(310) 253-5710
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PLANNING DIVISION

9770 CULVER BOULEVARD, CULVER CITY, CALIFORNIA 90232-0507

FINAL MITIGATED NEGATIVE DECLARATION

Project Title and Culver City File No.: 11469 Jefferson Boulevard Project
P2019-0194-SPR
P2019-0194-CUP
P2019-0194-AUP

Project Location: 11469 Jefferson Boulevard, Culver City, CA 90230

Project Sponsor: Jefferson Boulevard Associates, LLC c/o Sandstone Properties, Inc.

Project Description: The Project would redevelop a 33,813 square foot (SF) (0.78-acre) property located in the northwest corner of the intersection at Jefferson Boulevard and Slauson Avenue. The existing single-story commercial (retail/restaurant) building and associated asphalt-paved surface parking lot would be removed as part of the Project. The Project includes the development of a new, five-story, 175-room boutique hotel building with food and beverage amenities and a two level, below-grade parking garage. A pool and roof top bar would be located on the fifth floor. The 111,000 SF building would be up to 56 feet in height (with the elevator shaft reaching 69 feet and 6 inches in height) and surrounded by landscaped areas located on site and within the public right of way. Parking for the proposed uses would be provided on site within a subterranean parking structure that would accommodate a minimum of 138 parking spaces.

Environmental Determination: This is to advise that the City of Culver City, acting as the lead agency, has conducted an Initial Study to determine if the Project may have a significant effect on the environment and is proposing this MITIGATED NEGATIVE DECLARATION based on the following finding:

☐ The Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or

☒ The Initial Study identified potentially significant effects, but:

1. Revisions in the project plans or proposals made by, or agreed to by the applicant before this proposed MITIGATED NEGATIVE DECLARATION AND INITIAL STUDY was released for public review would avoid the effects or mitigate the effects or mitigate the effects to a point where clearly no significant effects would occur, and

2. There is no substantial evidence before the agency that the project as revised may have a significant effect on the environment.

A copy of the Initial Study, and any applicable mitigation measures, and any other material which constitute the record of proceedings upon which the City based its decision to adopt this FINAL MITIGATED NEGATIVE DECLARATION may be obtained at:

City of Culver City, Planning Division
9770 Culver Boulevard, Culver City, CA 90232

www.culvercity.org

Contact: Lisa Edwards, Contract Planner (310) 253-5710 or Lisa.Edwards@culvercity.org

April 2021

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Culver CITY
PLANNING DIVISION

9770 CULVER BOULEVARD, CULVER CITY, CALIFORNIA 90232-0507

INITIAL STUDY

ENVIRONMENTAL CHECKLIST FORM AND ENVIRONMENTAL DETERMINATION

Project Title:	11469 Jefferson Boulevard Project		
City of Culver City Case Nos:	P2019-0194-SPR P2019-0194-CUP P2019-0194-AUP		
Lead Agency Name & Address:	City of Culver City, Planning Division 9770 Culver Boulevard, Culver City, CA 90232		
Contact Person & Phone No.:	Lisa Edwards, Contract Planner (310) 253-5710		
Project Location/Address:	11469 Jefferson Boulevard, Culver City, CA 90230		
Nearest Cross Street:	Jefferson Boulevard and Slauson Avenue	**APN:**	4216-028-023
Project Sponsor's Name & Address:	Jefferson Boulevard Associates, LLC c/o Sandstone Properties, Inc. (the Applicant) 14724 Ventura Boulevard, 3rd Floor Sherman Oaks, California 91403		
General Plan Designation:	General Corridor	**Zoning:**	Commercial General (CG)
Overlay Zone/Special District:	Commercial Zero Setback Overlay Zone		

Project Description and Requested Action: *(Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary)*

The Project would redevelop a 33,813 square foot (SF) (0.78-acre) property located in the northwest corner of the intersection at Jefferson Boulevard and Slauson Avenue. The existing single-story commercial (retail/restaurant) building and associated asphalt-paved surface parking lot would be removed as part of the Project. The Project includes the development of a new, five-story, 175-room boutique hotel building with destination food and beverage amenities and a two level, below-grade parking garage. A pool and roof top bar would be located on the fifth floor. The 111,000 SF building would reach up to 56 feet in height (with the elevator shaft reaching 69 feet and 6 inches in height) and would be surrounded by landscaped areas located on site and within the public right of way. Parking for the proposed uses would be provided on site within a subterranean parking structure that would accommodate a minimum of 138 parking spaces.

Please refer to Attachment A, Project Description, for a detailed discussion of the Project.

Existing Conditions of the Project Site:
The Project Site is currently improved with an approximately 13,000 SF main single-story, wood-framed commercial shopping center which includes both retail and restaurant uses. The remainder of the site consists of an asphalt-paved surface parking lot and ornamental landscaped areas. Ingress/egress to the Project Site is available via a driveway from Jefferson Boulevard and a driveway from Slauson Avenue.

Surrounding Land Uses and Setting: *(Briefly describe the project's surrounding)*
The Project Site is located at the south-end of the commercial corridor that runs along Jefferson Boulevard perpendicular to Interstate 405 (I-405) freeway within the Fox Hills area of Culver City. Downtown Los Angeles is approximately eight (8) miles east of the Project Site. The Project Site is bounded by the intersection at Jefferson Boulevard and Slauson Avenue with commercial uses directly north of the Project Site and a public alley adjacent to the western Project boundary with residential uses just beyond the alley. Commercial uses are also located east and south of the Project Site across Jefferson Boulevard and Slauson Avenue. Both the I-405 and State Route 90 (SR-90) freeways are located less than 400 feet west and south of the Project Site.

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

- City of Culver City construction-related permits (i.e., demolition permit, haul route permit, building permit, grading permit, etc.), as well as Site Plan Review, Conditional Use Permit, Administrative Use Permit, and/or other permits as needed, including, but not limited, permits associated with the sale and consumption of alcoholic beverages and outdoor dining.
- South Coast Air Quality Management District – Construction-related permits, as applicable
- Los Angles Regional Water Quality Control Board – Construction-related permits, as applicable (i.e., Stormwater/Water Quality Mitigation Plan, Dewatering Plan/Permit, Soil Management and Remediation Plan)
- California Department of Toxic Substances Control - Soil Management and Remediation Plan
- California Department of Transportation (Caltrans) – Encroachment Permit
- Other agencies as needed

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Less Than Significant Impact With Mitigation Incorporated" as indicated by the checklist on the following pages:

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

ENVIRONMENTAL DETERMINATION:

On the basis of this initial evaluation:

☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a 'potentially significant impact' or 'potentially significant unless mitigated' impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPO**RT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Michael Allen — 4/21/2021

Michael Allen, Planning Manager, Culver City — Date

PURPOSE OF THE INITIAL STUDY

The Project is analyzed in this Initial Study, in accordance with the California Environmental Quality Act (CEQA), to determine if approval of the Project would have a significant impact on the environment. This Initial Study has been prepared pursuant to the requirements of CEQA, under Public Resources Code 21000-21177, of the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387) and under the guidance of the City of Culver City. The City of Culver City is the Lead Agency under CEQA and is responsible for preparing the Initial Study for the proposed Project.

Environmental Review Process

The Draft MND was circulated for public review from January 21, 2021 to February 19, 2021. A "Notice of Availability & Intent to Adopt a Mitigated Negative Declaration" for the project was mailed at the commencement of the public review period to: owners and occupants within a 500 feet of the Project Site, potentially interested agencies and organizations, as well as individuals who have previously requested to receive notices and information on the Project. The Notice was also sent to Governor's Office of Planning and Research (OPR) State Clearinghouse and Planning Unit, who distributed the MND documentation to selected state agencies for review. Copies of the Draft MND were made available to the public within the City's Planning Division Office at City Hall and on the City's website at www.culvercity.org.

As a result of public review on the Draft MND, the City received one letter from a public agency (Caltrans) with comments regarding the Draft MND. In addition, nine (9) comment letters were received members of the public. Copies of the letters are available for review at the City's Planning Division Office at City Hall.

Where necessary, this Final MND, includes "corrections and additions" to the Draft MND that have been made to clarify, correct, or add to the information provided in the Draft MND document as a result of comments received on the Draft MND. These changes do not add significant new information to the Draft MND, nor do they result in new or more severe significant environmental impacts from the project. As such, recirculation of the MND document or further environmental review per CEQA is not necessary.

Also, it is acknowledged that the CEQA Guidelines do not require formal responses to comments received on a Draft MND document. Thus, the focus of the "corrections and additions" in this Final MND is on the disposition of significant environmental issues raised. Deletions are shown with ~~strikethrough~~ and additions are shown with a double underline.

EVALUATION OF ENVIRONMENTAL IMPACTS:

The impact columns heading definitions in the table below are as follows:

- "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- "Less Than Significant Impact With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The mitigation measures must be described, along with a brief explanation of how they reduce the effect to a less than significant level.
- "Less Than Significant Impact" applies where the project creates no significant impacts, only Less Than Significant impacts. An impact may be considered "less than significant" if "project design features" would be implemented by the project or if compliance with applicable regulatory requirements or standard conditions of approval would ensure impacts are less than significant.

- "No Impact" applies where a project does not create an impact in that category. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one proposed (e.g., the project would not displace existing residences). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to toxic pollutants, based on a project-specific screening analysis).

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire protection regarding the state's inventory of forest land, including the Forest and Range Assessment of and the Forest Legacy Assessment Project; and forest carbon measurements methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
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 1220(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?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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 nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
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?	☐	☒	☐	☐
VI. ENERGY – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐
VII. GEOLOGY AND SOILS – Would the project:				
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) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
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 waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐
IX. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surface 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☒	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
XII. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
a) Would the Project result in the 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?	☐	☐	☒	☐
c) For a project located within a private air strip 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?	☐	☐	☒	☐
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☒	☐	☐
Police protection?	☐	☒	☐	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐
XVII. TRANSPORTATION– Would the project:				
a) Conflict with program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycles, and pedestrian facilities?	☐	☒	☐	☐
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐
XVIII. TRIBAL CULTURAL RESOURCES– Would the project:				
a) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k) or	☐	☒	☐	☐
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.	☐	☒	☐	☐

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐
XIX. WILDFIRES – Would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

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

ATTACHMENT A
PROJECT DESCRIPTION

A. INTRODUCTION

Jefferson Boulevard Associates, LLC c/o Sandstone Properties, Inc. (the Applicant) proposes to redevelop an approximately 33,813 square foot (SF) (0.78-acre) property located at 11469 Jefferson Boulevard northwest of the intersection at Jefferson Boulevard and Slauson Avenue in Culver City (Project Site). The proposed commercial development (Project) would include the development of a boutique hotel with destination food and amenities. The Project Site is currently developed with an approximately 13,000 SF main single-story, wood-framed commercial shopping center which includes both retail and restaurant uses and an asphalt-paved surface parking lot and ornamental landscaped areas. All existing site uses would be demolished and removed to support development of the Project.

A detailed discussion of the Project is provided below.

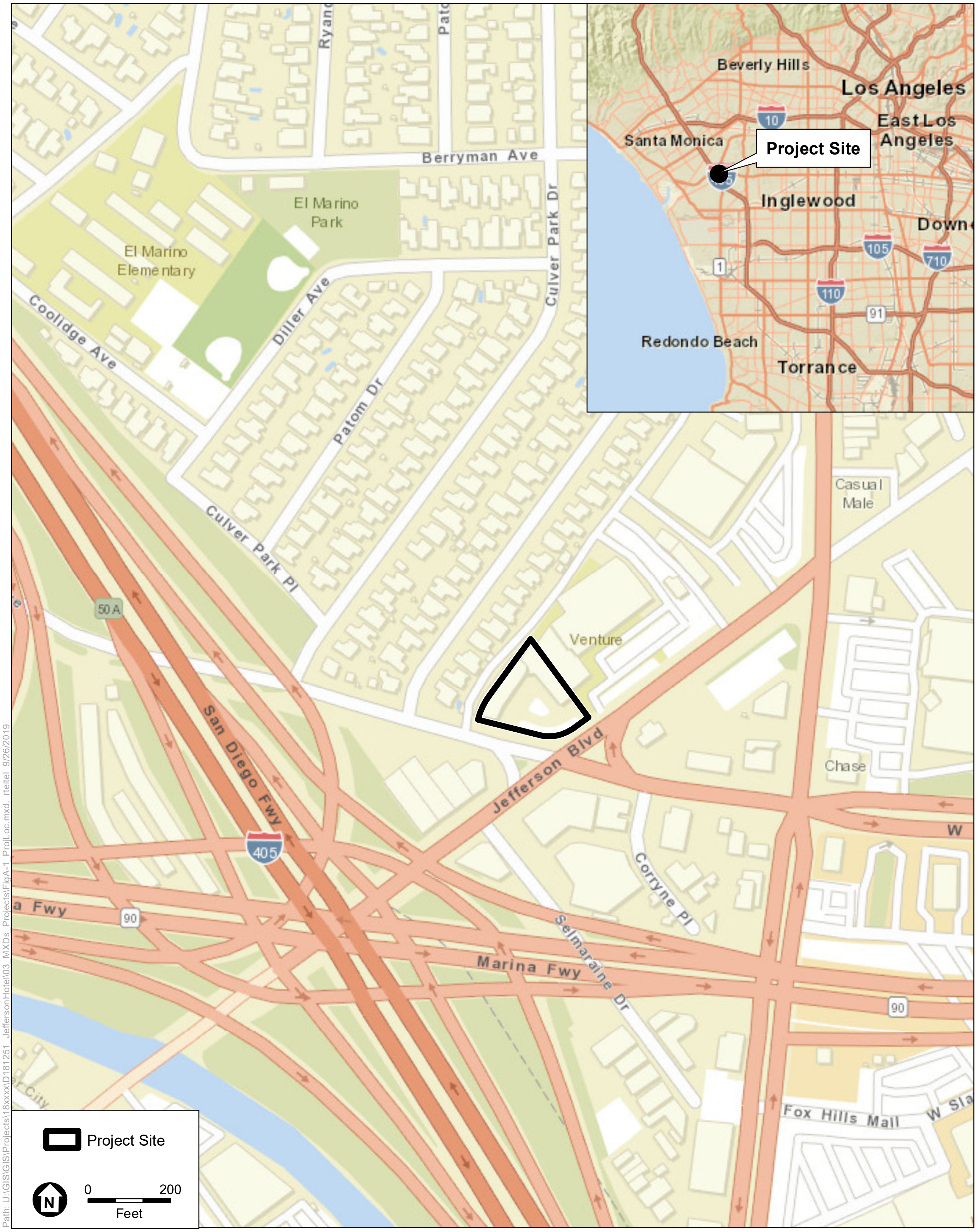
B. PROJECT LOCATION AND SURROUNDING USES

The Project Site is located at the south-end of the commercial corridor that runs along Jefferson Boulevard perpendicular to Interstate 405 (I-405) freeway within the Fox Hills area of Culver City. Downtown Los Angeles is approximately eight (8) miles east of the Project Site. **Figure A-1**, *Regional and Project Vicinity Locations*, illustrates the location of the Project Site from a regional and local perspective. The Project Site is bounded by the intersection at Jefferson Boulevard and Slauson Avenue with commercial uses directly north of the Project Site and a public alley adjacent to the western Project boundary with residential uses just beyond the alley. Commercial uses are also located east and south of the Project Site across Jefferson Boulevard and Slauson Avenue. Both the I-405 and State Route 90 (SR-90) freeways are located less than 400 feet west and south of the Project Site. **Figure A-2**, *Aerial Photograph with Surrounding Land Uses,* illustrates the surrounding uses.

