

(c) Does the currently proposed 2022 Master Plan require Subsequent or Supplemental CEQA Documentation with respect to environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		
	Yes	No
New Significant Environmental Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantial Increase in the Severity of a Previously Identified Significant Effect Caused by a Change in the Project or Circumstances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
New or Substantially More Severe Significant Impacts Shown by New Information	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to Substantially Reduce a Significant Effect Shown by New Information but Declined by Proponent	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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## 2012 Master Plan

The 2012 Master Plan would not cause substantial adverse effects on human beings, either directly or indirectly, with the exception of significant and unavoidable impacts related to construction noise, and potentially traffic. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include air quality, geology and soils, GHG emissions, hazards and hazardous materials, noise, population and housing, public services, recreation, and transportation, which are addressed in the applicable sections in the 2016 Master Plan FEIR. Direct and indirect project impacts on human beings were found to be less than significant upon implementation of mitigation with the exception of the following:

- 1) Construction Noise – Section 4I, Noise, of the 2016 Master Plan FEIR identified and evaluated the anticipated significant impacts related to on-site construction noise at nearby residential uses in excess of established thresholds (60 dBA, Leq at single-family residences; 65 dBA, Leq at multi-family residences; or 70 dBA, Leq at transient lodging). Mitigation Measure MM-NOISE-1 and Project Design Features (PDF-NOISE-1 through PDF-NOISE-5 and PDF-NOISE-7) would reduce impacts but not to a less than significant level.
- 2) Operational Noise -- Section 4I, Noise also addresses operational noise and indicates that project implementation would temporarily increase noise levels at adjacent noise-sensitive receptors in the project area as the result of temporary helicopter activity during use of the proposed interim helistops. Project-related noise from helicopter activity would only be significant when using the temporary interim helistops. Project-related noise from helicopter activity when using the permanent helistop after it is built will be less than significant. Therefore, the temporary interim helistops would result in a temporary and periodic significant impact, but the permanent helistop would result in a less than significant permanent impact.
- 3) Construction Traffic – Section 4L, Transportation and Traffic, of the 2016 Master Plan FEIR identified and evaluated significant impacts related to traffic during construction. With the implementation of PDF TRAF- 1, Construction Traffic Management Plan, and PDF TRAF- 2, Pedestrian Safety, potential construction impacts associated with hauling, deliveries and worker vehicles would be reduced. Scheduling of construction-related traffic to avoid peak hours, prohibited on-street parking, temporary traffic controls, and the use of safety precautions, such as alternate routing and protection barriers in accordance with the two Project Design Features would minimize the potential for the project to result in substantial disruption of traffic flow, intersection operational impacts, conflicts with pedestrians and/or bicyclists, or loss of on-street parking in the project area's commercial zones and residential neighborhoods. However, given the potential addition of construction-related vehicle trips during peak construction periods, transportation and parking impacts related to construction would be considered significant and unavoidable, though such impacts would only occur on a temporary basis while construction activities are occurring on-site.
- 4) Operational Traffic – Section 4L, Transportation and Traffic of the 2016 Master Plan FEIR identified and evaluated the anticipated significant impacts related to operational traffic. Implementation of the 2012 Master Plan would result in a net increase in traffic generation on the Project Site of 6,598 daily trips at Full Buildout (2030). Project-related operational traffic impacts on study area intersections were considered potentially significant.

The project would increase traffic on the nearby Caltrans facilities. With regard to freeway segments (three segments were considered significantly impacts) and the one intersection under the jurisdiction of Caltrans that was considered significantly impacted, while the County would make a fair-share contribution to offset increases in trips that would occur as a result of project traffic, the project was still considered to have a significant impact on Caltrans facilities.

## 2022 Master Plan

The 2022 Master Plan would not cause substantial adverse effects on human beings, either directly or indirectly, with the exception of the same significant and unavoidable impacts as the 2012 Master Plan, with the exception of traffic impacts related to delay and level of service:

- 1) **Construction Noise.** Construction of the proposed 2022 Master Plan Revision would require the use of the same type of mobile heavy equipment and methods in the same general locations, although phasing would be different. Increased noise levels at sensitive receivers (both on-site and off-site) are expected to be generally the same and would continue to exceed established thresholds even with mitigation.
- 2) **Interim Operational Noise.** The proposed 2022 Master Plan Revision currently includes use of one of the locations evaluated in the 2016 Master Plan FEIR (Interim Helistop 2) as a temporary helistop during construction. But use of Interim Helistop 1 remains an option. Therefore, noise impacts for use of this helistop would be the same, resulting in significant impacts. There are no feasible mitigation measures to reduce the noise impacts of the interim heli-stops, impacts would continue to be significant and unavoidable.
- 3) **Construction Traffic.** Since net new construction would be less than analyzed in the 2016 Master Plan EIR, vehicle trips and associated miles travelled (VMT) -- the primary metric that is now used to evaluate traffic impacts -- would be less than for the 2012 Master Plan and therefore VMT impacts would be less or similar. Impacts to intersections and levels of service are no longer considered significant under CEQA. In addition, the project is located within the West Carson Transit Oriented District (TOD) Specific Plan area (approved October 2019). Projects within TOD areas have fewer impacts with respect to VMT because of their proximity to transit. Conservatively, despite changes to CEQA to remove delay and levels of service as impacts under CEQA, construction traffic impacts of the 2022 Master Plan are still considered significant and unavoidable for the purposes of this addendum.
- 4) **Operational Traffic.** Similar to construction traffic impacts, since the total building area would be less under the proposed 2022 Master Plan Revision, vehicle trips and associated miles travelled would be less than would occur under the 2022 Master Plan and therefore VMT impacts would be less or similar. As for construction traffic, impacts to intersections and levels of service are no longer be considered significant under CEQA. As noted above, the project is located within the West Carson Transit Oriented District (TOD) Specific Plan area. Projects within TOD areas have fewer impacts with respect to VMT because of their proximity to transit. Conservatively, despite changes to CEQA to remove delay and levels of service as impacts under CEQA, operational traffic impacts are still considered significant and unavoidable for the purposes of this addendum.

## W. CONCLUSION

The currently proposed 2022 Master Plan is described in Section 2 of this Addendum and would be within the assumptions analyzed in the 2016 Master Plan FEIR. The currently proposed 2022 Master Plan has been reviewed by the County of Los Angeles in light of Sections 15162 and 15163 of the Guidelines. As the CEQA Lead Agency, the County of Los Angeles has determined, based on the analysis presented herein, that none of the conditions (identified in Section 1) apply which would require preparation of a subsequent or supplemental EIR and that an Addendum to the certified Harbor-UCLA Campus Redevelopment Project Final EIR is the appropriate environmental documentation under CEQA for the currently proposed 2022 Master Plan.

Section 3 discusses issue-by-issue how the impacts anticipated for the currently proposed 2022 Master Plan would be within those previously identified in the 2016 Master Plan FEIR. The Mitigation Monitoring and Reporting Program (MMRP) adopted with the 2016 Master Plan FEIR would continue to apply as appropriate to the currently proposed 2022 Master Plan to ensure that all impacts are reduced as necessary and feasible.

As discussed throughout this Addendum (see in particular the summary presented in **Table 4**), the currently proposed 2022 Master Plan would result in environmental impacts within those analyzed for every issue with implementation of applicable Project Design Features and mitigation measures as included in the adopted MMRP for the 2012 Master Plan.

## **4. REPORT PREPARATION**

### **Lead Agency**

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Daniel Carney, Program Director  
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### **Consultants**

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Wendy Lockwood, CEQA Project Manager

# Wendy Lockwood

## Education

Sussex University, England, Chemistry, concentration in Environmental Science  
Master's degree, Candidate, Environmental Management, University of San Francisco

## Professional Affiliations

Association of Environmental Professionals  
Los Angeles Conservancy  
American Planning Association

Ms. Lockwood is an environmental consultant with over 25 years' experience in the preparation of environmental documents pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). She has been the Project Manager for major projects and technical task leader on complex projects involving noise, air quality, energy, and hazardous wastes/materials issues. Ms. Lockwood has broad knowledge and understanding of State and local planning regulations and regional planning documents in Southern California. She has participated in the preparation of environmental documentation for over 500 projects.

Ms. Lockwood has experience with a wide variety of projects, issues and communities and using this experience is able to quickly identify and address issues of potential concern before they become major problems. Her technical background allows her to review complex documentation and identify potential analytic flaws. For these reasons, Ms. Lockwood is frequently asked by lead agencies, larger consulting firms, and lawyers to provide detailed review and recommendations concerning CEQA and NEPA documents, including providing overall advice concerning approach and content of environmental documents, critical review of completed documents/analyses as well as providing specific review of more complex projects and/or issues.

In January 2006, Ms. Lockwood started the small environmental consulting firm of Sirius Environmental (Sirius). Sirius (WBE/SBE/VSBE) is an environmental consulting firm that provides CEQA and NEPA related services. Sirius Environmental was formed to focus on project and program management of projects and programs requiring a detailed understanding of CEQA and NEPA and requiring responsive, individualized management. Sirius Environmental provides support to developers, engineers, consulting firms and public agencies in the preparation of clear, accurate technical reports and documents that meet the increasingly demanding needs of communities and their decision makers.

Ms. Lockwood's areas of technical specialty are land use, energy conservation, noise, air quality, greenhouse gas emissions and hazardous materials. She has overseen the preparation of numerous technical analyses for a variety of projects – small and large. She is familiar with land use regulation and prepares policy consistency analyses for projects in complex regulatory environments as well as aesthetic analyses for projects in urban and rural environments.

Ms. Lockwood is an experienced CEQA and NEPA project manager. She has overseen the preparation of comprehensive environmental documents for a variety of different projects, managing complex technical analyses and providing advice to clients regarding effective mitigation strategies. She is familiar with recent case law with respect to environmental documentation. She undertakes public outreach for controversial projects in a number of sensitive communities.

Ms. Lockwood provides QA/QC for a variety of projects including transportation projects (Regional Transportation Plans, Mid-Coast Corridor Transit Project, Orange Line Extension), policy documents (City of Los Angeles CEQA staff training, Updated Thresholds Guide) and plans (Mobility Element, Hollywood Community Plan, Boyle Heights Community Plan).



# technical memorandum

date December 13, 2021

to

cc

from Alan Sako, ESA  
Olivia Chan, ESA  
Alison Campestre, ESA

subject Air Quality and Greenhouse Gas Analysis  
Harbor-UCLA Medical Center Campus Master Plan Project  
(now referred to as the Harbor-UCLA Replacement Program)

## 1.0 Introduction and Purpose

### 1.1 Overview and Brief Project Description

On December 20, 2016, Los Angeles County (County or Applicant), acting as the Lead Agency under the California Environmental Quality Act (CEQA), approved the Harbor-UCLA Medical Center Campus Master Plan Project (2012 Master Plan)<sup>1</sup> and certified the associated Master Plan EIR (2016 Master Plan EIR). The 2012 Master Plan addresses the future needs of the communities served by the Harbor-UCLA Medical Center Campus (Harbor-UCLA). The 72-acre Medical Center Campus is located in the unincorporated County of Los Angeles community of West Carson, which roughly encompasses the 2.3-square-mile area between the Harbor Freeway (I-110) on the east and Normandie Avenue on the west, and Del Amo Boulevard on the north and Lomita Boulevard on the south.

The 2012 Master Plan encompassed construction of a new Hospital tower on schedule to meet increasing state law seismic requirements for acute care facilities, renovation of the existing Hospital building to house non-acute care support uses, replacement of aging facilities, reconfigured vehicular and pedestrian access to and circulation within the Harbor-UCLA Medical Center Campus, and implementation of a cohesive site design that would enhance the experience of staff, patients, and visitors. As a result of the 2012 Master Plan, the Campus-wide floor area would increase from approximately 1,279,284 square feet (sf) to approximately 2,457,801 sf (an increase of 1,178,517 sf).

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<sup>1</sup> The Master Plan approved in December 2016 was completed in June 2012 and is referred to as the 2012 Master Plan.

On November 10, 2020 the County Board of Supervisors approved a revision to the Harbor-UCLA Medical Center Campus Master Plan (2020 Master Plan) that included a reduction in new development, slightly increased the parking count, and adjusted the campus circulation and reconfigured the layout for the buildings. The 2020 Master Plan included reducing total new construction from approximately 2,458,000 square feet to approximately 2,126,000 square feet and modifying the project sequencing, stacking of construction. An Addendum to the Certified EIR addressed this change but detailed air quality analysis was not undertaken at that time because the 2020 Master Plan represented an overall reduction in area and construction details were not reasonably foreseeable.<sup>2</sup>

Since approval of the 2020 Master Plan, the proposed construction schedule as well as the hospital and supporting facilities envisioned for the Harbor-UCLA Campus have been further modified and defined. The 2020 and 2022 modifications to the Master Plan generally include integration of buildings instead of separate buildings spread out over the campus; a potential new location for the DMH building; an increase in total parking spaces; and generally, an acceleration, consolidation and shifting of the construction schedule and location of the planned facilities.

Environmental Science Associates (ESA) was retained as a sub-consultant to Sirius Environmental to assess the 2020 Master Plan as updated in 2022 (proposed 2022 Master Plan) including conservative assumptions regarding the construction schedule to determine whether the modified project sequencing, stacking of construction, and building construction floor area would result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to air quality in accordance with State CEQA Guidelines Section 15164 (Addendum to an EIR or Negative Declaration).

## 1.2 Master Plan and proposed 2022 Master Plan Comparison

ESA undertook detailed modeling of anticipated construction activities using conservative assumptions, i.e., construction may not occur exactly as anticipated in this analysis but because of assumptions regarding overlap of activities and equipment use, daily air emissions would not exceed what is presented in this memorandum.

**Table 1** *Building Areas -- 2012 Master Plan Compared to 2020/proposed 2022 Master Plans* summarizes and compares the facilities evaluated in the 2016 Master Plan EIR (2012 Master Plan) and the proposed 2022 Master Plan. As discussed previously and demonstrated in Table 1, the proposed 2022 Master Plan would result in a decrease to the Campus-wide floor area square footage as compared to the facilities evaluated in the 2016 Master Plan EIR.

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<sup>2</sup> Also, on November 10, 2020, the Board of Supervisors approved the Medicine Substation Revision to the Harbor-HUCLA Medical Center Campus Master Plan related to a proposed new 66KV substation to be constructed by the Southern California Edison Company that was required to provide sufficient electrical power to meet the eventual power demand of the Harbor-UCLA Medical Center Master Plan. An Addendum to the Certified EIR addressed this change.

**TABLE 1  
BUILDING AREAS – 2012 MASTER PLAN COMPARED TO 2020/PROPOSED 2022 MASTER PLANS**

Facility / Building	2012 Master Plan (2016 Master Plan EIR)	2020 Master Plan (and Max Proposed 2022 Master Plan)	Units
Administrative Office	130,635	463,000	SF
Day-Care Center	4,360	4,360	SF
Central Utilities/Industrial/Infrastructure	129,205	62,535	SF
Hospital/Inpatient	1,202,655	771,000	SF
Hospital Beds	446	379	Beds
Library	0	0	SF
Medical Office/Outpatient	480,500	338,555	SF
Biomedical Research & Development LA Biomed (Lundquist)	225,000	225,000	SF
Bioscience Park	250,000	250,000	SF
Warehouse/Storage	0	11,000 <sup>a</sup>	SF
Retail	35,000	0	SF
<b>Total</b>	<b>2,457,801<sup>b</sup></b>	<b>2,125,829<sup>c</sup></b>	SF
<b>Net New Construction</b>	<b>1,178,517</b>	<b>846,545</b>	SF

<sup>a</sup> There would be retail restaurant within one or more buildings but areas have not been determined.

<sup>b</sup> The Harbor-UCLA Medical Center Replacement Program Environmental Impact Report (EIR) indicated 2,457,355 total square feet. However, the sum of the values is 2,457,801 square feet, as shown above. The difference is less than 0.02% and does not alter any of the findings of the EIR.

<sup>c</sup> The Harbor-UCLA Medical Center Replacement Program EIR Addendum from November 10, 2020 indicated 2,125,450 total square feet. However, the sum of the values is 2,125,829 square feet, as shown above. The difference is less than 0.02% and does not alter any of the findings of the Addendum.

SOURCE: County of Los Angeles, Harbor-UCLA Medical Center Replacement Program, EIR Addendum, November 10, 2020, <http://file.lacounty.gov/SDSInter/bos/supdocs/150272.pdf>.

Compared to the 2012 Master Plan, the proposed 2022 Master Plan would result in less demolition debris and less soil import, due to consolidation of facilities. The proposed 2022 Master Plan would require slightly greater soil export. However, overall, the proposed 2022 Master Plan would result in reduced total number of demolition and soil haul truck trips compared to the 2012 Master Plan. A comparison of the demolition and soil volumes for the 2012 Master Plan and the proposed 2022 Master Plan are provided in **Table 2, Demolition and Soil Export and Import Volumes**.

**TABLE 2  
DEMOLITION AND SOIL EXPORT AND IMPORT VOLUMES**

Facility / Building	2012 Master Plan (2016 Master Plan EIR)	Proposed 2022 Master Plan	Units
Demolition	294,738	126,794	CY
Soil Export	154,153	204,841	CY
Soil Import	274,241	108,818	CY

SOURCE: County of Los Angeles, 2021.

The schedule for construction phases has been updated as follows:

- Phase M (2017–2018): Demolition is substantially complete but the temporary relocation of users is not complete.
- Phase C (late 2018–early 2023): Demolition and construction. The SCE service yard, the direct bury utility ductbank being installed in lieu of utility tunnel and the surface lots are underway. This phase is complete and/or underway with the exception of construction of the Central Plant and central information technology (IT) building. The Central Plant and IT Building are included as part of Phase 2 construction. The SCE service yard, the direct bury utility ductbank and SCE Service Yard are now included as part of Phase 1.
- Phase 1 (2018–2025): Demolition, temporary relocation of uses, and construction. This phase has not occurred; some of the demolition is already completed and the remainder will take place in 2023 and 2025. Construction is anticipated to start in 2022. This phase previously included a parking structure. Additional activities have been added to this phase including the SCE service yard and service building, and Outpatient/Support Building. This phase is anticipated to start in 2022 with completion in 2025.)
- Phase 2 (2021–2023): Construction. This phase previously included the Outpatient Tower and DMH Outpatient Building. The Outpatient Tower has been moved to Phase 1 and the DMH Outpatient Building has been moved to its own phase. This phase now includes the Central Plant Building, IT/Shops Building, a temporary helipad, and surface parking. This phase now includes demolition of D buildings previously included in phases C, 1 and 3. This phase is anticipated to start in 2023 with completion in 2027.)
- Phase 3 (early 2023–2028): Demolition, temporary and permanent relocation of uses, and construction (This phase previously included a temporary helipad and staff parking. The temporary helipad has been moved to Phase 2. This phase now includes the Patient Bed Tower and Diagnostic Treatment Center, regional lab or warehouse building, and connector building. This phase is anticipated to start in 2023 with completion in 2028.)
- Phase 4 (2028–2030): Reconfiguration, construction (including the permanent helistop), and removal of the temporary helistop. (This phase previously included the Patient Bed Tower and Diagnostic Treatment Center, which have been moved to Phase 3. This phase now includes renovation of the existing Hospital Tower and PCDC and parking structures and surface parking. This phase is anticipated to start in 2028 with completion in 2030.)
- Phase 5 (combined with other phases): Demolition, construction, remodeling of existing buildings, and infrastructure reconfiguration. (This phase previously included the renovation of the existing Hospital Tower, a retail building, and parking structures and surface parking. The retail building is not being constructed and the other activities have been moved to Phase 4.)
- Phase 6 (combined with other phases): Demolition, permanent relocations, removal of temporary modular building, and construction. (This phase previously included the Bioscience Building, parking structure, and Outpatient Building B. Phase 6 demolitions have been moved to Phase 4 and the Bioscience Building has been moved to a new Bioscience Park phase.)
- Phase DMH Outpatient Building (2022 - 2023): Grading and construction. This phase includes the DMH Outpatient Building that was previously in Phase 2.
- Phase Bioscience Park (2024 - 2026): Grading and construction. This phase includes the Bioscience Park Buildings and parking.

## 2.0 Comparative Evaluation of Environmental Impacts

### 2.1 Existing Environmental Setting

No substantial changes to pertinent air quality regulations that would lead to new significant environmental effects or a substantial increase in the severity of previously identified significant effects have occurred since the preparation of the 2016 Master Plan EIR. As such, refer to Section 4.4, *Air Quality*, of the 2016 Master Plan EIR for an in-depth discussion of the existing environmental setting.

The Project Site is located within the South Coast Air Basin (Basin) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD) for air quality planning. The SCAQMD has established an Air Quality Management Plan (AQMP) that contains policies and measures to achieve federal and State standards for improved air quality. Since the date that the County certified the EIR on December 20, 2016, the SCAQMD adopted the 2016 AQMP on March 3, 2017, which was approved by the California Air Resources Board (CARB) on March 23, 2017. Key elements of the 2016 AQMP include implementing fair-share emissions reductions strategies at the federal, State, and local levels; establishing partnerships, funding, and incentives to accelerate deployment of zero and near-zero-emissions technologies; and taking credit from co-benefits from greenhouse gas, energy, transportation and other planning efforts.<sup>3</sup> The strategies included in the 2016 AQMP build on the strategies from the previous 2012 AQMP and are intended to demonstrate attainment of the National Ambient Air Quality Standards (NAAQS), which are set at levels considered safe to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including against decreased visibility and damage to animals, crops, vegetation, and buildings,<sup>4</sup> for the federal non-attainment pollutants ozone and PM<sub>2.5</sub> while accounting for regional growth, increasing development, and maintaining a healthy economy.<sup>5</sup>

In general, SCAQMD's criteria for evaluating control strategies for stationary and mobile sources is based on the following: (1) cost-effectiveness; (2) emissions reduction potential; (3) enforceability; (4) legal authority; (5) public acceptability; (6) rate of emission reduction; and (7) technological feasibility. Control strategies in the AQMP with potential applicability to reducing short-term emissions from construction activities associated with the Project include strategies denoted in the 2016 AQMP as MOB-08 and MOB-10, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment.<sup>6</sup> The 2016 AQMP measures MOB-08 and MOB-10 build on similar measures from the 2012 AQMP, which were previously denoted as ONRD-04 and OFFRD-01. Descriptions of the 2016 AQMP measures MOB-08 and MOB-10 are provided below:

- **MOB-08 – Accelerated Retirement of Older On-Road Heavy-Duty Vehicles:** This measure seeks to replace up to 2,000 heavy-duty vehicles per year with newer or new vehicles that at a minimum, meet the 2010 on-road heavy-duty nitrogen oxides (NO<sub>x</sub>) exhaust emissions standard of 0.2 grams per brake horsepower-hour (g/bhp-hr).
- **MOB-10 – Extension of the SOON Provision for Construction/Industrial Equipment:** This measure continues the Surplus Off-Road Option for NO<sub>x</sub> (SOON) provision of the statewide In-Use Off-Road Fleet Vehicle Regulation through the 2031 timeframe.

<sup>3</sup> SCAQMD, 2016 AQMP, March 2017.

<sup>4</sup> U.S. EPA, NAAQS Table, <https://www.epa.gov/criteria-air-pollutants/naaqs-table>. Accessed September 8, 2021.

<sup>5</sup> SCAQMD, NAAQS/CAAQS and Attainment Status for South Coast Air Basin, 2016.

<sup>6</sup> SCAQMD, 2016 AQMP, March 2017.

## 2.2 Project Design Features

The 2012 Master Plan (as well as the 2020 Master Plan) would achieve the applicable objectives of the Los Angeles County General Plan Framework Element, the Southern California Association of Government (SCAG) Regional Transportation Plan, and SCAQMD Air Quality Management Plan for establishing a regional land use pattern that promotes sustainability. The 2012 Master Plan (and 2020 Master Plan) supported pedestrian activity on the Project Site and incorporated energy efficient and water efficient measures. The proposed 2022 Master Plan would likewise achieve the applicable objectives of the aforementioned plans, would support pedestrian activity, and would incorporate energy efficient and water efficient measures.

The 2012 Master Plan was designed to meet the standards for Leadership in Energy and Environmental Design (LEED) Silver Certification by the U.S. Green Building Council (USGBC) through the incorporation of green building techniques and other sustainability features. The 2012 Master Plan also included a sustainability program which would be monitored by a LEED-accredited design consultant to provide guidance on the design, construction and operations of the 2012 Master Plan; and to provide performance monitoring during operation of the 2012 Master Plan to reconcile design and energy performance and enhance energy savings. Additionally, the 2012 Master Plan was designed to comply with the Los Angeles County Green Building Standards Code. The proposed 2022 Master Plan would have generally the same aforementioned design standards, with the notable exception that the Master Plan would now be designed to LEED Gold. The proposed 2022 Master Plan would continue to be required to conduct mitigation monitoring in accordance with the 2016 Master Plan EIR.

The following Project Design Features (PDFs) pertaining to air quality that were identified in the 2016 Master Plan EIR are also applicable to the proposed 2022 Master Plan.

**PDF AQ-1:** The Project would be designed and operate to meet or exceed the applicable green building, energy, water, and waste requirements of the State of California Green Building Standards Code and the Los Angeles County Green Building Ordinance and meet the standards of the USGBC LEED Silver Certification<sup>7</sup> level or its equivalent. Green building measures would include, but are not limited to the following:

- The Project would implement a construction waste management plan to recycle and/or salvage a minimum of 75 percent of nonhazardous construction debris.
- The Project would be designed to optimize energy performance and reduce building energy cost by 5 percent or more for new construction and 3 percent or more for major renovations compared to ASHRAE 90.1-2010, Appendix G and the Title 24 (2013) Building Standards Code.
- The Project would reduce indoor and outdoor water use by a minimum of 20 percent compared to baseline standards by installing water fixtures that exceed applicable standards. The reduction in potable water would be achieved through the installation of high-efficiency water faucets, high-efficiency toilets, flushless urinals, water-efficient irrigation systems, planting native or drought-tolerant plant species, using recycled water for landscaping, or other similar means.
- The Project would include lighting controls with occupancy sensors to take advantage of available natural light.

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<sup>7</sup> PDF AQ-1 is presented as was adopted in the 2016 Master Plan EIR. As discussed above, the Project would be designed to the USGBC LEED Gold Certification level per current County requirements.

- The Project shall install cool roofs for heat island reduction and strive to meet the CALGreen Tier 1 Solar Reflectance Index (SRI) or equivalent.
- Project buildings shall be constructed with solar-ready rooftops that provide for the installation of on-site solar photovoltaic (PV) or solar water heating (SWH) systems. The building design documents shall show an allocated Solar Zone and the pathway for interconnecting the PV or SWH system with the building electrical or plumbing system. The Solar Zone is a section of the roof that has been specifically designated and reserved for the installation of a solar PV system, SWH system, and/or other solar generating system. The Solar Zone must be kept free from roof penetrations and have minimal shading.
- The Project would be designed and operated with mechanically ventilated areas that would utilize air filtration media for outside and return air prior to occupancy that provides at least a Minimum Efficiency Reporting Value (MERV) of 15 as required for hospital inpatient care.
- To encourage carpooling and the use of electric vehicles by project employees and visitors, the County shall designate a minimum of eight (8) percent on on-site parking for carpool and/or alternative-fueled vehicles and shall pre-wire, or install conduit and panel capacity for, electric vehicle charging stations for a minimum of five (5) percent of on-site parking spaces.
- The Project shall appropriate incorporate bicycle infrastructure including bicycle parking and “end-of-trip” facilities in compliance with the applicable portions of the County’s Healthy Design Ordinance (HDO) (Los Angeles County Code, Title 22, Section 22.52.1225).

**PDF AQ-2:** The Project shall implement the following measures during construction activities:

- The Project shall require construction contractor(s) to utilize off-road diesel-powered construction equipment that meets or exceeds the CARB and USEPA Tier 4 off-road emissions standard for equipment rated at 50 hp or greater during Project construction.
- To the extent possible, pole power will be made available for use with electric tools, equipment, lighting, etc. These requirements shall be included in applicable bid documents and successful contractor(s) must demonstrate the ability to supply such equipment. A copy of each unit’s certified tier specification or model year specification and CARB or SCAQMD operating permit (if applicable) shall be available upon request at the time of mobilization of each applicable unit of equipment.
- The Project shall encourage construction contractors to apply for SCAQMD “SOON” funds, which provides funds to accelerate the clean-up of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website:  
<http://www.aqmd.gov/tao/Implementation/SOONProgram.htm>.
- In accordance with Section 2485 in Title 13 of the California Code of Regulations, the idling of all diesel fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to five minutes at any location.
- The County shall prohibit heavy-duty construction equipment and truck queuing and staging in front of on-site building entrances and exits.
- The Project shall comply with the applicable provisions of SCAQMD Rule 403 to minimize generation of fugitive dust. Active demolition or grading construction areas and unpaved roads shall be controlled by temporary covers or wetted sufficiently to reduce dust.

- Enhanced watering shall be required for soil moving activities within 100 feet of the existing patient tower, such as ensuring that water is applied not more than 15 minutes prior to soil excavation.
- On-site vehicles shall be limited to 15 miles per hour on unpaved roadways.
- Haul trucks carrying dirt, soil, sand, or other loose material shall be covered and maintain a freeboard height of 12 inches.
- Prior to leaving areas of active construction, haul trucks would be inspected and put through procedures as necessary to remove loose debris from tire wells and on the truck exterior to prevent track out.
- Construction areas shall install temporary fencing, if necessary, to prevent debris and material movement on the site and into patient care buildings or to off-site areas.
- The County shall ensure building air filtration media and heating, ventilation, and air conditioning (HVAC) systems are serviced, maintained, and replaced per manufacturers specifications and are not compromised from the accumulation of particulate matter and fugitive dust.
- All coatings used on-site shall comply with SCAQMD Rule 1113, as applicable. The project will strive to utilize material which is pre-primed or pre-painted. Additionally, the project shall limit daily application of architectural coatings applied on-site to 170 gallons per day with an average of 50 grams VOC per liter of coating, less water and less exempt compounds, or equivalent usage resulting in similar or less VOC emissions. For example, stains, specialty primers, and industrial maintenance coatings allowed by Rule 1113 that contain VOCs at a level of 100 grams per liter of coating, less water and less exempt compounds would be limited to 85 gallons per day on site

## 2.3 Summary of the 2016 Master Plan EIR Air Quality Impacts

### 2.3.1 Conflicts with Air Quality Plans

**Less than Significant Impact.** The 2016 Master Plan EIR determined that project-related construction activities would be consistent with the applicable AQMP. As discussed above, at the time that the 2016 Master Plan EIR was prepared, the 2016 AQMP was in draft form, and thus, the 2016 Master Plan EIR analyzed whether the 2012 Master Plan would conflict with the 2012 AQMP, the applicable plan for the Basin. The AQMP includes emission control measures that would be applicable to the 2012 Master Plan. Being relatively small in number and temporary in nature, the adopted 2016 Master Plan EIR determined that construction jobs under the 2012 Master Plan would not conflict with the long-term employment projections upon which the AQMP is based (i.e., SCAG) 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)). Control strategies in the AQMP with potential applicability to short-term emissions from construction activities include strategies denoted in the AQMP as ONRD-04 and OFFRD-01, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment by accelerating replacement of older, emissions-prone engines with newer engines meeting more stringent emission standards. The 2016 Master Plan EIR determined that the Approved Master Plan Project would not conflict with implementation of these strategies. Additionally, the 2012 Master Plan would comply with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment. The 2012 Master Plan would also comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403.

Therefore, because the 2016 Master Plan EIR determined that the 2012 Master Plan would be consistent with and meet or exceed the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities, the 2012 Master Plan would not conflict with or obstruct implementation of the AQMP. Thus, the 2012 Master Plan would have a less than significant impact related to conflict with applicable goals and policies, and no mitigation would be required.

### **2.3.2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation**

**Less than Significant Impact.** The 2016 Master Plan EIR determined that construction of the 2012 Master Plan's proposed uses would have the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Project site. In addition, fugitive dust emissions would result from excavation and debris removal. The maximum, worst-case daily regional construction emissions were calculated for the 2012 Master Plan's construction. The 2016 Master Plan EIR determined that construction of the Approved Master Plan Project would not exceed the applicable SCAQMD daily thresholds of significance for volatile organic compounds (VOC), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), sulfur oxide (SO<sub>x</sub>), respirable particulate matter (PM<sub>10</sub>), or fine particulate matter (PM<sub>2.5</sub>). As a result, construction of the 2012 Master Plan would not violate any air quality standard or contribute substantially to an existing or projected air quality violation, and thus, impacts would be less than significant and no mitigation would be required.

### **2.3.3 Result in a cumulatively considerable net increase of any non-attainment criteria pollutant**

**Less than Significant Impact.** The 2016 Master Plan EIR determined that construction of the 2012 Master Plan would contribute to local and regional air pollutant emissions during construction (short-term or temporary). However, construction of the 2012 Master Plan would result in less-than-significant impacts relative to the maximum daily emissions as compared to the SCAQMD regional significance thresholds for construction phases for criteria air pollutant emissions in which the region is non-attainment under the California Ambient Air Quality Standards (CAAQS) or NAAQS (i.e., ozone precursors of VOCs and NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>). In addition, construction emissions from the 2012 Master Plan would not exceed the SCAQMD regional significance thresholds for attainment or maintenance criteria air pollutants (i.e., CO and sulfur dioxide [SO<sub>2</sub>]).

Construction of the 2012 Master Plan would generate emissions from heavy-duty equipment operations and truck traffic during construction activities. In addition, fugitive dust emissions may result from other construction activities. During the finishing phase, the application of architectural coatings (i.e., paints) and other building materials may release VOCs. Project compliance with CARB and SCAQMD control measures as well as the implementation of PDFs would minimize and reduce construction emissions. As a result, the 2012 Master Plan would not result in a cumulatively considerable net increase of a criteria pollutant for which the region is non-attainment. Therefore, construction impacts of the 2012 Master Plan would be less than significant and mitigation measures are not required.

### 2.3.4 Expose sensitive receptors to substantial pollutant concentrations

**Less than Significant Impact.** Construction of the 2012 Master Plan would generate on-site emissions of fugitive dust and equipment exhaust emissions; however, the 2012 Master Plan would be required to comply with SCAQMD Rule 403 to limit fugitive dust emissions and would implement PDF AQ-2, which requires that construction equipment operating at the Project Site shall be subject to a number of requirements to minimize emissions including that specified equipment meet the Tier 4 final off-road emissions standards or utilize electric and natural gas fuel in place of diesel fuel. The localized construction air quality analysis for the 2012 Master Plan was conducted using the methodology described in the SCAQMD *Localized Significance Threshold Methodology* (June 2003, revised July 2008).<sup>8</sup> The maximum daily localized emissions were calculated for each of the 2012 Master Plan's construction phases and presented in the 2016 Master Plan EIR. As shown therein, maximum localized concentrations during construction activities would not cause or contribute to an exceedance of the allowable thresholds at the closest sensitive receptors. Therefore, with respect to localized construction emissions of the 2012 Master Plan, impacts would be less than significant and mitigation measures are not required.

Furthermore, the 2016 Master Plan EIR determined that construction of the 2012 Master Plan would not result in substantial emissions of toxic air contaminants (TACs) at nearby sensitive receptors. The greatest potential for TAC emissions would be related to diesel particulate matter emissions associated with heavy equipment operations during demolition, grading and excavation, and building construction activities. In addition, incidental amounts of toxic substances such as oils, solvents, and paints would be used. As discussed in the 2016 Master Plan EIR, these products would comply with all applicable SCAQMD rules for their manufacture and use. The 2012 Master Plan would also be subject to several SCAQMD rules designed to limit exposure to TACs during construction activities. The 2012 Master Plan would be required to comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction. The 2012 Master Plan would also comply with the requirements of SCAQMD Rule 1403 if asbestos is found during the renovation and construction activities. Furthermore, the Project would voluntarily implement the construction control measures described in PDF AQ-2.