C. PLANNING AND ZONING

The Culver City General Plan designation for the Project Site is General Corridor which allows for a range of small to medium scale commercial uses with an emphasis on community serving retail, office, and service uses along major corridors. The General Corridor designation is intended to support desirable existing and future neighborhood and community serving commercial uses and housing opportunities that are compatible with nearby residential neighborhoods. No changes to the Project Site’s existing General Plan designations are proposed by the Project.

The Project Site’s existing zoning designation is Commercial General (CG) and the Project Site is within a Commercial Zero Setback Overlay Zone. The CG Zoning District identifies areas that are long major corridors appropriate for small- to medium-scale commercial uses, emphasizing community-serving retail, office, and service uses. The CG Zoning District is consistent with the General Corridor land use designation of the General Plan. The Commercial Zero Setback Overlay Zone is intended to preserve the reinforce a traditional city streetscape and create a more pedestrian-friendly environment. As required under this overlay zone, the first story of proposed buildings that exceed 750 SF shall have a zero setback from the street-facing property of any street listed in Subsection 17.260.020.B. (i.e., Jefferson Boulevard and Slauson Avenue). No changes to the Project Site’s existing Zoning designations are proposed by the Project.

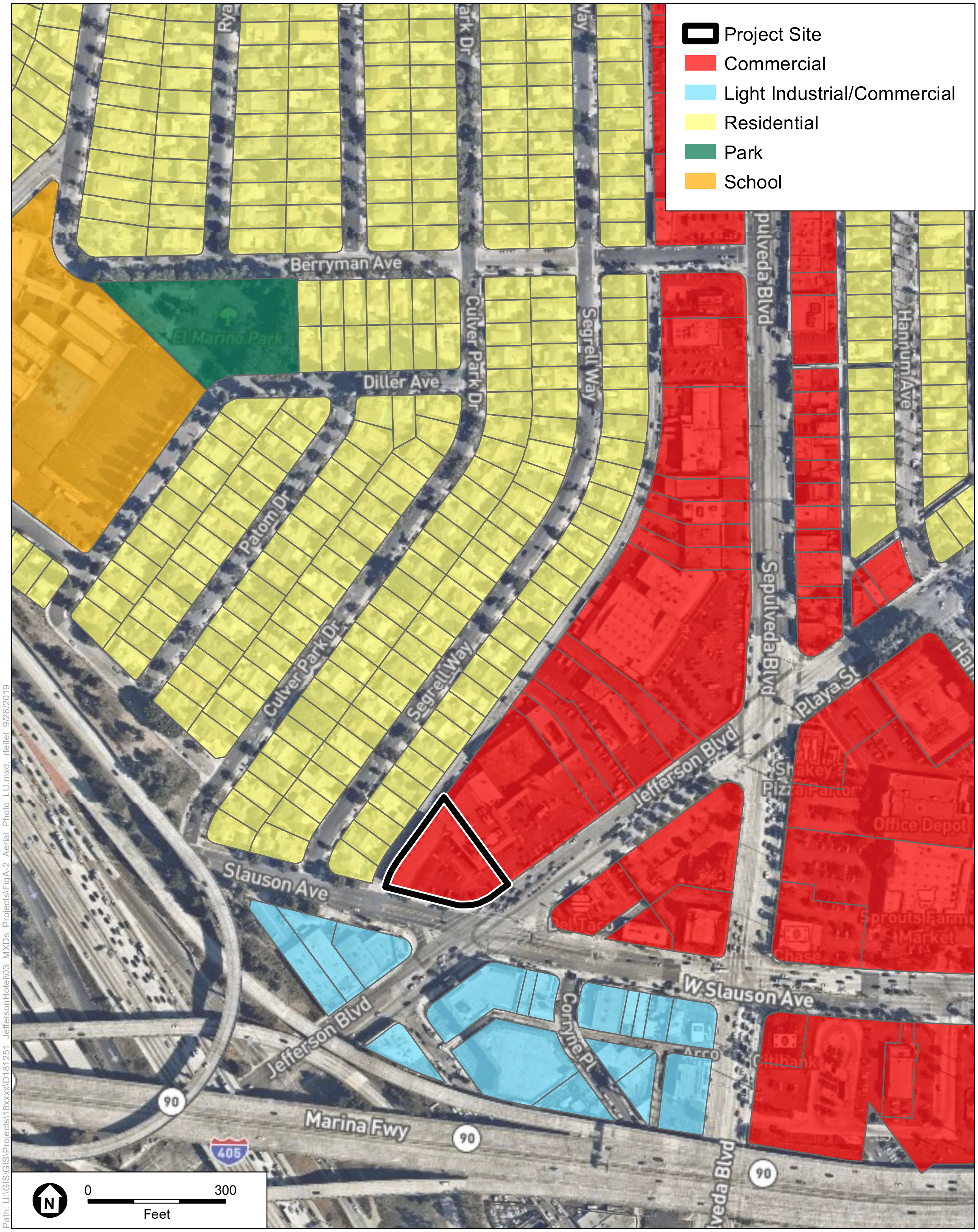


SOURCE: ESRI, 2019; ESA, 2019

11469 Jefferson Boulevard Project

Figure A-1
Regional and Project Vicinity Location

ESA



SOURCE: Open Street Map, 2019.

11469 Jefferson Boulevard Project

Figure A-2
Aerial Photograph with Surrounding Land Uses

ESA

D. EXISTING CONDITIONS

The Project Site is currently improved with an approximately 13,000 SF single-story, wood-framed commercial shopping center which includes both retail and restaurant uses. The remainder of the Project Site consists of an asphalt-paved surface parking lot and ornamental landscaped areas. Ingress/egress to the Project Site is available via a driveway from Jefferson Boulevard and a driveway from Slauson Avenue.

E. DESCRIPTION OF PROPOSED PROJECT

1. Project Uses

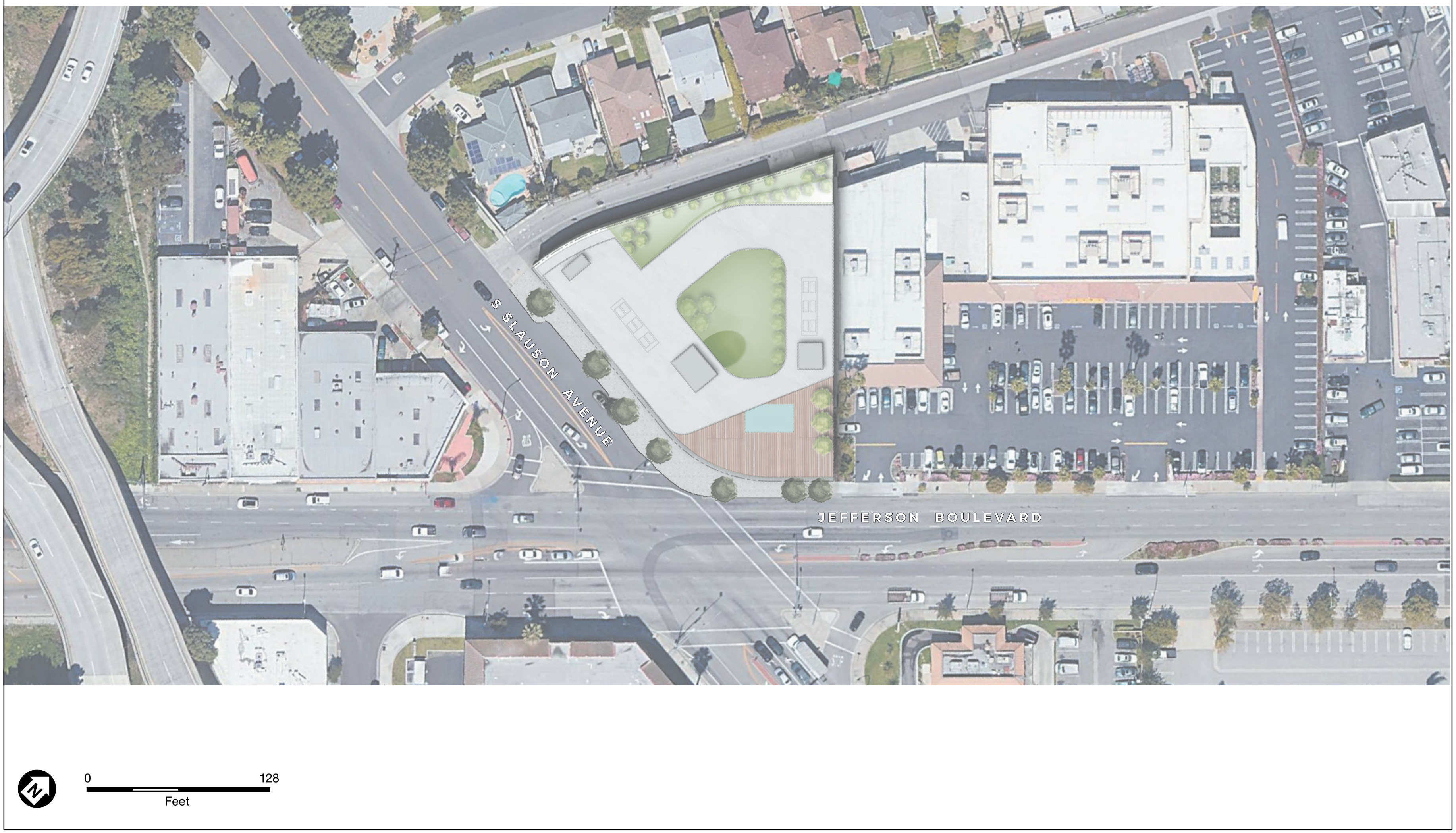
The Project is proposing the development of a new, five-story, 175-key boutique hotel building over subterranean parking (parking discussed below). The hotel ground floor lobby would include food and beverage amenities, including a destination bar and restaurant, a business tech center, and meeting spaces. A light well, evoking the design of a cenote, would provide natural light and a view of the landscaped courtyard. The fifth level would include a roof deck area with a swimming pool, and food and beverage amenities, including a destination sky bar. The second floor guest rooms and meetings rooms would be organized around the landscaped courtyard. The third through fifth floors would feature a fitness center and guest rooms overlooking the courtyard, surrounding cityscape and landscaped terraces. The 175-keysproposed under the Project would include a mix of king rooms, double queen rooms, and suites. **Figure A-3**, *Conceptual Site Plan,* illustrates the general site plan of the Project; **Figure A-4**, *Ground Floor Plan*, illustrates the ground floor for the Project; **Figure A-5**, *Second Floor Plan*, illustrates the second floor for the Project; and **Figure A-6**, *Fifth Floor Plan*, illustrates the fifth floor for the Project. The uses proposed by the Project are described in detail below and a summary of the Project is provided in **Table A-1**, *Proposed Project Land Use Summary*. As shown in Table A-1, the Project would provide a total of approximately 67,030 SF in 175 hotel rooms, 8,536 SF of back of- house, 14,783 SF of hotel amenities, 630 SF of bicycle parking and 18,842 SF of circulation, and 1,119 SF of loading area for a total building area of 111,000 gross SF. In addition, 15,450 SF of open space area would be provided, as well as 56,300 SF of subterranean parking area.

2. Building Heights and Elevations

Consistent with the Commercial Zero Setback Overlay Zone, the Project has been designed with zero setbacks along Jefferson Boulevard and Slauson Avenue. The building can be described by its elevations: the south and west elevations, the north elevation, and the interior elevation. The south and west elevations front the southside of the Project Site at Jefferson Boulevard and Slauson Avenue, while the north elevation runs adjacent to the public alley, and the interior elevation that occupies the vertical walls of the internal courtyard. Each elevation is described further below.

The south and west elevations include a glass facade[1] that wraps the length of the south-facing corner of the proposed building at the intersection of Jefferson Boulevard and Slauson Avenue. The glass facade would be designed as a sculptural skin composed of steel and glass and is intended to reflect the surroundings of the Project Site.

[1] *Glass used for the curtain-wall would be low-reflective glass, consistent with City requirements.*



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SOURCE: Nakada + Associates, 2019

11469 Jefferson Boulevard Project

Figure A-3
Conceptual Site Plan

ESA

SOURCE: Nakada + Associates, 2020

11469 Jefferson Boulevard Project

Figure A-4
Ground Floor Plan

ESA

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SOURCE: Nakada + Associates, 2020

11469 Jefferson Boulevard Project

Figure A-5
Second Floor Plan

SOURCE: Nakada + Associates, 2020

11469 Jefferson Boulevard Project

Figure A-6
Fifth Floor Plan

Table A-1
Proposed Project Land Use Summary

Hotel (175 rooms)	67,030 SF
Back-Of-House	8,536 SF
Hotel Amenities	
Restaurant	2,900 SF
Rooftop Bar	413 SF
Meeting Rooms	4,570 SF
Lounge (ground floor)	5,000 SF
Lobby	1,200 SF
Fitness Room	700 SF
Hotel Amenities subtotal	*14,783 SF*
Bicycle Parking	630 SF
Circulation (Stairs/Elevators)	18,842 SF
Loading Area	1,119 SF
Total Project SF	**111,000 SF**
Open Space Area	**15,450 SF**
Passenger Vehicle Parking SF	**56,300**[a]
Site Area	**33,800 SF**

SF = square feet

[a] *56,300 SF of parking assumes 2 subterranean parking levels for 138 spaces.*

Source: Nakada, 2020.

The north elevation that faces the residential uses (the Sunkist Park neighborhood) provides a softer visual aesthetic as compared to the south elevation. The north elevation features landscaped terraces with vertical gardens that step back from the neighborhood and provide a greater distance from the hotel. Along with the stepped terraces, high planters have been placed at the edge of each floor-slab to cut-off any possible sight-lines to and from the hotel guest rooms. The proposed building has also been designed with a slight bend such that all openings on the guest room floors are diverted away from the residences. This bend would passively direct all views away from the neighborhood to further reduce any possible sightlines to and from the hotel rooms.

As with the north elevation, the interior elevation also features landscaping. The trees that would be included in the interior of the hotel provide for a dense garden and can be viewed by the public from a portal opening along Jefferson Boulevard.

The proposed building would reach up to 56 feet in height (with the elevator shaft reaching 69 feet and 6 inches in height) and would not exceed the maximum allowed height for the Project Site of 56 feet. Roof mounted mechanical equipment (e.g., air conditioning, heating, exhaust, and ventilation ducts, etc.) would be screened from public view from adjoining public streets and rights-of-way. The method of screening would be architecturally compatible with other on-site development in terms of colors, materials, and architectural style as approved by the City's Planning Manager.

Sections for the courtyard vignettes are illustrated in **Figure A-7**, *Courtyard Vignette Sections*. Building sections are shown in **Figure A-8,** *Building Section A*, and **Figure A-9,** *Building Section B*. Building section locations A and B are shown on the floor plans. Building elevations for the Project are illustrated in **Figure A-10,** *Building*

Elevation - North and East, **Figure A-11,** *Building Elevation – South and West*. Renderings of the proposed building are also provided in **Figure A-12,** *Rendering - Southeasterly View from Slauson Avenue*, **Figure A-13**, *Rendering – Northerly Aerial View from Jefferson Boulevard/Slauson Avenue Intersection*, and **Figure A-14**, *Rendering - Courtyard*.

3. Parking and Access

(a) Parking

The parking demand analysis included as part of the Project's Traffic Impact Study included shared parking and empirical parking demand analyses, the latter of which is based on parking demand data collected recently at nearby and similar hotel sites. Per the Project parking demand analysis, the Project is expected to have a maximum peak parking demand of 138 parking spaces, which would occur midday on a weekday. Therefore, the Traffic Study indicates 138 spaces in two subterranean levels would be sufficient to meet the demands of the Project. However, the final parking count will be determined in consultation with the City based on the results of the Project's parking demand analysis. Regardless, parking requirements are not considered impacts under CEQA, however, for purposes of this MND, to provide a conservative assessment of construction-related impacts associated with excavation activities, it is assumed that 35 feet of excavation would be required.

The Project's subterranean parking would be designed to accommodate vehicles through a combination of standard, tandem and ADA parking spaces. The Project Site would include valet-assist parking on each subterranean parking level in order to maintain safe and efficient use of the tandem spaces.

The first floor of the subterranean parking structure would offer ample parking for low emission vehicles (i.e., hybrid, alternative fuel and electrical automobiles) and carpool vehicles as required by the California Green Building Code (CGBC) (Section 5.106.5.3.3, Electric Vehicle (EV) charging space calculation). In total, the Project would provide 56 EV-Parking spaces (including 28 EV-Capable, 14 EV-Ready and 14 EV-Functioning spaces), per CCMC Section 17.320.035.O.3.

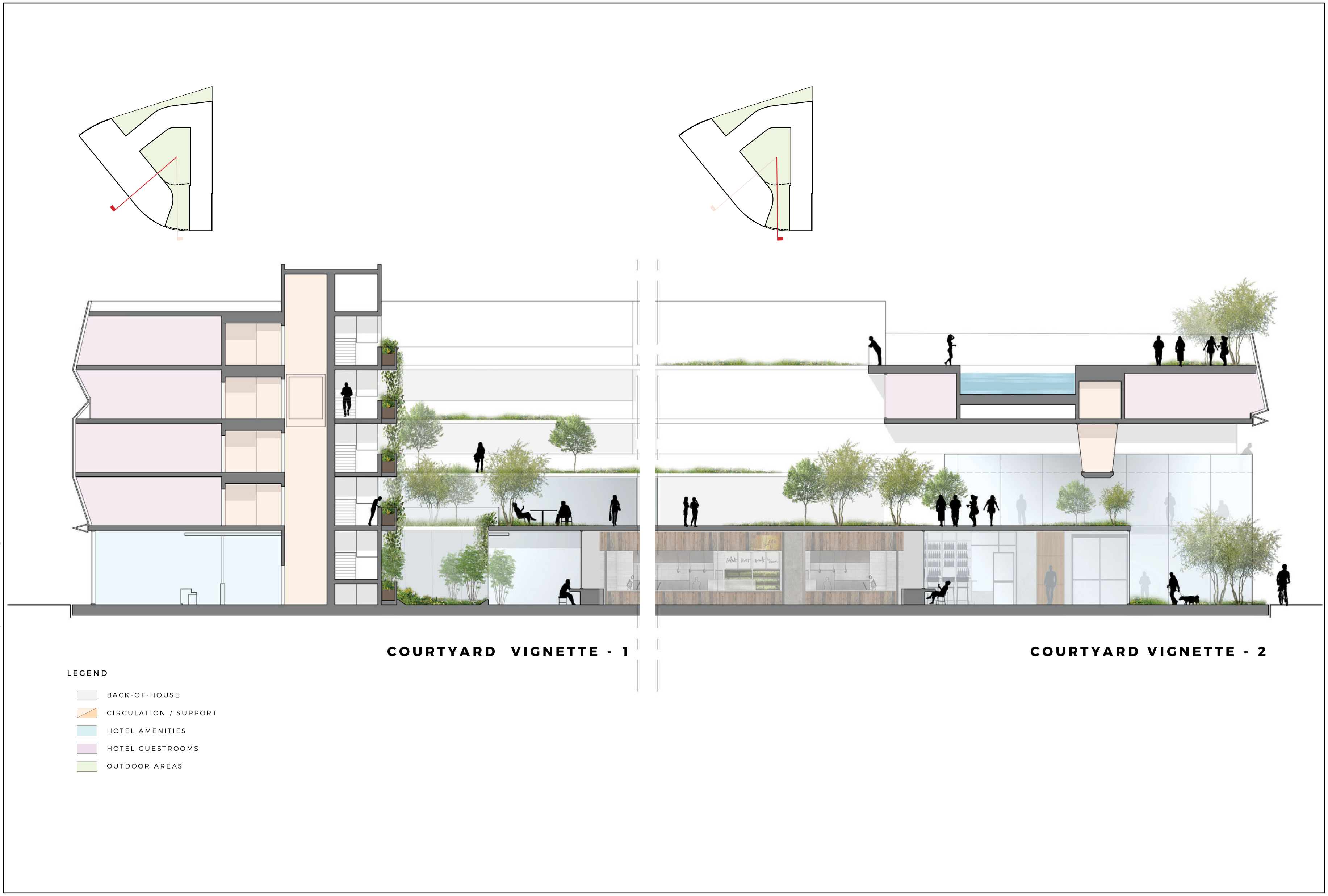
As shown in Figure A-4, direct vehicular access to the parking area would be provided from an inbound-only driveway on Slauson Avenue in the western portion of the Project Site, which would include two entry drive aisles. The drive aisle closer to the hotel would serve as a passenger drop-off and pick-up area. The second drive aisle would allow entering vehicles to access the parking ramp down to the two subterranean parking levels. Access to the subterranean parking garage would not be gate controlled. There would be two driveway exits onto the adjacent unnamed alley to egress onto the surrounding roadway system. One exit driveway would be provided directly off of the dual drive aisles (which would merge into a single aisle approaching the alley), while the second exit would provide egress for vehicles exiting the subterranean parking garage. Exiting vehicles would be allowed to travel north or south along the public alley toward Berryman Avenue or Slauson Avenue, respectively.

(b) Bicycle Parking

The Project would provide a total of 62 bicycle spaces, which would be 20 spaces above the City's Bicycle and Pedestrian Master Plan (BPMP) requirements. The Project would provide 52 long-term secure indoor bicycle parking spaces within the ground floor. In addition, 10 short-term bicycle parking spaces would be located within the landscaped area at the corner of Slauson Avenue and the public alley.

(c) Pedestrian Access

As shown on Figure A-4, pedestrian access would be provided from a pedestrian entrance on Jefferson Boulevard that would lead to the hotel lounge and restaurant area. Pedestrian access would also be provided from the ride share drop-off and accessed from Slauson Avenue. This would lead to the hotel lobby.



SOURCE: Nakada + Associates, 2019

Figure A-7
Courtyard Vignette Sections

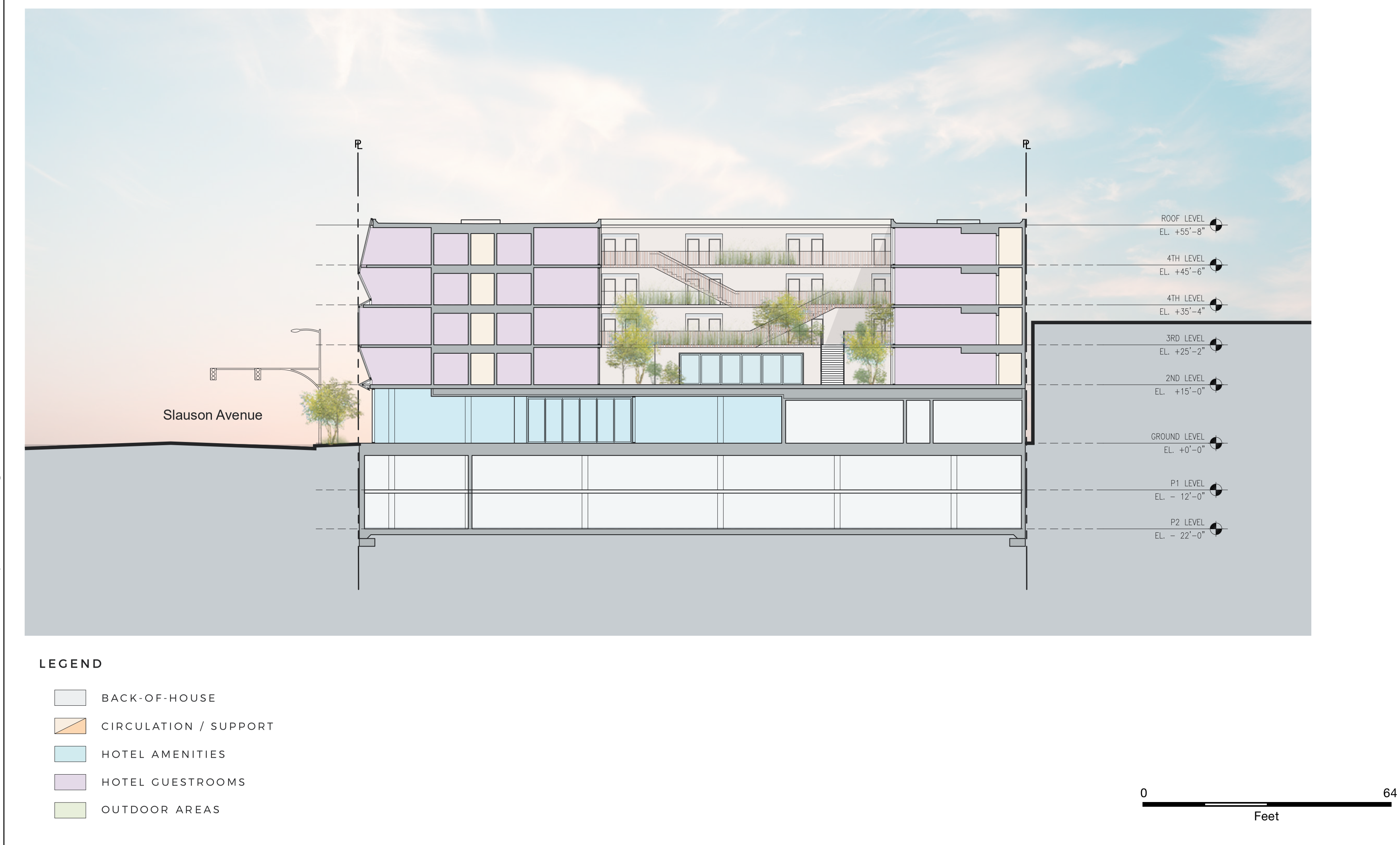
ESA

SOURCE: Nakada + Associates, 2019

11469 Jefferson Boulevard Project

Figure A-8
Building Section A

ESA



SOURCE: Nakada + Associates, 2019

11469 Jefferson Boulevard Project

Figure A-9
Building Section B

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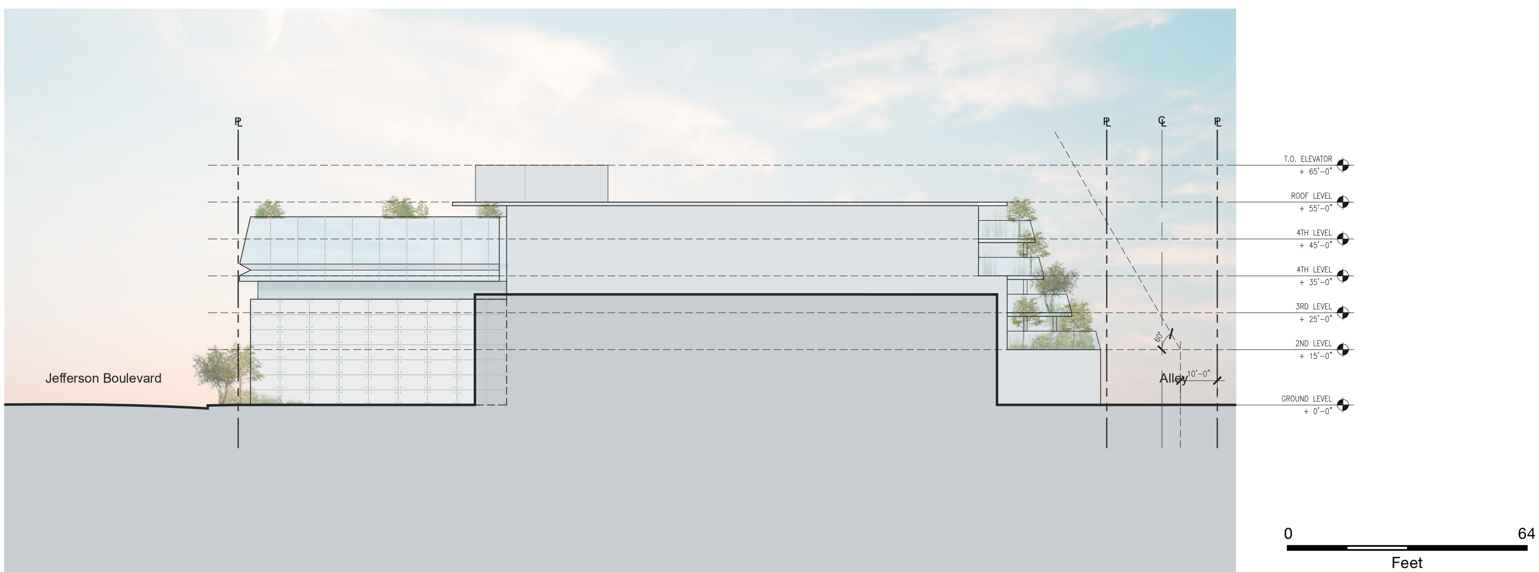
North Elevation