The 2016 Master Plan EIR determined that construction activities would not result in health risks that exceed SCAQMD thresholds of significance of an allowable incremental increase in cancer risk of 10 in one million and non-cancer health index of 1.0. Health risk impacts (cancer risk) were assessed for nearby existing and future off-site sensitive receptors (residential and school uses). For carcinogenic exposures, the cancer risk from diesel particulate matter (DPM) emissions from construction of the 2012 Master Plan was estimated to result in a maximum carcinogenic risk of 4.1 per one million and the maximum impact would occur at sensitive land uses (residences) directly south of the site. Since the maximum impact would be less than the risk threshold of 10 in one million, the 2012 Master Plan impacts would be less than significant. Additionally, the 2016 Master Plan EIR evaluated the potential non-cancer effects of chronic (i.e., long term) DPM exposures using the Hazard Index approach as described in the Office of Environmental Health Hazard Assessment (OEHHA) Guidance. A hazard index equal to or greater than 1.0 represents a significant chronic health hazard. As demonstrated in the 2016 Master Plan EIR, nearby off-site sensitive receptors would not be exposed to chronic impacts that would exceed

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<sup>8</sup> South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, (2008).

the threshold of 1.0. The maximum impact would occur at sensitive receptors directly east of the site. Therefore, non-cancer chronic impacts would be considered less than significant.

According to the SCAQMD, high levels of CO are associated with traffic congestion and with idling or slow-moving vehicles.<sup>9</sup> Localized areas where ambient concentrations exceed State and/or federal standards are termed “CO hotspots.”<sup>10</sup> Vehicular trips associated with the 2012 Master Plan would contribute to traffic in the surrounding areas and could lead to elevated concentrations of CO causing a CO hotspot. The 2016 Master Plan EIR determined that the increased traffic volume generated by the 2012 Master Plan would not result in significantly elevated CO concentrations above the ambient air quality standards based on a comparison of CO hotspots modeling conducted by the SCAQMD for its CO attainment demonstration.

As discussed in the 2016 Master Plan EIR, the SCAQMD conducted CO modeling for the 2003 AQMP for the most congested intersections in the South Coast Air Basin. In the 2003 AQMP, the SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County with an average daily traffic volume of about 100,000 vehicles per day.<sup>11</sup> This intersection is located near the on- and off-ramps to Interstate 405 in West Los Angeles. The evidence provided in Table 4-10 of Appendix V of the 2003 AQMP shows that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (1-hour average) and 3.5 ppm (8-hour average) at Wilshire Boulevard and Veteran Avenue.<sup>12</sup> Existing maximum background concentrations for this Wilshire Boulevard and Veteran Avenues intersection are 2.2 ppm (1-hour average) and 1.1 ppm (8-hour average).<sup>13</sup> When added to the existing background CO concentrations, the screening values would be 6.8 ppm (1-hour average) and 4.6 ppm (8-hour average), as compared to the CAAQS of 20 ppm (1-hour) and 9.0 (8-hour). Therefore, intersections operating at similar or lower traffic volumes would result in similar or lower CO concentrations below the applicable standards. Even if intersection traffic volumes exceed 100,000, CO concentrations could remain well below the applicable standards given overall lower ambient CO concentrations since 2003 and improvements in vehicle emissions standards that have reduced CO tailpipe emissions.

Therefore, the 2012 Master Plan would not expose sensitive receptors to substantial CO hotspot pollutant concentrations and CO hotspot impacts would be less than significant and mitigation measures are not required.

### **2.3.5 Result in other emissions such as those leading to odors adversely affecting a substantial number of people**

**Less than Significant Impact.** Potential sources that may emit odors during construction activities of the 2012 Master Plan include the use of architectural coatings and solvents. SCAQMD Rule 1113 limits the allowable amount of VOCs from architectural coatings and solvents. Since compliance with SCAQMD Rules governing these compounds is mandatory, no construction activities or materials are proposed that would create objectionable odors. Therefore, no significant impact would occur and no mitigation is required.

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<sup>9</sup> South Coast Air Quality Management District, CEQA Air Quality Handbook, page 5-1, (1993).

<sup>10</sup> South Coast Air Quality Management District, CEQA Air Quality Handbook, page 5-1, (1993).

<sup>11</sup> South Coast Air Quality Management District, 2003 Air Quality Management Plan, Appendix V: Modeling and Attainment Demonstrations, (2003) V-4-24.

<sup>12</sup> The eight-hour average is based on a 0.7 persistence factor, as recommended by the SCAQMD.

<sup>13</sup> Background concentrations are provided from SCAQMD’s Northwest Coastal Los Angeles County air monitoring areas. Data is from 2016, the most recent data available from SCAQMD.

### 2.3.6 On-Site Sensitive Uses

Although potential effects resulting from a project on sensitive populations on a project-site are not considered an impact to the environment under CEQA, the 2016 Master Plan EIR discussed the potential for air pollutant emissions to affect on-site receptors since hospital uses are normally considered sensitive receptors. The 2016 Master Plan EIR determined that implementation of PDF AQ-1 and PDF AQ-2 and compliance with applicable regulations and other construction best management practices in accordance with SCAQMD Rule 403 would ensure that construction-related emissions would not adversely affect on-site sensitive receptors.

### 2.3.7 Cumulative Air Quality Impacts

**Less than Significant Impact.** The 2016 Master Plan EIR reviewed the SCAQMD strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to the federal Clean Air Act mandates with respect to the 2012 Master Plan's short-term construction-related air quality emissions and cumulative conditions. The 2016 Master Plan EIR determined that construction of the 2012 Master Plan would comply with SCAQMD Rule 403 requirements and the ATCM to limit heavy duty diesel motor vehicle idling to no more than 5 minutes at any given time. In addition, the 2012 Master Plan would utilize a construction contractor(s) that complies with required and applicable Best Available Control Technology ("BACT") and the In-Use Off-Road Diesel Vehicle Regulation. Per SCAQMD rules and mandates as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects in the Air Basin, which would include each of the related projects in the 2012 Master Plan area. As demonstrated in the 2016 Master Plan EIR, regional and localized construction emissions associated with the 2012 Master Plan would not exceed the SCAQMD thresholds of significance. As such, the 2012 Master Plan's contribution to cumulatively significant construction impacts to air quality would be less than significant and mitigation measures are not required.

## 2.4 Analysis of the proposed 2022 Master Plan

### 2.4.1 Operations

Since the overall square footage of the developed area would decrease under the proposed 2022 Master Plan, operational emissions due to area (coating, consumer products, and landscaping) and energy emissions sources would be less than the estimated operational emissions presented in the 2016 Master Plan EIR due to reduced use of coating and consumer products and reduced building energy demand. Additionally, the reduction in developed area would result in a reduction in trips and associated operational daily vehicle miles traveled (VMT), which would result in the proposed 2022 Master Plan resulting in reduced mobile source air pollutant emissions compared to the 2012 Master Plan. Similarly, since the modifications to the 2012 Master Plan would result in both decreased overall building square footage and reduced daily VMT, the proposed 2022 Master Plan's greenhouse gas emissions would be less than those presented in the 2016 Master Plan EIR. Thus, greenhouse gas emissions from construction and operations as well as air quality emissions from operations would be within the scope of the maximum daily emissions presented in the 2016 Master Plan EIR. Therefore, the analysis presented herein focuses on air pollutant emissions resulting from construction of the proposed 2022 Master Plan. As the proposed 2022 Master Plan would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to operational air pollutant emissions and construction and operational greenhouse gas emissions, these topics will not be discussed further.

## 2.4.2 Construction

### *Methodology*

For the proposed 2022 Master Plan, revised air quality modeling of construction emissions has been completed to evaluate the changes to the construction schedule proposed in the 2016 Master Plan EIR. As such, the analysis of the proposed 2022 Master Plan construction changes and the findings related to Air Quality are based on emissions modeling conducted for the proposed 2022 Master Plan, with detailed modeling output files provided in Exhibit A of this memorandum.

As in the 2012 Master Plan, proposed 2022 Master Plan construction activities that would have the potential to create regional air quality impacts include vehicle trips generated by construction workers, vendor trucks, and haul trucks traveling to and from the Project Site and building activities, such as fugitive dust emissions from demolition and the application of paint and other surface coatings. The proposed 2022 Master Plan's maximum daily regional and localized criteria pollutant emissions during construction have been estimated by assuming a conservative scenario for construction activities (i.e., assuming construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. The emissions have been estimated using the California Emissions Estimator Model (CalEEMod, Version 2020.4.0)<sup>14</sup> software, an emissions inventory software program recommended by the SCAQMD and the CARB on-road vehicle emissions factor model (EMFAC).

As with the construction schedule presented in the 2016 Master Plan EIR for the 2012 Master Plan, construction of the proposed 2022 Master Plan would require multiple phases of demolition, grading/excavation, building construction, paving, and architectural coatings. However, since the total built square footage of the proposed 2022 Master Plan would be less than the 2012 Master Plan, the analysis presented herein focuses on the worst case emissions scenarios instead of modeling for all construction phases. Pursuant to State CEQA Guidelines Section 15164, the most intense periods of proposed 2022 Master Plan construction were modeled to determine whether the proposed 2022 Master Plan sequencing, stacking of construction, and building construction floor area would result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to air quality. The most intense periods of construction were selected based on careful evaluation of the proposed 2022 Master Plan construction schedule, including the months with the greatest number of overlapping construction activities and equipment and vehicle usage, the types of overlapping activities (i.e., multiple overlapping demolition and grading phases, which tend to have higher particulate matter emissions), the highest daily worker trips, the highest daily vendor and truck trips, and the highest daily rate of architectural coating application. These various emission sources as well as the overlap of multiple phases would contribute to maximum daily emissions when compared to other construction periods.

As with modeling conducted for the 2016 Master Plan EIR, the CalEEMod default input values used in this analysis were adjusted to be specific to the proposed 2022 Master Plan based on equipment types and the construction schedule. Haul truck trip estimates were based on grading and demolition information obtained from the County. Vendor truck trip estimates were based on calculation methodologies in CalEEMod. Worker trips were adjusted upward based on the worker trip methodology utilized in the modeling of the 2012 Master Plan. Specifically, the worker trips utilized the conservative CalEEMod default input values as a baseline and applied

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<sup>14</sup> CalEEMod has been updated since approval of the EIR. The major updates to the model include updated building energy factors that based on the State of California Title 24-2019 Building Energy Efficiency Standards, utility carbon dioxide intensity factors, Institute of Transportation Engineers 10<sup>th</sup> Edition trip generation rates, and mobile source emission factors.

factors and scalar adjustments based on expected laborer counts provided by the County for modeling of the 2012 Master Plan. Ultimately, the estimated worker trips used to model expected emissions from the proposed 2022 Master Plan are more conservative than the CalEEMod defaults, which are already considered conservative.

Emissions from on-road vehicles were estimated outside of CalEEMod using EMFAC2021 emission factors for haul and material vendor trucks and worker vehicles. CalEEMod is based on outputs from the CARB off-road emissions factor (OFFROAD) and on-road emissions factor EMFAC models, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including on- and off-road vehicles. These values were applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. Emissions from proposed 2022 Master Plan construction activities were estimated based on the construction phase in which the activity would be occurring. Like the 2012 Master Plan, the maximum daily emissions were predicted values for the worst-case day and do not represent the emissions that would occur for every day of construction of the proposed 2022 Master Plan. The proposed 2022 Master Plan maximum daily emissions were compared to the maximum daily emissions of the 2012 Master Plan as well as the SCAQMD daily regional thresholds of significance. Emissions calculations are provided in Exhibit A of this memorandum.

As with the 2012 Master Plan, the proposed 2022 Master Plan construction activities that would have the potential to create local air quality impacts include fugitive dust from grading and demolition and building activities such as the application of paint and other surface coatings. The localized effects from the on-site portion of the proposed 2022 Master Plan's construction emissions were evaluated at the nearby sensitive receptor locations that would be potentially impacted by Project construction in accordance with the SCAQMD *Localized Significance Threshold Methodology* (June 2003, revised July 2008).<sup>15</sup> Screening-level analysis of LSTs is only recommended for construction activities at project sites that are 5 acres or less. The SCAQMD recommends that operational activities and construction for any project over 5 acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. Dispersion modeling of estimated CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions during construction was conducted for the 2012 Master Plan and presented in the 2016 Master Plan EIR. However, as shown below in Table 2, the maximum regional daily construction emissions of the relevant pollutants (i.e., CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>) resulting from construction of the proposed 2022 Master Plan would be less than the maximum regional daily construction emissions of the 2012 Master Plan. Thus, dispersion modeling would not be required to demonstrate that the maximum localized daily emissions would be less than the LSTs and the analysis is discussed qualitatively.

Construction of the Approved Master Plan Project has already commenced, but construction of the proposed 2022 Master Plan phases included in this analysis are estimated to start in 2022. However, if construction commences at a later date, construction impacts would be lower than those analyzed and presented here due to the use of a more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to State regulations that require vehicle fleet operators to phase-in less polluting heavy-duty equipment.

### **2.4.3 Conflicts with Air Quality Plans**

As discussed above, the 2016 Master Plan EIR determined that the 2012 Master Plan would not conflict with the strategies of the 2012 AQMP. Like the 2012 Master Plan, the proposed 2022 Master Plan would not conflict with goals to reduce VMT and would comply with applicable control measures. Since the certification of the 2016

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<sup>15</sup> South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, (2008).

Master Plan EIR, the SCAQMD has updated the AQMP with the most recent version being the 2016 AQMP. The 2016 AQMP builds on the previous AQMP. Pursuant to the methodology provided in Chapter 12 of SCAQMD's 1993 CEQA Air Quality Handbook, consistency with the 2016 AQMP is affirmed when a project: (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. As discussed below, the proposed 2022 Master Plan would not conflict with the above two criteria and as such, would not conflict implementation of the applicable AQMP.

### ***Emission Control Measures***

The proposed 2022 Master Plan would result in short-term construction emissions. However, like the 2012 Master Plan, the proposed 2022 Master Plan would implement control strategies outlined in the AQMP, as applicable. Control strategies in the AQMP, applicable to control temporary emissions from proposed 2022 Master Plan construction activities, include MOB-08 and MOB-10 as denoted in the 2016 AQMP, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment by accelerating the replacement of older, emissions-prone engines with newer engines that meet more stringent emission standards. Furthermore, the proposed 2022 Master Plan would use construction contractors that are required by State regulation to be in compliance with the CARB ATCM that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation that aims to reduce emissions through the installation of diesel particulate matter filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. The proposed 2022 Master Plan would also comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings) that limits the amount of VOCs in architectural coatings and solvents. As an additional emission control measure, the Applicant requires, through its construction specifications, the use of Super Compliant Paints for interior painting, which have one tenth of the VOC content compared to typical coating. Like the 2012 Master Plan, the proposed 2022 Master Plan would implement PDF AQ-2 to minimize construction emissions by requiring that construction equipment operating at the proposed 2022 Master Plan Site be subject to a number of requirements including that specified equipment meet the Tier 4 final off-road emissions standards or utilize electric and natural gas fuel in place of diesel fuel. Compliance with these requirements meets or exceeds the applicable AQMP requirements for emission control strategies intended to reduce emissions from construction equipment and activities.

As discussed in the next section, construction of the proposed 2022 Master Plan would not exceed the SCAQMD significance thresholds, with implementation of the above AQMP-consistent emission control strategies. Therefore, the proposed 2022 Master Plan would not increase the frequency or severity of an air quality standards violation or cause a new violation.

### ***Growth Projections***

The proposed 2022 Master Plan would result in an increase in short-term employment during construction. Like the 2012 Master Plan, construction jobs under the proposed 2022 Master Plan would generally be small in number, temporary in nature, and filled by local construction workers already living and working in the region at similar short-term construction jobs, and therefore, these jobs would not conflict with the long-term employment projections upon which the AQMP are based. In addition, the proposed 2022 Master Plan would result in the development of less building floor area and generate less VMT compared to the 2012 Master Plan. Thus, the proposed 2022 Master Plan would not result in additional population or employment growth beyond that of the

2012 Master Plan. Therefore, the proposed 2022 Master Plan would not conflict with the 2016 AQMP and air quality impacts would be less than significant and no mitigation measures would be required.

#### **2.4.4 Result in a cumulatively considerable net increase of any non-attainment criteria pollutants**

Like the 2012 Master Plan, the proposed 2022 Master Plan would contribute to local and regional air pollutant emissions during construction (short-term or temporary). Based on the following analysis, construction would result in less than significant impacts relative to the maximum daily emissions as compared to the SCAQMD regional significance thresholds for construction criteria air pollutant emissions in which the region is non-attainment under the CAAQS or NAAQS (i.e., ozone precursors of VOCs and NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>). As shown below, construction emissions would not exceed the SCAQMD regional significance thresholds for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., CO and SO<sub>2</sub>).

##### ***Construction Emissions***

Like the 2012 Master Plan, construction of the proposed 2022 Master Plan would have the potential to generate temporary regional criteria pollutant emissions through the use of heavy-duty construction equipment, such as backhoes and forklifts, through vehicle trips generated by workers and haul trucks traveling to and from the Project Site, and through building activities such as the application of paint and other surface coatings. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Mobile source emissions, primarily NO<sub>x</sub>, would result from the use of construction equipment such as forklifts and loaders. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions.

The maximum daily construction emissions for the proposed 2022 Master Plan were estimated for the construction months following the methodology outlined above. The maximum daily emissions are predicted values for a representative worst-case day, and do not represent the actual emissions that would occur for every day of construction, which would likely be lower on many days. As stated above, in order to provide a conservative emissions analysis, for modeling purposes, construction emissions were modeled at the earliest possible start date, depending on the construction phase, and the VOC content in the coating during the architectural coating phases was assumed to be the default 100 grams VOC per liter (instead of 10 grams VOC per liter in the Super Compliant Paints, which the Applicant has committed to using for some coating phases). Detailed emissions calculations are provided in Exhibit A of this memorandum.

The results of the criteria pollutant calculations are presented in **Table 2**, *Estimated Maximum Regional Construction Emissions* and include dust control measures required to be implemented by SCAQMD Rule 403 (Control of Fugitive Dust) and fugitive VOC control measures required to be implemented by architectural coating emission factors based on SCAQMD Rule 1113 (Architectural Coatings). Although construction-related regional daily VOC emissions would be more than the 2012 Master Plan's maximum daily VOC emissions as shown in Table 3, the proposed 2022 Master Plan's regional construction emissions, including VOC emissions, would continue to remain less than the SCAQMD significance thresholds. Therefore, the proposed 2022 Master Plan would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to air quality. Similar to the 2012 Master Plan, the proposed 2022 Master Plan would not result in a cumulatively considerable increase in emissions due to construction-related emissions and impacts would be less than significant. No mitigation measures would be required.

**TABLE 3**  
**ESTIMATED MAXIMUM REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY) <sup>a</sup>**

Source	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM10 <sup>b</sup>	PM2.5 <sup>b</sup>
<b>2012 Master Plan Maximum Daily Regional Construction Emissions</b>	<b>64</b>	<b>92</b>	<b>351</b>	<b>1</b>	<b>83</b>	<b>23</b>
<b>Month-Year</b>	<b>Proposed 2022 Master Plan Overlapping Phases with Maximum Emissions</b>					
January-2024	Phase 1D.1 – Building Construction of Parking Structure (PSA)					
	1	7	30	0	7	2
	Phase 1D.1 – Building Construction of Outpatient Tower (OPT) and Support Building					
	1	5	29	0	5	1
	Phase 2D.1.2 – Demolition					
	0	3	16	0	1	0
	Phase 2B.1 – Building Construction					
	1	3	22	0	1	0
	Phase 3A.3 – Grading					
	0	20	34	0	7	3
	Phase 3B.1 – Building Construction of Inpatient Tower (IPT)					
	3	17	110	0	21	6
	<b>January 2024 Overlapping Phases Total</b>					
	<b>6</b>	<b>55</b>	<b>241</b>	<b>1</b>	<b>43</b>	<b>12</b>
October-2026	Phase 2G.1 – Building Construction of Central Plant					
	1	4	24	0	2	1
	Phase 3B.1 – Building Construction of IPT					
	2	16	100	0	21	6
	Phase 3B.1 – Architectural Coating of IPT					
	31	0	6	0	2	0
	Phase 3B.1 – Paving of IPT					
	1	3	21	0	1	0
	Phase 3B.1 – Building Construction of Warehouse					
	1	6	52	0	14	4
	BioScience Park – Grading					
	0	3	19	0	1	0
	BioScience Park – Building Construction					
	1	5	19	0	1	0
	BioScience Park – Architectural Coating					
	32	0	2	0	0	0
	BioScience Park – Paving					
	0	1	10	0	0	0
	<b>October 2026 Overlapping Phases Total</b>					
	<b>69</b>	<b>39</b>	<b>254</b>	<b>1</b>	<b>42</b>	<b>11</b>
<b>Proposed 2022 Master Plan Maximum Daily Emissions</b>	<b>69</b>	<b>55</b>	<b>254</b>	<b>1</b>	<b>43</b>	<b>12</b>
<i>Proposed 2022 Master Plan Emissions Compared to 2016 Master Plan EIR Emissions</i>	5	(37)	(97)	(1)	(40)	(11)
<b>SCAQMD Significance Thresholds</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Exceeds Thresholds?	No	No	No	No	No	No

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit A. Additionally, consistent with the 2012 Master Plan, emissions calculations include PDF AQ-2.

<sup>b</sup> Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2021.

## 2.4.5 Expose sensitive receptors to substantial pollutant concentrations

### **Construction Localized Emissions**

As discussed above, the 2016 Master Plan EIR analyzed localized construction impacts using the methodology described in the SCAQMD *Localized Significance Threshold Methodology* (June 2003, revised July 2008).<sup>16</sup> Localized emissions thresholds (LSTs) only apply to CO, NO<sub>2</sub>, PM10, and PM2.5 and exclude offsite emissions due to mobile sources. The analysis presented in the 2016 Master Plan EIR demonstrated that the maximum

<sup>16</sup> South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, (2008).

localized concentrations for the aforementioned pollutants during construction activities would not exceed the allowable thresholds at the closest sensitive receptors for the relevant standards.

As shown in Table 2, during construction of the proposed 2022 Master Plan maximum regional daily emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> would be less than the 2012 Master Plan's maximum regional daily emissions of these pollutants. Thus, the maximum daily localized emissions of these pollutants from construction of the proposed 2022 Master Plan would be less than the SCAQMD LSTs. Furthermore, like the 2012 Master Plan, the proposed 2022 Master Plan would incorporate PDF AQ-2, which would require that specified equipment meet the Tier 4 final off-road emissions standards. Therefore, construction of the proposed 2022 Master Plan would not result in any new significant impacts. Similar to the 2012 Master Plan, construction of the proposed 2022 Master Plan would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant. No mitigation is required.

### ***CO Hotspots Analysis***

Similar to the analysis provided in the 2016 Master Plan EIR, the potential for the proposed 2022 Master Plan to cause or contribute to CO hotspots was evaluated by comparing impacted intersections with prior studies conducted by the SCAQMD in support of their AQMPs. This comparison provides evidence supporting the conclusion that the proposed 2022 Master Plan would not cause or contribute to the formation of CO hotspots, that CO concentrations at impacted intersections would remain well below the ambient air quality standards, and that no further CO analysis is warranted or required.

As noted above, the proposed 2022 Master Plan would result in fewer trips and therefore VMT as compared to the approved Project. Therefore, like the 2012 Master Plan, the proposed 2022 Master Plan would not expose sensitive receptors to substantial CO hotspot pollutant concentrations and CO hotspot impacts would be less than significant and less than the 2012 Master Plan.

### ***Toxic Air Contaminant Emissions***

The air quality-sensitive land uses within the vicinity of the proposed 2022 Master Plan include the same air quality-sensitive receptor uses identified in the 2016 Master Plan EIR. The air quality sensitive receptors located in close proximity to the Project Site, which were evaluated in the 2016 Master Plan EIR, include the following land uses:

- The Harbor-UCLA Medical Center Employee Children's Center and a multifamily residential apartment complex, Harbor Cove Villa, are located on Carson Street just west of the intersection with Vermont Avenue.
- The area north of Carson Street is a predominantly single-family residential neighborhood.
- Vermont Avenue, the southern half of the block facing the Medical Center Campus, at 219th Street, is developed with a condominium complex, Torrance Park Villas, and mobile home parks, Starlite Trailer Park and Rainbow Mobile Home Park.
- Single-Family and multi-family residential neighborhoods border the Medical Center Campus to the south, across 220th Street, as well as to the west, across Normandie Avenue within the Harbor City community of Los Angeles.

- Halldale Avenue Elementary School is located to the northwest of the Medical Center Campus west of Normandie Avenue and north of 216th Street.
- White Middle School is located to the southeast of the Medical Center Campus east of Interstate 110 and Figueroa Street and south of 220th Street.

As with the 2012 Master Plan, the greatest potential for TAC emissions during construction of the proposed 2022 Master Plan would be related to diesel particulate matter emissions associated with heavy equipment operations during demolition, grading and excavation, and building construction activities. In addition, incidental amounts of toxic substances such as oils, solvents, and paints would be used. These products would comply with all applicable SCAQMD rules for their manufacture and use. Like the 2012 Master Plan, the proposed 2022 Master Plan would be subject to several SCAQMD rules designed to limit exposure to TACs during construction activities. The proposed 2022 Master Plan would be required to comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction. Furthermore, like the 2012 Master Plan, the proposed 2022 Master Plan would also voluntarily implement the construction control measures described in PDF AQ-2.

Moreover, according to the OEHHA and the SCAQMD's Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (August 2003), health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 70-year) resident exposure duration. Given that construction is temporary and short-term, the proposed 2022 Master Plan would not result in a long-term (i.e., lifetime or 70-year) exposure as a result of construction activities. Additionally, construction of the proposed 2022 Master Plan is scheduled to take fewer months to complete and, as shown in Table 2, would generate maximum PM10 and PM2.5 emissions less than the maximum emissions disclosed in the 2016 Master Plan EIR for the 2012 Master Plan, making the duration of exposure to TAC emissions associated with construction of the proposed 2022 Master Plan even lower than the 2012 Master Plan.

Thus, although there are sensitive receptors located nearby the Project Site, compliance with the aforementioned regulatory control measures and the reduced duration of construction activities would minimize exposures. As a result, TAC emissions from construction activities for the proposed 2022 Master Plan would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to air quality. Similar to the 2012 Master Plan, the proposed 2022 Master Plan would not expose sensitive receptors to substantial TAC emissions and impacts would be less than significant. No mitigation is required.

### ***On-site Sensitive Uses***

As discussed above and in the 2016 Master Plan EIR, hospital uses are normally considered sensitive receptors, but potential effects resulting from a project on sensitive populations on the project-site are not considered an impact to the environment under CEQA. Nonetheless, due to the sensitivity of on-site receptors, the potential for air pollutant emissions to affect on-site receptors during the construction of the proposed 2022 Master Plan is disclosed herein.

Per PDF AQ-2 outlined in the 2016 Master Plan EIR, construction of the proposed 2022 Master Plan would also utilize heavy-duty construction equipment that meet the most stringent USEPA and CARB certified Tier 4 standards, which would result in substantially reduced combustion emissions of NO<sub>x</sub>, PM10, and PM2.5 as

compared to the statewide fleet average. PDF AQ-2 requires the proposed 2022 Master Plan to comply with strict idling limits in accordance with Section 2485 in Title 13 of the California Code of Regulations and to prohibit the queuing and staging of heavy-duty equipment and trucks in front of on-site building entrances and exits and as far away as possible from patient rooms and building air intake systems, which would minimize the potential for exposure of construction emissions to on-site sensitive receptors. Like the 2012 Master Plan, the proposed 2022 Master Plan would also implement numerous fugitive dust control measures as best management practices in compliance with SCAQMD Rule 403, which would include, but is not limited to, the use of covers and watering, limiting on-site vehicles speeds on unpaved roads, requiring haul trucks to be covered with adequate freeboard space, and implementing haul truck procedures to prevent the track out of dust and debris. Enhanced watering shall be required for soil moving activities within 100 feet of the existing patient tower, such as ensuring that water is applied not more than 15 minutes prior to soil excavation. The proposed 2022 Master Plan would install temporary fencing around active construction areas as needed to prevent debris and material movement on the site and into patient care buildings or to off-site areas. Furthermore, the proposed 2022 Master Plan would ensure building air filtration media and HVAC systems are serviced, maintained, and replaced to ensure a high level of indoor air quality. As listed in PDF AQ-1, the 2012 Master Plan and proposed 2022 Master Plan buildings would be designed and operated with mechanically ventilated areas that would utilize air filtration media for outside and return air prior to occupancy that provides at least a MERV of 15 as required for hospital inpatient care. Per ASHRAE Standard 52.2 (2012), MERV 15 would result in a removal efficiency of at least 85 percent for particles from 0.3 to 1.0 micrometers ( $\mu\text{m}$ ), 90 percent for 1.0 to 3.0  $\mu\text{m}$ , and 95 percent for 3.0 to 10.0  $\mu\text{m}$ .<sup>17</sup> As such, the use of MERV 15 air filtration media or better would achieve substantial reductions in PM<sub>10</sub> and PM<sub>2.5</sub> from outdoor air concentrations, including from construction-related DPM concentrations and associated health risks. Implementation of PDF AQ-1 and PDF AQ-2 and compliance with applicable regulations and other construction best management practices in accordance with SCAQMD Rule 403 would ensure that construction-related emissions would not adversely affect on-site sensitive receptors.

## **2.4.6 Result in other emissions such as those leading to odors adversely affecting a substantial number of people**

### ***Other Emissions***

As discussed above and shown in Table 2, the proposed 2022 Master Plan's maximum regional construction emissions would not exceed the SCAQMD regional significance thresholds for non-attainment pollutants of ozone precursors (i.e., VOC and NO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub> or for attainment or maintenance criteria air pollutants (i.e., CO and SO<sub>2</sub>). As discussed above the proposed 2022 Master Plan's maximum localized construction emissions would be less than the 2012 Master Plan's maximum localized construction emissions and, thus, would not exceed the localized thresholds for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. Therefore, the proposed 2022 Master Plan would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to air quality. Similar to the 2012 Master Plan, the proposed 2022 Master Plan would result in other emissions affecting a substantial number of people and impacts would be less than significant. No mitigation is required.

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<sup>17</sup> ASHRAE, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size. [https://www.ashrae.org/File%20Library/docLib/StdAddenda/52\\_2\\_2012\\_2015Supplement.pdf](https://www.ashrae.org/File%20Library/docLib/StdAddenda/52_2_2012_2015Supplement.pdf).

## **Odors**

Similar to the 2012 Master Plan, potential activities that may emit odors during construction activities for the proposed 2022 Master Plan include equipment exhaust, paving and painting activities. Such odors are localized, generally to the immediate area surrounding a construction site and transitory in nature. In addition, odors associated with construction activities are not those typically associated with odor complaints. As discussed previously, SCAQMD Rule 1113 would limit the amount of VOCs in architectural coatings and solvents and the Applicant has agreed to further reduce the amount of VOCs in architectural coatings through the use of Super Compliant Paints. In addition, the proposed 2022 Master Plan would comply with the applicable provisions of the CARB ATCM regarding idling limitations for diesel trucks. Through mandatory compliance with SCAQMD Rules, no construction activities or materials are expected to create objectionable odors affecting a substantial number of people.

Therefore, the proposed 2022 Master Plan would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to air quality. Similar to the 2012 Master Plan, the proposed 2022 Master Plan would not result in odor emissions affecting a substantial number of people and impacts would be less than significant. No mitigation is required.

### **2.4.7 Cumulative Air Quality Impacts**

As discussed in the 2016 Master Plan EIR, the SCAQMD (refer to State CEQA Guidelines Section 15064.7) has established guidelines to assess a project's cumulative impacts. The SCAQMD recommends using two different methodologies: (1) that project-specific air quality impacts be used to determine the project's potential cumulative impacts to regional air quality;<sup>18</sup> or (2) that a project's consistency with the current AQMP be used to determine its potential cumulative impacts.

As discussed above and shown in Table 2, the proposed 2022 Master Plan's maximum regional construction and net operational emissions would not exceed the SCAQMD regional significance thresholds. As discussed above, the proposed 2022 Master Plan's maximum localized construction emissions would not exceed the SCAQMD localized significance thresholds. Additionally, as discussed previously, the proposed 2022 Master Plan would result in less-than-significant impacts for TAC emissions and other emissions (such as odors).

As discussed above, like the 2012 Master Plan, the proposed 2022 Master Plan would implement control strategies outlined in the AQMP, as applicable and would not conflict with the ability of federal, State, and local agencies to implement fair-share emissions strategies outlined in the 2016 AQMP. As discussed above, the proposed 2022 Master Plan would result in an increase in short-term employment during construction. Like the 2012 Master Plan, construction jobs under the proposed 2022 Master Plan would generally be small in number, temporary in nature, and filled by local construction workers already living and working in the region at similar short-term construction jobs, and therefore, these jobs would not conflict with the long-term employment projections upon which the AQMP are based. Therefore, like the 2012 Master Plan, the proposed 2022 Master Plan would not conflict with the City's and SCAG's growth policies and projections on which the 2016 AQMP is based.

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<sup>18</sup> South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution White Paper, Appendix D, 1993, page D-3.

Therefore, the proposed 2022 Master Plan would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to air quality. Similar to the 2012 Master Plan, the proposed 2022 Master Plan's construction cumulative impacts would be less than significant and would not be cumulatively considerable, and mitigation measures are not required.

## 2.5 Mitigation Measures

As with the 2012 Master Plan evaluated in the 2016 Master Plan EIR, the proposed 2022 Master Plan would result in less-than-significant impacts with respect to emissions of construction emissions and consistency with applicable air quality plans, policies, or regulations. Therefore, no mitigation measures would be required.

## 3.0 Conclusion

ESA was retained as a sub-consultant to Sirius Environmental to assess the modifications included in the proposed 2022 Master Plan Project to determine whether the modified project sequencing, stacking of construction, and building construction floor area would result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to air quality in accordance with State CEQA Guidelines Section 15164. Since the overall square footage of the developed area would decrease under the 2022 master Plan, operational emissions due to area (coating, consumer products, and landscaping) and energy emissions sources as well as mobile sources would be less than the estimated operational emissions presented in the 2016 Master Plan EIR. Thus, greenhouse gas emissions from construction and operations as well as air quality emissions from operations of the proposed 2022 Master Plan would be within the scope of the maximum daily emissions presented in the 2016 Master Plan EIR. The proposed 2022 Master Plan would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to operational air pollutant emissions and construction and operational greenhouse gas emissions.

Air quality modeling of construction emissions for the proposed 2022 Master Plan has been completed to evaluate the changes to the construction schedule proposed in the Master Plan EIR. Maximum construction emissions associated with the proposed 2022 Master Plan would be less than the maximum emissions disclosed in the Master Plan EIR for the 2012 Master Plan. Therefore, the proposed 2022 Master Plan would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to construction air pollutant emissions.

The proposed 2022 Master Plan would implement the same PDFs pertaining to air quality that were identified in the 2016 Master Plan EIR (no mitigation measures were identified in the 2016 Master Plan EIR). No need for mitigation measures has been identified for the proposed 2022 Master Plan.