East Elevation

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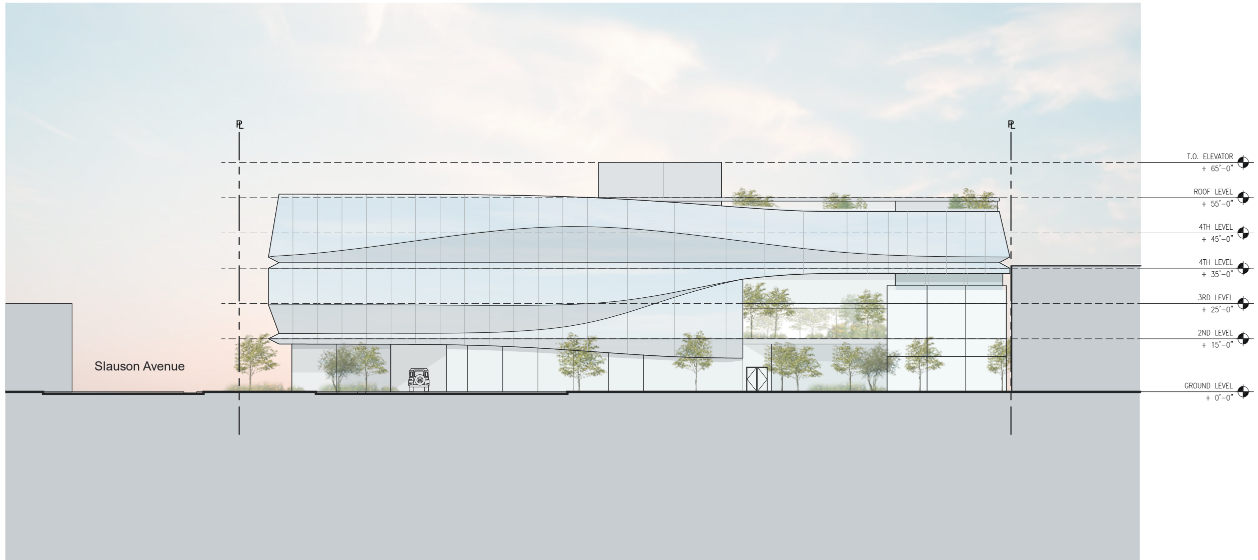
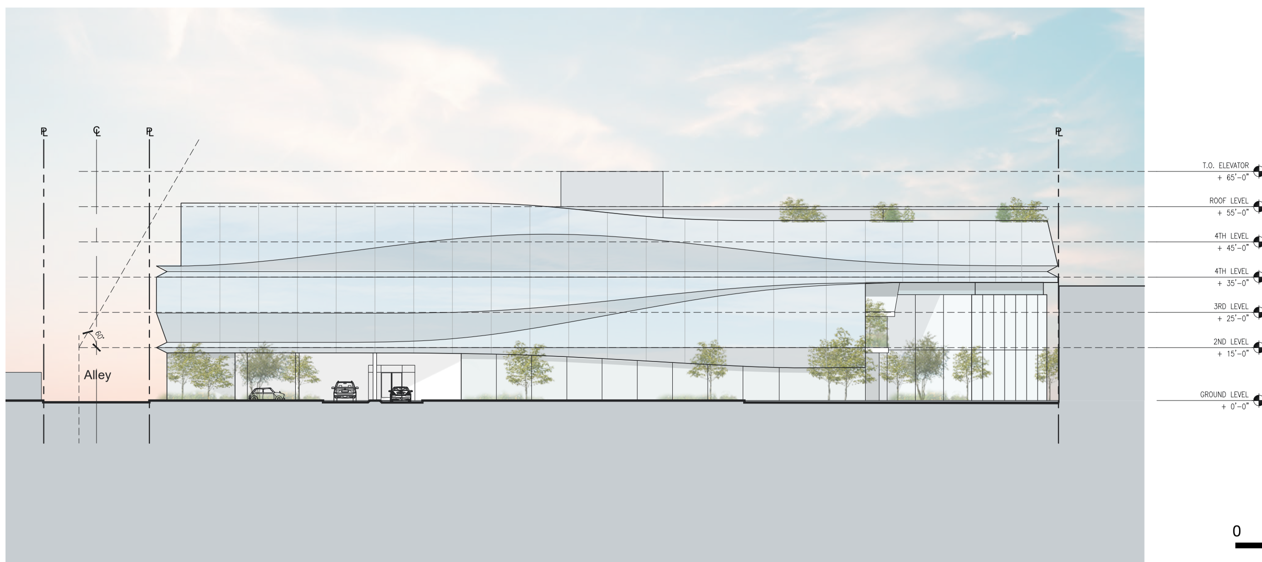
SOURCE: Nakada + Associates, 2019

11469 Jefferson Boulevard Project

Figure A-10
Building Elevation - North and East



South Elevation



West Elevation

SOURCE: Nakada + Associates, 2019

11469 Jefferson Boulevard Project

Figure A-11
Building Elevation - South and West

ESA

SOURCE: Nakada + Associates, 2019

Figure A-12
Rendering - Southeasterly View from Slauson Avenue

SOURCE: Nakada + Associates, 2019

Figure A-13
Rendering - Northerly Aerial View from Jefferson Boulevard/Slauson Avenue Intersection

SOURCE: Nakada + Associates, 2020

11469 Jefferson Boulevard Project

Figure A-14
Rendering - Courtyard

ESA

4. Open Space, Landscaping and Amenities

The Project would include a total of approximately 15,450 SF of open areas, which would include a small 250 SF courtyard and a 500 SF outdoor dining area on the ground floor, a 2,800 SF terrace on the second floor, a larger 4,800 SF courtyard on the second floor, and an 2,000 SF pool deck and 5,100 SF lounge on the fifth floor. The courtyard areas on the ground, second, and third floors as well as the dining area on the ground floor and the pool deck on the fifth floor would be accessible to the public.

As discussed above, and consistent with the Commercial Zero Setback Overlay Zone, the Project has been designed with zero setbacks along Jefferson Boulevard and Slauson Avenue, which would encourage public access to ground floor restaurant and lounge. The sidewalks along Jefferson Boulevard and Slauson avenue would be well landscaped with street trees, landscape planters, tree grates, benches, bicycle racks, and trash receptacles to activate the pedestrian environment. In addition, along Jefferson Boulevard, the Project would also provide outdoor dining as a component of the restaurant located on ground floor.

5. Lighting and Signage

Site signage would be used for Project identity, building identification, pedestrian wayfinding, and security markings. It would be designed and located to be compatible with the architecture and landscaping of the Project. No off-site signage is proposed. All signage would be provided consistent with a Master Sign Program pursuant to zoning code section 17.330.050.D.2. All hotel and restaurant signage would be limited to the commercial elevation along the Jefferson Boulevard commercial corridor. The residential elevation would not include any signage.

Pedestrian areas would be well lit for security. The proposed buildings would include accent lighting to complement the building architecture. Lensed light-emitting diode (LED) downlights would be integrated into the architectural canopies to provide appropriate light levels. Façade lighting is intended to reinforce the architecture of the building and to provide a nighttime presence for the Project. Fixtures would be designed to prevent light trespass on adjacent properties. Recessed LED fixtures would be designed to eliminate unwanted glare and set to limit all light pollution into the sky. Surface mounted LED fixtures would be integrated into planters. In grade LED fixtures would provide focused uplight on the site trees along the perimeter of the site.

6. Sustainability Features

Energy saving and sustainable design would be incorporated throughout the Project. The Project would incorporate green building design, which would promote conservation, energy efficiency, and carbon emission reduction.

<u>Conservation and Energy Efficiency</u>

1. Recycling or salvaging at least 65 percent of non-hazardous construction and demolition debris.
2. Using local manufactures and recycled products where possible.
3. Stormwater filtration and capture systems.
4. Permeable exterior paving surfaces to reduce stormwater runoff.
5. Installation of electric vehicle supply equipment (EVSE) or EV charging stations.
6. Installation of a photovoltaic system equivalent to at least one percent of the Project’s electricity demand and at least one kilowatt (kW) of solar photovoltaics per 10,000 SF of new development.
7. Water saving fixtures in all locations including waterless urinals in public restrooms and water saving landscaping.

8. Incorporation of low-water and drought tolerant plants in the landscape plan.
9. Irrigation using captured stormwater.
10. Irrigation timers with rain sensors.
11. Dual and triple low emissivity glazing.
12. High reflective roof material.
13. High efficiency heating and air conditioning systems.
14. Reliance on fluorescent, LED or other type of high efficiency systems for all interior and exterior lighting. New lighting installed in parking structures and all common areas shall be motion sensor controlled;
15. Natural ventilation and lighting.
16. On-site recycling collection facilities

Carbon Emission Reduction

1. Bicycle racks along the Slauson Avenue adjacent.
2. Other bicycle oriented facilities include safe lockable storage areas for hotel use.

Mobility Features

The Project's central location within Los Angeles County and proximity near multi-modal facilities including local and regional bus transit stops, and bike lanes or facilities presents an opportunity to enhance mobility. In addition, the features described above, some specific initiatives include:

1. Access to multi-modal transit with connecting bike and bus routes. There is direct access to eight bus routes and bicycle lanes/routes.
2. Bike friendly design with bicycle parking for hotel guests and employees.
3. Designated parking for low-emission/zero-emission vehicles.
4. The perimeter of the site area will incorporate the City's approved Streetscape plan which will create an attractive and inviting walkable environment.

7. Site Security

The Project would incorporate a 24-hour/seven-day video surveillance security program to ensure the safety of its hotel guests, employees, and visitors. Site security features would include building access/design to assist in crime prevention efforts and to reduce the demand for police protection services. The Project design would include lighting of entry-ways and public areas for site security purposes.

8. Loading and Trash Removal

Loading for large deliveries for the hotel and restaurant uses would occur in a designated loading area located on site on the ground floor north of the subterranean parking structure entrance, as shown Figure A-4. This loading area would be accessed from public alley.

A scout service, or an employee of the City's Environmental Programs and Operation (EPO) Division, would collect all trash bins serving the Project from the dedicated trash rooms located adjacent to the loading dock, as shown in Figure A-4.

9. Construction Schedule/Activities

A Construction Management Plan would be developed by the general contractor and their traffic management contractor in consultation with the Project's traffic engineer as necessary, and approved by the City of Culver City Engineer prior to issuance of a demolition permit. This plan would document how the Project's construction management team would implement and conduct its site management responsibilities during the construction phase of the Project The plan would include: name and telephone number of a contact person regarding traffic complaints or emergency situations; contact information for local police, fire, and emergency response organizations and procedures for the continuous coordination of construction activity; procedures for training the flag person(s) used in implementing the plan; the location, times, and estimated duration of any temporary lane closures; managing the approved haul route plan; and construction parking management plan.

The Project would comply with Culver City's allowable construction hours of (Chapter 9.07: Noise Regulations, Section 9.07.035 Construction):

- Monday-Friday: 8:00 AM through 8:00 PM
- Saturdays: 9:00 AM through 7:00 PM
- Sundays: 10:00 AM through 7:00 PM

Any work outside of the above hours would require consultation and approval with pertinent Culver City departments prior to any works being scheduled. Businesses and surrounding residents would be given notification of the proposed after hours work prior to the starting said work including details of the work to be performed with an anticipated time required to undertake each activity. After hours work would be limited, but may be required for specific tasks in order to minimize impacts to pedestrians, vehicular traffic or in the interest of safety.

Dirt hauling and construction material deliveries or removal would not be allowed during morning (7:00 AM – 9:00 AM) and afternoon (4:00 PM – 6:00 PM) peak traffic periods. It should be noted that this requirement will have the effect of prolonging overall construction time. However, this would minimize peak hour traffic impacts. Also, every effort would be made to minimize the need for lane closures. Should lane closures be required, neighbors and city officials would be notified via the email notification system set up at the commencement of construction. Lane closures, if required, will occur only between the hours of 9:00 AM – 3:00 PM. Again, avoiding the peak traffic periods. Such events would be coordinated with neighboring construction projects, as necessary.

A series of permits would be required for Project phases including demolition, excavation, subterranean and above-ground construction. These approvals may include contingencies requiring additional design and submittals that must be approved before work can begin. Some anticipated items requiring further approval might include, but not be limited to: Final Construction Traffic Management Plan; Erosion and Sediment Control Plan; and Shoring and Excavation Plan. The Final Construction Traffic Management Plan would include measures to minimize traffic impacts associated with any concurrent construction activities occurring in the Project vicinity.

Before any lane closures and/or other temporary modifications to traffic are implemented, further approvals would be required from Culver City Public Works Traffic Management Division and/or other pertinent city departments. These items may include, but would not limited to: Traffic Control Plan including, but not limited to vehicular, bicycle, and pedestrian traffic routing; Off-site Civil work including lighting, signage, landscape, paving, and striping; and After Hours Application.

It is anticipated that construction activities would commence as early as the first quarter of 2022 with full build-out occurring in 2024, for a total of 30 months of construction.

F. NECESSARY APPROVALS

It is anticipated that other agencies whose approvals may be required for the Project ~~from the Culver City~~ would include, but may not be limited to, the following:

- City of Culver City - Demolition Permits to remove the existing on-site structure to allow for construction of the proposed building.
- City of Culver City - Construction Permits, including building, grading, excavation, foundation, and associated permits.
- City of Culver City - Haul Route Permit, as may be required by Culver City.
- City of Culver City - Site Plan Review, Conditional Use Permit, Administrative Use Permit, and/or other permits as needed, including, but not limited, permits associated with the sale and consumption of alcoholic beverages and outdoor dining.
- South Coast Air Quality Management District- Construction-related permits, as applicable
- Los Angles Regional Water Quality Control Board - Construction-related permits, as applicable (i.e., Stormwater/Water Quality Mitigation Plan, Dewatering Plan/Permit, Soil Management and Remediation Plan)
- California Department of Toxic Substances Control - Soil Management and Remediation Plan
- California Department of Transportation (Caltrans) - Encroachment Permit
- Other approvals as needed.

ATTACHMENT B
EXPLANATION OF CHECKLIST DETERMINATIONS

I. AESTHETICS

Would the project:

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

Less Than Significant Impact. The Project Site is located in a highly urbanized area, with a mix of commercial and residential uses in the nearby vicinity. The topography surrounding the Project Site is flat with no notable ocean, mountain or other scenic vistas that would be affected by the Project. In addition, although the Project proposes building heights reaching up to 56 feet in height (with the elevator shaft reaching 69 feet and 6 inches in height), the immediate surrounding area consists of a range of low- to mid-rise buildings. As such, given the flat topography in the area, the proposed buildings would not substantially obstruct views not already obscured or blocked by other buildings and structures in the area. Further, the Project Site is not located in a scenic resource area or area with protected views designated by the City. Therefore, development of the Project would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant.

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

No Impact. The Project Site is located in a highly urbanized area of the City and is currently developed with a single-story commercial (retail) building and associated asphalt-paved surface parking lot.

The Project Site is not located in the vicinity of a City or State-designated scenic highway. In addition, the Project Site does not contain any unique or locally recognized, natural (i.e., rock outcroppings and trees), features. Furthermore, as described below under Response V.a, based on a recent historical resources survey, no buildings or improvements on the Project Site are eligible for the National Register, California Register, or Local designation; therefore, no damage to historical resources would occur with implementation of the Project.

Vegetation on the Project Site is largely confined to ornamental landscaped trees, all of which would be removed as part of the Project, including the removal of two street trees (African fern pine). As discussed under Response IV.e, below, the Project would comply with the applicable provisions pertaining to the removal and replacement of street trees in the Culver City Municipal Code (CCMC) within Title 9: General Regulations, Chapter 9.08: Streets and Sidewalks – Tree Removal, Section 9.08.220: Removal of Trees in Parkways Related to Private Improvement or Development Project. Based on the City's requirements, the Project is required to plant two new Street Right-of-Way trees or Parkway trees for each tree that is removed from the Project Site. The size and location of the replacement trees would be determined by the Public Works Director based on what is appropriate for the particular Street Right-of-Way or Parkway.

Overall, based on the above, the Project would not substantially damage scenic resources located within the vicinity of a scenic highway. No impacts would occur.

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

Less Than Significant Impact. The Project Site is considered to be located in an urbanized area. The aging buildings and features within the Project Site have low aesthetic value. Interstate 405 (I-405) is located to the west of the Project Site, the Marina Freeway (SR-90) is located south of the Project Site, and the Project Site is surrounded by commercial and residential uses. As such, the analysis provided below analyzes whether the Project would conflict with applicable zoning and other regulations governing scenic quality. The Culver City General Plan (General Plan) and CCMC include goals, objectives, and policies, that govern scenic quality.

As part of the Open Space Element of the General Plan, Objective 6 establishes an objective to protect view resources, view corridors, and scenic viewpoints. As previously discussed in Response I.a and I.b, above, development of the Project would have less than significant impacts as it relates to scenic vistas and scenic resources and would be consistent with this objective. In addition, as part of the Land Use Element of the General Plan, Objective 6 establishes an objective to revitalize the physical character economic well-being of the City's commercial corridor and Policy 6.A, encourages revitalization of commercial corridors in the City through new development and renovation of existing structures with incentives which address development standards and the project approval process. The Project proposes to demolish a single-story commercial (retail) building and associated asphalt-paved surface parking lot and replace them with a mid-rise boutique hotel with destination food and amenities and would serve to revitalize the corner of Jefferson Boulevard and Slauson Avenue, which is part of a Commercial Corridor, in support of this objective and associated policy. Furthermore, as part of the Land Use Element of the General Plan, Objective 12 establishes an objective to ensure that new construction and renovation of existing residential and non-residential buildings and streetscapes are accomplished with the highest quality of architecture and site design. As discussed in Attachment A, Project Description, of this Initial Study/Mitigated Negative Declaration (IS/MND), the Project's contemporary design includes a custom, glass curtain-wall that wraps the length of the south-facing corner of the proposed building at the intersection of Jefferson Boulevard and Slauson Avenue. The curtain-wall is designed as a sculptural skin composed of steel and glass and is intended to reflect the surroundings of the Project Site. The Project would also include stepped terraces and high planters as well as interior landscaping that can be viewed by the public, which would further enhance the character of the proposed building, in support of this objective.

With regard to the CCMC, the Project is within a Commercial Zero Setback Overlay Zone, which is intended to preserve and reinforce a traditional city streetscape, and create a more pedestrian-friendly environment. As required under this overlay zone, the first story of any proposed buildings that exceed 750 SF shall have a zero setback from the street-facing property of any street listed in Subsection 17.260.020.B, which includes Jefferson Boulevard. The proposed building would be consistent with the requirements of the Commercial Zero Setback Overlay Zone as well as all other setback and design requirements established in the CCMC.

Overall, the Based on the analysis provided above, the Project would not conflict with applicable zoning or other regulations governing scenic quality. Impacts would be less than significant.

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

Light and Glare

Less Than Significant Impact. The Project Site is currently developed with a single-story commercial (retail) building and associated asphalt-paved surface parking lot. The Project Site is located in a highly urbanized area, with a mix of low-rise commercial and residential. The Project Site is bounded by the intersection at Jefferson Boulevard and Slauson Avenue to the south.

The Project vicinity exhibits considerable ambient nighttime illumination levels due to the densely developed nature of the area, existing building and parking lot on the Project Site, as well as from adjacent commercial properties located north, east and south of the Project Site. Artificial light sources from the on-site uses and other surrounding properties include interior and exterior lighting for security, parking, architectural enhancement, incidental landscape lighting, and illuminated signage. Automobile headlights, streetlights and stoplights for visibility and safety purposes along the major and secondary surface streets contribute to overall ambient lighting levels as well.

Similar to existing Project Site and surrounding uses, the Project would include low to moderate levels of interior and exterior lighting for security, parking, signage and architectural enhancement. Soft accent lighting used for signage, and architectural enhancement would be directed to permit visibility of the highlighted elements but, would not be so bright as to cause substantial light spillover. All proposed signage and outdoor lighting would be subject to applicable regulations contained within the CCMC. Compliance with these regulations would ensure that impacts regarding Project lighting are less than significant.

Glare occurs from sunlight reflected from reflective materials utilized in existing buildings along the adjacent roadways and from vehicle windows and surfaces. Glare-sensitive receptors include motorists on the roadways surrounding the Project Site. As glare is a temporary phenomenon that changes with the movement of the sun, receptors other than motorists are generally less sensitive to glare impacts than to light impacts. A custom, glass curtain-wall that would wrap the length of the south-facing corner of the proposed building at the intersection of Jefferson Boulevard and Slauson Avenue would have low-reflectivity values (no mirror-like tints or films), minimizing off-site glare, which would be consistent with City requirements. To the extent glare is experienced by adjacent uses or the occupants of vehicles on nearby streets it would be temporary, changing with the movement of the sun throughout the course of the day and the seasons of the year. Impacts would be less than significant.

Shade and Shadow

Less Than Significant Impact. Shading impacts were addressed in the Project's *Shade/Shadow Report* prepared by ESA (November 2020), which is available for review at the Culver City Planning Division. Potential shading impacts could result when shadow-sensitive uses are located to the north, northwest, or northeast of new structures. Shade sensitive uses in the Project vicinity include the backyards, pools, and solar collectors associated with the single-family residential uses to the west of the Project Site.

For purposes of this analysis, a Project impact would normally be considered significant if shadow-sensitive uses would be shaded by Project-related structures for more than three hours between the hours of 9:00 A.M. and 3:00 P.M. between late October and early April, or for more than four hours between the hours of 9:00 A.M. and 5:00 P.M. between early April and late October.[1] As analyzed within the *Shade/Shadow Report*, no shadow-sensitive uses would be subject to significant new shading by the proposed building for more than three hours between the hours of 9:00 A.M. and 3:00 P.M. between late October and early April, or for more than four hours

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[1] *Shadow impacts thresholds based on criteria set forth in the City of LA CEQA Thresholds Guide (2006).*

between the hours of 9:00 A.M. and 5:00 P.M. between early April and late October.[2] As a result, the addition of the Project would not significantly increase the shading of adjacent shadow-sensitive uses based on the significance thresholds stated above. Impacts would be less than significant.

II. Agriculture and Forest Resources

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

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

No Impact. The Project Site is located in a highly urbanized area of the City and is currently developed with a single-story commercial (retail) building and an associated asphalt-paved surface parking lot. The Project Site does not contain agricultural uses or related operations and is not located on designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program.[3] Furthermore, the General Plan does not identify the Project Site as an area designated for agriculture use. Therefore, the Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. No impacts would occur.

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

No Impact. The Project Site's existing Zoning designation is Commercial General (CG) and the Project Site is within a Commercial Zero Setback Overlay Zone. The Project does not propose to change the Zoning designations. No portion of the Project or surrounding land uses are zoned for agriculture and no nearby lands are enrolled under the Williamson Act. As such, the Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impacts would occur.

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

No Impact. As discussed under Response II.b, above, the Project Site's existing Zoning designation is Commercial General (CG) and the Project Site is within a Commercial Zero Setback Overlay Zone. No forest land or timberland zoning is present on the Project Site or in the surrounding area. As such, the Project would not conflict with existing zoning for forest land or timberland. No impacts would occur.

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2 *ESA, Shade/Shadow Report for the Jeff Hotel Project, Culver City, CA, June 2019.*

3 *State of California Department of Conservation, California Important Farmland Finder, https://maps.conservation.ca.gov/dlrp/ciff/, accessed October 2019.*

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

No Impact. No forest land exists on the Project Site or in the surrounding area. As such, the Project would not result in the loss of forest land or conversion of forest land to non-forest use. No impacts would occur.

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

No Impact. Since there are no agricultural or forest uses or related operations on or near the Project Site, the Project would not involve the conversion of farmland or forest land to other uses, either directly or indirectly. No impacts would occur.

III. AIR QUALITY

The following impact analysis pertaining to air quality impacts is based on information contained in the Project's Air Quality Technical Report prepared by ESA, dated November 2020, which is available for review at the Culver City Planning Division.

As part of the Project, the following Project Design Features (PDFs) would be implemented and are assumed within the analyses below. The PDFs would be incorporated into the Project development as conditions of approval and included in the Mitigation Monitoring Program, included as Attachment C within this IS/MND.

Project Design Features

PDF-AIR-1: **Construction Features:** Construction equipment operating at the Project Site shall be subject to a number of requirements. These requirements shall be included in applicable bid documents and successful contractor(s) must demonstrate the ability to supply such equipment. Construction measures would include, but are not limited to the following:

- The Project shall require all off-road diesel construction equipment greater than 50 horsepower (hp) that will be used an aggregate of 40 or more hours to meet the U.S. Environmental Protection Agency Tier 4 Final off-road emission standards. A copy of each unit's certified tier specification or model year specification and California Air Resources Board or South Coast Air Quality Management District operating permit (if applicable) shall be available upon request at the time of mobilization of each applicable unit of equipment. This construction feature would allow for a reduction in diesel particulate matter and NO_X emissions during construction activities.

PDF-AIR-2: **Design Elements:** In accordance with CALGreen Building Standards, the Project shall incorporate the following mandatory energy and emission saving features:

- The Project shall recycle and/or salvage at least 65 percent of non–hazardous construction and demolition debris.
- The Project shall include easily accessible recycling areas dedicated to the collection and storage of non-hazardous materials such as paper, corrugated cardboard, glass, plastics, metals, and landscaping debris (trimmings).
- The Project shall include efficient heating, ventilation, and air conditioning (HVAC) systems.
- The Project shall install low-flow water fixtures that are consistent with U.S. Environmental Protection Agency WaterSense specifications.

PDF-AIR-3: Voluntary Design Elements: The Project shall incorporate many operational energy and emission saving features including the following:

- The Project design would meet criteria for the LEED Silver or equivalent certification level.
- The Project shall install a solar photovoltaic power system equivalent to at least 1 percent of the Project's electricity demand and at least 1 kilowatt (kW) of solar photovoltaics per 10,000 square feet of new development.

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

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

Less Than Significant Impact. The Project Site is located within the 6,745-square-mile South Coast Air Basin (Air Basin). Air quality planning for the Air Basin is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Project would be subject to the SCAQMD's Air Quality Management Plan (AQMP), which contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving ambient air quality standards. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by the Southern California Association of Governments (SCAG). As part of the analysis for this checklist question, the SCAQMD recommends that lead agencies demonstrate that a project would not directly obstruct implementation of an applicable air quality plan and that a project be consistent with the assumptions (typically land-use related, such as resultant employment or residential units) upon which the air quality plan is based.

Construction

As discussed in the Air Quality Technical Report, the Project would result in an increase in short-term employment compared to existing conditions. Although the Project will require workers over the construction process, these jobs are temporary in nature. Construction jobs under the Project would not conflict with the long-term employment projections upon which the AQMP is based. Control strategies in the AQMP with potential applicability to short-term emissions from construction activities include strategies denoted in the AQMP as MOB-08 and MOB-10, 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. Consistent with the Project, trucks and other vehicles in loading and unloading queues would be parked with engines off to reduce vehicle emissions during construction activities. Furthermore, the Project would utilize off-road diesel equipment greater than 50 horsepower that meet United States Environmental Protection Agency (USEPA) Tier 4 Final off-road emission standards, as per PDF-AIR-1. Additionally, the Project would comply with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment. The Project would also comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403.

Compliance with these requirements is consistent with and meets or exceeds the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Because the Project would not conflict with the control strategies intended to reduce emissions from construction equipment, the Project would not conflict with or obstruct implementation of the AQMP.

Operation

As discussed in Attachment A, Project Description, of this IS/MND, the Project Site is located in Culver City and is currently zoned as Commercial General (CG) based on the City's Zoning Map. The Project would be replacing the existing low-level commercial buildings totaling 13,301 square feet and a surface parking lot totaling 20,516 square feet and developing a five-story, 175-room boutique hotel, which would comprise a total building area of approximately 111,000 square feet within a 0.78 acre (33,800 square feet) parcel that would be consistent with the current zoning designation. The Project would also be consistent with the Circulation Element of the General Plan. The Project is committed to providing strong pedestrian connections to nearby recreational uses and nearby transit options. The Project Site is located approximately a quarter mile from the Westfield Culver City shopping mall and served by various bus routes operated by the Los Angeles County Metropolitan Transportation Authority (Metro) and Culver City Bus with bus stops located in close proximity to the Project Site, including the Culver City Transit Center Bus Station that is located approximately 900 feet southeast of the Project Site that is served by the Culver City bus routes 3,4 and 6 and the Metro bus routes 108, 110 and 217. The Metro Expo Line Culver City light rail station is approximately two and three quarter miles north of the Project Site. The Project would concentrate recreational uses and employment growth in an area served by the local bus lines. As such, the Project would not conflict with SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) policies for the concentration of growth in proximity to transit.

The Project would generate indirect growth associated with hotel employees. Based on a building area of approximately 111,000 square feet, the Project would generate approximately 130 employees.[4] According to SCAG, Culver City is forecasted to have an employment growth of 8,900 jobs between 2012 and 2040.[5] As such, the estimated 130 hotel employees generated by the Project are within SCAG's employment growth assumptions of Culver City. As such, the Project would not generate growth beyond the range of development anticipated within the established SCAG regional forecast for Culver City. The Project would not increase or induce residential density growth not otherwise anticipated. Any indirect population growth by the Project within Culver City and/or neighboring cities would be nominal and would not materially affect forecasted SCAG growth assumptions. Therefore, based on the above analysis, the Project would not spur additional growth other than that already anticipated for Culver City and would not eliminate impediments to growth. Consequently, the Project would not foster growth inducing impacts in conflict with the assumptions in the AQMP.

Overall, the Project would not conflict with the AQMP during construction and operation. Impacts would be less than significant.

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

Less Than Significant Impact. As indicated above, the Project Site is located within the Air Basin, which is characterized by relatively poor air quality. State and federal air quality standards are often exceeded in many parts of the Air Basin, including those monitoring stations nearest to the Project location. The Project would contribute to local and regional air pollutant emissions during construction (short-term or temporary) and Project occupancy (long-term).