# Exhibit A

**Detailed Emissions Calculations,  
Construction Equipment and Scheduling  
Assumptions, and Modeling Outputs**



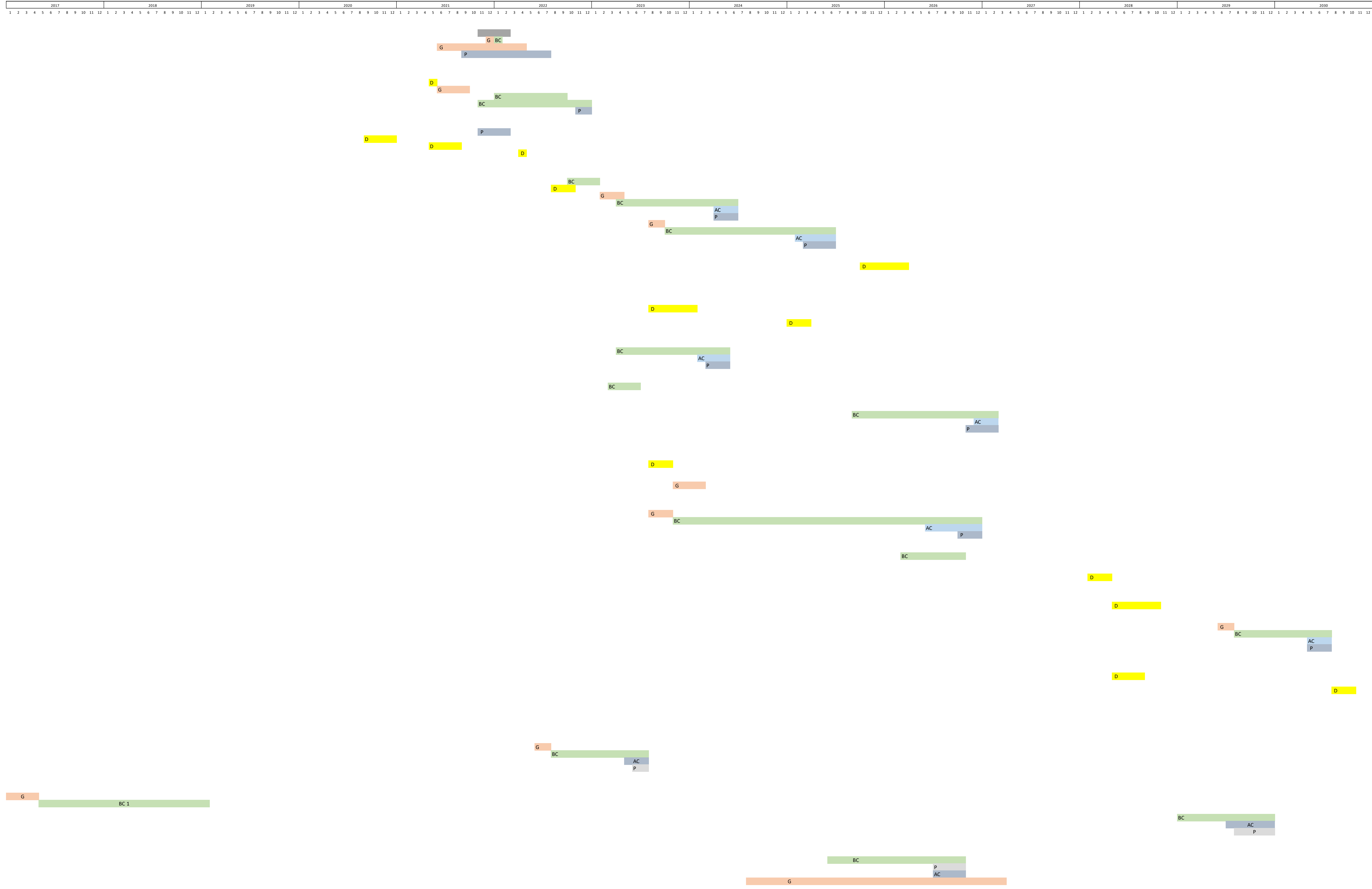
**Addendum to the Harbor UCLA Master Plan EIR**  
**Summary of Construction Air Quality Emissions Analysis**

Month/Year Phase	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
	lb/day					
<b>Master Plan EIR Maximum Daily Emissions</b>	<b>64</b>	<b>92</b>	<b>351</b>	<b>1</b>	<b>83</b>	<b>23</b>
Jan-2024 PHASE 1D.1 - BC - Construction of PS-A	1	7	30	0	7	2
PHASE 1D.1 - BC - Construction of OPT	1	5	29	0	5	1
PHASE 2D.1.2 - D	0	3	16	0	1	0
PHASE 2B.1 - BC	1	3	22	0	1	0
PHASE 3A.3 - G	0	20	34	0	7	3
PHASE 3B.1 - BC (Build IPT)	3	17	110	0	21	6
<i>Total</i>	<i>6</i>	<i>55</i>	<i>241</i>	<i>1</i>	<i>43</i>	<i>12</i>
Oct-2026 PHASE 2G.1 - BC	1	4	24	0	2	1
PHASE 3B.1 - BC (Build IPT)	2	16	100	0	21	6
PHASE 3B.1 - AC (Build IPT)	31	0	6	0	2	0
PHASE 3B.1 - P (Build IPT)	1	3	21	0	1	0
PHASE 3B.1 - BC (Warehouse)	1	6	52	0	14	4
Bioscience - G	0	3	19	0	1	0
Bioscience - BC	1	5	19	0	1	0
Bioscience - AC	32	0	2	0	0	0
Bioscience - P	0	1	10	0	0	0
<i>Total</i>	<i>69</i>	<i>39</i>	<i>254</i>	<i>1</i>	<i>42</i>	<i>11</i>
<b>Modified Project Maximum Daily Emissions</b>	<b>69</b>	<b>55</b>	<b>254</b>	<b>1</b>	<b>43</b>	<b>12</b>
SCAQMD Regional Significance Thresholds	75	100	550	150	150	55
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: ESA 2021

Harbor-UCLA Master Plan - Addendum  
Air Quality and Greenhouse Gas Assessment

Project Information	Construction	Start	Finish	Construction Activity	Draft EIR Reference
<b>PHASE 1</b>	PS-A, OPT, SUPPORT BUILDINGS, SCE YARD, 13 MW BLDG				
	PHASE 1A - MAKE READY TO MOVE MANAGEMENT & MAKE READY UTILITY DUCTBANK (LOC)	12/14/2021	3/30/2022	Tenant Improvements N21, N24	Phase M, L, 3
	PHASE 1A.1 - CONSTRUCTION - MAKE READY - PUMP & N21 TO MOVE MGMT (LOC)	12/14/2021	1/20/2022	Sub, Install	Phase C
	PHASE 1A.2 - CONSTRUCTION - 3 small EMERGENCY GENERATORS (LOC)	4/7/2022	4/7/2022	Utilities trenching	
	PHASE 1A.3 - CONSTRUCTION - PROJECT UTILITY DUCTBANK (LB)	9/15/2021	7/27/2022	Utilities install and paving	
	PHASE 1B - MAKE READY - SCE 66 KV, YARD, PAD, & 12 KV BUILDING				
	PHASE 1B.1 - CONSTRUCTION - MAKE READY - DEMO OF SITE & BUILD SCE PAD (LOC)	4/27/2021	9/22/2021	Demo, Utilities, Pad/Panel	Phase M, C, 1, 3
	PHASE 1B.2 - CONSTRUCTION - SCE CONSTRUCTION BEYOND MEDICINE SUBSTATION & COMPOUNDING	1/22/2022	9/15/2022	Build 12KV Distribution	Phase C
	PHASE 1B.3 - CONSTRUCTION - 12 KV BUILDING CONSTRUCTION ONLY (LB)	11/16/2021	12/14/2022	Build 12KV Elec Bldg	Phase C
	PHASE 1C - 11 MOVE MGMT & MAKE READY FOR PS-A, OPT, SB, SE CONNECTOR				
PHASE 1C.1.1 SOW I - CONSTRUCTION - SL-2 (S4) (LB)	11/2/2021	3/30/2022	LI-2		
PHASE 1C.1.1 SOW II - CONSTRUCTION - MR - FOUMATE/DEMO FOR UTILITYDOME & INC 1D.1 FRACKG	9/24/2020	11/30/2020	Demo, Abatement, Utilities		
PHASE 1C.1.1 SOW III - CONSTRUCTION - MR - FOUMATE/DEMO FOR UTILITYDOME & INC 1D.1 FRACKG	5/24/2021	8/9/2021			
PHASE 1C.1.1 SOW IV - CONSTRUCTION - MR - FOUMATE/DEMO FOR UTILITYDOME & INC 1D.1 FRACKG	4/12/2022	5/13/2022	Demo F2B Bldg	Phase C	
PHASE 1D - SCOPING, PROCUREMENT, DESIGN & CONSTRUCTION - OPT, SB, DRIVEWAY, PS-A, SE CONN (DB)					
PHASE 1D.1 - DEMO PARKING LOTS PS-A, OPT, SB					
Construction of Emergency Walk-in SE Entrance to Existing Hospital (Was Phase 1C Inc. 1.2)	10/31/2022	12/27/2022	Build Emergency Walk-in Etc		
Demo of Braking Lots & Entrance (Phs 1D.1, 1D.1.1)	8/11/2022	10/28/2022	Demo Parking Lots		
Construction of PS-A (L1, L2)	2/6/2023	4/8/2023	Grading		
Construction of PS-A (L1, L2)	4/26/2023	6/26/2024	Architectural Coating		
Construction of PS-A (L1, L2)	4/26/2023	6/26/2024	Roadway Paving		
Construction of PS-A (L1, L2)	8/16/2023	10/30/2023	Grading		
Construction of PS-A (L1, L2)	11/2/2023	4/26/2024	Support Bldg		
Construction of PS-A (L1, L2)	2/1/2024	6/26/2024	Architectural Coating		
Construction of PS-A (L1, L2)	3/21/2024	6/26/2024	Roadway Paving		
PHASE 1E - MAKE READY - DEMO OUTLYING BUNGALOWS FOR SL1 EXTENSION (LOC)					
PHASE 1E.1 - CONSTRUCTION - MAKE READY - DEMO OUTLYING BUNGALOWS FOR SL1 EXTENSION	10/4/2023	3/30/2024	Demo Bungalows		
PHASE 1E.1.1 - Make Ready Project - Demo of Bungalows N24, N25-N28, N29 A-C, N29-AB, N28, N28 (Phs 1E-1G Inc. 1) (LOC)					
<b>PHASE 2</b>	CENTRAL PLANT (CP #7961)				
	PHASE 2A - MAKE READY - DEMO FOR IPT FOOTPRINT, CNTRL PLANT, HAZMAT & PAINT SHOP (LOC)				
	PHASE 2A.1 - CONSTRUCTION - MR - DEMO FOR IPT FOOTPRINT (D-BLOGS & F20) (LOC)	8/7/2023	1/31/2024	Demo	
	MR - Demo for IPT Cooper (D-186) (Phs 2D.1, 2I) (LOC)				
	PHASE 2D.1.3 - CONSTRUCTION - MR - DEMO FOR CNTRL PLANT (PAINT SHP, HAZMAT, T-1, M-1 & F-BLDG)	1/23/2025	3/5/2025	Demo	Phase 6
	PHASE 2B - SCOPING, DESIGN & CONSTRUCTION (IT BUILDING & SHOPS STEWARK) (DB)				
	PHASE 2B.1 - DESIGN/AGENCY/CONSTRUCTION - IT BUILDING & SHOPS & STEWARK (DB)				
	Construction by Design-Build Team - IT & Shops & Stewark (Phs 2B-Inc. 1) (DB)	4/20/2023	8/6/2024	Build IT, Shops	Phase C, 5
	Construction by Design-Build Team - IT & Shops & Stewark (Phs 2B-Inc. 1) (DB)	2/1/2024	5/6/2024	Architectural Coating	
	Construction by Design-Build Team - IT & Shops & Stewark (Phs 2B-Inc. 1) (DB)	3/1/2024	5/6/2024	Roadway Paving	
PHASE 2F - INTERIM HELIPAD PROJECT (LB)					
PHASE 2F.1 - CONSTRUCTION - INTERIM HELIPAD PROJECT (LB)	3/15/2023	6/19/2023	Build Interim Helipad	Phase 3	
PHASE 2G - SCOPING, PROCUREMENT, DESIGN & CONSTRUCTION - CENTRAL PLANT, STEWARK & SL-2 EXT (DB)					
PHASE 2G.1 DESIGN/AGENCY/CONSTRUCTION - CENTRAL PLANT, STEWARK & SL-2 EXTENSION (DB)					
Construction by Design-Build Team for Central Plant, Stewark, & SL-2 Ext (Phs 2G-Inc. 1) (DB)	9/17/2025	2/24/2027	Build Central Plant	Phase C	
Construction by Design-Build Team for Central Plant, Stewark, & SL-2 Ext (Phs 2G-Inc. 1) (DB)	12/1/2027	2/2/2027	Architectural Coating		
Construction by Design-Build Team for Central Plant, Stewark, & SL-2 Ext (Phs 2G-Inc. 1) (DB)	11/1/2027	12/1/2027	Roadway Paving		
<b>PHASE 3</b>	INPATIENT BUILDING REPLACEMENT (CP #792)				
	PHASE 3A.2 - MAKE READY DEMO 2 & 3 SOUTH, EXIST HELIPAD, UTILITY DUCTBANK (LOC)				
	PHASE 3A.2 - CONSTRUCTION - MAKE READY - DEMO 2 & 3 SOUTH, EXIST HELIPAD (LOC)	8/7/2023	10/31/2023	Demo 2 & 3 South, Existing Helipad	
	PHASE 3A.3 - MR UTILITY DUCTBANK (LB)				
	PHASE 3A.3 - CONSTRUCTION - MAKE READY STEWARK (LB)	11/1/2023	2/6/2024	Utilities	Phase C
	PHASE 3B - SCOPING, PROCURE, DESIGN & CONST - IPT, STEWARK, PH-3 SE CONN, WHSE, ENT ROADS (DB)				
	PHASE 3B.1 - DESIGN/AGENCY/CONSTRUCTION - IPT, STEWARK & PH-3 SE CONNECTOR (DB)				
	Construction by Design-Build Team for IPT, SE Connector-Ph2 (Phs 3B-Inc. 1) (DB)	8/17/2023	10/30/2023	Grading	
	Construction by Design-Build Team for IPT, SE Connector-Ph2 (Phs 3B-Inc. 1) (DB)	11/2/2023	12/31/2024	Build IPT, SE Connector-Ph2	
	Construction by Design-Build Team for IPT, SE Connector-Ph2 (Phs 3B-Inc. 1) (DB)	7/2/2026	12/31/2026	Architectural Coating	
Construction by Design-Build Team for IPT, SE Connector-Ph2 (Phs 3B-Inc. 1) (DB)	10/1/2026	12/31/2026	Roadway Paving		
PHASE 3B.1 - DESIGN/AGENCY/CONSTRUCTION - WAREHOUSE, STEWARK, ENT ROADS (DB)					
Construction of Warehouse (Phs 3B-Inc. 1) (DB)	3/25/2026	10/4/2026	Build Warehouse	Phase C	
PHASE 3D - MOVE MGMT INTO IPT & DEMO INTERIM HELIPAD					
PHASE 3D.4 - CONSTRUCTION - MAKE READY - DEMO - INTERIM HELIPAD, 1 SOUTH, PARLOW, 1&2 E	2/10/2028	4/11/2028	Demo Interim Helipad		
<b>PHASE 4</b>	REMAINING WORK - NOT INCLUDED IN PHASES 1 TO 3				
	PHASE 4 - MAKE READY DEMO North and South Wings				
	PHASE - CONSTRUCTION - MAKE READY - DEMO	5/22/2028	10/15/2028	Demo North and South Wings	
	PHASE - BUILD PARKING STRUCTURE				
	PHASE - CONSTRUCTION - PARKING STRUCTURE	6/30/2029	8/30/2029	Grading	
	PHASE - CONSTRUCTION - PARKING STRUCTURE	9/1/2029	7/7/2030	Parking Structure	
	PHASE - CONSTRUCTION - PARKING STRUCTURE	4/1/2030	7/7/2030	Architectural Coating	
	PHASE - CONSTRUCTION - PARKING STRUCTURE	4/1/2030	7/7/2030	Roadway Paving	
	PHASE - MAKE READY DEMO MRI IMAGING CENTER				
	PHASE - CONSTRUCTION - MAKE READY - DEMO	5/22/2023	8/15/2023	Demo MRI, Imaging Center	
PHASE - MAKE READY DEMO WAREHOUSE, CENTRAL PLANT					
PHASE - CONSTRUCTION - MAKE READY - DEMO	8/1/2030	10/30/2030	Demo Warehouse, Existing Central Plant		
<b>MHOPC</b>	MHOPC				
	SCOPING, PROCURE, DESIGN & CONST - MHOPC (DB)				
Construction of 2-story Modular Building	6/1/2022	7/30/2023	Grading		
Construction of 2-story Modular Building	8/1/2022	7/30/2023	Build		
Construction of 2-story Modular Building	11/2/2023	7/30/2023	Architectural Coating		
Construction of 2-story Modular Building	6/1/2023	7/30/2023	Roadway Paving		
<b>LUNQUIST</b>	THE LUNQUIST INSTITUTE (Formerly LABORERS)				
	The Lundquist Institute Master Plan	1/1/2017	4/15/2017	Grading	
	The Lundquist Institute Master Plan	4/26/2017	3/12/2019	Build 1	
	The Lundquist Institute Master Plan	11/2/2019	10/30/2020	Build 2	
The Lundquist Institute Master Plan	7/1/2020	11/30/2020	Architectural Coating		
The Lundquist Institute Master Plan	8/1/2020	12/30/2020	Paving		
<b>BioScience Park</b>	BIO-SCIENCE RESEARCH PARK				
	The BioScience Park Construction	6/2/2025	10/9/2026	Building Construction	
	The BioScience Park Construction	7/1/2026	10/9/2026	Paving	
	The BioScience Park Construction	7/1/2026	10/9/2026	Architectural Coating	
The BioScience Park Construction	7/16/2024	4/15/2027	Grading		



Harbor-UCLA Master Plan  
Air Quality and Greenhouse Gas Assessment

Project Information

Land Use	CalEEMod Land Use Type	Units
Surface Parking	Unenclosed Parking	120,000 sqft
SCE Service Yard	General Industrial	14,000 sqft
12KV Service Building	General Industrial	6,000 sqft
Parking Structure A	Unenclosed Parking with elevator	381,000 sqft
Outpatient Building	Hospital	231,000 sqft
Support Building	Hospital	195,000 sqft
SE Connector Building	Hospital	30,000 sqft
		310 spaces
		Open Substation
		1175 spaces
		30,000 sqft moved to MHOPC (See DMH Tab)

Source: Harbor-UCLA, 2015; PCR Services Corporation, 2015

Construction Schedule and California Emissions Estimator Model (CalEEMod) Inputs

Activity	CalEEMod Phase	Start Date	End Date	No. Days	Equipment	Quantity	Demolition Debris	Dirt Export	Dirt Import
PHASE 1A.1 - CONSTRUCTION - MAKE READY - (N14 & N21) TI, MOVE TI / N/A		11/18/2021	3/29/2022	94					
PHASE 1A.1 - CONSTRUCTION - 2 small EMERGENCY GENERATORS (UC)	Grading	12/9/2021	1/20/2022	31	Excavators Rubber Tired Loaders Water Trucks Tractors/Loaders/Backhoes Graders	1 1 1 3 1			
PHASE 1A.3 - CONSTRUCTION - PROJECT UTILITY DUCTBANK (UB) Utility Installation	Grading	6/29/2021	4/27/2022	217	Concrete/Industrial Saws Excavators Water Trucks Tractors/Loaders/Backhoes Graders Forklifts Air Compressors Welder	1 2 2 2 1 1 1 1	28,027.00	10,851.00	
	Paving	9/15/2021	7/27/2022	226	Cement and Mortar Mixers Trencher Paving Equipment Rollers	1 1 1 1			
PHASE 1B.1 - CONSTRUCTION- MAKE READY - DEMO OF SITE & BUILD Demo & SCE Pad	Demolition	4/27/2021	5/26/2021	22	Concrete/Industrial Saws Excavators Water Trucks Graders	1 1 1 1	722.22		
	Grading	5/27/2021	9/22/2021	85	Tractors/Loaders/Backhoes Rubber Tired Dozers Water Trucks Graders	3 1 1 1	4,444.44	555.56	
PHASE 1B.1 - SCE CONSTRUCTION 66 KV MEDICINE SUBSTATION & CO	Building Construction	1/2/2022	9/15/2022	184	Concrete/Industrial Saws Water Trucks Tractors/Loaders/Backhoes Graders Welder Cement and Mortar Mixers	1 1 3 1 1 1			
PHASE 1B.2 - CONSTRUCTION - 12 KV BUILDING CONSTRUCTION ONLY	Building Construction	11/8/2021	12/14/2022	288	Concrete/Industrial Saws Water Trucks Tractors/Loaders/Backhoes Graders Welder Cement and Mortar Mixers	1 1 3 1 1 1			
	Paving	10/1/2022	12/14/2022	53	Cement and Mortar Mixers Trencher Paving Equipment Rollers	1 1 1 1			
PHASE 1C.1.3 SOW-I CONSTRUCTION - SL-2 (145) (LB)	Paving	11/1/2021	3/20/2022	100	Cement and Mortar Mixers Trencher Paving Equipment Rollers	1 1 1 1			
Surface Parking									
PHASE 1C.1.1 SOW-II - CONSTRUCTION - MR - FO/ABATE/DEMO FOR Demo, Abatement, Utilities PACKAGE B	Demolition	9/24/2020	11/6/2020	32	Concrete/Industrial Saws Excavators Water Trucks Graders	1 1 1 1	13,698.21		
	SF	89661							
PHASE 1C.1.1 SOW-II - CONSTRUCTION - MR - FO/ABATE/DEMO FOR Demo, Abatement, Utilities PACKAGE A	Demolition	5/24/2021	8/6/2021	55	Concrete/Industrial Saws Excavators Water Trucks Graders	1 1 1 1	2,422.29		
	SF	15855							
Demo for F10 Building (IOC) Demo F10 Bldg	Demolition	4/12/2022	5/13/2022	24	Concrete/Industrial Saws Excavators Water Trucks Graders	1 1 1 1	886.11		
	SF	5800							
Construction of Emergency Walk-in SE Entrance to Existing Hospital Emergency Walk-in Exit	Building Construction	10/31/2022	12/27/2022	42	Forklift Welder	1 1			
Demo of Parking Lots & Entrance (Phs-1D.1 was 1C-13.) Demo Parking Lots	Demolition	8/11/2022	10/28/2022	57	Excavators Concrete/Industrial Saws Tractors/Loaders/Backhoes Graders Water Trucks	1 1 1 1 1	9,027.78		
	SF	150000							
Construction of P5-A (1,193), Entrance Road & Drop Off (Phs-1D-In) Build P5-A, Roadway Paving	Grading	2/8/2023	4/8/2023	43	Tractors/Loaders/Backhoes Rubber Tired Dozers Water Trucks Graders	3 1 1 1	9,172.22	2,293.06	
	Building Construction	4/9/2023	6/6/2024	304	Forklift Welder Crane	1 1 1			
	Architectural Coatings	4/1/2024	6/6/2024	49	Air Compressors	1			
	Paving	4/1/2024	6/6/2024	49	Tractors/Loaders/Backhoes Cement and Mortar Mixers Roller Paving Equipment Trencher	1 1 1 1 1	3,369.00 10,986.33		
Construction of OPT, Medical Foundation Drive (Phs-1D-inc. 1) (DB) Construction of Support Building & Sitework (Phs-1D-inc. 1) (DB) Build Support Bldg, Sitework	Grading	8/16/2023	10/30/2023	54	Tractors/Loaders/Backhoes Rubber Tired Dozers Water Trucks Graders	3 1 1 1	12,546.03	3,136.51	
	Building Construction (4)	11/1/2023	6/26/2025	432	Forklift Welder Tractors/Loaders/Backhoes Air Compressors Water Trucks Crane	2 2 2 1 1 1			
	Architectural Coatings	2/1/2025	6/26/2025	104	Air Compressors	1			
	Paving	3/2/2025	6/26/2025	84	Tractors/Loaders/Backhoes Cement and Mortar Mixers Roller Paving Equipment Trencher	1 1 1 1 1			
PHASE 1C.1 - Make Ready Project - Demo of Bungalows N14, N16-18, N20-N22, N24-A-C, N26-A8B, N28, N31 (Phs-1G-inc. 1) (IOC)	Demolition	10/4/2025	3/30/2026	126	Concrete/Industrial Saws Excavators Water Trucks Graders	1 1 1 1	10,358.33		
	SF	67800							

Demolition (CY)

Soft Demo	3,711 CY	trees, scrubs...
Hard Demo	33,403 CY	SF of building, hardscape
Dirt Export	68,545 CY	include fluff
Dirt Import	16,836 CY	include fluff
Truck Size (CY)	32 CY	
<b>Total Truck Trips</b>	<b>10,208 Trucks</b>	

Architectural Coating

CalEEMod assumes the total surface for architectural coating equals:

Nonresidential Coating Area	2 times the square footage 75% interior 25% exterior
Parking Lot Coating Area	6% of the square foot; interior 25% of the square foot; exterior

Source: SCAQMD, CEQA Air Quality Handbook, (1993) A9-124.

Land Use	Non-Residential Land Uses		
	Area (sf)	Interior (sf)	Exterior (sf)
Surface Parking	120,000	7,200	30,000
SCE Service Yard	14,000	21,000	7,000
12KV Service Building	6,000	9,000	3,000
Parking Structure A	381,000	571,500	190,500
Outpatient Building	231,000	346,500	115,500
Support Building	195,000	292,500	97,500
SE Connector Building	30,000	45,000	15,000
<b>Total Non-Residential</b>		<b>1,292,700</b>	<b>458,500</b>

ENTER VALUES ABOVE INTO CALEEMOD

Harbor-UCLA Master Plan  
Air Quality and Greenhouse Gas Assessment

Project Information

Land Use	CalEEMod Land Use Type	Units
Temporary Helipad	Other Asphalt Surface	10,000 sqft
IT/Shops Building	General Office/General Industrial	22,000 sqft
Central Plant Building	General Office	26,000 sqft
Surface Parking (SL-2 Ext)	—	50,000 sqft
		120 spaces

Source: Harbor-UCLA, 2015; PCR Services Corporation, 2015

Construction Schedule and California Emissions Estimator Model (CalEEMod) Inputs

Activity	CalEEMod Phase	Start Date	End Date	No. Days	Equipment	Quantity	Demolition Debris	Dirt Export	Dirt Import
PHASE 2D.1.2 - CONSTRUCT - MR - DEMO FOR IPT FOOTPRINT	Demolition	8/7/2023	1/31/2024	128	Concrete/Industrial Saws	1	7,119.44		
	SF				Excavators	1			
					Water Trucks	1			
	46600				Graders	1			
PHASE 2D.1.3 - CONSTRUCT - MR - DEMO FOR CNTRL PLANT [PA]	Demolition	1/23/2025	3/5/2025	30	Concrete/Industrial Saws	1	7,425.00		
	SF				Excavators	1			
					Water Trucks	1			
	48600				Graders	1			
PHASE 2B.1 - DESIGN/AGENCY/CONSTRUCTION - IT BUILDING i Build IT, Shops, Sitework	Building Construction	4/20/2023	5/6/2024	273	Forklifts	1		2,118.52	529.63
					Crane	1			
					Tractors/Loaders/Backhoes	3			
					Welder	1			
					Graders	1			
					Air Compressors	1			
Architectural Coatings	2/1/2024	5/6/2024	68	Air Compressors	1				
Paving		3/1/2024	5/6/2024	47	Water Trucks	1			
					Tractors/Loaders/Backhoes	2			
					Paving Equipment	1			
					Rollers	1			
					Trencher	1			
PHASE 2F.1- CONSTRUCTION - INTERIM HELIPAD PROJECT (LB)	Building Construction	3/17/2023	6/19/2023	67	Forklift	2			
Build Interim Helipad					Welder	1			
PHASE 2G.1 DESIGN/AGENCY/CONSTRUCTION - CENTRAL PLANT Build Central Plant, Sitework	Building Construction	9/17/2025	2/24/2027	376	Forklifts	1	2,503.70	625.93	
					Crane	1			
					Tractors/Loaders/Backhoes	3			
					Welder	1			
					Graders	1			
					Air Compressors	1			
Architectural Coatings	12/1/2026	2/2/2027	46	Air Compressors	1				
Paving		11/1/2026	2/2/2027	67	Water Trucks	1			
					Tractors/Loaders/Backhoes	2			
					Paving Equipment	1			
					Rollers	1			
					Trencher	1			

Demolition (CY)

Soft Demo	1,454	CY	trees, scrubs,...
Hard Demo	13,090	CY	SF of building, hardscape
Dirt Export	4,622	CY	include fluff
Dirt Import	1,156	CY	include fluff
Truck Size (CY)	12	CY	
<b>Total Truck Trips</b>	<b>1,694</b>	<b>Trucks</b>	

Architectural Coating

CalEEMod assumes the total surface for architectural coating equals:

Nonresidential Coating Area	2 times the square footage 75% interior 25% exterior
Parking Lot Coating Area	6% of the square foot Interior 25% of the square foot Exterior

Source: SCAQMD, CEQA Air Quality Handbook, (1993) A9-124.

Non-Residential Land Uses				
Land Use	Area (sf)	Interior (sf)	Exterior (sf)	
Temporary Helipad	10,000	15,000	5,000	
IT/Shops Building	22,000	33,000	11,000	
Central Plant Building	26,000	39,000	13,000	
Surface Parking (SL-2 Ext)	50,000	3,000	12,500	
<b>Total Non-Residential</b>		<b>90,000</b>	<b>41,500</b>	

ENTER VALUES ABOVE INTO CALEEMOD

Harbor-UCLA Master Plan  
Air Quality and Greenhouse Gas Assessment

Project Information

Land Use	CalEEMod Land Use Type	Units	
Patient Bed tower/Diagnostic Treatment Center	Hospital	501,000 sqft	379 Beds
Warehouse		11,000 sqft	
SE Connector		10,000 sqft	

Source: Harbor-UCLA, 2015; PCR Services Corporation, 2015

Construction Schedule and California Emissions Estimator Model (CalEEMod) Inputs

Activity	CalEEMod Phase	Start Date	End Date	No. Days	Equipment	Quantity	Demolition Debris	Dirt Export	Dirt Import
PHASE 3A.2 - CONSTRUCTION - MAKE READY - DEMO 2 & 3 SOUTH, EXISTING HELIPAD	Demolition SF 17600	8/7/2023	10/31/2023	62	Concrete/Industrial Saws	1	2,151.11		
					Excavators	1			
					Water Trucks	1			
					Graders	1			
					Tractors/Loaders/Backhoes	1			
PHASE 3A.3 - CONSTRUCTION - MAKE READY SITEWORK (LB) UTILITIES - DUCT BANK	Grading	11/1/2023	2/6/2024	70	Tractors/Loaders/Backhoes	2		18,052.00	30,126.00
					Rubber Tired Dozers	1			
					Water Trucks	1			
					Graders	1			
						1			
PHASE 3B.1 - DESIGN/AGENCY/CONSTRUCTION - IPT, SITEWORK  Build IPT, SE Connector-Ph2	Grading	8/17/2023	10/30/2023	53	Tractors/Loaders/Backhoes	3	33,675.00	38,726.00	
					Rubber Tired Dozers	1			
					Water Trucks	1			
	Building Construction (3)	11/1/2023	12/31/2026	827	Rubber Tired Loaders	1			
					Tractors/Loaders/Backhoes	8			
					Forklift	2			
					Welder	3			
					Air Compressors	2			
					Crane	2			
					Architectural Coatings	1			
Paving	10/1/2026	12/31/2026	66	Tractors/Loaders/Backhoes	2				
				Forklift	1				
				Welder	1				
				Cement and Motar Mixers	1				
				Roller	1				
PHASE 3B.1 - DESIGN/AGENCY/CONSTRUCTION - WAREHOUSE, SITEWORK, ENT ROADS (DB) Build Warehouse		3/25/2026	10/4/2026	138	Tractors/Loaders/Backhoes	2			
					Welder	2			
					Air Compressors	1			
					Crane	1			
						1			
PHASE 3D.4 - CONSTRUCTION - MAKE READY - DEMO - INTERIM HELIPAD 1 south parlow 1 east, 2 east	Demolition SF 40450	2/10/2028	4/11/2028	44	Concrete/Industrial Saws	1	6,179.86		
					Excavators	1			
					Water Trucks	1			
					Graders	1			
					Tractors/Loaders/Backhoes	1			

Demolition (CY)

Soft Demo	833	CY	trees, scrubs,...
Hard Demo	7,498	CY	SF of building, hardscape
Dirt Export	63,794	CY	include fluff
Dirt Import	68,852	CY	include fluff
Truck Size (CY)	12	CY	
<b>Total Truck Trips</b>	<b>11,748</b>	<b>Trucks</b>	

Architectural Coating

CalEEMod assumes the total surface for architectural coating equals:

Nonresidential Coating Area	2 times the square footage 75% interior 25% exterior
Parking Lot Coating Area	6% of the square foot Interior 25% of the square foot Exterior

Source: SCAQMD, CEQA Air Quality Handbook, (1993) A9-124.

Non-Residential Land Uses			
Land Use	Area (sf)	Interior (sf)	Exterior (sf)
Patient Bed tower/Diagnostic Treatment Center	501,000	751500	250500
Warehouse	11,000	16,500	5500
SE Connector	10,000	15000	5000
<b>Total Non-Residential</b>		<b>783,000</b>	<b>261,000</b>

ENTER VALUES ABOVE INTO CALEEMOD

Harbor-UCLA Master Plan  
Air Quality and Greenhouse Gas Assessment

Project Information

Land Use	CalEEMod Land Use Type	Units	
Renovate Existing Hospital Tower	Hospital	234,000 sqft	
Renovate PCDC	Hospital	57,000 sqft	
Public Parking Structure(s)	Unenclosed Parking with Elevator	551,150 sqft	1,220.00 Spaces
Redesign and resurface - Surface Parking Lots	Surface Parking Lot	104,005 sqft	570.00 Spaces

HK took from later tabs  
HK took from later tabs

Source: Harbor-UCLA, 2015; PCR Services Corporation, 2015

Construction Schedule and California Emissions Estimator Model (CalEEMod) Inputs

Activity	CalEEMod Phase	Start Date	End Date	No. Days	Equipment	Quantity	Demolition Debris	Dirt Export	Dirt Import			
Demolish Buildings: North Wing, South Wing	Demolition SF 180300	5/22/2028	10/15/2028	105	Concrete/Industrial Saws	1	27,545.83					
					Excavators	1						
					Water Trucks	1						
					Graders	1						
					Tractors/Loaders/Backhoes	1						
PHASE - CONSTRUCTION - PARKING STRUCTURE	Grading	6/30/2029	8/30/2029	44	Tractors/Loaders/Backhoes	3		13,268.43	3,317.11			
					Rubber Tired Dozers	1						
					Water Trucks	1						
	Graders	1										
	Building Construction	9/1/2029	7/7/2030	220	Forklift	1						
					Welder	1						
					Crane	1						
	Architectural Coatings	4/1/2030	7/7/2030	70	Air Compressors	1						
	Paving	4/1/2030	7/7/2030	70	Tractors/Loaders/Backhoes	1						2,764.26
					Cement and Motar Mixers	1						
Roller					1							
Paving Equipment					1							
Trencher	1											
PHASE - MAKE READY DEMO MFI, IMAGING CENTER PHASE - CONSTRUCTION - MAKE READY - DEMO N25, N23, N33, N39, Cottages 14/16/18	Demolition SF 108000	5/22/2023	8/15/2023	62	Concrete/Industrial Saws	1	16,500.00					
					Excavators	1						
					Water Trucks	1						
					Tractors/Loaders/Backhoes	1						
					Graders	1						
PHASE - MAKE READY DEMO WAREHOUSE, CENTRAL PLANT PHASE - CONSTRUCTION - MAKE READY - DEMO cooling towers	Demolition SF 41400	8/1/2030	10/30/2030	65	Concrete/Industrial Saws	1	6,325.00					
					Excavators	1						
					Water Trucks	1						
					Graders	1						
					Tractors/Loaders/Backhoes	1						

Demolition (CY)

Soft Demo	5,037 CY	trees, scrubs,...
Hard Demo	45,334 CY	SF of building, hardscape
Dirt Export	13,268 CY	include fluff
Dirt Import	6,081 CY	include fluff
Truck Size (CY)	12 CY	
<b>Total Truck Trips</b>	<b>5,810 Trucks</b>	

Architectural Coating

CalEEMod assumes the total surface for architectural coating equals:	
Nonresidential Coating Area	2 times the square footage 75% interior 25% exterior
Parking Lot Coating Area	6% of the square foot Interior 25% of the square foot Exterior

Source: SCAQMD, CEQA Air Quality Handbook, (1993) A9-124.

ENTER VALUES ABOVE INTO CALEEMOD

Non-Residential Land Uses			
Land Use	Area (sf)	Interior (sf)	Exterior (sf)
Renovate Existing Hospital Tower	234,000	351,000	117,000
Renovate PCDC	57,000	85,500	28,500
Public Parking Structure(s)	551,150	826,725	275,575
Redesign and resurface - Surface Parking	104,005	6,240	26,001
<b>Total Non-Residential</b>		<b>1,269,465</b>	<b>447,076</b>

ENTER VALUES ABOVE INTO CALEEMOD

Harbor-UCLA Master Plan  
Air Quality and Greenhouse Gas Assessment

Project Information

Land Use	CalEEMod Land Use Type	Units
DMH Outpatient Building	Lab/Medical Office	30,000 sqft <i>latest information from Parisa</i>

Source: Harbor-UCLA, 2015; PCR Services Corporation, 2015

Construction Schedule and California Emissions Estimator Model (CalEEMod) Inputs

Activity	Caleemod Phase	Start Date	End Date	No. Days	Equipment	Quantity	Demolition Debris	Dirt Export	Dirt Import
	Grading	6/1/2022	7/30/2023	303	Graders	1	1,388.89	5,777.78	1,444.44
					Tractors/Loaders/Backhoes	1			
					Water Trucks	1			
	Building Construction	8/1/2022	7/30/2023	260	Forklift	2			
					Welder	2			
					Tractors/Loaders/Backhoes	2			
					Air Compressors	1			
					Water Trucks	1			
					Crane	1			
	Architectural Coatings	5/1/2023	7/30/2023	65	Air Compressors	1			
	Paving	6/1/2023	7/30/2023	42	Tractors/Loaders/Backhoes	1			
					Cement and Motar Mixers	1			
					Roller	1			
					Paving Equipment	1			
					Trencher	1			

Demolition (CY)

Soft Demo	139 CY	trees, scrubs,...
Hard Demo	1,250 CY	SF of building, hardscape
Dirt Export	5,778 CY	include fluff
Dirt Import	1,444 CY	include fluff
Truck Size (CY)	12 CY	
<b>Total Truck Trips</b>	<b>718 Trucks</b>	

Architectural Coating

CalEEMod assumes the total surface for architectural coating equals:	
Nonresidential Coating Area	2 times the square footage 75% interior 25% exterior
Parking Lot Coating Area	6% of the square foot Interior 25% of the square foot Exterior

Source: SCAQMD, CEQA Air Quality Handbook, (1993) A9-124.

ENTER VALUES ABOVE INTO CALEEMOD

Non-Residential Land Uses			
Land Use	Area (sf)	Interior (sf)	Exterior (sf)
DMH Outpatient Building	30,000	45,000	15,000
<b>Total Non-Residential</b>		<b>45,000</b>	<b>15,000</b>

ENTER VALUES ABOVE INTO CALEEMOD

**Harbor-UCLA Master Plan  
Air Quality and Greenhouse Gas Assessment**

**Project Information**

Land Use	CalEEMod Land Use Type	Units
The Lundquist Institute (Formerly LA Biomed) - (1)	Lab/Medical Office	80,000 sqft
The Lundquist Institute (Formerly LA Biomed) - (2)	Lab/Medical Office	145,000 sqft

Source: Harbor-UCLA, 2015; PCR Services Corporation, 2015

**Construction Schedule and California Emissions Estimator Model (CalEEMod) Inputs**

Activity	CalEEMod Phase	Start Date	End Date	No. Days	Equipment	Quantity	Demolition Debris	Dirt Export	Dirt Import
	Grading	1/1/2017	4/15/2017	75	Rubber Tired Loaders	1	2,222.22		
		Actual	Actual		Tractors/Loaders/Backhoes	1			
					Water Trucks	1			
	Building Construction (1)	Actual	4/16/2017	3/1/2019	490	Forklift	2	3,851.85	4,814.81
						Welder	2		
						Tractors/Loaders/Backhoes	2		
						Air Compressors	1		
						Water Trucks	1		
						Crane	1		
	Building Construction (2)	1/1/2029	12/30/2029	260	Forklift	4	2,592.59	7,703.70	9,629.63
					Welder	2			
					Tractors/Loaders/Backhoes	2			
					Air Compressors	1			
					Water Trucks	1			
	Crane	2							
Architectural Coatings	7/1/2029	12/30/2029	130	Air Compressors	1				
Paving	8/1/2029	12/30/2029	108	Tractors/Loaders/Backhoes	1				
				Cement and Motar Mixers	1				
				Roller	1				
				Paving Equipment	1				
				Trencher	1				

**Demolition (CY)**

Soft Demo	481 CY	trees, scrubs,...
Hard Demo	4,333 CY	SF of building, hardscape
Dirt Export	11,556 CY	include fluff
Dirt Import	14,444 CY	include fluff
Truck Size (CY)	12 CY	
<b>Total Truck Trips</b>	<b>2,568 Trucks</b>	

**Architectural Coating**

CalEEMod assumes the total surface for architectural coating equals:	
Nonresidential Coating Area	2 times the square footage 75% interior 25% exterior
Parking Lot Coating Area	6% of the square foot Interior 25% of the square foot Exterior

Source: SCAQMD, CEQA Air Quality Handbook, (1993) A9-124.

**ENTER VALUES ABOVE INTO CALEEMOD**

Non-Residential Land Uses			
Land Use	Area (sf)	Interior (sf)	Exterior (sf)
The Lundquist Institute (Formerly LA Bior	225,000	337,500	112,500
<b>Total Non-Residential</b>		<b>337,500</b>	<b>112,500</b>

**ENTER VALUES ABOVE INTO CALEEMOD**

Harbor-UCLA Master Plan  
Air Quality and Greenhouse Gas Assessment

Project Information

Land Use	CalEEMod Land Use Type	Units
Bioscience Building	Lab/ Medical Office	250,000 sqft

Source: Harbor-UCLA, 2015; PCR Services Corporation, 2015

Construction Schedule and California Emissions Estimator Model (CalEEMod) Inputs

Activity	CalEEMod Phase	Start Date	End Date	No. Days	Equipment	Quantity	Demolition Debris	Dirt Export	Dirt Import
Research Building	Grading	7/16/2024	4/15/2027	718	Rubber Tired Loaders	1		31,953.00	3.71
					Grader	1			
					Tractors/Loaders/Backhoes	3			
					Air Compressors	1			
					Water Trucks	1			
	Building Construction	6/2/2025	10/8/2026	354	Forklift	1	10,229.00	5,325.50	
					Tractors/Loaders/Backhoes	3			
					Air Compressors	1			
					Welder	1			
					Crane	1			
	Architectural Coatings	7/1/2026	10/8/2026	72	Air Compressors	1			
	Paving	7/1/2026	10/8/2026	72	Tractors/Loaders/Backhoes	1			
Roller					1				
Paving Equipment					1				
Trencher					1				

Demolition (CY)

Soft Demo	1,023 CY	trees, scrubs,...
Hard Demo	9,206 CY	SF of building, hardscape
Dirt Export	37,279 CY	include fluff
Dirt Import	4 CY	include fluff
Truck Size (CY)	12 CY	
<b>Total Truck Trips</b>	<b>3,959 Trucks</b>	

Architectural Coating

CalEEMod assumes the total surface for architectural coating equals:	
Nonresidential Coating Area	2 times the square footage 75% interior 25% exterior
Parking Lot Coating Area	6% of the square foot Interior 25% of the square foot Exterior

Source: SCAQMD, CEQA Air Quality Handbook, (1993) A9-124.

ENTER VALUES ABOVE INTO CALEEMOD

Non-Residential Land Uses				
Land Use	Area (sf)	Interior (sf)	Exterior (sf)	
Bioscience Building	250,000	375,000	125,000	
	0	-	-	
<b>Total Non-Residential</b>		<b>375,000</b>	<b>125,000</b>	

ENTER VALUES ABOVE INTO CALEEMOD

**Addendum to the Harbor UCLA Master Plan EIR**  
**Summary of Vendor, Haul, and Worker Daily One-Way Trips**

<b>Construction Phases</b>	<b>Daily One-Way Vendor Trips</b>	<b>Daily One-Way Haul Trips</b>	<b>Daily One-Way Worker Trips</b>
Bioscience - G	2	10	32
Bioscience - BC	42	0	104
Bioscience - AC	0	0	22
Bioscience - P	0	0	14
PHASE 1D.1 - BC - Construction of OPT & SB	72	0	436
PHASE 1D.1 - BC - Construction of PS-A	64	0	613
PHASE 2B.1 - BC	4	0	88
PHASE 2D.1.2 - D	2	10	108
PHASE 2G.1 - BC	16	0	158
PHASE 3A.3 - G	2	115	240
PHASE 3B.1 - BC (Build IPT)	86	0	1988
PHASE 3B.1 - AC (Build IPT)	0	0	150
PHASE 3B.1 - P (Build IPT)	0	0	100
PHASE 3B.1 - BC (Warehouse)	2	0	1320

*\*Water trucks in the equipment list are included in the vendor trip count*

**Addendum to the Harbor UCLA Master Plan EIR  
Total On-Road Emissions**

**Addendum to the Harbor UCLA Master Plan EIR**

**Total On-Road Emissions**

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)	Regional Emissions (pounds/day)										Total CO2e (MT/yr)
						ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5	
<b>260</b> Max construction days per year																
<b>PHASE 1D.1 - BC - Construct PS-A</b>		<b>2024</b>														
Total Haul Trips	0															
Hauling	0	114	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	64	114	8	6.9	15	0.04	4.15	3.95	0.02	0.38	0.02	0.39	0.10	0.02	0.12	103.91
Worker	613	114	8	14.7	0	0.36	1.58	21.08	0.06	6.29	0.03	6.33	1.56	0.03	1.60	317.00
					Total:	0.40	5.72	25.03	0.08	6.67	0.05	6.72	1.66	0.05	1.71	420.91
<b>PHASE 1D.1 - BC - Construct OPT &amp; SB</b>		<b>2024</b>														
Total Haul Trips	0															
Hauling	0	260	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	260	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	436	260	8	14.7	0	0.26	1.12	14.99	0.04	4.48	0.02	4.50	1.11	0.02	1.13	514.23
					Total:	0.26	1.12	14.99	0.04	4.48	0.02	4.50	1.11	0.02	1.13	514.23
<b>PHASE 2D.1.2 - D</b>		<b>2024</b>														
Total Haul Trips	214															
Hauling	10	23	8	20	15	0.01	1.54	1.22	0.01	0.18	0.01	0.20	0.05	0.01	0.06	9.23
Vendor	0	23	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	108	23	8	14.7	0	0.06	0.28	3.71	0.01	1.11	0.01	1.11	0.28	0.01	0.28	11.27
					Total:	0.07	1.82	4.93	0.02	1.29	0.02	1.31	0.32	0.02	0.34	20.50
<b>PHASE 2B.1 - BC</b>		<b>2024</b>														
Total Haul Trips	0															
Hauling	0	91	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	4	91	8	6.9	15	0.00	0.26	0.25	0.00	0.02	0.00	0.02	0.01	0.00	0.01	5.18
Worker	88	91	8	14.7	0	0.05	0.23	3.03	0.01	0.90	0.00	0.91	0.22	0.00	0.23	36.33
					Total:	0.05	0.49	3.27	0.01	0.93	0.01	0.93	0.23	0.01	0.24	41.51

**Addendum to the Harbor UCLA Master Plan EIR**

**Total On-Road Emissions**

Construction Phase	260 Max construction days per year		Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)	Regional Emissions (pounds/day)											Total CO2e (MT/yr)
	Daily One-Way Trips	Haul Days per Phase (days)				ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5		
<b>PHASE 3A.3 - G</b>																	
Total Haul Trips	2024																
Total Haul Trips	3098																
Hauling	116	27	8	20	15	0.09	17.88	14.15	0.09	2.14	0.13	2.26	0.57	0.12	0.69	125.68	
Vendor	2	27	8	6.9	15	0.00	0.13	0.12	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.77	
Worker	240	27	8	14.7	0	0.14	0.62	8.25	0.02	2.46	0.01	2.48	0.61	0.01	0.62	29.39	
Total:						0.23	18.62	22.52	0.11	4.61	0.14	4.75	1.18	0.14	1.32	155.85	
<b>PHASE 3B.1 - BC - Construct IPT</b>																	
Total Haul Trips	2024																
Total Haul Trips	0																
Hauling	0	260	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	86	260	8	6.9	15	0.05	5.57	5.31	0.02	0.51	0.02	0.53	0.13	0.02	0.16	318.45	
Worker	1988	260	8	14.7	0	1.18	5.12	68.36	0.20	20.41	0.11	20.52	5.07	0.10	5.17	2344.70	
Total:						1.23	10.69	73.68	0.22	20.92	0.13	21.05	5.21	0.12	5.33	2663.15	
<b>PHASE 3B.1 - BC - Construct IPT</b>																	
Total Haul Trips	2026																
Total Haul Trips	0																
Hauling	0	260	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	86	260	8	6.9	15	0.05	5.29	5.19	0.02	0.51	0.02	0.53	0.13	0.02	0.15	307.50	
Worker	1988	260	8	14.7	0	0.95	4.18	59.37	0.19	20.41	0.10	20.51	5.07	0.09	5.16	2240.26	
Total:						1.00	9.47	64.55	0.21	20.92	0.12	21.04	5.21	0.11	5.32	2547.76	
<b>PHASE 3B.1 - AC - Construct IPT</b>																	
Total Haul Trips	2026																
Total Haul Trips	0																
Hauling	0	154	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0	154	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Worker	150	154	8	14.7	0	0.07	0.32	4.48	0.01	1.54	0.01	1.55	0.38	0.01	0.39	100.12	
Total:						0.07	0.32	4.48	0.01	1.54	0.01	1.55	0.38	0.01	0.39	100.12	

**Addendum to the Harbor UCLA Master Plan EIR**

**Total On-Road Emissions**

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)	Regional Emissions (pounds/day)										Total CO2e (MT/yr)
						ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5	
<b>260</b>		Max construction days per year														
<b>PHASE 3B.1 - P - Construct IPT</b>																
Total Haul Trips	0															
Hauling	0	66	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	66	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	100	66	8	14.7	0	0.05	0.21	2.99	0.01	1.03	0.00	1.03	0.26	0.00	0.26	28.61
Total:						0.05	0.21	2.99	0.01	1.03	0.00	1.03	0.26	0.00	0.26	28.61
<b>PHASE 3B.1 - BC (Warehouse)</b>																
Total Haul Trips	0															
Hauling	0	138	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	2	138	8	6.9	15	0.00	0.12	0.12	0.00	0.01	0.00	0.01	0.00	0.00	0.00	3.80
Worker	1320	138	8	14.7	0	0.63	2.78	39.42	0.12	13.55	0.06	13.62	3.37	0.06	3.43	789.52
Total:						0.63	2.90	39.54	0.12	13.56	0.07	13.63	3.37	0.06	3.43	793.31
<b>BioScience Park - G</b>																
Total Haul Trips	1930															
Hauling	10	260	8	20	15	0.01	1.46	1.20	0.01	0.18	0.01	0.19	0.05	0.01	0.06	100.55
Vendor	2	260	8	6.9	15	0.00	0.12	0.12	0.00	0.01	0.00	0.01	0.00	0.00	0.00	7.15
Worker	32	260	8	14.7	0	0.02	0.07	0.96	0.00	0.33	0.00	0.33	0.08	0.00	0.08	36.06
Total:						0.02	1.65	2.27	0.01	0.52	0.01	0.54	0.13	0.01	0.15	143.76
<b>BioScience Park - BC</b>																
Total Haul Trips	0															
Hauling	0	201	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	42	201	8	6.9	15	0.02	2.58	2.53	0.01	0.25	0.01	0.26	0.06	0.01	0.08	116.10
Worker	104	201	8	14.7	0	0.05	0.22	3.11	0.01	1.07	0.01	1.07	0.27	0.00	0.27	90.60
Total:						0.07	2.80	5.64	0.02	1.31	0.02	1.33	0.33	0.02	0.35	206.70

**Addendum to the Harbor UCLA Master Plan EIR**

**Total On-Road Emissions**

Construction Phase	260 Max construction days per year		Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)	Regional Emissions (pounds/day)											Total CO2e (MT/yr)
	Daily One-Way Trips	Haul Days per Phase (days)				ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5		
<b>BioScience Park - AC</b>																	
Total Haul Trips	0																
Hauling	0	72	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0	72	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Worker	22	72	8	14.7	0	0.01	0.05	0.66	0.00	0.23	0.00	0.23	0.06	0.00	0.06	6.87	
Total:						0.01	0.05	0.66	0.00	0.23	0.00	0.23	0.06	0.00	0.06	6.87	
<b>BioScience Park - P</b>																	
Total Haul Trips	0																
Hauling	0	72	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0	72	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Worker	14	72	8	14.7	0	0.01	0.03	0.42	0.00	0.14	0.00	0.14	0.04	0.00	0.04	4.37	
Total:						0.01	0.03	0.42	0.00	0.14	0.00	0.14	0.04	0.00	0.04	4.37	

**Addendum to the Harbor UCLA Master Plan EIR**

**Total On-Road Emissions**

Construction Phase	260 Max construction days per year					Regional Emissions (Tons/year)											(MT/yr) Total CO2e
	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5		
	<b>PHASE 1D.1 - BC - Construct PS-A</b>																
	2024																
Total Haul Trips	0																
Hauling	0	114	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	64	114	8	6.9	15	0.00	0.24	0.23	0.00	0.02	0.00	0.02	0.01	0.00	0.01	103.91	
Worker	613	114	8	14.7	0	0.02	0.09	1.20	0.00	0.36	0.00	0.36	0.09	0.00	0.09	317.00	
<b>PHASE 1D.1 - BC - Construct OPT &amp; SB</b>																	
	2024																
Total Haul Trips	0																
Hauling	0	260	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0	260	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Worker	436	260	8	14.7	0	0.03	0.15	1.95	0.01	0.58	0.00	0.59	0.14	0.00	0.15	514.23	
<b>PHASE 2D.1.2 - D</b>																	
	2024																
Total Haul Trips	214																
Hauling	10	23	8	20	15	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.23	
Vendor	0	23	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Worker	108	23	8	14.7	0	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	11.27	
<b>PHASE 2B.1 - BC</b>																	
	2024																
Total Haul Trips	0																
Hauling	0	91	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	4	91	8	6.9	15	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.18	
Worker	88	91	8	14.7	0	0.00	0.01	0.14	0.00	0.04	0.00	0.04	0.01	0.00	0.01	36.33	

**Addendum to the Harbor UCLA Master Plan EIR**

**Total On-Road Emissions**

Construction Phase	260 Max construction days per year					Regional Emissions (Tons/year)											(MT/yr) Total CO2e
	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5		
<u>PHASE 3A.3 - G</u>	2024																
Total Haul Trips	3098																
Hauling	116	27	8	20	15	0.00	0.24	0.19	0.00	0.03	0.00	0.03	0.01	0.00	0.01	125.68	
Vendor	2	27	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	
Worker	240	27	8	14.7	0	0.00	0.01	0.11	0.00	0.03	0.00	0.03	0.01	0.00	0.01	29.39	
<u>PHASE 3B.1 - BC - Construct IPT</u>	2024																
Total Haul Trips	0																
Hauling	0	260	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	86	260	8	6.9	15	0.01	0.72	0.69	0.00	0.07	0.00	0.07	0.02	0.00	0.02	318.45	
Worker	1988	260	8	14.7	0	0.15	0.67	8.89	0.03	2.65	0.01	2.67	0.66	0.01	0.67	2344.70	
<u>PHASE 3B.1 - BC - Construct IPT</u>	2026																
Total Haul Trips	0																
Hauling	0	260	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	86	260	8	6.9	15	0.01	0.69	0.67	0.00	0.07	0.00	0.07	0.02	0.00	0.02	307.50	
Worker	1988	260	8	14.7	0	0.12	0.54	7.72	0.02	2.65	0.01	2.67	0.66	0.01	0.67	2240.26	
<u>PHASE 3B.1 - AC - Construct IPT</u>	2026																
Total Haul Trips	0																
Hauling	0	154	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0	154	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Worker	150	154	8	14.7	0	0.01	0.02	0.34	0.00	0.12	0.00	0.12	0.03	0.00	0.03	100.12	

**Addendum to the Harbor UCLA Master Plan EIR**

**Total On-Road Emissions**

Construction Phase	260 Max construction days per year					Regional Emissions (Tons/year)											(MT/yr) Total CO2e
	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5		
	<b>PHASE 3B.1 - P - Construct IPT</b>																
Total Haul Trips	0																
Hauling	0	66	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0	66	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Worker	100	66	8	14.7	0	0.00	0.01	0.10	0.00	0.03	0.00	0.03	0.01	0.00	0.01	28.61	
<b>PHASE 2G.1 - BC</b>																	
Total Haul Trips	0																
Hauling	0	260	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	16	260	8	6.9	15	0.00	0.13	0.13	0.00	0.01	0.00	0.01	0.00	0.00	0.00	57.21	
Worker	158	260	8	14.7	0	0.01	0.04	0.61	0.00	0.21	0.00	0.21	0.05	0.00	0.05	178.05	
<b>PHASE 3B.1 - BC (Warehouse)</b>																	
Total Haul Trips	0																
Hauling	0	138	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	2	138	8	6.9	15	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.80	
Worker	1320	138	8	14.7	0	0.04	0.19	2.72	0.01	0.94	0.00	0.94	0.23	0.00	0.24	789.52	
<b>BioScience Park - G</b>																	
Total Haul Trips	1930																
Hauling	10	260	8	20	15	0.00	0.19	0.16	0.00	0.02	0.00	0.03	0.01	0.00	0.01	100.55	
Vendor	2	260	8	6.9	15	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.15	
Worker	32	260	8	14.7	0	0.00	0.01	0.12	0.00	0.04	0.00	0.04	0.01	0.00	0.01	36.06	

**Addendum to the Harbor UCLA Master Plan EIR**

**Total On-Road Emissions**

Construction Phase	260 Max construction days per year					Regional Emissions (Tons/year)											(MT/yr) Total CO2e
	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5		
	<b>BioScience Park - BC</b>																
Total Haul Trips	0																
Hauling	0	201	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	42	201	8	6.9	15	0.00	0.26	0.25	0.00	0.02	0.00	0.03	0.01	0.00	0.01	116.10	
Worker	104	201	8	14.7	0	0.00	0.02	0.31	0.00	0.11	0.00	0.11	0.03	0.00	0.03	90.60	
<b>BioScience Park - AC</b>																	
Total Haul Trips	0																
Hauling	0	72	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0	72	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Worker	22	72	8	14.7	0	0.00	0.00	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.00	6.87	
<b>BioScience Park - P</b>																	
Total Haul Trips	0																
Hauling	0	72	8	20	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0	72	8	6.9	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Worker	14	72	8	14.7	0	0.00	0.00	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.00	4.37	

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
2024Hauling Hauling	0.01506835	1.736594392	0.53415245	0.01416079	0.0242504	0.02319665
2024Vendor Vendor	0.01969384	1.266700708	0.44120439	0.01277308	0.01665469	0.01592783
2024Worker Worker	0.01832772	0.079436569	1.06105707	0.00303024	0.00168421	0.00155002
2026Hauling Hauling	0.01376405	1.595849109	0.49695887	0.01364807	0.02370376	0.02267409
2026Vendor Vendor	0.01588145	1.125637812	0.37555792	0.01233428	0.01550079	0.01482427
2026Worker Worker	0.01474423	0.064876665	0.92145437	0.00289707	0.00151768	0.00139649
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
<u>PHASE 1D.1 - BC - Construct PS-A</u>	<u>2024</u>									
Total Haul Trips	0									
Hauling	0	114	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	64	114	8	6.9	0.02	1.23	0.43	0.01	0.02	0.02
Worker	613	114	8	14.7	0.36	1.58	21.08	0.06	0.03	0.03

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
2024Hauling Hauling	0.01506835	1.736594392	0.53415245	0.01416079	0.0242504	0.02319665
2024Vendor Vendor	0.01969384	1.266700708	0.44120439	0.01277308	0.01665469	0.01592783
2024Worker Worker	0.01832772	0.079436569	1.06105707	0.00303024	0.00168421	0.00155002
2026Hauling Hauling	0.01376405	1.595849109	0.49695887	0.01364807	0.02370376	0.02267409
2026Vendor Vendor	0.01588145	1.125637812	0.37555792	0.01233428	0.01550079	0.01482427
2026Worker Worker	0.01474423	0.064876665	0.92145437	0.00289707	0.00151768	0.00139649
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)						
					ROG	NOX	CO	SO2	PM10	PM2.5	
<u>PHASE 1D.1 - BC - Construct OPT &amp; SB</u>	<u>2024</u>										
Total Haul Trips	0										
Hauling	0	260	8	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	260	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	436	260	8	14.7	0.26	1.12	14.99	0.04	0.02	0.02	
<u>PHASE 2D.1.2 - D</u>	<u>2024</u>										
Total Haul Trips	214										
Hauling	10	23	8	20	0.01	0.77	0.24	0.01	0.01	0.01	0.01
Vendor	0	23	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	108	23	8	14.7	0.06	0.28	3.71	0.01	0.01	0.01	

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
2024Hauling Hauling	0.01506835	1.736594392	0.53415245	0.01416079	0.0242504	0.02319665
2024Vendor Vendor	0.01969384	1.266700708	0.44120439	0.01277308	0.01665469	0.01592783
2024Worker Worker	0.01832772	0.079436569	1.06105707	0.00303024	0.00168421	0.00155002
2026Hauling Hauling	0.01376405	1.595849109	0.49695887	0.01364807	0.02370376	0.02267409
2026Vendor Vendor	0.01588145	1.125637812	0.37555792	0.01233428	0.01550079	0.01482427
2026Worker Worker	0.01474423	0.064876665	0.92145437	0.00289707	0.00151768	0.00139649
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
<u>PHASE 2B.1 - BC</u>	<u>2024</u>									
Total Haul Trips	0									
Hauling	0	91	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	4	91	8	6.9	0.00	0.08	0.03	0.00	0.00	0.00
Worker	88	91	8	14.7	0.05	0.23	3.03	0.01	0.00	0.00
<u>PHASE 3A.3 - G</u>	<u>2024</u>									
Total Haul Trips	3098									
Hauling	116	27	8	20	0.08	8.88	2.73	0.07	0.12	0.12
Vendor	2	27	8	6.9	0.00	0.04	0.01	0.00	0.00	0.00
Worker	240	27	8	14.7	0.14	0.62	8.25	0.02	0.01	0.01

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
	2024Hauling Hauling	0.01506835	1.736594392	0.53415245	0.01416079	0.0242504
2024Vendor Vendor	0.01969384	1.266700708	0.44120439	0.01277308	0.01665469	0.01592783
2024Worker Worker	0.01832772	0.079436569	1.06105707	0.00303024	0.00168421	0.00155002
2026Hauling Hauling	0.01376405	1.595849109	0.49695887	0.01364807	0.02370376	0.02267409
2026Vendor Vendor	0.01588145	1.125637812	0.37555792	0.01233428	0.01550079	0.01482427
2026Worker Worker	0.01474423	0.064876665	0.92145437	0.00289707	0.00151768	0.00139649
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
<u>PHASE 3B.1 - BC - Construct IPT</u> <u>2024</u>										
Total Haul Trips	0									
Hauling	0	260	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	86	260	8	6.9	0.03	1.66	0.58	0.02	0.02	0.02
Worker	1988	260	8	14.7	1.18	5.12	68.36	0.20	0.11	0.10
<u>PHASE 3B.1 - BC - Construct IPT</u> <u>2026</u>										
Total Haul Trips	0									
Hauling	0	260	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	86	260	8	6.9	0.02	1.47	0.49	0.02	0.02	0.02
Worker	1988	260	8	14.7	0.95	4.18	59.37	0.19	0.10	0.09

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
2024Hauling Hauling	0.01506835	1.736594392	0.53415245	0.01416079	0.0242504	0.02319665
2024Vendor Vendor	0.01969384	1.266700708	0.44120439	0.01277308	0.01665469	0.01592783
2024Worker Worker	0.01832772	0.079436569	1.06105707	0.00303024	0.00168421	0.00155002
2026Hauling Hauling	0.01376405	1.595849109	0.49695887	0.01364807	0.02370376	0.02267409
2026Vendor Vendor	0.01588145	1.125637812	0.37555792	0.01233428	0.01550079	0.01482427
2026Worker Worker	0.01474423	0.064876665	0.92145437	0.00289707	0.00151768	0.00139649
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
<u>PHASE 3B.1 - AC - Construct IPT</u>										
	<u>2026</u>									
Total Haul Trips	0									
Hauling	0	154	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	154	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	150	154	8	14.7	0.07	0.32	4.48	0.01	0.01	0.01
<u>PHASE 3B.1 - P - Construct IPT</u>										
	<u>2026</u>									
Total Haul Trips	0									
Hauling	0	66	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	66	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	100	66	8	14.7	0.05	0.21	2.99	0.01	0.00	0.00

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
2024Hauling Hauling	0.01506835	1.736594392	0.53415245	0.01416079	0.0242504	0.02319665
2024Vendor Vendor	0.01969384	1.266700708	0.44120439	0.01277308	0.01665469	0.01592783
2024Worker Worker	0.01832772	0.079436569	1.06105707	0.00303024	0.00168421	0.00155002
2026Hauling Hauling	0.01376405	1.595849109	0.49695887	0.01364807	0.02370376	0.02267409
2026Vendor Vendor	0.01588145	1.125637812	0.37555792	0.01233428	0.01550079	0.01482427
2026Worker Worker	0.01474423	0.064876665	0.92145437	0.00289707	0.00151768	0.00139649
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
<u>PHASE 2G.1 - BC</u>										
	<u>2026</u>									
Total Haul Trips	0									
Hauling	0	260	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	16	260	8	6.9	0.00	0.27	0.09	0.00	0.00	0.00
Worker	158	260	8	14.7	0.08	0.33	4.72	0.01	0.01	0.01
<u>PHASE 3B.1 - BC (Warehouse)</u>										
	<u>2026</u>									
Total Haul Trips	0									
Hauling	0	138	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	2	138	8	6.9	0.00	0.03	0.01	0.00	0.00	0.00
Worker	1320	138	8	14.7	0.63	2.78	39.42	0.12	0.06	0.06

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
2024Hauling Hauling	0.01506835	1.736594392	0.53415245	0.01416079	0.0242504	0.02319665
2024Vendor Vendor	0.01969384	1.266700708	0.44120439	0.01277308	0.01665469	0.01592783
2024Worker Worker	0.01832772	0.079436569	1.06105707	0.00303024	0.00168421	0.00155002
2026Hauling Hauling	0.01376405	1.595849109	0.49695887	0.01364807	0.02370376	0.02267409
2026Vendor Vendor	0.01588145	1.125637812	0.37555792	0.01233428	0.01550079	0.01482427
2026Worker Worker	0.01474423	0.064876665	0.92145437	0.00289707	0.00151768	0.00139649
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
<u>BioScience Park - G</u>										
<u>2026</u>										
Total Haul Trips	1930									
Hauling	10	260	8	20	0.01	0.70	0.22	0.01	0.01	0.01
Vendor	2	260	8	6.9	0.00	0.03	0.01	0.00	0.00	0.00
Worker	32	260	8	14.7	0.02	0.07	0.96	0.00	0.00	0.00
<u>BioScience Park - BC</u>										
<u>2026</u>										
Total Haul Trips	0									
Hauling	0	201	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	42	201	8	6.9	0.01	0.72	0.24	0.01	0.01	0.01
Worker	104	201	8	14.7	0.05	0.22	3.11	0.01	0.01	0.00

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)					
	ROG	NOX	CO	SO2	PM10	PM2.5
	2024Hauling Hauling	0.01506835	1.736594392	0.53415245	0.01416079	0.0242504
2024Vendor Vendor	0.01969384	1.266700708	0.44120439	0.01277308	0.01665469	0.01592783
2024Worker Worker	0.01832772	0.079436569	1.06105707	0.00303024	0.00168421	0.00155002
2026Hauling Hauling	0.01376405	1.595849109	0.49695887	0.01364807	0.02370376	0.02267409
2026Vendor Vendor	0.01588145	1.125637812	0.37555792	0.01233428	0.01550079	0.01482427
2026Worker Worker	0.01474423	0.064876665	0.92145437	0.00289707	0.00151768	0.00139649
GWP	N/A	N/A	N/A	N/A	N/A	N/A

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					ROG	NOX	CO	SO2	PM10	PM2.5
<u>BioScience Park - AC</u>										
	<u>2026</u>									
Total Haul Trips	0									
Hauling	0	72	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	72	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	22	72	8	14.7	0.01	0.05	0.66	0.00	0.00	0.00
<u>BioScience Park - P</u>										
	<u>2026</u>									
Total Haul Trips	0									
Hauling	0	72	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	72	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	14	72	8	14.7	0.01	0.03	0.42	0.00	0.00	0.00

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
	2024Hauling Hauling	1559.36414	0.08218565
2024Vendor Vendor	1377.97499	0.0444451	0.19361282
2024Worker Worker	306.539439	0.00439547	0.00668816
2026Hauling Hauling	1504.81428	0.07447891	0.23998519
2026Vendor Vendor	1332.37984	0.04032573	0.18835672
2026Worker Worker	293.06677	0.00361408	0.0058167
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
<u>PHASE 1D.1 - BC - Construct PS-A</u>	<u>2024</u>							
Total Haul Trips	0							
Hauling	0	114	8	20	0.00	0.00	0.00	0.00
Vendor	64	114	8	6.9	69.37	0.06	2.83	72.25
Worker	613	114	8	14.7	314.90	0.11	1.99	317.00

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
	2024Hauling Hauling	1559.36414	0.08218565
2024Vendor Vendor	1377.97499	0.0444451	0.19361282
2024Worker Worker	306.539439	0.00439547	0.00668816
2026Hauling Hauling	1504.81428	0.07447891	0.23998519
2026Vendor Vendor	1332.37984	0.04032573	0.18835672
2026Worker Worker	293.06677	0.00361408	0.0058167
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
<u>PHASE 1D.1 - BC - Construct OPT &amp; SB</u>	<u>2024</u>							
Total Haul Trips	0							
Hauling	0	260	8	20	0.00	0.00	0.00	0.00
Vendor	0	260	8	6.9	0.00	0.00	0.00	0.00
Worker	436	260	8	14.7	510.81	0.18	3.23	514.23
<u>PHASE 2D.1.2 - D</u>	<u>2024</u>							
Total Haul Trips	214							
Hauling	10	23	8	20	7.17	0.01	0.33	7.51
Vendor	0	23	8	6.9	0.00	0.00	0.00	0.00
Worker	108	23	8	14.7	11.19	0.00	0.07	11.27