[4] *108,100 SF hotel X 0.00113 employees per average SF (per the Lodging factor from Table 14 of the 2018 Developer School Fee Justification Study, LAUSD, March 2018) = 122 employees. Also, 2,900 SF restaurant X 0.00271 (per the Neighborhood Shopping Centers factor from Table 14 of the 2018 Developer School Fee Justification Study, LAUSD, https://achieve.lausd.net/cms/lib/CA01000043/Centricity/Domain/921/LAUSD%20Dev%20Fee%20Study%202018%20FINAL.pdf, March 2018) = 8 employees. Thus, there would be a total of 130 employees on the Project Site*

[5] *Southern California Association of Governments, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, Demographic and Growth Forecast Appendix, Table 11, Jurisdictional Forecast, page 23, April 2016. While the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy has been adopted, the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy forms the basis of the growth projections in the currently applicable 2016 AQMP.*

Construction

Construction has the potential to create regional air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers and haul trips traveling to and from the Project Site. In addition, fugitive dust emissions would result from construction activities. During the finishing phase, the application of architectural coatings (i.e., paints) and other building materials would release VOCs. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

Based on criteria set forth in the SCAQMD CEQA Air Quality Handbook, a project would have the potential to violate an air quality standard or contribute substantially to an existing violation and result in a significant impact with regard to construction emissions if regional emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 75 pounds a day for volatile organic compounds ("VOCs"), (2) 100 pounds per day for nitrogen oxides ("NO_X"), (3) 550 pounds per day for carbon monoxide ("CO"), (4) 150 pounds per day for sulfur oxides ("SO_X"), (5) 150 pounds per day for PM10, and (6) 55 pounds per day for PM2.5.[6]

The Project's maximum daily construction emissions were calculated as pounds per day for each construction phase by year. Some Project construction phases would overlap and the maximum daily emissions account for the overlapping activities. In addition, construction contractors are required to comply with the applicable provision of SCAQMD Rule 403 for controlling fugitive dust emissions. Applicable fugitive dust control measures are incorporated into the construction emissions modeling within the SCAQMD-approved CalEEMod software and include the application of water (or non-toxic soil stabilizer) to disturbed areas and unpaved road surfaces and limiting vehicle speeds to 15 miles per hour on unpaved surfaces. The estimated maximum daily values do not represent the emissions that would occur for every day of construction. Due to variability in day-to-day construction activities, emissions could be lower on any given day, particularly on days when overlapping construction activities are not occurring. Results of the criteria pollutant calculations are presented in **Table B-1**, *Maximum Unmitigated Regional Construction Emissions*, along with the regional significance thresholds for each air pollutant.[7] As shown therein, construction-related daily emissions for the criteria and precursor pollutants (VOC, NO_X, CO, SO_X, PM10, and PM2.5) would be below SCAQMD significance thresholds. Therefore, impacts related to regional construction emissions would be less than significant.

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6 *South Coast Air Quality Management District, Air Quality Significance Thresholds, (April 2019), http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf, accessed October 2019.*

7 *Construction emissions included in Table B-1 assume construction of the Project starts in 2020. In doing so, the analysis is conservative in that emissions would be reduced in future years due to less pollutant emitting construction equipment, which is accounted for in the CalEEMod software.*

Table B-1
Maximum Unmitigated Regional Construction Emissions (pounds per day)[a]

Regional Emissions	VOC	NO_x	CO	SO_2	PM_{10} [b]	$PM_{2.5}$ [b]
Demolition - 2020	<1	3	13	<1	1	<1
Excavation - 2020	1	24	20	<1	5	2
Foundations - 2020	<1	2	10	<1	<1	<1
Continuous Concrete Pour - 2020	2	45	18	<1	5	2
Building Construction - 2021	1	4	11	<1	1	<1
Building Construction - 2022	1	4	11	<1	1	<1
Paving - 2021	<1	2	13	<1	<1	<1
Architectural Coating - 2022	15	<1	3	<1	<1	<1
Overlapping Phases[c]						
2020						
Foundations + Continuous Concrete Pour	2	47	28	<1	5	2
2021						
Building Construction + Paving	1	6	24	<1	1	1
2022						
Building Construction + Architectural Coatings	15	4	14	<1	1	<1
Maximum Daily Construction Emissions	**15**	**47**	**28**	**<1**	**5**	**2**
SCAQMD Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in the Air Quality Technical Report.
[b] Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.
[c] Analysis accounted for emissions from overlapping phases.

Source: ESA, 2020.

Operation

The SCAQMD has separate significance thresholds to evaluate potential impacts associated with the incremental increase in criteria air pollutants associated with long-term Project operations. Based on criteria set forth in the SCAQMD CEQA Air Quality Handbook, a project would have the potential to violate an air quality standard or contribute substantially to an existing violation and result in a significant impact with regard to operational emissions if regional emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 55 pounds a day for VOCs, (2) 55 pounds per day for NO_X, (3) 550 pounds per day for CO, (4) 150 pounds per day for SO_X, (5) 150 pounds per day for PM10, and (6) 55 pounds per day PM2.5.[8] Regional air pollutant emissions associated with Project operations would be generated by the consumption of electricity and natural gas, and by the operation of on-road vehicles. Pollutant emissions associated with energy demand (i.e., electricity generation and natural gas consumption) are classified by the SCAQMD as regional stationary source emissions.

The Project would be designed to meet the standards for Leadership in Energy and Environmental Design (LEED) Silver level by the U.S. Green Building Council (USGBC) through the incorporation of green building techniques and other sustainability features. The Project also would be designed and operated to meet or exceed

[8] *South Coast Air Quality Management District, Air Quality Significance Thresholds, http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2, accessed October 2019.*

the applicable requirements of the State of California Green Building Standards Code and the Culver City Green Building Program (as required by the City's standard conditions of approval). Some of the Project's "green building measures" as part of its design to reduce Project-related criteria pollutant emissions would include efficient heating, ventilation, and air conditions (HVAC systems), installation of low-flow water fixtures, and installation of a solar photovoltaic power systems equivalent to at least one percent of the Project's electricity demand and at least 1 kilowatt (kW) of solar photovoltaics per 10,000 SF of new development, as further described in the project design features listed below (see PDF-AIR-1 through PDF-AIR-3, below).

Operational criteria pollutant emissions were calculated for mobile, area, and stationary sources for the Project buildout year (conservatively assumed as 2022). Daily trip generation rates for the Project were provided by the Project's Traffic Study and include trips associated with the proposed hotel uses.[9] Results of the criteria pollutant calculations are presented in **Table B-2**, *Maximum Unmitigated Regional Operational Emissions*, along with the regional significance thresholds. The net increase in operational-related daily emissions (Project emissions minus existing emissions) for the criteria and precursor pollutants (VOC, NO_X, CO, SO_X, PM10, and PM2.5) would be substantially below the SCAQMD thresholds of significance. Therefore, Project-related operational emissions would result in a less than significant impact.

Table B-2
Maximum Regional Operational Emissions (pounds per day)[a]

Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	3	<1	<1	<1	<1	<1
Energy	<1	1	1	<1	<1	<1
Mobile Sources	5	5	36	<1	7	2
Total Project Operational Emissions	*8*	*5*	*37*	*<1*	*7*	*2*
Existing Site Emissions Removed	*2*	*1*	*9*	*<1*	*1*	*<1*
Net Maximum Regional Operational Emissions	**6**	**4**	**27**	**<1**	**6**	**2**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in the Air Quality Technical Report.

Source: ESA, 2020.

The SCAQMD's approach for assessing cumulative impacts related to operations or long-term implementation is based on attainment of ambient air quality standards in accordance with the requirements of the federal Clean Air Act (CAA) and California Clean Air Act. As discussed earlier, the SCAQMD has developed a comprehensive plan, the AQMP, which addresses the region's cumulative air quality condition.

A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or California non-attainment pollutant. Because the Los Angeles County portion of the Air Basin is currently in non-attainment for ozone, NO_2, PM10, and PM2.5, cumulative projects could exceed an air quality standard or contribute to an existing or projected air quality exceedance. Cumulative impacts to air quality are evaluated under two sets of thresholds for CEQA and the SCAQMD. In particular, Section 15064(h)(3) of the CEQA

[9] *Crain & Associates, Jefferson Hotel Project Traffic Study, 2020.*

Guidelines provides guidance in determining the significance of cumulative impacts. Specifically, Section 15064(h)(3) states in part that:

> *A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.*

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the Project's incremental contribution to cumulative air quality impacts is determined based on compliance with the SCAQMD adopted the AQMP. As discussed above in Section 5.1, Consistency with Air Quality Management Plan, the Project would not conflict with or obstruct implementation of AQMP and would be consistent with the growth projections in the AQMP.

Nonetheless, SCAQMD no longer recommends relying solely upon consistency with the AQMP as an appropriate methodology for assessing cumulative air quality impacts. The SCAQMD recommends that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality. The Project's regional emissions would be below SCAQMD significance thresholds. In particular, non-attainment pollutant emissions of ozone precursors and particulate matter would not exceed the SCAQMD significance thresholds. The formation of ground-level ozone is a complex process due to photochemical reactions of precursor pollutants (i.e., VOC and NO_X emissions) in the atmosphere in the presence of sunlight. Meteorological factors, such as wind, would result in dispersive effects of pollutants, including ozone precursor and particulate matter emissions, that are dispersed horizontally downwind and through vertical mixing. It is unlikely that the Project's emissions, which would not exceed the SCAQMD significance thresholds, would result in a substantial measurable increase in the respective pollutant concentrations in the Air Basin to a degree that clearly predictable and identifiable heath impacts would specifically result from this Project's emissions. Therefore, the Project's incremental contribution to long-term emissions of non-attainment pollutants and ozone precursors, considered together with cumulative projects, would not be cumulatively considerable. Impacts would be less than significant.

c. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Certain population groups are especially sensitive to air pollution and should be given special consideration when evaluating potential air quality impacts. These population groups include children, the elderly, persons with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. As defined in the SCAQMD CEQA Air Quality Handbook, a sensitive receptor to air quality is defined as any of the following land use categories: (1) long-term health care facilities; (2) rehabilitation centers; (3) convalescent centers; (4) retirement homes; (5) residences; (6) schools; (7) parks and playgrounds; (8) child care centers; and (9) athletic fields.

Localized - Construction

The localized effects from the on-site portion of daily emissions were evaluated at sensitive receptor locations potentially impacted by the Project according to the SCAQMD's localized daily significance threshold ("LST") methodology. Daily localized emissions caused by the Project were compared to the LSTs in the SCAQMD's look-up tables to determine whether the emissions would cause violations of ambient air quality standards.[10] The Project Site is located in the SCAQMD SRA 2 and would generally disturb up to 0.78 acres on a given day. The off-site air quality sensitive receptors would be the residential uses located within 25 meters to the north and west of the Project Site. Using the Localized Significance Threshold Methodology, the results of the analysis determined localized Project-related construction emissions would be below the SCAQMD thresholds of significance. Results of the pollutant calculations are presented in **Table B-3**, *Unmitigated Localized Construction Emissions*.[11] The emissions for increase in construction-related daily emissions for the criteria and precursor pollutants (NO_X, CO, PM10, and PM2.5) would be substantially below the SCAQMD thresholds of significance. Therefore, Project-related localized construction emissions would result in a less than significant impact.

Table B-3
Maximum Localized Construction Emissions (pounds per day)[a]

Regional Emissions	NO_x	CO	PM_{10} [b]	$PM_{2.5}$ [b]
Demolition - 2020	1	12	0.3	0.1
Excavation - 2020	1	16	2.4	1.3
Foundations - 2020	1	10	<0.1	<0.1
Continuous Concrete Pour - 2020	1	12	<0.1	<0.1
Building Construction - 2021	2	9	0.1	0.1
Building Construction - 2022	2	9	0.1	0.1
Paving - 2021	2	12	0.1	0.1
Architectural Coating - 2022	<1	2	0.0	<0.1
Overlapping Phases[c]				
2020				
Foundations + Continuous Concrete Pour	2	22	0.1	0.1
2021				
Building Construction + Paving	4	21	0.2	0.2
2022				
Building Construction + Architectural Coatings	2	11	0.1	0.1
Maximum Daily Construction Emissions	**4**	**22**	**2**	**1**
SCAQMD Localized Significance Thresholds [c]	**103**	**562**	**2**	**1**
Exceed Threshold?	No	No	No	No

[a] Totals may not add up exactly due to rounding in the modeling. Detailed emissions calculations are provided in the Air Quality Technical Report.

[b] Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

[c] Analysis accounted for emissions *from overlapping phases.*

Source: ESA, 2020.

[10] *LSTs are only applicable to the following criteria pollutants: NO_X, carbon monoxide ("CO"), PM10, and PM2.5.*

[11] *Construction emissions included in Table B-3 assume construction of the Project starts in 2020. In doing so, the analysis is conservative in that emissions would be reduced in future years due to less pollutant emitting construction equipment, which is accounted for in the CalEEMod software.*

Localized - Operation

The localized effects from the on-site portion of daily emissions were evaluated at sensitive receptor locations potentially impacted by the Project according to the SCAQMD's localized daily significance threshold ("LST") methodology. Daily localized emissions caused by the Project were compared to the LSTs in the SCAQMD's look-up tables to determine whether the emissions would cause violations of ambient air quality standards.[12] The Project Site is located in the SCAQMD SRA 2 and would generally disturb up to 0.78 acres on a given day. The off-site air quality sensitive receptors would be the residential uses located within 25 meters to the north and west of the Project Site. Using the Localized Significance Threshold Methodology, the results of the analysis determined localized Project-related construction emissions would be below the SCAQMD thresholds of significance. The maximum daily increase in localized emissions and localized significance thresholds are presented in **Table B-4**, *Unmitigated Localized Operational Emissions*. As shown therein, the increase in maximum localized operational emissions for sensitive receptors would be substantially below the localized thresholds for NO_X, CO, PM10, and PM2.5. Therefore, with respect to localized operational emissions, impacts would be less than significant.

Table B-4
Maximum Unmitigated Localized Operational Emissions (pounds per day)[a]

Source	NO_X	CO	PM_{10}	$PM_{2.5}$
Area	**<1**	**<1**	**<0.1**	**<0.1**
Energy	**1**	**1**	**<0.1**	**<0.1**
Total Localized Project Operational Emissions	*1*	*1*	*<0.1*	*<0.1*
Localized Existing Site Emissions Removed	*<1*	*<1*	*<0.1*	*<0.1*
Net Localized (On-Site) Emissions	**1**	**1**	**<0.1**	**<0.1**
SCAQMD Numeric Indicators	**103**	**562**	**1**	**1**
Exceeds Thresholds?	**No**	**No**	**No**	**No**

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Air Quality Technical Report.

Source: ESA, 2020.

Carbon Monoxide Hotspots

The potential for the Project to cause or contribute to CO hotspots is evaluated by comparing Project intersections (both intersection geometry and traffic volumes) with prior studies conducted by SCAQMD in support of their AQMPs and considering existing background CO concentrations. As discussed below, this comparison demonstrates that the Project would not cause or contribute considerably to the formation of CO hotspots, that CO concentrations at Project impacted intersections would remain well below the ambient air quality standards, and that no further CO analysis is warranted or required.

As discussed further in the Air Quality Technical Report, CO levels in the Project area are substantially below the federal and state standards. Maximum CO levels in recent years are 3 ppm (one-hour average) and 1.8 ppm (eight-hour average) compared to the thresholds of 20 ppm (one-hour average) and 9.0 ppm (eight-hour average). CO levels decreased dramatically in the Air Basin with the introduction of the catalytic converter in 1975. No exceedances of CO have been recorded at monitoring stations in the Air Basin for some time and the Air Basin is currently designated as a CO attainment area for both the CAAQS and NAAQS. Thus, it is not

[12] *LSTs are only applicable to the following criteria pollutants: NO_X, carbon monoxide ("CO"), PM10, and PM2.5.*

expected that CO levels at Project-impacted intersections would rise to the level of an exceedance of these standards.