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
	2024Hauling Hauling	1559.36414	0.08218565
2024Vendor Vendor	1377.97499	0.0444451	0.19361282
2024Worker Worker	306.539439	0.00439547	0.00668816
2026Hauling Hauling	1504.81428	0.07447891	0.23998519
2026Vendor Vendor	1332.37984	0.04032573	0.18835672
2026Worker Worker	293.06677	0.00361408	0.0058167
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)				
					CO2	CH4	N2O	CO2e	
<u>PHASE 2B.1 - BC</u>									
	<u>2024</u>								
Total Haul Trips	0								
Hauling	0	91	8	20	0.00	0.00	0.00	0.00	
Vendor	4	91	8	6.9	3.46	0.00	0.14	3.60	
Worker	88	91	8	14.7	36.09	0.01	0.23	36.33	
<u>PHASE 3A.3 - G</u>									
	<u>2024</u>								
Total Haul Trips	3098								
Hauling	116	27	8	20	97.68	0.13	4.52	102.32	
Vendor	2	27	8	6.9	0.51	0.00	0.02	0.53	
Worker	240	27	8	14.7	29.20	0.01	0.18	29.39	

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
	2024Hauling Hauling	1559.36414	0.08218565
2024Vendor Vendor	1377.97499	0.0444451	0.19361282
2024Worker Worker	306.539439	0.00439547	0.00668816
2026Hauling Hauling	1504.81428	0.07447891	0.23998519
2026Vendor Vendor	1332.37984	0.04032573	0.18835672
2026Worker Worker	293.06677	0.00361408	0.0058167
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)				
					CO2	CH4	N2O	CO2e	
<u>PHASE 3B.1 - BC - Construct IPT</u>									
<u>2024</u>									
Total Haul Trips	0								
Hauling	0	260	8	20	0.00	0.00	0.00	0.00	
Vendor	86	260	8	6.9	212.60	0.17	8.66	221.43	
Worker	1988	260	8	14.7	2329.13	0.83	14.74	2344.70	
<u>PHASE 3B.1 - BC - Construct IPT</u>									
<u>2026</u>									
Total Haul Trips	0								
Hauling	0	260	8	20	0.00	0.00	0.00	0.00	
Vendor	86	260	8	6.9	205.56	0.16	8.43	214.15	
Worker	1988	260	8	14.7	2226.76	0.69	12.82	2240.26	

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
	2024Hauling Hauling	1559.36414	0.08218565
2024Vendor Vendor	1377.97499	0.0444451	0.19361282
2024Worker Worker	306.539439	0.00439547	0.00668816
2026Hauling Hauling	1504.81428	0.07447891	0.23998519
2026Vendor Vendor	1332.37984	0.04032573	0.18835672
2026Worker Worker	293.06677	0.00361408	0.0058167
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)				
					CO2	CH4	N2O	CO2e	
<u>PHASE 3B.1 - AC - Construct IPT</u>									
	<u>2026</u>								
Total Haul Trips	0								
Hauling	0	154	8	20	0.00	0.00	0.00	0.00	
Vendor	0	154	8	6.9	0.00	0.00	0.00	0.00	
Worker	150	154	8	14.7	99.52	0.03	0.57	100.12	
<u>PHASE 3B.1 - P - Construct IPT</u>									
	<u>2026</u>								
Total Haul Trips	0								
Hauling	0	66	8	20	0.00	0.00	0.00	0.00	
Vendor	0	66	8	6.9	0.00	0.00	0.00	0.00	
Worker	100	66	8	14.7	28.43	0.01	0.16	28.61	

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
	2024Hauling Hauling	1559.36414	0.08218565
2024Vendor Vendor	1377.97499	0.0444451	0.19361282
2024Worker Worker	306.539439	0.00439547	0.00668816
2026Hauling Hauling	1504.81428	0.07447891	0.23998519
2026Vendor Vendor	1332.37984	0.04032573	0.18835672
2026Worker Worker	293.06677	0.00361408	0.0058167
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)				
					CO2	CH4	N2O	CO2e	
<u>PHASE 2G.1 - BC</u>									
	<u>2026</u>								
Total Haul Trips	0								
Hauling	0	260	8	20	0.00	0.00	0.00	0.00	
Vendor	16	260	8	6.9	38.24	0.03	1.57	39.84	
Worker	158	260	8	14.7	176.98	0.05	1.02	178.05	
<u>PHASE 3B.1 - BC (Warehouse)</u>									
	<u>2026</u>								
Total Haul Trips	0								
Hauling	0	138	8	20	0.00	0.00	0.00	0.00	
Vendor	2	138	8	6.9	2.54	0.00	0.10	2.64	
Worker	1320	138	8	14.7	784.76	0.24	4.52	789.52	

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
	2024Hauling Hauling	1559.36414	0.08218565
2024Vendor Vendor	1377.97499	0.0444451	0.19361282
2024Worker Worker	306.539439	0.00439547	0.00668816
2026Hauling Hauling	1504.81428	0.07447891	0.23998519
2026Vendor Vendor	1332.37984	0.04032573	0.18835672
2026Worker Worker	293.06677	0.00361408	0.0058167
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)				
					CO2	CH4	N2O	CO2e	
<u>BioScience Park - G</u>									
	<u>2026</u>								
Total Haul Trips	1930								
Hauling	10	260	8	20	78.25	0.10	3.62	81.97	
Vendor	2	260	8	6.9	4.78	0.00	0.20	4.98	
Worker	32	260	8	14.7	35.84	0.01	0.21	36.06	
<u>BioScience Park - BC</u>									
	<u>2026</u>								
Total Haul Trips	0								
Hauling	0	201	8	20	0.00	0.00	0.00	0.00	
Vendor	42	201	8	6.9	77.61	0.06	3.18	80.85	
Worker	104	201	8	14.7	90.06	0.03	0.52	90.60	

**Addendum to the Harbor UCLA Master Plan EIR  
Running Emissions**

	Running Emissions Factor (grams/mile)		
	CO2	CH4	N2O
	2024Hauling Hauling	1559.36414	0.08218565
2024Vendor Vendor	1377.97499	0.0444451	0.19361282
2024Worker Worker	306.539439	0.00439547	0.00668816
2026Hauling Hauling	1504.81428	0.07447891	0.23998519
2026Vendor Vendor	1332.37984	0.04032573	0.18835672
2026Worker Worker	293.06677	0.00361408	0.0058167
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (MT/year)				
					CO2	CH4	N2O	CO2e	
<u>BioScience Park - AC</u>									
	<u>2026</u>								
Total Haul Trips	0								
Hauling	0	72	8	20	0.00	0.00	0.00	0.00	
Vendor	0	72	8	6.9	0.00	0.00	0.00	0.00	
Worker	22	72	8	14.7	6.82	0.00	0.04	6.87	
<u>BioScience Park - P</u>									
	<u>2026</u>								
Total Haul Trips	0								
Hauling	0	72	8	20	0.00	0.00	0.00	0.00	
Vendor	0	72	8	6.9	0.00	0.00	0.00	0.00	
Worker	14	72	8	14.7	4.34	0.00	0.02	4.37	

**Addendum to the Harbor UCLA Master Plan EIR  
Idling Emissions**

















**Addendum to the Harbor UCLA Master Plan EIR  
Idling Emissions**

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
2024Hauling Hauling	472.805795	0.09566056	0.07598602
2024Vendor Vendor	275.207401	0.05274178	0.04388609
2024Worker Worker	0	0	0
2026Hauling Hauling	453.111594	0.09241587	0.07289884
2026Vendor Vendor	264.786505	0.05126821	0.04228174
2026Worker Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
<u>PHASE 1D.1 - BC - Construct PS-A</u>	<u>2024</u>							
Total Haul Trips	0							
Hauling	0	114	8	15	0.00	0.00	0.00	0.00
Vendor	64	114	8	15	30.12	0.14	1.39	31.66
Worker	613	114	8	0	0.00	0.00	0.00	0.00

**Addendum to the Harbor UCLA Master Plan EIR  
Idling Emissions**

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
	2024Hauling Hauling	472.805795	0.09566056
2024Vendor Vendor	275.207401	0.05274178	0.04388609
2024Worker Worker	0	0	0
2026Hauling Hauling	453.111594	0.09241587	0.07289884
2026Vendor Vendor	264.786505	0.05126821	0.04228174
2026Worker Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)				
					CO2	CH4	N2O	CO2e	
<u>PHASE 1D.1 - BC - Construct OPT &amp; SB</u>									
	2024								
Total Haul Trips	0								
Hauling	0	260	8	15	0.00	0.00	0.00	0.00	
Vendor	0	260	8	15	0.00	0.00	0.00	0.00	
Worker	436	260	8	0	0.00	0.00	0.00	0.00	
<u>PHASE 2D.1.2 - D</u>									
	2024								
Total Haul Trips	214								
Hauling	10	23	8	15	1.63	0.01	0.08	1.72	
Vendor	0	23	8	15	0.00	0.00	0.00	0.00	
Worker	108	23	8	0	0.00	0.00	0.00	0.00	

**Addendum to the Harbor UCLA Master Plan EIR  
Idling Emissions**

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
	2024Hauling Hauling	472.805795	0.09566056
2024Vendor Vendor	275.207401	0.05274178	0.04388609
2024Worker Worker	0	0	0
2026Hauling Hauling	453.111594	0.09241587	0.07289884
2026Vendor Vendor	264.786505	0.05126821	0.04228174
2026Worker Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)				
					CO2	CH4	N2O	CO2e	
<u>PHASE 2B.1 - BC</u>									
2024									
Total Haul Trips	0								
Hauling	0	91	8	15	0.00	0.00	0.00	0.00	
Vendor	4	91	8	15	1.50	0.01	0.07	1.58	
Worker	88	91	8	0	0.00	0.00	0.00	0.00	
<u>PHASE 3A.3 - G</u>									
2024									
Total Haul Trips	3098								
Hauling	116	27	8	15	22.21	0.11	1.04	23.36	
Vendor	2	27	8	15	0.22	0.00	0.01	0.23	
Worker	240	27	8	0	0.00	0.00	0.00	0.00	

**Addendum to the Harbor UCLA Master Plan EIR  
Idling Emissions**

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
2024Hauling Hauling	472.805795	0.09566056	0.07598602
2024Vendor Vendor	275.207401	0.05274178	0.04388609
2024Worker Worker	0	0	0
2026Hauling Hauling	453.111594	0.09241587	0.07289884
2026Vendor Vendor	264.786505	0.05126821	0.04228174
2026Worker Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)				
					CO2	CH4	N2O	CO2e	
<u>PHASE 3B.1 - BC - Construct IPT</u>									
<u>2024</u>									
Total Haul Trips	0								
Hauling	0	260	8	15	0.00	0.00	0.00	0.00	
Vendor	86	260	8	15	92.30	0.44	4.27	97.02	
Worker	1988	260	8	0	0.00	0.00	0.00	0.00	
<u>PHASE 3B.1 - BC - Construct IPT</u>									
<u>2026</u>									
Total Haul Trips	0								
Hauling	0	260	8	15	0.00	0.00	0.00	0.00	
Vendor	86	260	8	15	88.81	0.43	4.11	93.35	
Worker	1988	260	8	0	0.00	0.00	0.00	0.00	

**Addendum to the Harbor UCLA Master Plan EIR  
Idling Emissions**

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
	2024Hauling Hauling	472.805795	0.09566056
2024Vendor Vendor	275.207401	0.05274178	0.04388609
2024Worker Worker	0	0	0
2026Hauling Hauling	453.111594	0.09241587	0.07289884
2026Vendor Vendor	264.786505	0.05126821	0.04228174
2026Worker Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)			
					CO2	CH4	N2O	CO2e
<u>PHASE 3B.1 - AC - Construct IPT</u>	<u>2026</u>							
Total Haul Trips	0							
Hauling	0	154	8	15	0.00	0.00	0.00	0.00
Vendor	0	154	8	15	0.00	0.00	0.00	0.00
Worker	150	154	8	0	0.00	0.00	0.00	0.00
<u>PHASE 3B.1 - P - Construct IPT</u>	<u>2026</u>							
Total Haul Trips	0							
Hauling	0	66	8	15	0.00	0.00	0.00	0.00
Vendor	0	66	8	15	0.00	0.00	0.00	0.00
Worker	100	66	8	0	0.00	0.00	0.00	0.00

**Addendum to the Harbor UCLA Master Plan EIR  
Idling Emissions**

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
	2024Hauling Hauling	472.805795	0.09566056
2024Vendor Vendor	275.207401	0.05274178	0.04388609
2024Worker Worker	0	0	0
2026Hauling Hauling	453.111594	0.09241587	0.07289884
2026Vendor Vendor	264.786505	0.05126821	0.04228174
2026Worker Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)				
					CO2	CH4	N2O	CO2e	
<u>PHASE 2G.1 - BC</u>									
	2026								
Total Haul Trips	0								
Hauling	0	260	8	15	0.00	0.00	0.00	0.00	
Vendor	16	260	8	15	16.52	0.08	0.77	17.37	
Worker	158	260	8	0	0.00	0.00	0.00	0.00	
<u>PHASE 3B.1 - BC (Warehouse)</u>									
	2026								
Total Haul Trips	0								
Hauling	0	138	8	15	0.00	0.00	0.00	0.00	
Vendor	2	138	8	15	1.10	0.01	0.05	1.15	
Worker	1320	138	8	0	0.00	0.00	0.00	0.00	

**Addendum to the Harbor UCLA Master Plan EIR  
Idling Emissions**

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
	2024Hauling Hauling	472.805795	0.09566056
2024Vendor Vendor	275.207401	0.05274178	0.04388609
2024Worker Worker	0	0	0
2026Hauling Hauling	453.111594	0.09241587	0.07289884
2026Vendor Vendor	264.786505	0.05126821	0.04228174
2026Worker Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)				
					CO2	CH4	N2O	CO2e	
<u>BioScience Park - G</u>									
2026									
Total Haul Trips									
	1930								
Hauling	10	260	8	15	17.67	0.09	0.82	18.59	
Vendor	2	260	8	15	2.07	0.01	0.10	2.17	
Worker	32	260	8	0	0.00	0.00	0.00	0.00	
<u>BioScience Park - BC</u>									
2026									
Total Haul Trips									
	0								
Hauling	0	201	8	15	0.00	0.00	0.00	0.00	
Vendor	42	201	8	15	33.53	0.16	1.55	35.24	
Worker	104	201	8	0	0.00	0.00	0.00	0.00	

**Addendum to the Harbor UCLA Master Plan EIR  
Idling Emissions**

	Idling Emissions Factor (grams/minute)		
	CO2	CH4	N2O
	2024Hauling Hauling	472.805795	0.09566056
2024Vendor Vendor	275.207401	0.05274178	0.04388609
2024Worker Worker	0	0	0
2026Hauling Hauling	453.111594	0.09241587	0.07289884
2026Vendor Vendor	264.786505	0.05126821	0.04228174
2026Worker Worker	0	0	0
GWP	1	25	290

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	Idling minutes per Day (miles)	Regional Emissions (MT/year)				
					CO2	CH4	N2O	CO2e	
<u>BioScience Park - AC</u>									
	2026								
Total Haul Trips	0								
Hauling	0	72	8	15	0.00	0.00	0.00	0.00	
Vendor	0	72	8	15	0.00	0.00	0.00	0.00	
Worker	22	72	8	0	0.00	0.00	0.00	0.00	
<u>BioScience Park - P</u>									
	2026								
Total Haul Trips	0								
Hauling	0	72	8	15	0.00	0.00	0.00	0.00	
Vendor	0	72	8	15	0.00	0.00	0.00	0.00	
Worker	14	72	8	0	0.00	0.00	0.00	0.00	

**Addendum to the Harbor UCLA Master Plan EIR  
Road Dust, Break Wear, and Tire wear Emissions**

**Addendum to the Harbor UCLA Master Plan EIR  
Road Dust, Break Wear, and Tire wear Emissions**

	Emission Factors (grams/mile)						
	RD	PM10			RD	PM2.5	
		BW	TW	BW		TW	
2024Hauling Hauling	3.00E-01	0.082315236	0.03527902	7.36E-02	0.02881033	0.00881975	
2024Vendor Vendor	3.00E-01	0.062716793	0.02363951	7.36E-02	0.02195088	0.00590988	
2024Worker Worker	3.00E-01	0.009001983	0.008	7.36E-02	0.00315069	0.002	
2026Hauling Hauling	3.00E-01	0.082405307	0.03529039	7.36E-02	0.02884186	0.0088226	
2026Vendor Vendor	3.00E-01	0.062625784	0.02364519	7.36E-02	0.02191902	0.0059113	
2026Worker Worker	3.00E-01	0.008948145	0.008	7.36E-02	0.00313185	0.002	

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)						
					RD	PM10			RD	PM2.5	
						BW	TW	BW		TW	
<u>PHASE 1D.1 - BC - Construct PS-A</u>	2024										
Total Haul Trips	0										
Hauling	0	114	8	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	64	114	8	6.9	0.29	0.06	0.02	0.07	0.02	0.01	
Worker	613	114	8	14.7	5.96	0.18	0.16	1.46	0.06	0.04	

**Addendum to the Harbor UCLA Master Plan EIR  
Road Dust, Break Wear, and Tire wear Emissions**

	Emission Factors (grams/mile)						
	RD	PM10			RD	PM2.5	
		BW	TW	BW		TW	
2024Hauling Hauling	3.00E-01	0.082315236	0.03527902	7.36E-02	0.02881033	0.00881975	
2024Vendor Vendor	3.00E-01	0.062716793	0.02363951	7.36E-02	0.02195088	0.00590988	
2024Worker Worker	3.00E-01	0.009001983	0.008	7.36E-02	0.00315069	0.002	
2026Hauling Hauling	3.00E-01	0.082405307	0.03529039	7.36E-02	0.02884186	0.0088226	
2026Vendor Vendor	3.00E-01	0.062625784	0.02364519	7.36E-02	0.02191902	0.0059113	
2026Worker Worker	3.00E-01	0.008948145	0.008	7.36E-02	0.00313185	0.002	

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)						
					RD	PM10			RD	PM2.5	
						BW	TW	BW		TW	
<u>PHASE 1D.1 - BC - Construct OPT &amp; SB</u>	2024										
Total Haul Trips	0										
Hauling	0	260	8	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	260	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	436	260	8	14.7	4.24	0.13	0.11	1.04	0.04	0.03	
<u>PHASE 2D.1.2 - D</u>	2024										
Total Haul Trips	214										
Hauling	10	23	8	20	0.13	0.04	0.02	0.03	0.01	0.00	
Vendor	0	23	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00	
Worker	108	23	8	14.7	1.05	0.03	0.03	0.26	0.01	0.01	

**Addendum to the Harbor UCLA Master Plan EIR  
Road Dust, Break Wear, and Tire wear Emissions**

	Emission Factors (grams/mile)					
	RD	PM10		TW	PM2.5	
		BW	TW		BW	TW
2024Hauling Hauling	3.00E-01	0.082315236	0.03527902	7.36E-02	0.02881033	0.00881975
2024Vendor Vendor	3.00E-01	0.062716793	0.02363951	7.36E-02	0.02195088	0.00590988
2024Worker Worker	3.00E-01	0.009001983	0.008	7.36E-02	0.00315069	0.002
2026Hauling Hauling	3.00E-01	0.082405307	0.03529039	7.36E-02	0.02884186	0.0088226
2026Vendor Vendor	3.00E-01	0.062625784	0.02364519	7.36E-02	0.02191902	0.0059113
2026Worker Worker	3.00E-01	0.008948145	0.008	7.36E-02	0.00313185	0.002

Construction Phase	Daily One-Way Trips	Haul Days per Phase  (days)	Work Hours per Day  (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					RD	PM10		TW	PM2.5	
						BW	TW		BW	TW
<u>PHASE 2B.1 - BC</u>	2024									
Total Haul Trips	0									
Hauling	0	91	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	4	91	8	6.9	0.02	0.00	0.00	0.00	0.00	0.00
Worker	88	91	8	14.7	0.86	0.03	0.02	0.21	0.01	0.01
<u>PHASE 3A.3 - G</u>	2024									
Total Haul Trips	3098									
Hauling	116	27	8	20	1.53	0.42	0.18	0.38	0.15	0.05
Vendor	2	27	8	6.9	0.01	0.00	0.00	0.00	0.00	0.00
Worker	240	27	8	14.7	2.33	0.07	0.06	0.57	0.02	0.02

**Addendum to the Harbor UCLA Master Plan EIR  
Road Dust, Break Wear, and Tire wear Emissions**

	Emission Factors (grams/mile)						
	RD	PM10			PM2.5		
		BW	TW	RD	BW	TW	
2024Hauling Hauling	3.00E-01	0.082315236	0.03527902	7.36E-02	0.02881033	0.00881975	
2024Vendor Vendor	3.00E-01	0.062716793	0.02363951	7.36E-02	0.02195088	0.00590988	
2024Worker Worker	3.00E-01	0.009001983	0.008	7.36E-02	0.00315069	0.002	
2026Hauling Hauling	3.00E-01	0.082405307	0.03529039	7.36E-02	0.02884186	0.0088226	
2026Vendor Vendor	3.00E-01	0.062625784	0.02364519	7.36E-02	0.02191902	0.0059113	
2026Worker Worker	3.00E-01	0.008948145	0.008	7.36E-02	0.00313185	0.002	

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					PM10			PM2.5		
					RD	BW	TW	RD	BW	TW
<u>PHASE 3B.1 - BC - Construct IPT</u>										
	2024									
Total Haul Trips	0									
Hauling	0	260	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	86	260	8	6.9	0.39	0.08	0.03	0.10	0.03	0.01
Worker	1988	260	8	14.7	19.32	0.58	0.52	4.74	0.20	0.13
<u>PHASE 3B.1 - BC - Construct IPT</u>										
	2026									
Total Haul Trips	0									
Hauling	0	260	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	86	260	8	6.9	0.39	0.08	0.03	0.10	0.03	0.01
Worker	1988	260	8	14.7	19.32	0.58	0.52	4.74	0.20	0.13

**Addendum to the Harbor UCLA Master Plan EIR  
Road Dust, Break Wear, and Tire wear Emissions**

	Emission Factors (grams/mile)					
	RD	PM10		TW	PM2.5	
		BW	TW		BW	TW
2024Hauling Hauling	3.00E-01	0.082315236	0.03527902	7.36E-02	0.02881033	0.00881975
2024Vendor Vendor	3.00E-01	0.062716793	0.02363951	7.36E-02	0.02195088	0.00590988
2024Worker Worker	3.00E-01	0.009001983	0.008	7.36E-02	0.00315069	0.002
2026Hauling Hauling	3.00E-01	0.082405307	0.03529039	7.36E-02	0.02884186	0.0088226
2026Vendor Vendor	3.00E-01	0.062625784	0.02364519	7.36E-02	0.02191902	0.0059113
2026Worker Worker	3.00E-01	0.008948145	0.008	7.36E-02	0.00313185	0.002

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					RD	PM10		RD	PM2.5	
						BW	TW		BW	TW
<u>PHASE 3B.1 - AC - Construct IPT</u> 2026										
Total Haul Trips	0									
Hauling	0	154	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	154	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	150	154	8	14.7	1.46	0.04	0.04	0.36	0.02	0.01
<u>PHASE 3B.1 - P - Construct IPT</u> 2026										
Total Haul Trips	0									
Hauling	0	66	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0	66	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00
Worker	100	66	8	14.7	0.97	0.03	0.03	0.24	0.01	0.01

**Addendum to the Harbor UCLA Master Plan EIR  
Road Dust, Break Wear, and Tire wear Emissions**

	Emission Factors (grams/mile)						
	RD	PM10			PM2.5		
		BW	TW	RD	BW	TW	
2024Hauling Hauling	3.00E-01	0.082315236	0.03527902	7.36E-02	0.02881033	0.00881975	
2024Vendor Vendor	3.00E-01	0.062716793	0.02363951	7.36E-02	0.02195088	0.00590988	
2024Worker Worker	3.00E-01	0.009001983	0.008	7.36E-02	0.00315069	0.002	
2026Hauling Hauling	3.00E-01	0.082405307	0.03529039	7.36E-02	0.02884186	0.0088226	
2026Vendor Vendor	3.00E-01	0.062625784	0.02364519	7.36E-02	0.02191902	0.0059113	
2026Worker Worker	3.00E-01	0.008948145	0.008	7.36E-02	0.00313185	0.002	

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					PM10			PM2.5		
					RD	BW	TW	RD	BW	TW
<u>PHASE 2G.1 - BC</u>										
	2026									
Total Haul Trips	0									
Hauling	0	260	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	16	260	8	6.9	0.07	0.02	0.01	0.02	0.01	0.00
Worker	158	260	8	14.7	1.54	0.05	0.04	0.38	0.02	0.01
<u>PHASE 3B.1 - BC (Warehouse)</u>										
	2026									
Total Haul Trips	0									
Hauling	0	138	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	2	138	8	6.9	0.01	0.00	0.00	0.00	0.00	0.00
Worker	1320	138	8	14.7	12.83	0.38	0.34	3.15	0.13	0.09

**Addendum to the Harbor UCLA Master Plan EIR  
Road Dust, Break Wear, and Tire wear Emissions**

	Emission Factors (grams/mile)						
	RD	PM10			PM2.5		
		BW	TW	RD	BW	TW	
2024Hauling Hauling	3.00E-01	0.082315236	0.03527902	7.36E-02	0.02881033	0.00881975	
2024Vendor Vendor	3.00E-01	0.062716793	0.02363951	7.36E-02	0.02195088	0.00590988	
2024Worker Worker	3.00E-01	0.009001983	0.008	7.36E-02	0.00315069	0.002	
2026Hauling Hauling	3.00E-01	0.082405307	0.03529039	7.36E-02	0.02884186	0.0088226	
2026Vendor Vendor	3.00E-01	0.062625784	0.02364519	7.36E-02	0.02191902	0.0059113	
2026Worker Worker	3.00E-01	0.008948145	0.008	7.36E-02	0.00313185	0.002	

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)					
					PM10			PM2.5		
					RD	BW	TW	RD	BW	TW
<u>BioScience Park - G</u>										
	2026									
Total Haul Trips	1930									
Hauling	10	260	8	20	0.13	0.04	0.02	0.03	0.01	0.00
Vendor	2	260	8	6.9	0.01	0.00	0.00	0.00	0.00	0.00
Worker	32	260	8	14.7	0.31	0.01	0.01	0.08	0.00	0.00
<u>BioScience Park - BC</u>										
	2026									
Total Haul Trips	0									
Hauling	0	201	8	20	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	42	201	8	6.9	0.19	0.04	0.02	0.05	0.01	0.00
Worker	104	201	8	14.7	1.01	0.03	0.03	0.25	0.01	0.01

**Addendum to the Harbor UCLA Master Plan EIR  
Road Dust, Break Wear, and Tire wear Emissions**

	Emission Factors (grams/mile)						
	RD	PM10			RD	PM2.5	
		BW	TW	BW		TW	
2024Hauling Hauling	3.00E-01	0.082315236	0.03527902	7.36E-02	0.02881033	0.00881975	
2024Vendor Vendor	3.00E-01	0.062716793	0.02363951	7.36E-02	0.02195088	0.00590988	
2024Worker Worker	3.00E-01	0.009001983	0.008	7.36E-02	0.00315069	0.002	
2026Hauling Hauling	3.00E-01	0.082405307	0.03529039	7.36E-02	0.02884186	0.0088226	
2026Vendor Vendor	3.00E-01	0.062625784	0.02364519	7.36E-02	0.02191902	0.0059113	
2026Worker Worker	3.00E-01	0.008948145	0.008	7.36E-02	0.00313185	0.002	

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Regional Emissions (pounds/day)						
					RD	PM10			RD	PM2.5	
						BW	TW	BW		TW	
<u>BioScience Park - AC</u> 2026											
Total Haul Trips	0										
Hauling	0	72	8	20	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0	72	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00	
Worker	22	72	8	14.7	0.21	0.01	0.01	0.05	0.00	0.00	
<u>BioScience Park - P</u> 2026											
Total Haul Trips	0										
Hauling	0	72	8	20	0.00	0.00	0.00	0.00	0.00	0.00	
Vendor	0	72	8	6.9	0.00	0.00	0.00	0.00	0.00	0.00	
Worker	14	72	8	14.7	0.14	0.00	0.00	0.03	0.00	0.00	

**Addendum to the Harbor UCLA Master Plan EIR  
Road Dust**

## Addendum to the Harbor UCLA Master Plan EIR Road Dust

### Paved Road Dust Emission Factors (Assumes No Precipitation)

Formula:  $EF_{Dust,P} = (k (sL)^{0.91} \times (W)^{1.02})$

Where:

$EF_{Dust,P}$  = Paved Road Dust Emission Factor (having the same units as k)

k = particle size multiplier

sL = road surface silt loading ( $g/m^2$ )

W = average fleet vehicle weight (tons) (CARB uses 2.4 tons as a fleet average vehicle weight factor)

	Emission Factor (grams per VMT)	
	PM10	PM2.5
k	0.9979	0.2449
sL	0.1	0.1
W	2.4	2.4
$EF_{Dust,P}$	3.00E-01	7.36E-02

### Unpaved Road Dust Emission Factors (Assumes No Precipitation)

Formula:  $EF_{Dust,U} = (k (s / 12)^1 \times (Sp / 30)^{0.5} / (M / 0.5)^{0.2}) - C$

Where:

$EF_{Dust,U}$  = Unpaved Road Dust Emission Factor (having the same units as k)

k = particle size multiplier

s = surface material silt content (%)

Sp = mean vehicle speed (mph)

M = surface material moisture content (%)

C = Emission Factor for 1980s vehicle fleet exhaust, brake wear, and tire wear

	Emission Factor (grams per VMT)	
	PM10	PM2.5
k	816.47	81.65
s	4.3%	4.3%
Sp	15	15
M	0.5%	0.5%
C	0.00047	0.00036
$EF_{Dust,U}$	5.20E+00	5.19E-01

Sources:

SCAQMD, CalEEMod, Version 2011.1.

CARB, *Entrained Dust from Paved Road Travel: Emission Estimation Methodology Background Document*, (1997).

USEPA, *AP-42*, Fifth Edition, Volume I, Chapter 13.2.1 - Paved Roads, (2011).

PCR Services Corporation, 2013.

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 1D.1 - OPT - BC ONLY**

**South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	426.00	1000sqft	9.78	426,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2025
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MWhr)</b>	691.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

Project Characteristics -

Land Use -

Construction Phase - Updated defaults with project-specific values

Off-road Equipment - Updated defaults with project-specific values

Trips and VMT - Updated defaults with project-specific values

Vehicle Trips - Calculated externally

Construction Off-road Equipment Mitigation - Updated defaults with project-specific PDFs

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	230.00	432.00
tblConstructionPhase	PhaseEndDate	11/26/2024	6/26/2025
tblConstructionPhase	PhaseStartDate	1/10/2024	11/1/2023
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblTripsAndVMT	VendorTripNumber	70.00	0.00
tblTripsAndVMT	WorkerTripNumber	136.00	0.00
tblVehicleTrips	ST_TR	7.72	0.00
tblVehicleTrips	SU_TR	6.77	0.00
tblVehicleTrips	WD_TR	10.72	0.00

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					
2023	1.5419	12.5238	13.5702	0.0226	0.0000	0.5954	0.5954	0.0000	0.5641	0.5641	0.0000	2,103.0069	2,103.0069	0.4923	0.0000	2,115.3145
2024	1.4433	11.7543	13.4847	0.0226	0.0000	0.5221	0.5221	0.0000	0.4944	0.4944	0.0000	2,103.3294	2,103.3294	0.4882	0.0000	2,115.5336
2025	1.3461	10.9569	13.4043	0.0226	0.0000	0.4506	0.4506	0.0000	0.4266	0.4266	0.0000	2,103.8519	2,103.8519	0.4848	0.0000	2,115.9708
<b>Maximum</b>	<b>1.5419</b>	<b>12.5238</b>	<b>13.5702</b>	<b>0.0226</b>	<b>0.0000</b>	<b>0.5954</b>	<b>0.5954</b>	<b>0.0000</b>	<b>0.5641</b>	<b>0.5641</b>	<b>0.0000</b>	<b>2,103.8519</b>	<b>2,103.8519</b>	<b>0.4923</b>	<b>0.0000</b>	<b>2,115.9708</b>

**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					
2023	0.7147	3.7328	14.4952	0.0226	0.0000	0.1377	0.1377	0.0000	0.1377	0.1377	0.0000	2,103.0069	2,103.0069	0.4923	0.0000	2,115.3145
2024	0.6775	3.6532	14.4668	0.0226	0.0000	0.1224	0.1224	0.0000	0.1224	0.1224	0.0000	2,103.3294	2,103.3294	0.4882	0.0000	2,115.5336
2025	0.6454	3.5758	14.4427	0.0226	0.0000	0.1092	0.1092	0.0000	0.1092	0.1092	0.0000	2,103.8519	2,103.8519	0.4848	0.0000	2,115.9708
<b>Maximum</b>	<b>0.7147</b>	<b>3.7328</b>	<b>14.4952</b>	<b>0.0226</b>	<b>0.0000</b>	<b>0.1377</b>	<b>0.1377</b>	<b>0.0000</b>	<b>0.1377</b>	<b>0.1377</b>	<b>0.0000</b>	<b>2,103.8519</b>	<b>2,103.8519</b>	<b>0.4923</b>	<b>0.0000</b>	<b>2,115.9708</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	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	52.96	68.89	-7.28	0.00	0.00	76.45	76.45	0.00	75.14	75.14	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	Building Construction	Building Construction	11/1/2023	6/26/2025	5	432	

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

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

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –**

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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
Building Construction	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 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	1.5419	12.5238	13.5702	0.0226		0.5954	0.5954		0.5641	0.5641		2,103.0069	2,103.0069	0.4923		2,115.3145
<b>Total</b>	<b>1.5419</b>	<b>12.5238</b>	<b>13.5702</b>	<b>0.0226</b>		<b>0.5954</b>	<b>0.5954</b>		<b>0.5641</b>	<b>0.5641</b>		<b>2,103.0069</b>	<b>2,103.0069</b>	<b>0.4923</b>		<b>2,115.3145</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.7147	3.7328	14.4952	0.0226		0.1377	0.1377		0.1377	0.1377	0.0000	2,103.0069	2,103.0069	0.4923		2,115.3145
<b>Total</b>	<b>0.7147</b>	<b>3.7328</b>	<b>14.4952</b>	<b>0.0226</b>		<b>0.1377</b>	<b>0.1377</b>		<b>0.1377</b>	<b>0.1377</b>	<b>0.0000</b>	<b>2,103.0069</b>	<b>2,103.0069</b>	<b>0.4923</b>		<b>2,115.3145</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.2 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	1.4433	11.7543	13.4847	0.0226		0.5221	0.5221		0.4944	0.4944		2,103.3294	2,103.3294	0.4882		2,115.5336
<b>Total</b>	<b>1.4433</b>	<b>11.7543</b>	<b>13.4847</b>	<b>0.0226</b>		<b>0.5221</b>	<b>0.5221</b>		<b>0.4944</b>	<b>0.4944</b>		<b>2,103.3294</b>	<b>2,103.3294</b>	<b>0.4882</b>		<b>2,115.5336</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.6775	3.6532	14.4668	0.0226		0.1224	0.1224		0.1224	0.1224	0.0000	2,103.3294	2,103.3294	0.4882		2,115.5336
<b>Total</b>	<b>0.6775</b>	<b>3.6532</b>	<b>14.4668</b>	<b>0.0226</b>		<b>0.1224</b>	<b>0.1224</b>		<b>0.1224</b>	<b>0.1224</b>	<b>0.0000</b>	<b>2,103.3294</b>	<b>2,103.3294</b>	<b>0.4882</b>		<b>2,115.5336</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.2 Building Construction - 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	1.3461	10.9569	13.4043	0.0226		0.4506	0.4506		0.4266	0.4266		2,103.8519	2,103.8519	0.4848		2,115.9708
<b>Total</b>	<b>1.3461</b>	<b>10.9569</b>	<b>13.4043</b>	<b>0.0226</b>		<b>0.4506</b>	<b>0.4506</b>		<b>0.4266</b>	<b>0.4266</b>		<b>2,103.8519</b>	<b>2,103.8519</b>	<b>0.4848</b>		<b>2,115.9708</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.6454	3.5758	14.4427	0.0226		0.1092	0.1092		0.1092	0.1092	0.0000	2,103.8519	2,103.8519	0.4848		2,115.9708
<b>Total</b>	<b>0.6454</b>	<b>3.5758</b>	<b>14.4427</b>	<b>0.0226</b>		<b>0.1092</b>	<b>0.1092</b>		<b>0.1092</b>	<b>0.1092</b>	<b>0.0000</b>	<b>2,103.8519</b>	<b>2,103.8519</b>	<b>0.4848</b>		<b>2,115.9708</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 1D.1 - OPT - BC ONLY**  
**South Coast Air Basin, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	426.00	1000sqft	9.78	426,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2025
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MWhr)</b>	691.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

Project Characteristics -

Land Use -

Construction Phase - Updated defaults with project-specific values

Off-road Equipment - Updated defaults with project-specific values

Trips and VMT - Updated defaults with project-specific values

Vehicle Trips - Calculated externally

Construction Off-road Equipment Mitigation - Updated defaults with project-specific PDFs

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	230.00	432.00
tblConstructionPhase	PhaseEndDate	11/26/2024	6/26/2025
tblConstructionPhase	PhaseStartDate	1/10/2024	11/1/2023
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblTripsAndVMT	VendorTripNumber	70.00	0.00
tblTripsAndVMT	WorkerTripNumber	136.00	0.00
tblVehicleTrips	ST_TR	7.72	0.00
tblVehicleTrips	SU_TR	6.77	0.00
tblVehicleTrips	WD_TR	10.72	0.00

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					
2023	1.5419	12.5238	13.5702	0.0226	0.0000	0.5954	0.5954	0.0000	0.5641	0.5641	0.0000	2,103.0069	2,103.0069	0.4923	0.0000	2,115.3145
2024	1.4433	11.7543	13.4847	0.0226	0.0000	0.5221	0.5221	0.0000	0.4944	0.4944	0.0000	2,103.3294	2,103.3294	0.4882	0.0000	2,115.5336
2025	1.3461	10.9569	13.4043	0.0226	0.0000	0.4506	0.4506	0.0000	0.4266	0.4266	0.0000	2,103.8519	2,103.8519	0.4848	0.0000	2,115.9708
<b>Maximum</b>	<b>1.5419</b>	<b>12.5238</b>	<b>13.5702</b>	<b>0.0226</b>	<b>0.0000</b>	<b>0.5954</b>	<b>0.5954</b>	<b>0.0000</b>	<b>0.5641</b>	<b>0.5641</b>	<b>0.0000</b>	<b>2,103.8519</b>	<b>2,103.8519</b>	<b>0.4923</b>	<b>0.0000</b>	<b>2,115.9708</b>

**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					
2023	0.7147	3.7328	14.4952	0.0226	0.0000	0.1377	0.1377	0.0000	0.1377	0.1377	0.0000	2,103.0069	2,103.0069	0.4923	0.0000	2,115.3145
2024	0.6775	3.6532	14.4668	0.0226	0.0000	0.1224	0.1224	0.0000	0.1224	0.1224	0.0000	2,103.3294	2,103.3294	0.4882	0.0000	2,115.5336
2025	0.6454	3.5758	14.4427	0.0226	0.0000	0.1092	0.1092	0.0000	0.1092	0.1092	0.0000	2,103.8519	2,103.8519	0.4848	0.0000	2,115.9708
<b>Maximum</b>	<b>0.7147</b>	<b>3.7328</b>	<b>14.4952</b>	<b>0.0226</b>	<b>0.0000</b>	<b>0.1377</b>	<b>0.1377</b>	<b>0.0000</b>	<b>0.1377</b>	<b>0.1377</b>	<b>0.0000</b>	<b>2,103.8519</b>	<b>2,103.8519</b>	<b>0.4923</b>	<b>0.0000</b>	<b>2,115.9708</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	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	52.96	68.89	-7.28	0.00	0.00	76.45	76.45	0.00	75.14	75.14	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	Building Construction	Building Construction	11/1/2023	6/26/2025	5	432	

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

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

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –**

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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
Building Construction	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 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	1.5419	12.5238	13.5702	0.0226		0.5954	0.5954		0.5641	0.5641		2,103.0069	2,103.0069	0.4923		2,115.3145
<b>Total</b>	<b>1.5419</b>	<b>12.5238</b>	<b>13.5702</b>	<b>0.0226</b>		<b>0.5954</b>	<b>0.5954</b>		<b>0.5641</b>	<b>0.5641</b>		<b>2,103.0069</b>	<b>2,103.0069</b>	<b>0.4923</b>		<b>2,115.3145</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	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
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
<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>	<b>0.0000</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.7147	3.7328	14.4952	0.0226		0.1377	0.1377		0.1377	0.1377	0.0000	2,103.0069	2,103.0069	0.4923		2,115.3145
<b>Total</b>	<b>0.7147</b>	<b>3.7328</b>	<b>14.4952</b>	<b>0.0226</b>		<b>0.1377</b>	<b>0.1377</b>		<b>0.1377</b>	<b>0.1377</b>	<b>0.0000</b>	<b>2,103.0069</b>	<b>2,103.0069</b>	<b>0.4923</b>		<b>2,115.3145</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	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
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
<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>	<b>0.0000</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 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	1.4433	11.7543	13.4847	0.0226		0.5221	0.5221		0.4944	0.4944		2,103.3294	2,103.3294	0.4882		2,115.5336
<b>Total</b>	<b>1.4433</b>	<b>11.7543</b>	<b>13.4847</b>	<b>0.0226</b>		<b>0.5221</b>	<b>0.5221</b>		<b>0.4944</b>	<b>0.4944</b>		<b>2,103.3294</b>	<b>2,103.3294</b>	<b>0.4882</b>		<b>2,115.5336</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	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
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
<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>	<b>0.0000</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					

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Off-Road	0.6775	3.6532	14.4668	0.0226		0.1224	0.1224		0.1224	0.1224	0.0000	2,103.3294	2,103.3294	0.4882		2,115.5336
<b>Total</b>	<b>0.6775</b>	<b>3.6532</b>	<b>14.4668</b>	<b>0.0226</b>		<b>0.1224</b>	<b>0.1224</b>		<b>0.1224</b>	<b>0.1224</b>	<b>0.0000</b>	<b>2,103.3294</b>	<b>2,103.3294</b>	<b>0.4882</b>		<b>2,115.5336</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.2 Building Construction - 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	1.3461	10.9569	13.4043	0.0226		0.4506	0.4506		0.4266	0.4266		2,103.8519	2,103.8519	0.4848		2,115.9708
<b>Total</b>	<b>1.3461</b>	<b>10.9569</b>	<b>13.4043</b>	<b>0.0226</b>		<b>0.4506</b>	<b>0.4506</b>		<b>0.4266</b>	<b>0.4266</b>		<b>2,103.8519</b>	<b>2,103.8519</b>	<b>0.4848</b>		<b>2,115.9708</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.6454	3.5758	14.4427	0.0226		0.1092	0.1092		0.1092	0.1092	0.0000	2,103.8519	2,103.8519	0.4848		2,115.9708
<b>Total</b>	<b>0.6454</b>	<b>3.5758</b>	<b>14.4427</b>	<b>0.0226</b>		<b>0.1092</b>	<b>0.1092</b>		<b>0.1092</b>	<b>0.1092</b>	<b>0.0000</b>	<b>2,103.8519</b>	<b>2,103.8519</b>	<b>0.4848</b>		<b>2,115.9708</b>

PHASE 1D.1 - OPT - BC ONLY - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 1D.1 - PS-A  
South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	1,175.00	Space	10.57	381,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MWhr)</b>	691.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

Project Characteristics -

Land Use - Updated defaults with project-specific values

Construction Phase - Updated defaults with project-specific values

Off-road Equipment - Updated defaults with project-specific values

Off-road Equipment - Updated defaults with project-specific values

Off-road Equipment -

Trips and VMT - Mobile on-road emissions calculated externally with EMFAC2021

Construction Off-road Equipment Mitigation - Updated with project-specific values

Energy Mitigation -

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	49.00
tblConstructionPhase	NumDays	300.00	304.00
tblConstructionPhase	NumDays	20.00	49.00
tblConstructionPhase	PhaseEndDate	10/18/2024	6/6/2024
tblConstructionPhase	PhaseEndDate	8/23/2024	6/6/2024
tblConstructionPhase	PhaseEndDate	9/20/2024	6/6/2024
tblConstructionPhase	PhaseStartDate	9/21/2024	4/1/2024
tblConstructionPhase	PhaseStartDate	7/1/2023	4/9/2023
tblConstructionPhase	PhaseStartDate	8/24/2024	4/1/2024
tblLandUse	LandUseSquareFeet	470,000.00	381,000.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblTripsAndVMT	VendorTripNumber	62.00	0.00
tblTripsAndVMT	WorkerTripNumber	160.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	32.00	0.00

**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					
2023	0.6645	5.7188	4.4278	9.1300e-003	0.0000	0.2539	0.2539	0.0000	0.2380	0.2380	0.0000	844.4754	844.4754	0.2287	0.0000	850.1917
2024	3.7998	14.3752	15.4476	0.0256	0.0000	0.7318	0.7318	0.0000	0.6831	0.6831	0.0000	2,416.8121	2,416.8121	0.6495	0.0000	2,433.0482
<b>Maximum</b>	<b>3.7998</b>	<b>14.3752</b>	<b>15.4476</b>	<b>0.0256</b>	<b>0.0000</b>	<b>0.7318</b>	<b>0.7318</b>	<b>0.0000</b>	<b>0.6831</b>	<b>0.6831</b>	<b>0.0000</b>	<b>2,416.8121</b>	<b>2,416.8121</b>	<b>0.6495</b>	<b>0.0000</b>	<b>2,433.0482</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					
2023	0.3353	1.7710	5.1139	9.1300e-003	0.0000	0.0659	0.0659	0.0000	0.0659	0.0659	0.0000	844.4754	844.4754	0.2287	0.0000	850.1917
2024	2.7246	2.9086	16.9240	0.0256	0.0000	0.0975	0.0975	0.0000	0.0975	0.0975	0.0000	2,416.8121	2,416.8121	0.6495	0.0000	2,433.0482
Maximum	2.7246	2.9086	16.9240	0.0256	0.0000	0.0975	0.0975	0.0000	0.0975	0.0975	0.0000	2,416.8121	2,416.8121	0.6495	0.0000	2,433.0482

	ROG	NOx	CO	SO2	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	31.46	76.71	-10.88	0.00	0.00	83.43	83.43	0.00	82.26	82.26	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	Building Construction	Building Construction	4/9/2023	6/6/2024	5	304	
2	Paving	Paving	4/1/2024	6/6/2024	5	49	
3	Architectural Coating	Architectural Coating	4/1/2024	6/6/2024	5	49	

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

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

**Acres of Paving: 10.57**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 22,860 (Architectural**

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Paving	Trenchers	1	8.00	78	0.50
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 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	0.6645	5.7188	4.4278	9.1300e-003		0.2539	0.2539		0.2380	0.2380		844.4754	844.4754	0.2287		850.1917
<b>Total</b>	<b>0.6645</b>	<b>5.7188</b>	<b>4.4278</b>	<b>9.1300e-003</b>		<b>0.2539</b>	<b>0.2539</b>		<b>0.2380</b>	<b>0.2380</b>		<b>844.4754</b>	<b>844.4754</b>	<b>0.2287</b>		<b>850.1917</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	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
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
<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>	<b>0.0000</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	0.3353	1.7710	5.1139	9.1300e-003		0.0659	0.0659		0.0659	0.0659	0.0000	844.4754	844.4754	0.2287		850.1917
<b>Total</b>	<b>0.3353</b>	<b>1.7710</b>	<b>5.1139</b>	<b>9.1300e-003</b>		<b>0.0659</b>	<b>0.0659</b>		<b>0.0659</b>	<b>0.0659</b>	<b>0.0000</b>	<b>844.4754</b>	<b>844.4754</b>	<b>0.2287</b>		<b>850.1917</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.2 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	0.6203	5.3305	4.3559	9.1300e-003		0.2261	0.2261		0.2118	0.2118		844.4650	844.4650	0.2272		850.1447
<b>Total</b>	<b>0.6203</b>	<b>5.3305</b>	<b>4.3559</b>	<b>9.1300e-003</b>		<b>0.2261</b>	<b>0.2261</b>		<b>0.2118</b>	<b>0.2118</b>		<b>844.4650</b>	<b>844.4650</b>	<b>0.2272</b>		<b>850.1447</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.3167	1.7312	5.0997	9.1300e-003		0.0582	0.0582		0.0582	0.0582	0.0000	844.4650	844.4650	0.2272		850.1447
<b>Total</b>	<b>0.3167</b>	<b>1.7312</b>	<b>5.0997</b>	<b>9.1300e-003</b>		<b>0.0582</b>	<b>0.0582</b>		<b>0.0582</b>	<b>0.0582</b>	<b>0.0000</b>	<b>844.4650</b>	<b>844.4650</b>	<b>0.2272</b>		<b>850.1447</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.3 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	0.8364	7.8259	9.2816	0.0135		0.4448	0.4448		0.4104	0.4104		1,290.8990	1,290.8990	0.4064		1,301.0593
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8364</b>	<b>7.8259</b>	<b>9.2816</b>	<b>0.0135</b>		<b>0.4448</b>	<b>0.4448</b>		<b>0.4104</b>	<b>0.4104</b>		<b>1,290.8990</b>	<b>1,290.8990</b>	<b>0.4064</b>		<b>1,301.0593</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.2158	1.0487	9.9919	0.0135		0.0353	0.0353		0.0353	0.0353	0.0000	1,290.8990	1,290.8990	0.4064		1,301.0593
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2158</b>	<b>1.0487</b>	<b>9.9919</b>	<b>0.0135</b>		<b>0.0353</b>	<b>0.0353</b>		<b>0.0353</b>	<b>0.0353</b>	<b>0.0000</b>	<b>1,290.8990</b>	<b>1,290.8990</b>	<b>0.4064</b>		<b>1,301.0593</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.4 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	2.1624					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>2.3431</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>

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	2.1624					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>2.1921</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 1D.1 - PS-A**  
**South Coast Air Basin, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	1,175.00	Space	10.57	381,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MWhr)</b>	691.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

Project Characteristics -

Land Use - Updated defaults with project-specific values

Construction Phase - Updated defaults with project-specific values

Off-road Equipment - Updated defaults with project-specific values

Off-road Equipment - Updated defaults with project-specific values

Off-road Equipment -

Trips and VMT - Mobile on-road emissions calculated externally with EMFAC2021

Construction Off-road Equipment Mitigation - Updated with project-specific values

Energy Mitigation -

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	49.00
tblConstructionPhase	NumDays	300.00	304.00
tblConstructionPhase	NumDays	20.00	49.00
tblConstructionPhase	PhaseEndDate	10/18/2024	6/6/2024
tblConstructionPhase	PhaseEndDate	8/23/2024	6/6/2024
tblConstructionPhase	PhaseEndDate	9/20/2024	6/6/2024
tblConstructionPhase	PhaseStartDate	9/21/2024	4/1/2024
tblConstructionPhase	PhaseStartDate	7/1/2023	4/9/2023
tblConstructionPhase	PhaseStartDate	8/24/2024	4/1/2024
tblLandUse	LandUseSquareFeet	470,000.00	381,000.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblTripsAndVMT	VendorTripNumber	62.00	0.00
tblTripsAndVMT	WorkerTripNumber	160.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	32.00	0.00

**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					
2023	0.6645	5.7188	4.4278	9.1300e-003	0.0000	0.2539	0.2539	0.0000	0.2380	0.2380	0.0000	844.4754	844.4754	0.2287	0.0000	850.1917
2024	3.7998	14.3752	15.4476	0.0256	0.0000	0.7318	0.7318	0.0000	0.6831	0.6831	0.0000	2,416.8121	2,416.8121	0.6495	0.0000	2,433.0482
<b>Maximum</b>	<b>3.7998</b>	<b>14.3752</b>	<b>15.4476</b>	<b>0.0256</b>	<b>0.0000</b>	<b>0.7318</b>	<b>0.7318</b>	<b>0.0000</b>	<b>0.6831</b>	<b>0.6831</b>	<b>0.0000</b>	<b>2,416.8121</b>	<b>2,416.8121</b>	<b>0.6495</b>	<b>0.0000</b>	<b>2,433.0482</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					
2023	0.3353	1.7710	5.1139	9.1300e-003	0.0000	0.0659	0.0659	0.0000	0.0659	0.0659	0.0000	844.4754	844.4754	0.2287	0.0000	850.1917
2024	2.7246	2.9086	16.9240	0.0256	0.0000	0.0975	0.0975	0.0000	0.0975	0.0975	0.0000	2,416.8121	2,416.8121	0.6495	0.0000	2,433.0482
<b>Maximum</b>	<b>2.7246</b>	<b>2.9086</b>	<b>16.9240</b>	<b>0.0256</b>	<b>0.0000</b>	<b>0.0975</b>	<b>0.0975</b>	<b>0.0000</b>	<b>0.0975</b>	<b>0.0975</b>	<b>0.0000</b>	<b>2,416.8121</b>	<b>2,416.8121</b>	<b>0.6495</b>	<b>0.0000</b>	<b>2,433.0482</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>31.46</b>	<b>76.71</b>	<b>-10.88</b>	<b>0.00</b>	<b>0.00</b>	<b>83.43</b>	<b>83.43</b>	<b>0.00</b>	<b>82.26</b>	<b>82.26</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/9/2023	6/6/2024	5	304	
2	Paving	Paving	4/1/2024	6/6/2024	5	49	
3	Architectural Coating	Architectural Coating	4/1/2024	6/6/2024	5	49	

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

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

**Acres of Paving: 10.57**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 22,860 (Architectural**

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Paving	Trenchers	1	8.00	78	0.50
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 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	0.6645	5.7188	4.4278	9.1300e-003		0.2539	0.2539		0.2380	0.2380		844.4754	844.4754	0.2287		850.1917
<b>Total</b>	<b>0.6645</b>	<b>5.7188</b>	<b>4.4278</b>	<b>9.1300e-003</b>		<b>0.2539</b>	<b>0.2539</b>		<b>0.2380</b>	<b>0.2380</b>		<b>844.4754</b>	<b>844.4754</b>	<b>0.2287</b>		<b>850.1917</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	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
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
<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>	<b>0.0000</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.3353	1.7710	5.1139	9.1300e-003		0.0659	0.0659		0.0659	0.0659	0.0000	844.4754	844.4754	0.2287		850.1917
<b>Total</b>	<b>0.3353</b>	<b>1.7710</b>	<b>5.1139</b>	<b>9.1300e-003</b>		<b>0.0659</b>	<b>0.0659</b>		<b>0.0659</b>	<b>0.0659</b>	<b>0.0000</b>	<b>844.4754</b>	<b>844.4754</b>	<b>0.2287</b>		<b>850.1917</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	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
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
<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>	<b>0.0000</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 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	0.6203	5.3305	4.3559	9.1300e-003		0.2261	0.2261		0.2118	0.2118		844.4650	844.4650	0.2272		850.1447
<b>Total</b>	<b>0.6203</b>	<b>5.3305</b>	<b>4.3559</b>	<b>9.1300e-003</b>		<b>0.2261</b>	<b>0.2261</b>		<b>0.2118</b>	<b>0.2118</b>		<b>844.4650</b>	<b>844.4650</b>	<b>0.2272</b>		<b>850.1447</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	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
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
<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>	<b>0.0000</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.3167	1.7312	5.0997	9.1300e-003		0.0582	0.0582		0.0582	0.0582	0.0000	844.4650	844.4650	0.2272		850.1447
<b>Total</b>	<b>0.3167</b>	<b>1.7312</b>	<b>5.0997</b>	<b>9.1300e-003</b>		<b>0.0582</b>	<b>0.0582</b>		<b>0.0582</b>	<b>0.0582</b>	<b>0.0000</b>	<b>844.4650</b>	<b>844.4650</b>	<b>0.2272</b>		<b>850.1447</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	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
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
<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>	<b>0.0000</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 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	0.8364	7.8259	9.2816	0.0135		0.4448	0.4448		0.4104	0.4104		1,290.8990	1,290.8990	0.4064		1,301.0593
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8364</b>	<b>7.8259</b>	<b>9.2816</b>	<b>0.0135</b>		<b>0.4448</b>	<b>0.4448</b>		<b>0.4104</b>	<b>0.4104</b>		<b>1,290.8990</b>	<b>1,290.8990</b>	<b>0.4064</b>		<b>1,301.0593</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	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
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
<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>	<b>0.0000</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.2158	1.0487	9.9919	0.0135		0.0353	0.0353		0.0353	0.0353	0.0000	1,290.8990	1,290.8990	0.4064		1,301.0593
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.2158</b>	<b>1.0487</b>	<b>9.9919</b>	<b>0.0135</b>		<b>0.0353</b>	<b>0.0353</b>		<b>0.0353</b>	<b>0.0353</b>	<b>0.0000</b>	<b>1,290.8990</b>	<b>1,290.8990</b>	<b>0.4064</b>		<b>1,301.0593</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	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
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
<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>	<b>0.0000</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 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	2.1624					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>2.3431</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	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
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
<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>	<b>0.0000</b>

PHASE 1D.1 - PS-A - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	2.1624					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>2.1921</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</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	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
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
<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>	<b>0.0000</b>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 2B.1 - BC,AC,P Phases**

**South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	22.00	1000sqft	0.51	22,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11	<b>Operational Year</b>	2024		
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MW hr)</b>	691.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

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

- Project Characteristics -
- Land Use -
- Construction Phase - Updated defaults with project-specific values
- Off-road Equipment - Updated defaults with project-specific values
- Off-road Equipment - Updated defaults with project-specific values
- Off-road Equipment -
- Trips and VMT - Onroad construction mobile emissions calculated externally with EMFAC2021
- Vehicle Trips - Mobile emissions calculated externally
- Construction Off-road Equipment Mitigation - Updated defaults with project-specific PDFs

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	68.00
tblConstructionPhase	NumDays	100.00	273.00
tblConstructionPhase	NumDays	5.00	47.00
tblConstructionPhase	PhaseEndDate	10/9/2023	5/6/2024
tblConstructionPhase	PhaseEndDate	9/25/2023	5/6/2024
tblConstructionPhase	PhaseEndDate	10/2/2023	5/6/2024
tblConstructionPhase	PhaseStartDate	10/3/2023	2/1/2024
tblConstructionPhase	PhaseStartDate	5/9/2023	4/20/2023
tblConstructionPhase	PhaseStartDate	9/26/2023	3/1/2024
tblOffRoadEquipment	HorsePower	187.00	84.00
tblOffRoadEquipment	LoadFactor	0.41	0.74
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

## PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	7.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	VendorTripNumber	4.00	0.00
tblTripsAndVMT	WorkerTripNumber	7.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	WD_TR	9.74	0.00



PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/20/2023	5/6/2024	5	273	
2	Paving	Paving	3/1/2024	5/6/2024	5	47	
3	Architectural Coating	Architectural Coating	2/1/2024	5/6/2024	5	68	

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

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

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 33,000; Non-Residential Outdoor: 11,000; Striped Parking Area: 0**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Building Construction	Welders	1	8.00	46	0.45
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Graders	1	8.00	84	0.74
Building Construction	Air Compressors	1	8.00	78	0.48
Paving	Pavers	0	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Trenchers	1	8.00	78	0.50
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	2	7.00	97	0.37

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**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
Building Construction	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment  
 Water Exposed Area

**3.2 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	2.1624	18.3561	18.1720	0.0277		1.0534	1.0534		0.9811	0.9811		2,638.9540	2,638.9540	0.7101		2,656.7067
<b>Total</b>	<b>2.1624</b>	<b>18.3561</b>	<b>18.1720</b>	<b>0.0277</b>		<b>1.0534</b>	<b>1.0534</b>		<b>0.9811</b>	<b>0.9811</b>		<b>2,638.9540</b>	<b>2,638.9540</b>	<b>0.7101</b>		<b>2,656.7067</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	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
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
<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>	<b>0.0000</b>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.5547	2.7214	18.6397	0.0277		0.0952	0.0952		0.0952	0.0952	0.0000	2,638.9540	2,638.9540	0.7101		2,656.7067
<b>Total</b>	<b>0.5547</b>	<b>2.7214</b>	<b>18.6397</b>	<b>0.0277</b>		<b>0.0952</b>	<b>0.0952</b>		<b>0.0952</b>	<b>0.0952</b>	<b>0.0000</b>	<b>2,638.9540</b>	<b>2,638.9540</b>	<b>0.7101</b>		<b>2,656.7067</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	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
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
<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>	<b>0.0000</b>

**3.2 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	2.0415	17.2576	18.0811	0.0278		0.9539	0.9539		0.8879	0.8879		2,640.1007	2,640.1007	0.7077		2,657.7931
<b>Total</b>	<b>2.0415</b>	<b>17.2576</b>	<b>18.0811</b>	<b>0.0278</b>		<b>0.9539</b>	<b>0.9539</b>		<b>0.8879</b>	<b>0.8879</b>		<b>2,640.1007</b>	<b>2,640.1007</b>	<b>0.7077</b>		<b>2,657.7931</b>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.5361	2.6816	18.6254	0.0278		0.0875	0.0875		0.0875	0.0875	0.0000	2,640.1007	2,640.1007	0.7077		2,657.7931
<b>Total</b>	<b>0.5361</b>	<b>2.6816</b>	<b>18.6254</b>	<b>0.0278</b>		<b>0.0875</b>	<b>0.0875</b>		<b>0.0875</b>	<b>0.0875</b>	<b>0.0000</b>	<b>2,640.1007</b>	<b>2,640.1007</b>	<b>0.7077</b>		<b>2,657.7931</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	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
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
<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>	<b>0.0000</b>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 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	0.8836	8.5192	10.6711	0.0152		0.4778	0.4778		0.4396	0.4396		1,468.3617	1,468.3617	0.4749		1,480.2342
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8836</b>	<b>8.5192</b>	<b>10.6711</b>	<b>0.0152</b>		<b>0.4778</b>	<b>0.4778</b>		<b>0.4396</b>	<b>0.4396</b>		<b>1,468.3617</b>	<b>1,468.3617</b>	<b>0.4749</b>		<b>1,480.2342</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	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
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
<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>	<b>0.0000</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	0.1857	0.8047	11.4510	0.0152		0.0248	0.0248		0.0248	0.0248	0.0000	1,468.3617	1,468.3617	0.4749		1,480.2342
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.1857</b>	<b>0.8047</b>	<b>11.4510</b>	<b>0.0152</b>		<b>0.0248</b>	<b>0.0248</b>		<b>0.0248</b>	<b>0.0248</b>	<b>0.0000</b>	<b>1,468.3617</b>	<b>1,468.3617</b>	<b>0.4749</b>		<b>1,480.2342</b>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.4 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	2.9991					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>3.1799</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	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
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
<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>	<b>0.0000</b>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	2.9991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>3.0288</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</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	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
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
<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>	<b>0.0000</b>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**PHASE 2B.1 - BC,AC,P Phases**  
 South Coast Air Basin, Winter

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	22.00	1000sqft	0.51	22,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MW hr)</b>	691.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

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

- Project Characteristics -
- Land Use -
- Construction Phase - Updated defaults with project-specific values
- Off-road Equipment - Updated defaults with project-specific values
- Off-road Equipment - Updated defaults with project-specific values
- Off-road Equipment -
- Trips and VMT - Onroad construction mobile emissions calculated externally with EMFAC2021
- Vehicle Trips - Mobile emissions calculated externally
- Construction Off-road Equipment Mitigation - Updated defaults with project-specific PDFs

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	68.00
tblConstructionPhase	NumDays	100.00	273.00
tblConstructionPhase	NumDays	5.00	47.00
tblConstructionPhase	PhaseEndDate	10/9/2023	5/6/2024
tblConstructionPhase	PhaseEndDate	9/25/2023	5/6/2024
tblConstructionPhase	PhaseEndDate	10/2/2023	5/6/2024
tblConstructionPhase	PhaseStartDate	10/3/2023	2/1/2024
tblConstructionPhase	PhaseStartDate	5/9/2023	4/20/2023
tblConstructionPhase	PhaseStartDate	9/26/2023	3/1/2024
tblOffRoadEquipment	HorsePower	187.00	84.00
tblOffRoadEquipment	LoadFactor	0.41	0.74
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00

## PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	7.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	VendorTripNumber	4.00	0.00
tblTripsAndVMT	WorkerTripNumber	7.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	1.00	0.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	WD_TR	9.74	0.00



PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/20/2023	5/6/2024	5	273	
2	Paving	Paving	3/1/2024	5/6/2024	5	47	
3	Architectural Coating	Architectural Coating	2/1/2024	5/6/2024	5	68	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 33,000; Non-Residential Outdoor: 11,000; Striped Parking Area: 0 (Architectural

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Building Construction	Welders	1	8.00	46	0.45
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Graders	1	8.00	84	0.74
Building Construction	Air Compressors	1	8.00	78	0.48
Paving	Pavers	0	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Trenchers	1	8.00	78	0.50
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	2	7.00	97	0.37

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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
Building Construction	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 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	2.1624	18.3561	18.1720	0.0277		1.0534	1.0534		0.9811	0.9811		2,638.9540	2,638.9540	0.7101		2,656.7067
<b>Total</b>	<b>2.1624</b>	<b>18.3561</b>	<b>18.1720</b>	<b>0.0277</b>		<b>1.0534</b>	<b>1.0534</b>		<b>0.9811</b>	<b>0.9811</b>		<b>2,638.9540</b>	<b>2,638.9540</b>	<b>0.7101</b>		<b>2,656.7067</b>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.5547	2.7214	18.6397	0.0277		0.0952	0.0952		0.0952	0.0952	0.0000	2,638.9540	2,638.9540	0.7101		2,656.7067
<b>Total</b>	<b>0.5547</b>	<b>2.7214</b>	<b>18.6397</b>	<b>0.0277</b>		<b>0.0952</b>	<b>0.0952</b>		<b>0.0952</b>	<b>0.0952</b>	<b>0.0000</b>	<b>2,638.9540</b>	<b>2,638.9540</b>	<b>0.7101</b>		<b>2,656.7067</b>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.2 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	2.0415	17.2576	18.0811	0.0278		0.9539	0.9539		0.8879	0.8879		2,640.1007	2,640.1007	0.7077		2,657.7931
<b>Total</b>	<b>2.0415</b>	<b>17.2576</b>	<b>18.0811</b>	<b>0.0278</b>		<b>0.9539</b>	<b>0.9539</b>		<b>0.8879</b>	<b>0.8879</b>		<b>2,640.1007</b>	<b>2,640.1007</b>	<b>0.7077</b>		<b>2,657.7931</b>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.5361	2.6816	18.6254	0.0278		0.0875	0.0875		0.0875	0.0875	0.0000	2,640.1007	2,640.1007	0.7077		2,657.7931
<b>Total</b>	<b>0.5361</b>	<b>2.6816</b>	<b>18.6254</b>	<b>0.0278</b>		<b>0.0875</b>	<b>0.0875</b>		<b>0.0875</b>	<b>0.0875</b>	<b>0.0000</b>	<b>2,640.1007</b>	<b>2,640.1007</b>	<b>0.7077</b>		<b>2,657.7931</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	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
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
<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>	<b>0.0000</b>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 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	0.8836	8.5192	10.6711	0.0152		0.4778	0.4778		0.4396	0.4396		1,468.3617	1,468.3617	0.4749		1,480.2342
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.8836</b>	<b>8.5192</b>	<b>10.6711</b>	<b>0.0152</b>		<b>0.4778</b>	<b>0.4778</b>		<b>0.4396</b>	<b>0.4396</b>		<b>1,468.3617</b>	<b>1,468.3617</b>	<b>0.4749</b>		<b>1,480.2342</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	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
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
<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>	<b>0.0000</b>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**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	0.1857	0.8047	11.4510	0.0152		0.0248	0.0248		0.0248	0.0248	0.0000	1,468.3617	1,468.3617	0.4749		1,480.2342
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.1857</b>	<b>0.8047</b>	<b>11.4510</b>	<b>0.0152</b>		<b>0.0248</b>	<b>0.0248</b>		<b>0.0248</b>	<b>0.0248</b>	<b>0.0000</b>	<b>1,468.3617</b>	<b>1,468.3617</b>	<b>0.4749</b>		<b>1,480.2342</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	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
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
<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>	<b>0.0000</b>

**3.4 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	2.9991					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>3.1799</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>

PHASE 2B.1 - BC,AC,P Phases - South Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**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	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
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
<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>	<b>0.0000</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	2.9991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>3.0288</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</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	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
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
<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>	<b>0.0000</b>

PHASE 2D.1.2 - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 2D.1.2  
South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1.00	1000sqft	0.02	1,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MWhr)</b>	691.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

Project Characteristics -

Land Use - Building used as placeholder to model demolition phase only.

Construction Phase - Updated with project-specific values

Off-road Equipment - Updated with project-specific values

Trips and VMT - Onroad construction mobile emissions calculated externally with EMFAC2021

Demolition -

Vehicle Trips - calculated externally

Construction Off-road Equipment Mitigation - Updated with project-specific values

## PHASE 2D.1.2 - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	128.00
tblOffRoadEquipment	HorsePower	97.00	158.00
tblOffRoadEquipment	LoadFactor	0.37	0.38
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	676.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	WD_TR	9.74	0.00



PHASE 2D.1.2 - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

PHASE 2D.1.2 - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/7/2023	1/31/2024	5	128	

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

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

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Graders	1	8.00	187	0.41
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	8.00	158	0.38

**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	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Demolition - 2023**

**Unmitigated Construction On-Site**

PHASE 2D.1.2 - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive 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					0.3584	0.0000	0.3584	0.0543	0.0000	0.0543			0.0000			0.0000
Off-Road	0.9059	8.7859	8.6078	0.0180		0.3548	0.3548		0.3367	0.3367		1,733.6265	1,733.6265	0.3982		1,743.5817
<b>Total</b>	<b>0.9059</b>	<b>8.7859</b>	<b>8.6078</b>	<b>0.0180</b>	<b>0.3584</b>	<b>0.3548</b>	<b>0.7132</b>	<b>0.0543</b>	<b>0.3367</b>	<b>0.3910</b>		<b>1,733.6265</b>	<b>1,733.6265</b>	<b>0.3982</b>		<b>1,743.5817</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	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
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
<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>	<b>0.0000</b>

PHASE 2D.1.2 - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					0.1398	0.0000	0.1398	0.0212	0.0000	0.0212			0.0000			0.0000
Off-Road	0.2072	0.8981	10.7516	0.0180		0.0276	0.0276		0.0276	0.0276	0.0000	1,733.6265	1,733.6265	0.3982		1,743.5817
<b>Total</b>	<b>0.2072</b>	<b>0.8981</b>	<b>10.7516</b>	<b>0.0180</b>	<b>0.1398</b>	<b>0.0276</b>	<b>0.1674</b>	<b>0.0212</b>	<b>0.0276</b>	<b>0.0488</b>	<b>0.0000</b>	<b>1,733.6265</b>	<b>1,733.6265</b>	<b>0.3982</b>		<b>1,743.5817</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	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
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
<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>	<b>0.0000</b>

**3.2 Demolition - 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					
Fugitive Dust					0.3584	0.0000	0.3584	0.0543	0.0000	0.0543			0.0000			0.0000
Off-Road	0.8477	7.9728	8.5716	0.0180		0.3144	0.3144		0.2981	0.2981		1,733.4375	1,733.4375	0.3971		1,743.3652
<b>Total</b>	<b>0.8477</b>	<b>7.9728</b>	<b>8.5716</b>	<b>0.0180</b>	<b>0.3584</b>	<b>0.3144</b>	<b>0.6728</b>	<b>0.0543</b>	<b>0.2981</b>	<b>0.3524</b>		<b>1,733.4375</b>	<b>1,733.4375</b>	<b>0.3971</b>		<b>1,743.3652</b>

PHASE 2D.1.2 - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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					0.1398	0.0000	0.1398	0.0212	0.0000	0.0212			0.0000			0.0000
Off-Road	0.2072	0.8981	10.7516	0.0180		0.0276	0.0276		0.0276	0.0276	0.0000	1,733.4375	1,733.4375	0.3971		1,743.3652
<b>Total</b>	<b>0.2072</b>	<b>0.8981</b>	<b>10.7516</b>	<b>0.0180</b>	<b>0.1398</b>	<b>0.0276</b>	<b>0.1674</b>	<b>0.0212</b>	<b>0.0276</b>	<b>0.0488</b>	<b>0.0000</b>	<b>1,733.4375</b>	<b>1,733.4375</b>	<b>0.3971</b>		<b>1,743.3652</b>

PHASE 2D.1.2 - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

PHASE 2D.1.2 - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 2D.1.2**  
**South Coast Air Basin, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1.00	1000sqft	0.02	1,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MW hr)</b>	691.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

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

Project Characteristics -

Land Use - Building used as placeholder to model demolition phase only.