Additionally, SCAQMD conducted CO modeling for the 2003 AQMP for the four worst-case intersections in the Air Basin: (1) Wilshire Boulevard and Veteran Avenue; (2) Sunset Boulevard and Highland Avenue; (3) La Cienega Boulevard and Century Boulevard; and (4) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP, 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 approximately 100,000 vehicles per day. This intersection is located near the on- and off-ramps to I-405 in West Los Angeles. The evidence provided in the 2003 AQMP (Table 4-10 of Appendix V) shows that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (one-hour average) and 3.2 (eight-hour average) at Wilshire Boulevard and Veteran Avenue. When added to the existing background CO concentrations, the screening values would be 7.6 ppm (one-hour average) and 5 ppm (eight-hour average).

Based on the Project's Traffic Study, under future operational year plus Project conditions, the intersection of Centinela Avenue and Sepulveda Boulevard had the highest peak traffic volume with approximately 77,460 per day.[13] As a result, CO concentrations are expected to be less than those estimated in the 2003 AQMP, which would not exceed the thresholds. Thus, this comparison demonstrates that the Project would not contribute considerably to the formation of CO hotspots and no further CO analysis is required. The Project would result in less than significant impacts with respect to CO hotspots.

Toxic Air Contaminants – Construction

The greatest potential for toxic air contaminants (TAC) emissions would be related to diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. In addition, incidental amounts of toxic substances such as oils, solvents, and paints would be used. As part of the Air Quality Technical Report, heal risk calculations were performed using a spreadsheet tool consistent with the OEHHA guidance, which incorporates the algorithms, equations, and a variable described above as well as in the OEHHA guidance, and incorporates the results of the AERMOD dispersion model. **Table B-5**, *Maximum Unmitigated Health Impacts for Off-Site Sensitive Receptors, summarizes the cancer risk and non-cancer impacts for the maximum impacted sensitive receptors.*

Table B-5
Maximum Unmitigated Health Impacts for Off-Site Sensitive Receptors

Sensitive Receptor	Maximum Cancer Risk (# in one million)	Hazard Index
Residential Land Use	9.2	0.01
Maximum Health Impact Thresholds	10	1.0
Exceeds Thresholds?	**No**	**No**

Source: ESA, 2019.

The cancer risk from DPM emissions from construction of the Project is estimated to result in a maximum cancer risk of approximately 9.1 per million, below the SCAQMD's significance threshold. As shown below, the Project would not result in a chronic hazard index greater than 1.0; therefore, chronic health risks would be less than significant. The maximum impacts would occur at a residential property across the service alley. As discussed previously, the lifetime exposure under OEHHA guidelines takes into account early life (infant and children)

[13] *Crain & Associates, Jefferson Hotel Project Traffic Study, 2020.*

exposure. The calculated cancer risk is estimated for outdoor exposure and assumes that sensitive receptors (residential uses) would not have any mitigation such as mechanical filtration and that residential uses would have continuously open windows. As the maximum cancer risk and non-cancer impacts would be less than the SCAQMD significance thresholds, impacts would be less than significant.

The process of assessing health risks and impacts includes a degree of uncertainty, which is dependent on the availability of data and the extent to which assumptions are relied upon in cases where the data are incomplete or unknown. All HRAs rely upon scientific studies to reduce the level of uncertainty; however, it is not possible to completely eliminate uncertainty from the analysis. Where assumptions are used to substitute for incomplete or unknown data, it is standard practice in performing HRAs to err on the side of health protection to avoid underestimating or underreporting the risk to the public by assessing risk on the most sensitive populations, such as children and the elderly. As shown in Table B-5, cancer risk for nearby sensitive receptors would remain below significance thresholds. These short-term emissions would not substantially contribute to a significant construction health risk. No residual emissions and corresponding individual cancer risk are anticipated after Project construction. Therefore, the Project would result in a less than significant impact related to construction TAC emissions.

Toxic Air Contaminants – Operation

SCAQMD recommends that health risk assessments be conducted for substantial sources of DPM emissions (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions. The Project is not anticipated to generate a substantial number of daily truck trips. Under existing conditions, trucks currently make deliveries from the service alley to the northwest of the Project Site. With implementation of the Project, delivery truck loading and unloading would be moved to the interior of the Project Site in dedicated loading areas, creating greater separation between trucks and off-site sensitive receptors. Furthermore, typical sources of hazardous TACs include industrial manufacturing processes and automotive repair facilities. The Project would not include any of these potential sources, although minimal emissions may result from the use of consumer products (e.g., aerosol sprays). Based on this, the Project is not expected to release substantial amounts of TACs.

Therefore, based on the limited activity of TAC sources and TAC concentrations at off-site sensitive receptors relative to existing conditions, the Project would not warrant the need for a health risk assessment associated with on-site activities, and potential TAC impacts would be less than significant.

d. 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 include the use of architectural coatings and solvents. According to the SCAQMD CEQA Air Quality Handbook, construction equipment is not a typical source of odors. SCAQMD Rule 1113 limits the amount of VOCs from architectural coatings and solvents. According to the SCAQMD CEQA Air Quality Handbook, construction equipment is not a typical source of odors. Odors from the combustion of diesel fuel would be minimized by complying with the CARB ATCM that limits diesel-fueled commercial vehicle idling to five minutes at any given location, which was adopted in 2004. The Project would also comply with SCAQMD Rule 402 (Nuisance), which prohibits the emissions of nuisance air contaminants or odorous compounds. Through adherence with mandatory compliance with SCAQMD Rules and State measures, construction activities and materials would not create objectionable odors. Construction of the Project's proposed uses would not be expected to generate nuisance odors at nearby sensitive receptors.

Results of the construction related criteria pollutant calculations are presented in Table B-1 (regional) and Table B-3 (localized). The daily emissions for criteria pollutants would be below SCAQMD significance thresholds. Since implementation of the Project would not exceed the regional or localized significance thresholds for attainment or non-attainment pollutants, the Project is not anticipated to contribute to health impacts related to these pollutants specifically because these thresholds were established at levels considered safe to protect public health, including the health of sensitive populations.

According to the SCAQMD CEQA Air Quality Handbook, 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. The Project would not involve elements related to these types of uses. The Project would include various trash receptacles associated with the proposed development. On-site trash receptacles used by the Project would be covered and properly maintained to prevent adverse odors. With proper housekeeping practices, trash receptacles would be maintained in a manner that promotes odor control, and no adverse odor impacts are anticipated from the uses. Impacts with respect to odors would be less than significant.

Results of the operational related criteria pollutant calculations are presented in Table B-2 (regional) and Table B-4 (localized). The daily emissions for criteria pollutants would be below SCAQMD significance thresholds. Since implementation of the Project would not exceed the regional or local significance thresholds for attainment or non-attainment pollutants, the Project is not anticipated to contribute to health impacts related to these pollutants specifically because these thresholds were established at levels considered safe to protect public health, including the health of sensitive populations.

IV. BIOLOGICAL RESOURCES

Would the project:

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

No Impact. The Project Site is located in a highly urbanized area of Culver City and is currently developed with a single-story commercial (retail) building and an associated asphalt-paved surface parking lot. The Project Site does not include suitable habitat for candidate, sensitive, or special status species. Due to high levels of human activity and density of development in the Project area, there is no potential for sufficient natural habitat to support candidate, sensitive, or special status species on the Project Site. As such, the Project would not have a substantial adverse effect on candidate, sensitive, or special status species. No impacts would occur.

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

No Impact. As discussed under Response IV.a, above, the Project Site is currently developed with urban uses. No designated riparian habitat or natural communities exist on the Project Site or in the surrounding area. The Project Site is paved with ornamental landscaping and two street trees (African fern pine) are located along Slauson Avenue. The Project Site and surrounding area does not include any vegetation that constitutes a plant community. As such, the Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. No impacts would occur.

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

No Impact. As discussed under Response IV.a, the Project Site is currently developed and located within an urbanized area. It does not contain any state federally protected wetlands as defined by Section 404 of the Clean Water Act. As such, the Project would not have a substantial adverse effect on federally protected wetlands. No impacts would occur.

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

Less Than Significant Impact With Mitigation Incorporated. The Project Site is located in a highly urbanized area of Culver City and is currently developed with urban uses. No wildlife corridors or native wildlife nursery sites are present on the Project Site or in the surrounding area. Further, due to the urbanized nature of the Project area, the potential for native resident or migratory wildlife species movement through the Project Site is negligible.

Nonetheless, the Project area does include ornamental trees that could support nesting bird habitat. As discussed under Response IV.b, the Project Site is paved with ornamental landscaping and two street trees (African fern pine) are located along Slauson Avenue. Jefferson Boulevard and Slauson Avenue are highly utilized streets with high levels of ambient noise and human disturbance resulting from pedestrian and vehicular traffic. Species tolerant of human disturbance have the potential to nest within these ornamental trees or shrubs contained within or adjacent to the Project Site.

Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). The removal of vegetation with nesting birds during the breeding season is considered a potentially significant impact. While the urbanized nature of the Project area limits the potential for native resident or migratory wildlife species movement through the Project Site, the Project would implement MM-BIO-1, below, which would be consistent with the Federal MBTA to reduce potential impacts to protected nesting birds. Impacts would be less than significant with mitigation incorporated.

Mitigation Measure

MM-BIO-1: The Applicant shall be responsible for the implementation of mitigation to reduce impacts to migratory and/or nesting bird species to below a level of significance through one of two ways. Either:

(1) Vegetation removal activities shall be scheduled outside the nesting season which runs from February 15 to August 31 to avoid potential impacts to nesting birds. This would insure that no active nests are disturbed; or

(2) If avoidance of the avian breeding season (February 15 through August 31) is not feasible, then:

(a) A qualified biologist shall conduct a preconstruction nesting bird survey within 15 days and again within 72 hours prior to any ground disturbing activities (staging, grading, vegetation removal or clearing, grubbing, etc.). The survey shall be conducted to ensure that impacts to birds, including raptors, protected by the MBTA and/or the California Fish and Game Code are avoided. Survey areas shall include suitable nesting habitat within 200 feet of construction site boundaries. This two-tiered survey method is intended to provide the Applicant with time to understand the potential issue and evaluate solutions if nests are present, prior to mobilizing resources. If active nests are not identified, no further action is necessary.

(b) If active nests are identified during pre-construction surveys, an avoidance buffer shall be demarcated for avoidance using flagging, staking, fencing, or another appropriate barrier to delineate construction avoidance until the nest is determined to no longer be active by a qualified biologist (i.e., young have fledged or no longer alive within the nest). An active nest is defined as a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. Given the high disturbance level, general avoidance buffers include a minimum 100-foot avoidance (for smaller birds more tolerant of human disturbance) to a 250-foot avoidance buffer for passerine and a 500-foot avoidance buffer from active raptor nests, or reduced buffer distances determined at the discretion of a qualified biologist familiar with local nesting birds and breeding bird behavior within the Project area.

Construction personnel shall be informed of the active nest and avoidance requirements. A biological monitor shall review the site, at a minimum of one-week intervals, during all construction activities occurring near active nests to ensure that no inadvertent impacts to active nests occur. Pre-construction nesting bird surveys and monitoring results shall be submitted to the Culver City Planning Division via email or memorandum upon completion of the pre-construction surveys and/or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.

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

Less Than Significant Impact. The Project Site does not support protected tree species. Vegetation within the Project area is largely confined to ornamental landscaping. All vegetation on the Project Site would be removed as part of the Project, including the removal of two street trees (African fern pine). Project implementation would comply with the applicable provisions pertaining to the removal and replacement of street trees in the CCMC within Title 9: General Regulations, Chapter 9.08: Streets and Sidewalks – Tree Removal, Section 9.08.215: Removal of Trees in Parkways Related to Private Improvement or Development Project. Per the CCMC, the Project is required to plant two new street right-of-way trees or parkway trees for each street tree that is removed in the public right-of-way. The size and location of replacement trees would be determined by the Public Works Director based on the street or parkway. With compliance to the applicable street tree removal and replacement provisions of the CCMC, impacts on street trees would be less than significant.

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

No Impact. As discussed above, no designated riparian habitat or natural communities exist on the Project Site or in the surrounding area. Additionally, there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan in place for the Project Site or the City. No impacts would occur.

V. CULTURAL RESOURCES

The following impact analysis pertaining to the Project Site's cultural resources is based on information contained in the Cultural Resources Assessment, prepared by ESA, dated June 2019, which is available for review at the Culver City Planning Division.

Would the project:

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

No Impact. A historical resource is defined in Section 15064.5(a)(3) of the CEQA Guidelines as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Resources listed in or determined eligible for the California Register of Historical Resources, included in a local register, or identified as significant in a historic resource survey are also considered historical resources under CEQA.

A project with an effect that may cause substantial adverse change in the significance of a historical resource is a project that may have a significant impact on the environment. Substantial adverse change is defined as physical demolition, relocation, or alteration of a resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.[14] Direct impacts are those that cause substantial adverse physical change to a historical resource. Indirect impacts are those that cause substantial adverse change to the immediate surroundings of a historical resource such that the significance of a historical resource would be materially impaired.

A records search for the Project was conducted on January 10, 2019, at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) housed at California State University, Fullerton. The records search included a review of all recorded archaeological resources and previous studies within the Project Site and a 1-mile radius, and historic architectural resources within or immediately adjacent to (within approximately 50 feet of) the Project Site. The records search also included a review of California Points of Historical Interest, California Historical Landmarks, the California Register, the National Register, the Archaeological Determinations of Eligibility, and the California State Historic Resources Inventory. Historic maps and aerial photographs were also examined to provide historical information about the Project Site. In addition to the SCCIC records search, additional archives were reviewed to establish any significant events or persons that might be associated with the gas station, remnants of which could be located subsurface in the Project Site. This included a review of the Los Angeles Public Library digital archives, Newpapers.com, and Ancestry.com.

The records search results indicate that 49 cultural resources studies have been previously conducted within a 1-mile radius of the Project Site. Of the 49 previous studies, none have included the Project Site and it does not appear to have been previously surveyed. The records search results indicate that eight archaeological resources have been recorded within the 1-mile radius and includes six prehistoric archaeological sites and two multicomponent archaeological sites. None of these resources are located within or adjacent to (within 50 feet

[14] *California Code of Regulations, Title 14, Chapter 3, Article 5, Section 15064.5 (b) (1)*

of) the Project Site. No historic architectural resources have been previously recorded within the Project Site or adjacent parcels.

Review of the 1927, 1938, 1947, 1948, and 1952 aerial photographs indicate that the Project Site was undeveloped/vacant land. The 1953 and 1963 aerial photographs show a small structure located within the middle portion of the Project Site. The 1963 aerial photograph also depicts a rectangular building in the west portion of the Project Site (on a north-south alignment). The 1972 and 1980 aerial photographs depict the same conditions as present in 1963. The small structure located within the middle portion of the Project Site is no longer present in 1994, and the existing structures had been constructed by this time. No additional improvements or substantial changes have occurred to the Project Site since 1994.

Based on a review of historical archives, it appears that one significant individual was associated with this property: Ferdy Sant. However, Sant appears to have been important in local Arizona history as a pharmacist and business owner, but not in relation to this property or other properties in California. Nothing in the record indicates that other individuals were important persons. Archival research did not reveal that significant events have occurred at this location. There were no newspaper accounts of historical events or trends that have made a significant contribution to the history or development of Culver City, California, or the United States associated with the gas or service station.