Construction Phase - Updated with project-specific values

Off-road Equipment - Updated with project-specific values

Trips and VMT - Onroad construction mobile emissions calculated externally with EMFAC2021

Demolition -

Vehicle Trips - calculated externally

Construction Off-road Equipment Mitigation - Updated with project-specific values

## PHASE 2D.1.2 - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	128.00
tblOffRoadEquipment	HorsePower	97.00	158.00
tblOffRoadEquipment	LoadFactor	0.37	0.38
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripNumber	676.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	WD_TR	9.74	0.00



PHASE 2D.1.2 - South Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/7/2023	1/31/2024	5	128	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Graders	1	8.00	187	0.41
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	8.00	158	0.38

**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	3	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

PHASE 2D.1.2 - South Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 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					
Fugitive Dust					0.3584	0.0000	0.3584	0.0543	0.0000	0.0543			0.0000			0.0000
Off-Road	0.9059	8.7859	8.6078	0.0180		0.3548	0.3548		0.3367	0.3367		1,733.6265	1,733.6265	0.3982		1,743.5817
<b>Total</b>	<b>0.9059</b>	<b>8.7859</b>	<b>8.6078</b>	<b>0.0180</b>	<b>0.3584</b>	<b>0.3548</b>	<b>0.7132</b>	<b>0.0543</b>	<b>0.3367</b>	<b>0.3910</b>		<b>1,733.6265</b>	<b>1,733.6265</b>	<b>0.3982</b>		<b>1,743.5817</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	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
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
<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>	<b>0.0000</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					0.1398	0.0000	0.1398	0.0212	0.0000	0.0212			0.0000			0.0000
Off-Road	0.2072	0.8981	10.7516	0.0180		0.0276	0.0276		0.0276	0.0276	0.0000	1,733.6265	1,733.6265	0.3982		1,743.5817
<b>Total</b>	<b>0.2072</b>	<b>0.8981</b>	<b>10.7516</b>	<b>0.0180</b>	<b>0.1398</b>	<b>0.0276</b>	<b>0.1674</b>	<b>0.0212</b>	<b>0.0276</b>	<b>0.0488</b>	<b>0.0000</b>	<b>1,733.6265</b>	<b>1,733.6265</b>	<b>0.3982</b>		<b>1,743.5817</b>

PHASE 2D.1.2 - South Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**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	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
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
<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>	<b>0.0000</b>

**3.2 Demolition - 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					
Fugitive Dust					0.3584	0.0000	0.3584	0.0543	0.0000	0.0543			0.0000			0.0000
Off-Road	0.8477	7.9728	8.5716	0.0180		0.3144	0.3144		0.2981	0.2981		1,733.4375	1,733.4375	0.3971		1,743.3652
<b>Total</b>	<b>0.8477</b>	<b>7.9728</b>	<b>8.5716</b>	<b>0.0180</b>	<b>0.3584</b>	<b>0.3144</b>	<b>0.6728</b>	<b>0.0543</b>	<b>0.2981</b>	<b>0.3524</b>		<b>1,733.4375</b>	<b>1,733.4375</b>	<b>0.3971</b>		<b>1,743.3652</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	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
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
<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>	<b>0.0000</b>

PHASE 2D.1.2 - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					0.1398	0.0000	0.1398	0.0212	0.0000	0.0212			0.0000			0.0000
Off-Road	0.2072	0.8981	10.7516	0.0180		0.0276	0.0276		0.0276	0.0276	0.0000	1,733.4375	1,733.4375	0.3971		1,743.3652
<b>Total</b>	<b>0.2072</b>	<b>0.8981</b>	<b>10.7516</b>	<b>0.0180</b>	<b>0.1398</b>	<b>0.0276</b>	<b>0.1674</b>	<b>0.0212</b>	<b>0.0276</b>	<b>0.0488</b>	<b>0.0000</b>	<b>1,733.4375</b>	<b>1,733.4375</b>	<b>0.3971</b>		<b>1,743.3652</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only**

**South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	26.00	1000sqft	0.60	26,000.00	0
Parking Lot	120.00	Space	1.15	50,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2027
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MWhr)</b>	691.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

Project Characteristics -

Land Use - Updated defaults with project-specific values

Construction Phase - Updated defaults with project-specific values

Off-road Equipment - Updated defaults with project-specific values

Trips and VMT - Onroad construction mobile emissions calculated externally with EMFAC2021

Construction Off-road Equipment Mitigation - Updated defaults with project-specific values

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	200.00	376.00
tblLandUse	LandUseSquareFeet	48,000.00	50,000.00
tblLandUse	LotAcreage	1.08	1.15
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	VendorTripNumber	12.00	0.00
tblTripsAndVMT	WorkerTripNumber	29.00	0.00



PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	9/17/2025	2/24/2027	5	376	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.15

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Building Construction - 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	1.5548	14.3178	15.2171	0.0298		0.5616	0.5616		0.5254	0.5254		2,836.0060	2,836.0060	0.7689		2,855.2294
<b>Total</b>	<b>1.5548</b>	<b>14.3178</b>	<b>15.2171</b>	<b>0.0298</b>		<b>0.5616</b>	<b>0.5616</b>		<b>0.5254</b>	<b>0.5254</b>		<b>2,836.0060</b>	<b>2,836.0060</b>	<b>0.7689</b>		<b>2,855.2294</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.5442	2.7479	17.8568	0.0298		0.0842	0.0842		0.0842	0.0842	0.0000	2,836.0060	2,836.0060	0.7689		2,855.2294
<b>Total</b>	<b>0.5442</b>	<b>2.7479</b>	<b>17.8568</b>	<b>0.0298</b>		<b>0.0842</b>	<b>0.0842</b>		<b>0.0842</b>	<b>0.0842</b>	<b>0.0000</b>	<b>2,836.0060</b>	<b>2,836.0060</b>	<b>0.7689</b>		<b>2,855.2294</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Building Construction - 2026**

**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	1.5548	14.3178	15.2171	0.0298		0.5616	0.5616		0.5254	0.5254		2,836.0060	2,836.0060	0.7689		2,855.2294
<b>Total</b>	<b>1.5548</b>	<b>14.3178</b>	<b>15.2171</b>	<b>0.0298</b>		<b>0.5616</b>	<b>0.5616</b>		<b>0.5254</b>	<b>0.5254</b>		<b>2,836.0060</b>	<b>2,836.0060</b>	<b>0.7689</b>		<b>2,855.2294</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.5442	2.7479	17.8568	0.0298		0.0842	0.0842		0.0842	0.0842	0.0000	2,836.0060	2,836.0060	0.7689		2,855.2294
<b>Total</b>	<b>0.5442</b>	<b>2.7479</b>	<b>17.8568</b>	<b>0.0298</b>		<b>0.0842</b>	<b>0.0842</b>		<b>0.0842</b>	<b>0.0842</b>	<b>0.0000</b>	<b>2,836.0060</b>	<b>2,836.0060</b>	<b>0.7689</b>		<b>2,855.2294</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Building Construction - 2027**

**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	1.5548	14.3178	15.2171	0.0298		0.5616	0.5616		0.5254	0.5254		2,836.0060	2,836.0060	0.7689		2,855.2294
<b>Total</b>	<b>1.5548</b>	<b>14.3178</b>	<b>15.2171</b>	<b>0.0298</b>		<b>0.5616</b>	<b>0.5616</b>		<b>0.5254</b>	<b>0.5254</b>		<b>2,836.0060</b>	<b>2,836.0060</b>	<b>0.7689</b>		<b>2,855.2294</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.5442	2.7479	17.8568	0.0298		0.0842	0.0842		0.0842	0.0842	0.0000	2,836.0060	2,836.0060	0.7689		2,855.2294
<b>Total</b>	<b>0.5442</b>	<b>2.7479</b>	<b>17.8568</b>	<b>0.0298</b>		<b>0.0842</b>	<b>0.0842</b>		<b>0.0842</b>	<b>0.0842</b>	<b>0.0000</b>	<b>2,836.0060</b>	<b>2,836.0060</b>	<b>0.7689</b>		<b>2,855.2294</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only  
South Coast Air Basin, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	26.00	1000sqft	0.60	26,000.00	0
Parking Lot	120.00	Space	1.15	50,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2027
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MWhr)</b>	691.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

- Project Characteristics -
- Land Use - Updated defaults with project-specific values
- Construction Phase - Updated defaults with project-specific values
- Off-road Equipment - Updated defaults with project-specific values
- Trips and VMT - Onroad construction mobile emissions calculated externally with EMFAC2021
- Construction Off-road Equipment Mitigation - Updated defaults with project-specific values

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	200.00	376.00
tblLandUse	LandUseSquareFeet	48,000.00	50,000.00
tblLandUse	LotAcreage	1.08	1.15
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	VendorTripNumber	12.00	0.00
tblTripsAndVMT	WorkerTripNumber	29.00	0.00



PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	9/17/2025	2/24/2027	5	376	

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

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

**Acres of Paving: 1.15**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Graders	1	8.00	187	0.41
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Building Construction	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Building Construction - 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	1.5548	14.3178	15.2171	0.0298		0.5616	0.5616		0.5254	0.5254		2,836.0060	2,836.0060	0.7689		2,855.2294
<b>Total</b>	<b>1.5548</b>	<b>14.3178</b>	<b>15.2171</b>	<b>0.0298</b>		<b>0.5616</b>	<b>0.5616</b>		<b>0.5254</b>	<b>0.5254</b>		<b>2,836.0060</b>	<b>2,836.0060</b>	<b>0.7689</b>		<b>2,855.2294</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.5442	2.7479	17.8568	0.0298		0.0842	0.0842		0.0842	0.0842	0.0000	2,836.0060	2,836.0060	0.7689		2,855.2294
<b>Total</b>	<b>0.5442</b>	<b>2.7479</b>	<b>17.8568</b>	<b>0.0298</b>		<b>0.0842</b>	<b>0.0842</b>		<b>0.0842</b>	<b>0.0842</b>	<b>0.0000</b>	<b>2,836.0060</b>	<b>2,836.0060</b>	<b>0.7689</b>		<b>2,855.2294</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Building Construction - 2026**

**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	1.5548	14.3178	15.2171	0.0298		0.5616	0.5616		0.5254	0.5254		2,836.0060	2,836.0060	0.7689		2,855.2294
<b>Total</b>	<b>1.5548</b>	<b>14.3178</b>	<b>15.2171</b>	<b>0.0298</b>		<b>0.5616</b>	<b>0.5616</b>		<b>0.5254</b>	<b>0.5254</b>		<b>2,836.0060</b>	<b>2,836.0060</b>	<b>0.7689</b>		<b>2,855.2294</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.5442	2.7479	17.8568	0.0298		0.0842	0.0842		0.0842	0.0842	0.0000	2,836.0060	2,836.0060	0.7689		2,855.2294
<b>Total</b>	<b>0.5442</b>	<b>2.7479</b>	<b>17.8568</b>	<b>0.0298</b>		<b>0.0842</b>	<b>0.0842</b>		<b>0.0842</b>	<b>0.0842</b>	<b>0.0000</b>	<b>2,836.0060</b>	<b>2,836.0060</b>	<b>0.7689</b>		<b>2,855.2294</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Building Construction - 2027**

**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	1.5548	14.3178	15.2171	0.0298		0.5616	0.5616		0.5254	0.5254		2,836.0060	2,836.0060	0.7689		2,855.2294
<b>Total</b>	<b>1.5548</b>	<b>14.3178</b>	<b>15.2171</b>	<b>0.0298</b>		<b>0.5616</b>	<b>0.5616</b>		<b>0.5254</b>	<b>0.5254</b>		<b>2,836.0060</b>	<b>2,836.0060</b>	<b>0.7689</b>		<b>2,855.2294</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.5442	2.7479	17.8568	0.0298		0.0842	0.0842		0.0842	0.0842	0.0000	2,836.0060	2,836.0060	0.7689		2,855.2294
<b>Total</b>	<b>0.5442</b>	<b>2.7479</b>	<b>17.8568</b>	<b>0.0298</b>		<b>0.0842</b>	<b>0.0842</b>		<b>0.0842</b>	<b>0.0842</b>	<b>0.0000</b>	<b>2,836.0060</b>	<b>2,836.0060</b>	<b>0.7689</b>		<b>2,855.2294</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	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
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
<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>	<b>0.0000</b>

PHASE 2G.1 - Central Plant & SL-2 Ext - BC Only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 3A.3 - Make Ready Sitework  
South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1,000.00	User Defined Unit	1.00	1,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MWhr)</b>	691.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

- Project Characteristics -
- Land Use - Placeholder. This is a grading phase only.
- Construction Phase - Updated default with project-specific values
- Off-road Equipment - Updated default with project-specific values
- Trips and VMT - Onroad construction emissions calculated externally with EMFAC2021
- Grading - Updated default with project-specific values
- Construction Off-road Equipment Mitigation - Updated default with project-specific values

## PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	70.00
tblGrading	AcresOfGrading	70.00	35.00
tblGrading	MaterialExported	0.00	18,052.00
tblGrading	MaterialImported	0.00	30,126.00
tblLandUse	LandUseSquareFeet	10,000.00	1,000.00
tblLandUse	LotAcreage	0.23	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblTripsAndVMT	HaulingTripNumber	6,022.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00



PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	11/1/2023	2/6/2024	5	70	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 35

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	0	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	2	8.00	97	0.37

**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
Grading	4	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 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					
Fugitive Dust					6.6302	0.0000	6.6302	3.3793	0.0000	3.3793			0.0000			0.0000
Off-Road	1.3709	14.8515	9.2616	0.0214		0.6233	0.6233		0.5734	0.5734		2,071.0089	2,071.0089	0.6698		2,087.7540
<b>Total</b>	<b>1.3709</b>	<b>14.8515</b>	<b>9.2616</b>	<b>0.0214</b>	<b>6.6302</b>	<b>0.6233</b>	<b>7.2535</b>	<b>3.3793</b>	<b>0.5734</b>	<b>3.9527</b>		<b>2,071.0089</b>	<b>2,071.0089</b>	<b>0.6698</b>		<b>2,087.7540</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	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
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
<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>	<b>0.0000</b>

PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					2.5858	0.0000	2.5858	1.3179	0.0000	1.3179			0.0000			0.0000
Off-Road	0.2616	1.1338	11.4926	0.0214		0.0349	0.0349		0.0349	0.0349	0.0000	2,071.0089	2,071.0089	0.6698		2,087.7540
<b>Total</b>	<b>0.2616</b>	<b>1.1338</b>	<b>11.4926</b>	<b>0.0214</b>	<b>2.5858</b>	<b>0.0349</b>	<b>2.6207</b>	<b>1.3179</b>	<b>0.0349</b>	<b>1.3528</b>	<b>0.0000</b>	<b>2,071.0089</b>	<b>2,071.0089</b>	<b>0.6698</b>		<b>2,087.7540</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	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
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
<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>	<b>0.0000</b>

PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 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					
Fugitive Dust					6.6302	0.0000	6.6302	3.3793	0.0000	3.3793			0.0000			0.0000
Off-Road	1.3375	14.1799	9.2587	0.0214		0.5889	0.5889		0.5418	0.5418		2,071.0220	2,071.0220	0.6698		2,087.7672
<b>Total</b>	<b>1.3375</b>	<b>14.1799</b>	<b>9.2587</b>	<b>0.0214</b>	<b>6.6302</b>	<b>0.5889</b>	<b>7.2190</b>	<b>3.3793</b>	<b>0.5418</b>	<b>3.9210</b>		<b>2,071.0220</b>	<b>2,071.0220</b>	<b>0.6698</b>		<b>2,087.7672</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	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
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
<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>	<b>0.0000</b>

PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					2.5858	0.0000	2.5858	1.3179	0.0000	1.3179			0.0000			0.0000
Off-Road	0.2616	1.1338	11.4926	0.0214		0.0349	0.0349		0.0349	0.0349	0.0000	2,071.0220	2,071.0220	0.6698		2,087.7672
<b>Total</b>	<b>0.2616</b>	<b>1.1338</b>	<b>11.4926</b>	<b>0.0214</b>	<b>2.5858</b>	<b>0.0349</b>	<b>2.6207</b>	<b>1.3179</b>	<b>0.0349</b>	<b>1.3528</b>	<b>0.0000</b>	<b>2,071.0220</b>	<b>2,071.0220</b>	<b>0.6698</b>		<b>2,087.7672</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	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
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
<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>	<b>0.0000</b>

PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 3A.3 - Make Ready Sitework  
South Coast Air Basin, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1,000.00	User Defined Unit	1.00	1,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MWhr)</b>	691.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

- Project Characteristics -
- Land Use - Placeholder. This is a grading phase only.
- Construction Phase - Updated default with project-specific values
- Off-road Equipment - Updated default with project-specific values
- Trips and VMT - Onroad construction emissions calculated externally with EMFAC2021
- Grading - Updated default with project-specific values
- Construction Off-road Equipment Mitigation - Updated default with project-specific values

## PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	70.00
tblGrading	AcresOfGrading	70.00	35.00
tblGrading	MaterialExported	0.00	18,052.00
tblGrading	MaterialImported	0.00	30,126.00
tblLandUse	LandUseSquareFeet	10,000.00	1,000.00
tblLandUse	LotAcreage	0.23	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblTripsAndVMT	HaulingTripNumber	6,022.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00



PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	11/1/2023	2/6/2024	5	70	

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

**Acres of Grading (Grading Phase): 35**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	0	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	2	8.00	97	0.37

**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
Grading	4	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 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					
Fugitive Dust					6.6302	0.0000	6.6302	3.3793	0.0000	3.3793			0.0000			0.0000
Off-Road	1.3709	14.8515	9.2616	0.0214		0.6233	0.6233		0.5734	0.5734		2,071.0089	2,071.0089	0.6698		2,087.7540
<b>Total</b>	<b>1.3709</b>	<b>14.8515</b>	<b>9.2616</b>	<b>0.0214</b>	<b>6.6302</b>	<b>0.6233</b>	<b>7.2535</b>	<b>3.3793</b>	<b>0.5734</b>	<b>3.9527</b>		<b>2,071.0089</b>	<b>2,071.0089</b>	<b>0.6698</b>		<b>2,087.7540</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	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
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
<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>	<b>0.0000</b>

PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					2.5858	0.0000	2.5858	1.3179	0.0000	1.3179			0.0000			0.0000
Off-Road	0.2616	1.1338	11.4926	0.0214		0.0349	0.0349		0.0349	0.0349	0.0000	2,071.0089	2,071.0089	0.6698		2,087.7540
<b>Total</b>	<b>0.2616</b>	<b>1.1338</b>	<b>11.4926</b>	<b>0.0214</b>	<b>2.5858</b>	<b>0.0349</b>	<b>2.6207</b>	<b>1.3179</b>	<b>0.0349</b>	<b>1.3528</b>	<b>0.0000</b>	<b>2,071.0089</b>	<b>2,071.0089</b>	<b>0.6698</b>		<b>2,087.7540</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	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
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
<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>	<b>0.0000</b>

PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 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					
Fugitive Dust					6.6302	0.0000	6.6302	3.3793	0.0000	3.3793			0.0000			0.0000
Off-Road	1.3375	14.1799	9.2587	0.0214		0.5889	0.5889		0.5418	0.5418		2,071.0220	2,071.0220	0.6698		2,087.7672
<b>Total</b>	<b>1.3375</b>	<b>14.1799</b>	<b>9.2587</b>	<b>0.0214</b>	<b>6.6302</b>	<b>0.5889</b>	<b>7.2190</b>	<b>3.3793</b>	<b>0.5418</b>	<b>3.9210</b>		<b>2,071.0220</b>	<b>2,071.0220</b>	<b>0.6698</b>		<b>2,087.7672</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	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
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
<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>	<b>0.0000</b>

PHASE 3A.3 - Make Ready Sitework - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					2.5858	0.0000	2.5858	1.3179	0.0000	1.3179			0.0000			0.0000
Off-Road	0.2616	1.1338	11.4926	0.0214		0.0349	0.0349		0.0349	0.0349	0.0000	2,071.0220	2,071.0220	0.6698		2,087.7672
<b>Total</b>	<b>0.2616</b>	<b>1.1338</b>	<b>11.4926</b>	<b>0.0214</b>	<b>2.5858</b>	<b>0.0349</b>	<b>2.6207</b>	<b>1.3179</b>	<b>0.0349</b>	<b>1.3528</b>	<b>0.0000</b>	<b>2,071.0220</b>	<b>2,071.0220</b>	<b>0.6698</b>		<b>2,087.7672</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	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
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
<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>	<b>0.0000</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 3B.1 - IPT & SE Connector - BC,AC,P**  
**South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	501.00	1000sqft	11.50	501,000.00	0
General Light Industry	10.00	1000sqft	0.23	10,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11	<b>Operational Year</b>	2027		
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MWhr)</b>	691.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

- Project Characteristics -
- Land Use -
- Construction Phase - Updated defaults with project-specific values
- Off-road Equipment -
- Off-road Equipment - Updated defaults with project-specific values
- Off-road Equipment - Updated defaults with project-specific values
- Trips and VMT - Onroad construction mobile emissions calculated externally using EMFAC2021
- Construction Off-road Equipment Mitigation - Updated defaults with project-specific values

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	154.00
tblConstructionPhase	NumDays	300.00	827.00
tblConstructionPhase	NumDays	20.00	66.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblTripsAndVMT	VendorTripNumber	84.00	0.00
tblTripsAndVMT	WorkerTripNumber	165.00	0.00
tblTripsAndVMT	WorkerTripNumber	33.00	0.00
tblTripsAndVMT	WorkerTripNumber	23.00	0.00



PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	11/1/2023	12/31/2026	5	827	
2	Architectural Coating	Architectural Coating	6/1/2026	12/31/2026	5	154	
3	Paving	Paving	10/1/2026	12/31/2026	5	66	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 766,500; Non-Residential Outdoor: 255,500; Striped Parking Area: 0

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Rubber Tired Loaders	1	8.00	203	0.36
Building Construction	Tractors/Loaders/Backhoes	8	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Forklifts	1	8.00	89	0.20
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Trenchers	2	8.00	78	0.50
Paving	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

**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
Building Construction	18	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 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	3.4246	29.7372	32.4923	0.0568		1.3713	1.3713		1.2899	1.2899		5,363.5533	5,363.5533	1.4035		5,398.6394
<b>Total</b>	<b>3.4246</b>	<b>29.7372</b>	<b>32.4923</b>	<b>0.0568</b>		<b>1.3713</b>	<b>1.3713</b>		<b>1.2899</b>	<b>1.2899</b>		<b>5,363.5533</b>	<b>5,363.5533</b>	<b>1.4035</b>		<b>5,398.6394</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	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
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
<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>	<b>0.0000</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	1.3476	6.7930	36.0222	0.0568		0.2433	0.2433		0.2433	0.2433	0.0000	5,363.5532	5,363.5532	1.4035		5,398.6394
<b>Total</b>	<b>1.3476</b>	<b>6.7930</b>	<b>36.0222</b>	<b>0.0568</b>		<b>0.2433</b>	<b>0.2433</b>		<b>0.2433</b>	<b>0.2433</b>	<b>0.0000</b>	<b>5,363.5532</b>	<b>5,363.5532</b>	<b>1.4035</b>		<b>5,398.6394</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.2 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	3.2200	27.7574	32.3477	0.0568		1.2052	1.2052		1.1331	1.1331		5,364.8171	5,364.8171	1.3968		5,399.7379
<b>Total</b>	<b>3.2200</b>	<b>27.7574</b>	<b>32.3477</b>	<b>0.0568</b>		<b>1.2052</b>	<b>1.2052</b>		<b>1.1331</b>	<b>1.1331</b>		<b>5,364.8171</b>	<b>5,364.8171</b>	<b>1.3968</b>		<b>5,399.7379</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	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
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
<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>	<b>0.0000</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	1.2917	6.6736	35.9795	0.0568		0.2203	0.2203		0.2203	0.2203	0.0000	5,364.8171	5,364.8171	1.3968		5,399.7379
<b>Total</b>	<b>1.2917</b>	<b>6.6736</b>	<b>35.9795</b>	<b>0.0568</b>		<b>0.2203</b>	<b>0.2203</b>		<b>0.2203</b>	<b>0.2203</b>	<b>0.0000</b>	<b>5,364.8171</b>	<b>5,364.8171</b>	<b>1.3968</b>		<b>5,399.7379</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	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
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
<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>	<b>0.0000</b>

**3.2 Building Construction - 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	2.9897	25.4662	32.1648	0.0569		1.0244	1.0244		0.9633	0.9633		5,366.9817	5,366.9817	1.3918		5,401.7775
<b>Total</b>	<b>2.9897</b>	<b>25.4662</b>	<b>32.1648</b>	<b>0.0569</b>		<b>1.0244</b>	<b>1.0244</b>		<b>0.9633</b>	<b>0.9633</b>		<b>5,366.9817</b>	<b>5,366.9817</b>	<b>1.3918</b>		<b>5,401.7775</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	1.2435	6.5575	35.9434	0.0569		0.2006	0.2006		0.2006	0.2006	0.0000	5,366.9817	5,366.9817	1.3918		5,401.7775
<b>Total</b>	<b>1.2435</b>	<b>6.5575</b>	<b>35.9434</b>	<b>0.0569</b>		<b>0.2006</b>	<b>0.2006</b>		<b>0.2006</b>	<b>0.2006</b>	<b>0.0000</b>	<b>5,366.9817</b>	<b>5,366.9817</b>	<b>1.3918</b>		<b>5,401.7775</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	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
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
<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>	<b>0.0000</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**3.2 Building Construction - 2026**

**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	2.9897	25.4662	32.1648	0.0569		1.0244	1.0244		0.9633	0.9633		5,366.9817	5,366.9817	1.3918		5,401.7775
<b>Total</b>	<b>2.9897</b>	<b>25.4662</b>	<b>32.1648</b>	<b>0.0569</b>		<b>1.0244</b>	<b>1.0244</b>		<b>0.9633</b>	<b>0.9633</b>		<b>5,366.9817</b>	<b>5,366.9817</b>	<b>1.3918</b>		<b>5,401.7775</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	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
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
<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>	<b>0.0000</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	1.2435	6.5575	35.9434	0.0569		0.2006	0.2006		0.2006	0.2006	0.0000	5,366.9817	5,366.9817	1.3918		5,401.7775
<b>Total</b>	<b>1.2435</b>	<b>6.5575</b>	<b>35.9434</b>	<b>0.0569</b>		<b>0.2006</b>	<b>0.2006</b>		<b>0.2006</b>	<b>0.2006</b>	<b>0.0000</b>	<b>5,366.9817</b>	<b>5,366.9817</b>	<b>1.3918</b>		<b>5,401.7775</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.3 Architectural Coating - 2026**

**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	30.7596					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>30.9304</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</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	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
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
<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>	<b>0.0000</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	30.7596					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>30.7893</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</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	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
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
<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>	<b>0.0000</b>

**3.4 Paving - 2026**

**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	1.5415	13.7932	17.0836	0.0245		0.7344	0.7344		0.6801	0.6801		2,313.2062	2,313.2062	0.6897		2,330.4476
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.5415</b>	<b>13.7932</b>	<b>17.0836</b>	<b>0.0245</b>		<b>0.7344</b>	<b>0.7344</b>		<b>0.6801</b>	<b>0.6801</b>		<b>2,313.2062</b>	<b>2,313.2062</b>	<b>0.6897</b>		<b>2,330.4476</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.5383	2.8360	17.9806	0.0245		0.0898	0.0898		0.0898	0.0898	0.0000	2,313.2061	2,313.2061	0.6897		2,330.4476
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.5383</b>	<b>2.8360</b>	<b>17.9806</b>	<b>0.0245</b>		<b>0.0898</b>	<b>0.0898</b>		<b>0.0898</b>	<b>0.0898</b>	<b>0.0000</b>	<b>2,313.2061</b>	<b>2,313.2061</b>	<b>0.6897</b>		<b>2,330.4476</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	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
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
<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>	<b>0.0000</b>

PHASE 3B.1 - Warehouse - BC only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 3B.1 - Warehouse - BC only**  
**South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	11.00	1000sqft	0.25	11,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2026
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MWhr)</b>	691.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

- Project Characteristics -
- Land Use -
- Construction Phase - Updated defaults with project-specific values
- Off-road Equipment - Updated defaults with project-specific values
- Trips and VMT - Onroad construction mobile emissions calculated externally with EMFAC2021
- Construction Off-road Equipment Mitigation - Updated defaults with project-specific values

PHASE 3B.1 - Warehouse - BC only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	100.00	138.00
tblConstructionPhase	PhaseEndDate	8/28/2026	10/2/2026
tblConstructionPhase	PhaseStartDate	4/11/2026	3/25/2026
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	4.00	7.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	VendorTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00



PHASE 3B.1 - Warehouse - BC only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/25/2026	10/2/2026	5	138	

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

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

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Welders	2	8.00	46	0.45
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37

**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
Building Construction	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

PHASE 3B.1 - Warehouse - BC only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Building Construction - 2026**

**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	1.2053	9.6536	11.6942	0.0204		0.3765	0.3765		0.3584	0.3584		1,883.3042	1,883.3042	0.4134			1,893.6398
<b>Total</b>	<b>1.2053</b>	<b>9.6536</b>	<b>11.6942</b>	<b>0.0204</b>		<b>0.3765</b>	<b>0.3765</b>		<b>0.3584</b>	<b>0.3584</b>		<b>1,883.3042</b>	<b>1,883.3042</b>	<b>0.4134</b>			<b>1,893.6398</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	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
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
<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>	<b>0.0000</b>

PHASE 3B.1 - Warehouse - BC only - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.6172	3.4537	12.7050	0.0204		0.1055	0.1055		0.1055	0.1055	0.0000	1,883.3042	1,883.3042	0.4134		1,893.6398
<b>Total</b>	<b>0.6172</b>	<b>3.4537</b>	<b>12.7050</b>	<b>0.0204</b>		<b>0.1055</b>	<b>0.1055</b>		<b>0.1055</b>	<b>0.1055</b>	<b>0.0000</b>	<b>1,883.3042</b>	<b>1,883.3042</b>	<b>0.4134</b>		<b>1,893.6398</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	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
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
<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>	<b>0.0000</b>

PHASE 3B.1 - Warehouse - BC only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 3B.1 - Warehouse - BC only**

**South Coast Air Basin, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	11.00	1000sqft	0.25	11,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2026
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MWhr)</b>	691.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

Project Characteristics -

Land Use -

Construction Phase - Updated defaults with project-specific values

Off-road Equipment - Updated defaults with project-specific values

Trips and VMT - Onroad construction mobile emissions calculated externally with EMFAC2021

Construction Off-road Equipment Mitigation - Updated defaults with project-specific values

## PHASE 3B.1 - Warehouse - BC only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	100.00	138.00
tblConstructionPhase	PhaseEndDate	8/28/2026	10/2/2026
tblConstructionPhase	PhaseStartDate	4/11/2026	3/25/2026
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	4.00	7.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	VendorTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00



PHASE 3B.1 - Warehouse - BC only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/25/2026	10/2/2026	5	138	

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

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

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating –**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Welders	2	8.00	46	0.45
Building Construction	Air Compressors	1	8.00	78	0.48
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37

**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
Building Construction	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

PHASE 3B.1 - Warehouse - BC only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Building Construction - 2026**

**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	1.2053	9.6536	11.6942	0.0204		0.3765	0.3765		0.3584	0.3584		1,883.3042	1,883.3042	0.4134		1,893.6398
<b>Total</b>	<b>1.2053</b>	<b>9.6536</b>	<b>11.6942</b>	<b>0.0204</b>		<b>0.3765</b>	<b>0.3765</b>		<b>0.3584</b>	<b>0.3584</b>		<b>1,883.3042</b>	<b>1,883.3042</b>	<b>0.4134</b>		<b>1,893.6398</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	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
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
<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>	<b>0.0000</b>

PHASE 3B.1 - Warehouse - BC only - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.6172	3.4537	12.7050	0.0204		0.1055	0.1055		0.1055	0.1055	0.0000	1,883.3042	1,883.3042	0.4134		1,893.6398
<b>Total</b>	<b>0.6172</b>	<b>3.4537</b>	<b>12.7050</b>	<b>0.0204</b>		<b>0.1055</b>	<b>0.1055</b>		<b>0.1055</b>	<b>0.1055</b>	<b>0.0000</b>	<b>1,883.3042</b>	<b>1,883.3042</b>	<b>0.4134</b>		<b>1,893.6398</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	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
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
<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>	<b>0.0000</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**PHASE 3B.1 - IPT & SE Connector - BC,AC,P  
South Coast Air Basin, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hospital	501.00	1000sqft	11.50	501,000.00	0
General Light Industry	10.00	1000sqft	0.23	10,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11	<b>Operational Year</b>		2027	
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MW hr)</b>	691.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

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

- Project Characteristics -
- Land Use -
- Construction Phase - Updated defaults with project-specific values
- Off-road Equipment -
- Off-road Equipment - Updated defaults with project-specific values
- Off-road Equipment - Updated defaults with project-specific values
- Trips and VMT - Onroad construction mobile emissions calculated externally using EMFAC2021
- Construction Off-road Equipment Mitigation - Updated defaults with project-specific values

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	154.00
tblConstructionPhase	NumDays	300.00	827.00
tblConstructionPhase	NumDays	20.00	66.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblTripsAndVMT	VendorTripNumber	84.00	0.00
tblTripsAndVMT	WorkerTripNumber	165.00	0.00
tblTripsAndVMT	WorkerTripNumber	33.00	0.00
tblTripsAndVMT	WorkerTripNumber	23.00	0.00



PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	11/1/2023	12/31/2026	5	827	
2	Architectural Coating	Architectural Coating	6/1/2026	12/31/2026	5	154	
3	Paving	Paving	10/1/2026	12/31/2026	5	66	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 766,500; Non-Residential Outdoor: 255,500; Striped Parking Area: 0 (Architectural)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Rubber Tired Loaders	1	8.00	203	0.36
Building Construction	Tractors/Loaders/Backhoes	8	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Forklifts	1	8.00	89	0.20
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Trenchers	2	8.00	78	0.50
Paving	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

**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
Building Construction	18	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 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	3.4246	29.7372	32.4923	0.0568		1.3713	1.3713		1.2899	1.2899		5,363.5533	5,363.5533	1.4035		5,398.6394
<b>Total</b>	<b>3.4246</b>	<b>29.7372</b>	<b>32.4923</b>	<b>0.0568</b>		<b>1.3713</b>	<b>1.3713</b>		<b>1.2899</b>	<b>1.2899</b>		<b>5,363.5533</b>	<b>5,363.5533</b>	<b>1.4035</b>		<b>5,398.6394</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	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
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
<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>	<b>0.0000</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	1.3476	6.7930	36.0222	0.0568		0.2433	0.2433		0.2433	0.2433	0.0000	5,363.5532	5,363.5532	1.4035		5,398.6394
<b>Total</b>	<b>1.3476</b>	<b>6.7930</b>	<b>36.0222</b>	<b>0.0568</b>		<b>0.2433</b>	<b>0.2433</b>		<b>0.2433</b>	<b>0.2433</b>	<b>0.0000</b>	<b>5,363.5532</b>	<b>5,363.5532</b>	<b>1.4035</b>		<b>5,398.6394</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.2 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	3.2200	27.7574	32.3477	0.0568		1.2052	1.2052		1.1331	1.1331		5,364.8171	5,364.8171	1.3968		5,399.7379
<b>Total</b>	<b>3.2200</b>	<b>27.7574</b>	<b>32.3477</b>	<b>0.0568</b>		<b>1.2052</b>	<b>1.2052</b>		<b>1.1331</b>	<b>1.1331</b>		<b>5,364.8171</b>	<b>5,364.8171</b>	<b>1.3968</b>		<b>5,399.7379</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	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
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
<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>	<b>0.0000</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	1.2917	6.6736	35.9795	0.0568		0.2203	0.2203		0.2203	0.2203	0.0000	5,364.8171	5,364.8171	1.3968		5,399.7379
<b>Total</b>	<b>1.2917</b>	<b>6.6736</b>	<b>35.9795</b>	<b>0.0568</b>		<b>0.2203</b>	<b>0.2203</b>		<b>0.2203</b>	<b>0.2203</b>	<b>0.0000</b>	<b>5,364.8171</b>	<b>5,364.8171</b>	<b>1.3968</b>		<b>5,399.7379</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	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
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
<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>	<b>0.0000</b>

**3.2 Building Construction - 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	2.9897	25.4662	32.1648	0.0569		1.0244	1.0244		0.9633	0.9633		5,366.9817	5,366.9817	1.3918		5,401.7775
<b>Total</b>	<b>2.9897</b>	<b>25.4662</b>	<b>32.1648</b>	<b>0.0569</b>		<b>1.0244</b>	<b>1.0244</b>		<b>0.9633</b>	<b>0.9633</b>		<b>5,366.9817</b>	<b>5,366.9817</b>	<b>1.3918</b>		<b>5,401.7775</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	1.2435	6.5575	35.9434	0.0569		0.2006	0.2006		0.2006	0.2006	0.0000	5,366.9817	5,366.9817	1.3918		5,401.7775
<b>Total</b>	<b>1.2435</b>	<b>6.5575</b>	<b>35.9434</b>	<b>0.0569</b>		<b>0.2006</b>	<b>0.2006</b>		<b>0.2006</b>	<b>0.2006</b>	<b>0.0000</b>	<b>5,366.9817</b>	<b>5,366.9817</b>	<b>1.3918</b>		<b>5,401.7775</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	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
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
<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>	<b>0.0000</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Building Construction - 2026**

**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	2.9897	25.4662	32.1648	0.0569		1.0244	1.0244		0.9633	0.9633		5,366.9817	5,366.9817	1.3918		5,401.7775
<b>Total</b>	<b>2.9897</b>	<b>25.4662</b>	<b>32.1648</b>	<b>0.0569</b>		<b>1.0244</b>	<b>1.0244</b>		<b>0.9633</b>	<b>0.9633</b>		<b>5,366.9817</b>	<b>5,366.9817</b>	<b>1.3918</b>		<b>5,401.7775</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	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
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
<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>	<b>0.0000</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	1.2435	6.5575	35.9434	0.0569		0.2006	0.2006		0.2006	0.2006	0.0000	5,366.9817	5,366.9817	1.3918		5,401.7775
<b>Total</b>	<b>1.2435</b>	<b>6.5575</b>	<b>35.9434</b>	<b>0.0569</b>		<b>0.2006</b>	<b>0.2006</b>		<b>0.2006</b>	<b>0.2006</b>	<b>0.0000</b>	<b>5,366.9817</b>	<b>5,366.9817</b>	<b>1.3918</b>		<b>5,401.7775</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.3 Architectural Coating - 2026**

**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	30.7596					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>30.9304</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	30.7596					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>30.7893</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</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	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
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
<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>	<b>0.0000</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Paving - 2026**

**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	1.5415	13.7932	17.0836	0.0245		0.7344	0.7344		0.6801	0.6801		2,313.2062	2,313.2062	0.6897		2,330.4476
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.5415</b>	<b>13.7932</b>	<b>17.0836</b>	<b>0.0245</b>		<b>0.7344</b>	<b>0.7344</b>		<b>0.6801</b>	<b>0.6801</b>		<b>2,313.2062</b>	<b>2,313.2062</b>	<b>0.6897</b>		<b>2,330.4476</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	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
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
<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>	<b>0.0000</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	0.5383	2.8360	17.9806	0.0245		0.0898	0.0898		0.0898	0.0898	0.0000	2,313.2061	2,313.2061	0.6897		2,330.4476
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.5383</b>	<b>2.8360</b>	<b>17.9806</b>	<b>0.0245</b>		<b>0.0898</b>	<b>0.0898</b>		<b>0.0898</b>	<b>0.0898</b>	<b>0.0000</b>	<b>2,313.2061</b>	<b>2,313.2061</b>	<b>0.6897</b>		<b>2,330.4476</b>

PHASE 3B.1 - IPT & SE Connector - BC,AC,P - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Harbor UCLA Bioscience - Cnst  
South Coast Air Basin, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	250.00	1000sqft	5.74	250,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2027
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MW hr)</b>	691.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

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

- Project Characteristics -
- Land Use -
- Construction Phase - Updated defaults with project-specific values
- Off-road Equipment - Updated defaults with project-specific values
- Grading - Updated defaults with project-specific values
- Trips and VMT - Onroad construction mobile emissions calculated externally to account for EMFAC2021
- Vehicle Trips - Operational mobile emissions not calculated in CalEEMod
- Construction Off-road Equipment Mitigation - Updated defaults with project-specific values
- Off-road Equipment - Updated defaults with project-specific values
- Off-road Equipment - Updated defaults with project-specific values
- Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	72.00
tblConstructionPhase	NumDays	230.00	354.00
tblConstructionPhase	NumDays	20.00	718.00
tblConstructionPhase	NumDays	20.00	72.00
tblConstructionPhase	PhaseEndDate	10/6/2025	10/8/2026
tblConstructionPhase	PhaseEndDate	8/11/2025	10/8/2026
tblConstructionPhase	PhaseEndDate	9/23/2024	4/15/2027
tblConstructionPhase	PhaseEndDate	9/8/2025	10/8/2026
tblConstructionPhase	PhaseStartDate	9/9/2025	7/1/2026
tblConstructionPhase	PhaseStartDate	9/24/2024	6/2/2025
tblConstructionPhase	PhaseStartDate	8/27/2024	7/16/2024
tblConstructionPhase	PhaseStartDate	8/12/2025	7/1/2026
tblGrading	AcresOfGrading	359.00	20.00
tblGrading	MaterialExported	0.00	37,279.00
tblGrading	MaterialImported	0.00	4.00
tblGrading	MaterialSiltContent	6.90	4.30
tblGrading	MeanVehicleSpeed	7.10	40.00
tblOffRoadEquipment	HorsePower	203.00	247.00
tblOffRoadEquipment	LoadFactor	0.36	0.40
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	LoadFactor	0.37	0.37

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	HaulingTripNumber	4,660.00	0.00
tblTripsAndVMT	VendorTripNumber	41.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	80.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	16.00	0.00
tblVehicleTrips	ST_TR	8.57	0.00
tblVehicleTrips	SU_TR	1.42	0.00
tblVehicleTrips	WD_TR	34.80	0.00

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					
2024	1.3667	13.2355	12.7756	0.0283	0.9435	0.5194	1.4629	0.2412	0.4844	0.7256	0.0000	2,730.0736	2,730.0736	0.7827	0.0000	2,749.6417
2025	2.3957	21.4371	25.2312	0.0496	0.9435	0.8389	1.7823	0.2412	0.7860	1.0272	0.0000	4,743.4592	4,743.4592	1.2849	0.0000	4,775.5829
2026	35.4850	29.5780	36.2357	0.0658	0.9435	1.2764	2.2199	0.2412	1.1926	1.4338	0.0000	6,303.0997	6,303.0997	1.7137	0.0000	6,345.9420
2027	1.2407	11.4726	12.6614	0.0283	0.9435	0.4256	1.3691	0.2412	0.3971	0.6383	0.0000	2,730.8170	2,730.8170	0.7823	0.0000	2,750.3746
<b>Maximum</b>	<b>35.4850</b>	<b>29.5780</b>	<b>36.2357</b>	<b>0.0658</b>	<b>0.9435</b>	<b>1.2764</b>	<b>2.2199</b>	<b>0.2412</b>	<b>1.1926</b>	<b>1.4338</b>	<b>0.0000</b>	<b>6,303.0997</b>	<b>6,303.0997</b>	<b>1.7137</b>	<b>0.0000</b>	<b>6,345.9420</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					
2024	0.3380	1.4647	16.2329	0.0283	0.3680	0.0451	0.4130	0.0941	0.0451	0.1391	0.0000	2,730.0736	2,730.0736	0.7827	0.0000	2,749.6417
2025	0.7780	3.7609	29.9116	0.0496	0.3680	0.1153	0.4833	0.0941	0.1153	0.2094	0.0000	4,743.4592	4,743.4592	1.2849	0.0000	4,775.5829
2026	33.1570	4.5906	41.7191	0.0658	0.3680	0.1409	0.5088	0.0941	0.1409	0.2349	0.0000	6,303.0997	6,303.0997	1.7137	0.0000	6,345.9420
2027	0.3380	1.4647	16.2329	0.0283	0.3680	0.0451	0.4130	0.0941	0.0451	0.1391	0.0000	2,730.8170	2,730.8170	0.7823	0.0000	2,750.3746
<b>Maximum</b>	<b>33.1570</b>	<b>4.5906</b>	<b>41.7191</b>	<b>0.0658</b>	<b>0.3680</b>	<b>0.1409</b>	<b>0.5088</b>	<b>0.0941</b>	<b>0.1409</b>	<b>0.2349</b>	<b>0.0000</b>	<b>6,303.0997</b>	<b>6,303.0997</b>	<b>1.7137</b>	<b>0.0000</b>	<b>6,345.9420</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>14.52</b>	<b>85.10</b>	<b>-19.78</b>	<b>0.00</b>	<b>61.00</b>	<b>88.68</b>	<b>73.40</b>	<b>61.00</b>	<b>87.89</b>	<b>81.11</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5873	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0547	0.0547	1.4000e-004		0.0583
Energy	0.0762	0.6923	0.5816	4.1500e-003		0.0526	0.0526		0.0526	0.0526		830.7816	830.7816	0.0159	0.0152	835.7186
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.6634</b>	<b>0.6926</b>	<b>0.6070</b>	<b>4.1500e-003</b>	<b>0.0000</b>	<b>0.0527</b>	<b>0.0527</b>	<b>0.0000</b>	<b>0.0527</b>	<b>0.0527</b>		<b>830.8363</b>	<b>830.8363</b>	<b>0.0161</b>	<b>0.0152</b>	<b>835.7768</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5873	2.3000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0547	0.0547	1.4000e-004		0.0583
Energy	0.0762	0.6923	0.5816	4.1500e-003		0.0526	0.0526		0.0526	0.0526		830.7816	830.7816	0.0159	0.0152	835.7186
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.6634</b>	<b>0.6926</b>	<b>0.6070</b>	<b>4.1500e-003</b>	<b>0.0000</b>	<b>0.0527</b>	<b>0.0527</b>	<b>0.0000</b>	<b>0.0527</b>	<b>0.0527</b>		<b>830.8363</b>	<b>830.8363</b>	<b>0.0161</b>	<b>0.0152</b>	<b>835.7768</b>

	ROG	NOx	CO	SO2	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	7/16/2024	4/15/2027	5	718	
2	Building Construction	Building Construction	6/2/2025	10/8/2026	5	354	
3	Paving	Paving	7/1/2026	10/8/2026	5	72	
4	Architectural Coating	Architectural Coating	7/1/2026	10/8/2026	5	72	

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

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

**Acres of Grading (Grading Phase): 20**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 375,000; Non-Residential Outdoor: 125,000; Striped Parking Area: 0 (Architectural Coat**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Rubber Tired Loaders	1	8.00	247	0.40
Building Construction	Cranes	1	7.00	231	0.29
Grading	Air Compressors	1	8.00	78	0.48
Grading	Excavators	0	8.00	158	0.38
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Building Construction	Air Compressors	1	8.00	78	0.48
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Paving	Trenchers	1	8.00	78	0.50
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

**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
Grading	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Grading - 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					
Fugitive Dust					0.9435	0.0000	0.9435	0.2412	0.0000	0.2412			0.0000			0.0000
Off-Road	1.3667	13.2355	12.7756	0.0283		0.5194	0.5194		0.4844	0.4844		2,730.0736	2,730.0736	0.7827		2,749.6417
<b>Total</b>	<b>1.3667</b>	<b>13.2355</b>	<b>12.7756</b>	<b>0.0283</b>	<b>0.9435</b>	<b>0.5194</b>	<b>1.4629</b>	<b>0.2412</b>	<b>0.4844</b>	<b>0.7256</b>		<b>2,730.0736</b>	<b>2,730.0736</b>	<b>0.7827</b>		<b>2,749.6417</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					0.3680	0.0000	0.3680	0.0941	0.0000	0.0941			0.0000			0.0000
Off-Road	0.3380	1.4647	16.2329	0.0283		0.0451	0.0451		0.0451	0.0451	0.0000	2,730.0736	2,730.0736	0.7827		2,749.6417
<b>Total</b>	<b>0.3380</b>	<b>1.4647</b>	<b>16.2329</b>	<b>0.0283</b>	<b>0.3680</b>	<b>0.0451</b>	<b>0.4130</b>	<b>0.0941</b>	<b>0.0451</b>	<b>0.1391</b>	<b>0.0000</b>	<b>2,730.0736</b>	<b>2,730.0736</b>	<b>0.7827</b>		<b>2,749.6417</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 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					
Fugitive Dust					0.9435	0.0000	0.9435	0.2412	0.0000	0.2412			0.0000			0.0000
Off-Road	1.2407	11.4726	12.6614	0.0283		0.4256	0.4256		0.3971	0.3971		2,730.8170	2,730.8170	0.7823		2,750.3746
<b>Total</b>	<b>1.2407</b>	<b>11.4726</b>	<b>12.6614</b>	<b>0.0283</b>	<b>0.9435</b>	<b>0.4256</b>	<b>1.3691</b>	<b>0.2412</b>	<b>0.3971</b>	<b>0.6383</b>		<b>2,730.8170</b>	<b>2,730.8170</b>	<b>0.7823</b>		<b>2,750.3746</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					0.3680	0.0000	0.3680	0.0941	0.0000	0.0941			0.0000			0.0000
Off-Road	0.3380	1.4647	16.2329	0.0283		0.0451	0.0451		0.0451	0.0451	0.0000	2,730.8170	2,730.8170	0.7823		2,750.3746
<b>Total</b>	<b>0.3380</b>	<b>1.4647</b>	<b>16.2329</b>	<b>0.0283</b>	<b>0.3680</b>	<b>0.0451</b>	<b>0.4130</b>	<b>0.0941</b>	<b>0.0451</b>	<b>0.1391</b>	<b>0.0000</b>	<b>2,730.8170</b>	<b>2,730.8170</b>	<b>0.7823</b>		<b>2,750.3746</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 2026**

**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					0.9435	0.0000	0.9435	0.2412	0.0000	0.2412			0.0000			0.0000
Off-Road	1.2407	11.4726	12.6614	0.0283		0.4256	0.4256		0.3971	0.3971		2,730.8170	2,730.8170	0.7823		2,750.3746
<b>Total</b>	<b>1.2407</b>	<b>11.4726</b>	<b>12.6614</b>	<b>0.0283</b>	<b>0.9435</b>	<b>0.4256</b>	<b>1.3691</b>	<b>0.2412</b>	<b>0.3971</b>	<b>0.6383</b>		<b>2,730.8170</b>	<b>2,730.8170</b>	<b>0.7823</b>		<b>2,750.3746</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	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
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
<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>	<b>0.0000</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					0.3680	0.0000	0.3680	0.0941	0.0000	0.0941			0.0000			0.0000
Off-Road	0.3380	1.4647	16.2329	0.0283		0.0451	0.0451		0.0451	0.0451	0.0000	2,730.8170	2,730.8170	0.7823		2,750.3746
<b>Total</b>	<b>0.3380</b>	<b>1.4647</b>	<b>16.2329</b>	<b>0.0283</b>	<b>0.3680</b>	<b>0.0451</b>	<b>0.4130</b>	<b>0.0941</b>	<b>0.0451</b>	<b>0.1391</b>	<b>0.0000</b>	<b>2,730.8170</b>	<b>2,730.8170</b>	<b>0.7823</b>		<b>2,750.3746</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Grading - 2027**

**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					0.9435	0.0000	0.9435	0.2412	0.0000	0.2412			0.0000			0.0000
Off-Road	1.2407	11.4726	12.6614	0.0283		0.4256	0.4256		0.3971	0.3971		2,730.8170	2,730.8170	0.7823		2,750.3746
<b>Total</b>	<b>1.2407</b>	<b>11.4726</b>	<b>12.6614</b>	<b>0.0283</b>	<b>0.9435</b>	<b>0.4256</b>	<b>1.3691</b>	<b>0.2412</b>	<b>0.3971</b>	<b>0.6383</b>		<b>2,730.8170</b>	<b>2,730.8170</b>	<b>0.7823</b>		<b>2,750.3746</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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					0.3680	0.0000	0.3680	0.0941	0.0000	0.0941			0.0000			0.0000
Off-Road	0.3380	1.4647	16.2329	0.0283		0.0451	0.0451		0.0451	0.0451	0.0000	2,730.8170	2,730.8170	0.7823		2,750.3746
<b>Total</b>	<b>0.3380</b>	<b>1.4647</b>	<b>16.2329</b>	<b>0.0283</b>	<b>0.3680</b>	<b>0.0451</b>	<b>0.4130</b>	<b>0.0941</b>	<b>0.0451</b>	<b>0.1391</b>	<b>0.0000</b>	<b>2,730.8170</b>	<b>2,730.8170</b>	<b>0.7823</b>		<b>2,750.3746</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 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	1.1550	9.9645	12.5698	0.0213		0.4132	0.4132		0.3889	0.3889		2,012.6422	2,012.6422	0.5026		2,025.2083
<b>Total</b>	<b>1.1550</b>	<b>9.9645</b>	<b>12.5698</b>	<b>0.0213</b>		<b>0.4132</b>	<b>0.4132</b>		<b>0.3889</b>	<b>0.3889</b>		<b>2,012.6422</b>	<b>2,012.6422</b>	<b>0.5026</b>		<b>2,025.2083</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.4400	2.2962	13.6788	0.0213		0.0703	0.0703		0.0703	0.0703	0.0000	2,012.6422	2,012.6422	0.5026		2,025.2083
<b>Total</b>	<b>0.4400</b>	<b>2.2962</b>	<b>13.6788</b>	<b>0.0213</b>		<b>0.0703</b>	<b>0.0703</b>		<b>0.0703</b>	<b>0.0703</b>	<b>0.0000</b>	<b>2,012.6422</b>	<b>2,012.6422</b>	<b>0.5026</b>		<b>2,025.2083</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Building Construction - 2026**

**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	1.1550	9.9645	12.5698	0.0213		0.4132	0.4132		0.3889	0.3889		2,012.6422	2,012.6422	0.5026		2,025.2083
<b>Total</b>	<b>1.1550</b>	<b>9.9645</b>	<b>12.5698</b>	<b>0.0213</b>		<b>0.4132</b>	<b>0.4132</b>		<b>0.3889</b>	<b>0.3889</b>		<b>2,012.6422</b>	<b>2,012.6422</b>	<b>0.5026</b>		<b>2,025.2083</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.4400	2.2962	13.6788	0.0213		0.0703	0.0703		0.0703	0.0703	0.0000	2,012.6422	2,012.6422	0.5026		2,025.2083
<b>Total</b>	<b>0.4400</b>	<b>2.2962</b>	<b>13.6788</b>	<b>0.0213</b>		<b>0.0703</b>	<b>0.0703</b>		<b>0.0703</b>	<b>0.0703</b>	<b>0.0000</b>	<b>2,012.6422</b>	<b>2,012.6422</b>	<b>0.5026</b>		<b>2,025.2083</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.4 Paving - 2026**

**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	0.7309	6.9954	9.1953	0.0132		0.3860	0.3860		0.3551	0.3551		1,278.1925	1,278.1925	0.4134		1,288.5273
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7309</b>	<b>6.9954</b>	<b>9.1953</b>	<b>0.0132</b>		<b>0.3860</b>	<b>0.3860</b>		<b>0.3551</b>	<b>0.3551</b>		<b>1,278.1925</b>	<b>1,278.1925</b>	<b>0.4134</b>		<b>1,288.5273</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	0.1618	0.7010	9.9751	0.0132		0.0216	0.0216		0.0216	0.0216	0.0000	1,278.1925	1,278.1925	0.4134		1,288.5273
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.1618</b>	<b>0.7010</b>	<b>9.9751</b>	<b>0.0132</b>		<b>0.0216</b>	<b>0.0216</b>		<b>0.0216</b>	<b>0.0216</b>	<b>0.0000</b>	<b>1,278.1925</b>	<b>1,278.1925</b>	<b>0.4134</b>		<b>1,288.5273</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.5 Architectural Coating - 2026**

**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	32.1875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>32.3584</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	32.1875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>32.2172</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</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	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
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
<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>	<b>0.0000</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Harbor UCLA Bioscience - Cnst  
South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	250.00	1000sqft	5.74	250,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	11			<b>Operational Year</b>	2027
<b>Utility Company</b>	Los Angeles Department of Water & Power				
<b>CO2 Intensity (lb/MW hr)</b>	691.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

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

Project Characteristics -

Land Use -

Construction Phase - Updated defaults with project-specific values

Off-road Equipment - Updated defaults with project-specific values

Grading - Updated defaults with project-specific values

Trips and VMT - Onroad construction mobile emissions calculated externally to account for EMFAC2021

Vehicle Trips - Operational mobile emissions not calculated in CalEEMod

Construction Off-road Equipment Mitigation - Updated defaults with project-specific values

Off-road Equipment - Updated defaults with project-specific values

Off-road Equipment - Updated defaults with project-specific values

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	72.00
tblConstructionPhase	NumDays	230.00	354.00
tblConstructionPhase	NumDays	20.00	718.00
tblConstructionPhase	NumDays	20.00	72.00
tblConstructionPhase	PhaseEndDate	10/6/2025	10/8/2026
tblConstructionPhase	PhaseEndDate	8/11/2025	10/8/2026
tblConstructionPhase	PhaseEndDate	9/23/2024	4/15/2027
tblConstructionPhase	PhaseEndDate	9/8/2025	10/8/2026
tblConstructionPhase	PhaseStartDate	9/9/2025	7/1/2026
tblConstructionPhase	PhaseStartDate	9/24/2024	6/2/2025
tblConstructionPhase	PhaseStartDate	8/27/2024	7/16/2024
tblConstructionPhase	PhaseStartDate	8/12/2025	7/1/2026
tblGrading	AcresOfGrading	359.00	20.00
tblGrading	MaterialExported	0.00	37,279.00
tblGrading	MaterialImported	0.00	4.00
tblGrading	MaterialSiltContent	6.90	4.30
tblGrading	MeanVehicleSpeed	7.10	40.00
tblOffRoadEquipment	HorsePower	203.00	247.00
tblOffRoadEquipment	LoadFactor	0.36	0.40
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	LoadFactor	0.37	0.37

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblOffRoadEquipment	OffRoadEquipmentType			Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType			Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType			Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType			Trenchers
tblOffRoadEquipment	OffRoadEquipmentType			Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount		1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount		3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount		1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount		2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount		2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount		2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount		1.00	0.00
tblTripsAndVMT	HaulingTripNumber		4,660.00	0.00
tblTripsAndVMT	VendorTripNumber		41.00	0.00
tblTripsAndVMT	WorkerTripNumber		15.00	0.00
tblTripsAndVMT	WorkerTripNumber		80.00	0.00
tblTripsAndVMT	WorkerTripNumber		10.00	0.00
tblTripsAndVMT	WorkerTripNumber		16.00	0.00
tblVehicleTrips	ST_TR		8.57	0.00
tblVehicleTrips	SU_TR		1.42	0.00
tblVehicleTrips	WD_TR		34.80	0.00

**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					
2024	1.3667	13.2355	12.7756	0.0283	0.9435	0.5194	1.4629	0.2412	0.4844	0.7256	0.0000	2,730.0736	2,730.0736	0.7827	0.0000	2,749.6417
2025	2.3957	21.4371	25.2312	0.0496	0.9435	0.8389	1.7823	0.2412	0.7860	1.0272	0.0000	4,743.4592	4,743.4592	1.2849	0.0000	4,775.5829

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

2026	35.4850	29.5780	36.2357	0.0658	0.9435	1.2764	2.2199	0.2412	1.1926	1.4338	0.0000	6,303.0997	6,303.0997	1.7137	0.0000	6,345.9420
2027	1.2407	11.4726	12.6614	0.0283	0.9435	0.4256	1.3691	0.2412	0.3971	0.6383	0.0000	2,730.8170	2,730.8170	0.7823	0.0000	2,750.3746
<b>Maximum</b>	<b>35.4850</b>	<b>29.5780</b>	<b>36.2357</b>	<b>0.0658</b>	<b>0.9435</b>	<b>1.2764</b>	<b>2.2199</b>	<b>0.2412</b>	<b>1.1926</b>	<b>1.4338</b>	<b>0.0000</b>	<b>6,303.0997</b>	<b>6,303.0997</b>	<b>1.7137</b>	<b>0.0000</b>	<b>6,345.9420</b>



Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	7/16/2024	4/15/2027	5	718	
2	Building Construction	Building Construction	6/2/2025	10/8/2026	5	354	
3	Paving	Paving	7/1/2026	10/8/2026	5	72	
4	Architectural Coating	Architectural Coating	7/1/2026	10/8/2026	5	72	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 20

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 375,000; Non-Residential Outdoor: 125,000; Striped Parking Area: 0 (Architectural Coat

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Rubber Tired Loaders	1	8.00	247	0.40
Building Construction	Cranes	1	7.00	231	0.29
Grading	Air Compressors	1	8.00	78	0.48
Grading	Excavators	0	8.00	158	0.38
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Building Construction	Air Compressors	1	8.00	78	0.48
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Paving	Trenchers	1	8.00	78	0.50
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Trips and VMT - Construction**  
**Mobile Emissions Modeled**  
**Externally**

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
Grading	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

**3.2 Grading - 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					
Fugitive Dust					0.9435	0.0000	0.9435	0.2412	0.0000	0.2412			0.0000			0.0000
Off-Road	1.3667	13.2355	12.7756	0.0283		0.5194	0.5194		0.4844	0.4844		2,730.0736	2,730.0736	0.7827		2,749.6417
<b>Total</b>	<b>1.3667</b>	<b>13.2355</b>	<b>12.7756</b>	<b>0.0283</b>	<b>0.9435</b>	<b>0.5194</b>	<b>1.4629</b>	<b>0.2412</b>	<b>0.4844</b>	<b>0.7256</b>		<b>2,730.0736</b>	<b>2,730.0736</b>	<b>0.7827</b>		<b>2,749.6417</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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					0.3680	0.0000	0.3680	0.0941	0.0000	0.0941			0.0000			0.0000
Off-Road	0.3380	1.4647	16.2329	0.0283		0.0451	0.0451		0.0451	0.0451	0.0000	2,730.0736	2,730.0736	0.7827		2,749.6417
<b>Total</b>	<b>0.3380</b>	<b>1.4647</b>	<b>16.2329</b>	<b>0.0283</b>	<b>0.3680</b>	<b>0.0451</b>	<b>0.4130</b>	<b>0.0941</b>	<b>0.0451</b>	<b>0.1391</b>	<b>0.0000</b>	<b>2,730.0736</b>	<b>2,730.0736</b>	<b>0.7827</b>		<b>2,749.6417</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.2 Grading - 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					
Fugitive Dust					0.9435	0.0000	0.9435	0.2412	0.0000	0.2412			0.0000			0.0000
Off-Road	1.2407	11.4726	12.6614	0.0283		0.4256	0.4256		0.3971	0.3971		2,730.8170	2,730.8170	0.7823		2,750.3746
<b>Total</b>	<b>1.2407</b>	<b>11.4726</b>	<b>12.6614</b>	<b>0.0283</b>	<b>0.9435</b>	<b>0.4256</b>	<b>1.3691</b>	<b>0.2412</b>	<b>0.3971</b>	<b>0.6383</b>		<b>2,730.8170</b>	<b>2,730.8170</b>	<b>0.7823</b>		<b>2,750.3746</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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					0.3680	0.0000	0.3680	0.0941	0.0000	0.0941			0.0000			0.0000
Off-Road	0.3380	1.4647	16.2329	0.0283		0.0451	0.0451		0.0451	0.0451	0.0000	2,730.8170	2,730.8170	0.7823		2,750.3746
<b>Total</b>	<b>0.3380</b>	<b>1.4647</b>	<b>16.2329</b>	<b>0.0283</b>	<b>0.3680</b>	<b>0.0451</b>	<b>0.4130</b>	<b>0.0941</b>	<b>0.0451</b>	<b>0.1391</b>	<b>0.0000</b>	<b>2,730.8170</b>	<b>2,730.8170</b>	<b>0.7823</b>		<b>2,750.3746</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.2 Grading - 2026**

**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					0.9435	0.0000	0.9435	0.2412	0.0000	0.2412			0.0000			0.0000
Off-Road	1.2407	11.4726	12.6614	0.0283		0.4256	0.4256		0.3971	0.3971		2,730.8170	2,730.8170	0.7823		2,750.3746
<b>Total</b>	<b>1.2407</b>	<b>11.4726</b>	<b>12.6614</b>	<b>0.0283</b>	<b>0.9435</b>	<b>0.4256</b>	<b>1.3691</b>	<b>0.2412</b>	<b>0.3971</b>	<b>0.6383</b>		<b>2,730.8170</b>	<b>2,730.8170</b>	<b>0.7823</b>		<b>2,750.3746</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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					0.3680	0.0000	0.3680	0.0941	0.0000	0.0941			0.0000			0.0000
Off-Road	0.3380	1.4647	16.2329	0.0283		0.0451	0.0451		0.0451	0.0451	0.0000	2,730.8170	2,730.8170	0.7823		2,750.3746
<b>Total</b>	<b>0.3380</b>	<b>1.4647</b>	<b>16.2329</b>	<b>0.0283</b>	<b>0.3680</b>	<b>0.0451</b>	<b>0.4130</b>	<b>0.0941</b>	<b>0.0451</b>	<b>0.1391</b>	<b>0.0000</b>	<b>2,730.8170</b>	<b>2,730.8170</b>	<b>0.7823</b>		<b>2,750.3746</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.2 Grading - 2027**

**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					0.9435	0.0000	0.9435	0.2412	0.0000	0.2412			0.0000			0.0000
Off-Road	1.2407	11.4726	12.6614	0.0283		0.4256	0.4256		0.3971	0.3971		2,730.8170	2,730.8170	0.7823		2,750.3746
<b>Total</b>	<b>1.2407</b>	<b>11.4726</b>	<b>12.6614</b>	<b>0.0283</b>	<b>0.9435</b>	<b>0.4256</b>	<b>1.3691</b>	<b>0.2412</b>	<b>0.3971</b>	<b>0.6383</b>		<b>2,730.8170</b>	<b>2,730.8170</b>	<b>0.7823</b>		<b>2,750.3746</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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					0.3680	0.0000	0.3680	0.0941	0.0000	0.0941			0.0000			0.0000
Off-Road	0.3380	1.4647	16.2329	0.0283		0.0451	0.0451		0.0451	0.0451	0.0000	2,730.8170	2,730.8170	0.7823		2,750.3746
<b>Total</b>	<b>0.3380</b>	<b>1.4647</b>	<b>16.2329</b>	<b>0.0283</b>	<b>0.3680</b>	<b>0.0451</b>	<b>0.4130</b>	<b>0.0941</b>	<b>0.0451</b>	<b>0.1391</b>	<b>0.0000</b>	<b>2,730.8170</b>	<b>2,730.8170</b>	<b>0.7823</b>		<b>2,750.3746</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.3 Building Construction - 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	1.1550	9.9645	12.5698	0.0213		0.4132	0.4132		0.3889	0.3889		2,012.6422	2,012.6422	0.5026		2,025.2083
<b>Total</b>	<b>1.1550</b>	<b>9.9645</b>	<b>12.5698</b>	<b>0.0213</b>		<b>0.4132</b>	<b>0.4132</b>		<b>0.3889</b>	<b>0.3889</b>		<b>2,012.6422</b>	<b>2,012.6422</b>	<b>0.5026</b>		<b>2,025.2083</b>

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.4400	2.2962	13.6788	0.0213		0.0703	0.0703		0.0703	0.0703	0.0000	2,012.6422	2,012.6422	0.5026		2,025.2083
<b>Total</b>	<b>0.4400</b>	<b>2.2962</b>	<b>13.6788</b>	<b>0.0213</b>		<b>0.0703</b>	<b>0.0703</b>		<b>0.0703</b>	<b>0.0703</b>	<b>0.0000</b>	<b>2,012.6422</b>	<b>2,012.6422</b>	<b>0.5026</b>		<b>2,025.2083</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.3 Building Construction - 2026**

**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	1.1550	9.9645	12.5698	0.0213		0.4132	0.4132		0.3889	0.3889		2,012.6422	2,012.6422	0.5026		2,025.2083
<b>Total</b>	<b>1.1550</b>	<b>9.9645</b>	<b>12.5698</b>	<b>0.0213</b>		<b>0.4132</b>	<b>0.4132</b>		<b>0.3889</b>	<b>0.3889</b>		<b>2,012.6422</b>	<b>2,012.6422</b>	<b>0.5026</b>		<b>2,025.2083</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.4400	2.2962	13.6788	0.0213		0.0703	0.0703		0.0703	0.0703	0.0000	2,012.6422	2,012.6422	0.5026		2,025.2083
<b>Total</b>	<b>0.4400</b>	<b>2.2962</b>	<b>13.6788</b>	<b>0.0213</b>		<b>0.0703</b>	<b>0.0703</b>		<b>0.0703</b>	<b>0.0703</b>	<b>0.0000</b>	<b>2,012.6422</b>	<b>2,012.6422</b>	<b>0.5026</b>		<b>2,025.2083</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.4 Paving - 2026**

**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	0.7309	6.9954	9.1953	0.0132		0.3860	0.3860		0.3551	0.3551		1,278.1925	1,278.1925	0.4134		1,288.5273
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.7309</b>	<b>6.9954</b>	<b>9.1953</b>	<b>0.0132</b>		<b>0.3860</b>	<b>0.3860</b>		<b>0.3551</b>	<b>0.3551</b>		<b>1,278.1925</b>	<b>1,278.1925</b>	<b>0.4134</b>		<b>1,288.5273</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	0.1618	0.7010	9.9751	0.0132		0.0216	0.0216		0.0216	0.0216	0.0000	1,278.1925	1,278.1925	0.4134		1,288.5273
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.1618</b>	<b>0.7010</b>	<b>9.9751</b>	<b>0.0132</b>		<b>0.0216</b>	<b>0.0216</b>		<b>0.0216</b>	<b>0.0216</b>	<b>0.0000</b>	<b>1,278.1925</b>	<b>1,278.1925</b>	<b>0.4134</b>		<b>1,288.5273</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>

**3.5 Architectural Coating - 2026**

**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	32.1875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>32.3584</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</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	32.1875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
<b>Total</b>	<b>32.2172</b>	<b>0.1288</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>		<b>3.9600e-003</b>	<b>3.9600e-003</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

Harbor UCLA Bioscience - Cnst - South Coast Air Basin, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**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	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
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
<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>	<b>0.0000</b>