The Project Site was subject to historic-period land uses dating back to the early 1950s, including a gasoline station and automotive repair shop. This suggests that the Project Site could also have some potential to contain historical resources. However, based on historical research that failed to identify a significant association with important events or individuals, it is unlikely that remnants of these previous uses would be eligible as historical resources since they are unlikely to yield information important in history.

Because the current building on the Project Site is not a historical resource, the Project would have no direct impact on historical resources. Furthermore, the Project would result in no indirect impacts to historical resources in the vicinity of the Project Site as the historic setting in the area around the Project Site is already eroded by contemporary development. Pursuant to CEQA, the Project would not result in direct or indirect impacts to historical resources.

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

Less Than Significant Impact With Mitigation Incorporated. As noted in the historical resources analysis above, no cultural resources (including archaeological resources) have been previously identified within the Project area. The Project Site is currently developed with a single-story commercial (retail) building and associated asphalt-paved surface parking lot. As discussed above, the records search results indicate that eight archaeological resources have been recorded within the 1-mile radius, which included six prehistoric archaeological sites and two multicomponent archaeological sites.

As discussed in the Cultural Resources Assessment, based on the factors used to determine the potential of encountering prehistoric archaeological deposits, the Project Site appears to have the potential to contain prehistoric archaeological resources. In addition, areas within the Project Site that appear to have been subject to fewer disturbances include an area west and south of the existing on-site building. This area is currently a paved parking lot. Parking lots have the potential to cap and preserve archaeological resources below the surface as excavations for parking lots are typically shallow and would therefore not disturb or displace deeper archaeological resources, and the asphalt pavement could have served as a barrier that could have prevented further impacts to any such resources. As such, there is a high to moderate possibility to encounter potentially significant intact subsurface prehistoric archaeological resources or human remains during ground-disturbing activities in this area. There is also a moderate to low potential for subsurface prehistoric archaeological resources in areas where buildings previously or currently are developed on the Project Site. As such, and as provided in the Cultural Resources Assessment, since the Project includes ground disturbance up to 35 feet in depth and there are some areas of the Project Site that may contain potentially significant intact prehistoric or Native American archaeological resources, MM-CUL-1 to MM-CUL-4 are prescribed to ensure that potentially significant impacts to previously unknown archaeological resources that might be unexpectedly discovered during Project implementation are reduced such that the Project would not cause a substantial adverse change in the significance of an archaeological resource. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM-CUL-1: Prior to issuance of demolition permit, the Applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology (Qualified Archaeologist) to oversee an archaeological monitor who shall be present during construction excavations such as demolition, clearing/grubbing, grading, trenching, or any other construction excavation activity associated with the Project. Full-time monitoring shall be conducted in areas of high to moderate potential (as shown on Figure 14 of the Cultural Resources Assessment) to a depth of 10 feet (depth at which archaeological sensitivity decreases). Full-time monitoring of initial ground disturbance in areas of moderate to low sensitivity (also as shown on Figure 14) shall be conducted to determine if full-time or periodic monitoring is warranted in these areas, as determined by the Qualified Archaeologist. Full-time monitoring in any area can be reduced to part-time inspections or ceased entirely if determined appropriate by the Qualified Archaeologist, based on field observations. Prior to commencement of excavation activities, an Archaeological and Cultural Resources Sensitivity Training shall be given for construction personnel. The training session shall be carried out by the Qualified Archaeologist and shall focus on how to identify archaeological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event.

MM-CUL-2: Prior to issuance of demolition permit, the Applicant shall retain a Native American tribal monitor from the Gabrieleno Tribe. The appropriate Native American monitor shall be selected based on ongoing consultation under AB 52 and shall be identified on the most recent contact list provided by the Native American Heritage Commission. The Native American Monitor shall be present during construction excavations such as demolition, clearing/grubbing, grading, trenching, or any other construction excavation activity associated with the Project. The frequency of monitoring shall take into account the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (younger alluvium vs. older alluvium), and the depth of excavation, and if found, the abundance and type of prehistoric archaeological resources encountered. Full-time field observation can be reduced to part-time inspections or ceased entirely if determined appropriate by the Gabrielino Tribe.

MM-CUL-3: In the event that archaeological resources (e.g., Native American artifacts or features, etc.) are unearthed, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. An appropriate buffer area shall be established by the Qualified Archaeologist around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. All prehistoric or Native American archaeological resources unearthed by Project construction activities shall be evaluated by the Qualified Archaeologist and a Gabrielino Tribe. If the resources are Native American in origin, the Gabrielino Tribe shall consult with the City and Qualified Archaeologist regarding the treatment and curation of any prehistoric archaeological resources to ensure cultural values ascribed to the resources, beyond those that are scientifically important, are considered. If a resource is determined by the Qualified Archaeologist to constitute a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or a "unique archaeological resource" pursuant to Public Resources Code Section 21083.2(g), the Qualified Archaeologist, preservation in place (i.e., avoidance) shall be the preferred manner of treatment. If preservation in place is not feasible, the Qualified Archaeologist shall coordinate with the Applicant and the City to develop a formal treatment plan that would serve to reduce impacts to the resources and that provides for the adequate recovery of the scientifically consequential information contained in the resources along with subsequent laboratory processing, analysis, evaluation, and reporting. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources, and shall incorporate the Gabrielino Tribe's treatment and curation recommendations. The treatment plan shall include measures regarding the curation of the recovered resources that may include curation at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material, and/or the Gabrielino Tribe. If no institution nor the Gabrielino Tribe accept the resources, they may be donated to a local school or historical society in the area (such as the Culver City Historical Society) for educational purposes.

MM-CUL-4: Prior to the release of the grading bond, the Qualified Archaeologist shall prepare a final report and appropriate California Department of Parks and Recreation Site Forms at the conclusion of archaeological monitoring. The report shall include a description of resources unearthed, if any, treatment of the resources, results of the artifact processing, analysis, and research, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. The report and the Site Forms shall be submitted by the Applicant to the City, the South Central Coastal Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures.

c. Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact With Mitigation Incorporated. As discussed above in Responses V.b, above, and as discussed further in the Cultural Resources Assessment, there is a high to moderate possibility to encounter potentially significant intact subsurface prehistoric archaeological resources or human remains during ground-disturbing activities in this area. As a result, in the event that previously unknown human remains may be encountered during construction excavations, MM-CUL-5 is prescribed to ensure that potentially significant impacts to them are reduced such that the Project would not disturb any human remains, including those interred outside of dedicated cemeteries. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM-CUL-5: If human remains are encountered unexpectedly during implementation of the Project, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the land owner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

If the NAHC is unable to identify an MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance.

VI. ENERGY

The following impact analysis pertaining to energy is based on information contained in the Project's Energy Technical Report prepared by ESA, dated November 2020, which is available for review at the Culver City Planning Division.

Would the project:

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

Less Than Significant Impact. The Project would consume energy during construction activities primarily from the use of heavy-duty construction equipment, on-road trucks, and workers commuting to and from the Project Site. Project operations would consume energy in the form of electricity for lighting, and water conveyance, natural gas for heating, and fossil fuels for employee and student trips. Operation of the Project would require energy in the form of electricity and natural gas for building heating, cooling, cooking, lighting, water demand and wastewater treatment, consumer electronics, and other energy needs; transportation-fuels, primarily gasoline, for vehicles traveling to and from the Project; and diesel for the maintenance and testing of emergency generators.

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

Construction

As discussed above, the Project would consume energy during construction activities primarily from the use of heavy-duty construction equipment, on-road trucks, and workers commuting to and from the Project Site. The *analysis below includes the Project's energy requirements and energy use efficiencies by energy type for each stage of the Project.*

Electricity used during construction to provide temporary power for lighting and electronic equipment (e.g., computers, etc.) and to power certain construction equipment (e.g., hand tools or other electric equipment) would generally not result in a substantial increase in on-site electricity use. Electricity use during construction would be variable depending on lighting needs and the use of electric-powered equipment and would be temporary for the duration of construction activities. It is expected that construction electricity use would generally be considered as temporary and negligible over the long-term.

Construction activities typically do not involve the consumption of natural gas.

The estimated fuel usage for off-road equipment is based on the number and type of equipment that would be used during construction activities, hour usage estimates, the total duration of construction activities, and hourly equipment fuel consumption factors. It is estimated that a maximum of approximately 10,679 one-way truck trips would be required to haul the material to off-site reuse and disposal facilities over the approximately 26-month construction period. The Project is estimated to generate approximately 14,222 one-way vendor truck trips for the delivery of building materials and supplies to the Project Site over the construction period. The Project would comply with anti-idling and emissions regulations, which would result in efficient use of construction-related energy and the minimization or elimination of wasteful and unnecessary consumption of energy, as well as implementation of PDF-AIR-1, which would require trucks and other vehicles to have their engines off while in loading and unloading queues, which would further reduce emissions and fuel consumption. As calculated in the Energy Technical Report, construction of the Project would use a total of approximately 46,602 gallons of diesel fuel for haul truck and vendor delivery trips. On an annual average basis, haul trucks and vendor delivery trips associated with Project construction would use approximately 21,509 gallons of diesel fuel per year during the 26-month construction period.

The number of construction workers that would be required would vary based on the phase of construction and activity taking place. Assuming construction worker automobiles have an average fuel economy consistent with the EMFAC2017 model and given the total vehicle miles traveled for construction workers, based on engineering estimates provided in CalEEMod used for the air quality and GHG emissions assessment, workers would travel a total of approximately 513,324 miles. Based on the information described above, the total gasoline fuel was estimated as 19,419 gallons. Construction fuel usage for heavy-duty construction equipment, haul trucks, vendor trucks, and worker trips is shown in **Table B-6**, *Project Construction Fuel Usage*.

Table B-6
Project Construction Fuel Usage

Source	Total Gallons of Diesel Fuel	Total Gallons of Gasoline Fuel
Construction:		
Heavy-Duty Construction Equipment	56,360	—
Haul Trucks	33,578	—
Vendor Trucks	13,025	—
Worker Trips	—	19,419
Total	**102,962**	**19,419**

Source: ESA, 2020.

For comparison purposes, the Project's construction energy demand from transportation fuel is compared to the Los Angeles County transportation fuel sales. Calculations, as presented in the Energy Technical Report, illustrate that the Project would represent a very small fraction of the County's total fuel consumption (i.e., 0.008 percent of the County's diesel fuel usage and 0.0002 percent of the County's gasoline fuel usage. Furthermore, construction of the Project would result in short-term and temporary energy demand lasting approximately 26 months. As such, the Project would not increase the need for new energy infrastructure.

Based on the above, construction of the Project would not result in the wasteful, inefficient, and unnecessary consumption of energy and would not increase the need for new energy infrastructure. Impacts would be less than significant.

Operation

Project operations would consume energy in the form of electricity for lighting, and water conveyance, natural gas for heating, and fossil fuels for employee and student trips. Operation of the Project would require energy in the form of electricity and natural gas for building heating, cooling, cooking, lighting, water demand and wastewater treatment, consumer electronics, and other energy needs; transportation-fuels, primarily gasoline, for vehicles traveling to and from the Project; and diesel for the maintenance and testing of emergency generators. **Table B-7**, *Project Operational Energy Usage*, provide a summary of the electricity, natural gas, and transportation fuel usage during operation of the Project.

Table B-7
Project Operational Energy Usage

	Energy Usage
Electricity (kWh)	
Project Net Total	0.96
Natural Gas (million cf)	
Project Net Total	2.8
Transportation Fuel (Gallons Per Year)	
Project Net Gasoline Fuel Total	106,690
Project Net Diesel Fuel Total	19,620

Source: ESA, 2020.

As shown in Table B-7, the Project would result in a net total of 0.96 million kilo Watt hours (kWh), which includes electricity usage for building lighting and equipment as well as electricity consumed for the conveyance and treatment of water, wastewater, and disposal of solid waste off-site. The Project would install solar electric PV systems, as required by the City's Green Building Code Solar Ordinance. As shown further in the Energy Technical Report, this electricity usage would be 0.001 percent of the SCE electricity sales. In addition, as shown in Table B-7, net Project consumption of natural gas would total 2.8 million cubic foot (cf), which includes energy consumption. Incorporation of similar Green Building Code measures would further reduce usage of natural gas. As also shown in the Energy Technical Report, natural as would be 0.0003 percent of the SoCalGas natural gas sales in 2017. As the Project would achieve greater than required energy efficiency, it would not result in the wasteful, inefficient, and unnecessary consumption of building energy or transportation energy usage.

Table B-7 also provides the Project's net total gasoline and diesel fuel usage per year during operation of the Project. As shown in Table B-7, Project net gasoline fuel usage was estimated to be 106,690 gallons per year and Project net diesel fuel usage was estimated to be 19,620 gallons per year. This would be approximately

0.003 percent and 0.003 percent of the Los Angeles County gasoline and diesel fuel usage in 2017. The Project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles. By locating commercial uses at an infill location in close proximity to existing off-site commercial, residential, and retail destinations and in close proximity to many public transit routes. In particular, the Project Site is located in the Sunkist Park Neighborhood in the central portion of the City and is within one-half-mile of existing public transit stops, as well as being within a reasonable walking distance from the Westfield Culver City shopping mall. The Project would create a pedestrian-friendly environment with direct access to the Westfield Culver City shopping mall and clear linkages to regional and local transportation systems. The Project would promote alternate modes of transit as it is within walking distance of several bus stops, including the Culver City Transit Center Bus Station that is located approximately 900 southeast of the Project Site that is served by the Culver City bus routes 3,4 and 6 and the Metro bus routes 108, 110 and 217. In addition, the Project would be consistent with the 2020-2045 RTP/SCS strategies to promote active transportation and supports improvements in local bike networks as the Project promotes the use of bicycles as it is located close to many Culver City bike paths.

Given that the Project Site are located in a transit-rich area such that vehicle trips and vehicle miles traveled (VMT) would be minimized, the Project would be consistent with and support the goals and benefits of the 2020-2045 RTP/SCS, which seeks improved access and mobility by placing “destinations closer together, thereby decreasing the time and cost of traveling between them.”[15] The density of housing, restaurants, shopping, and recreation amenities in the Sunkist Park Neighborhood, combined with the plentiful bike lanes, pedestrian paths and public transportation options in the District, supports the expectation that that projects located in the area would have a substantially greater level of transportation efficiency when compared to the Citywide and statewide averages. The Project would therefore be consistent with the 2020-2045 RTP/SCS goals and benefits intended to improve mobility and access to diverse destinations, provide better “placemaking,” provide more transportation choices, and reduce vehicular demand and associated emissions. As such, the Project would be consistent with regional plans to reduce VMT and would not cause wasteful, inefficient, or unnecessary use of energy.

Based on the above, operation of the Project would not result in the wasteful, inefficient, and unnecessary consumption of energy and would not increase the need for new energy infrastructure. Impacts would be less than significant.

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

Less Than Significant Impact. As discussed above in Response VI.a, and as discussed further in the Energy Technical Report, the Project would incorporate green building design features such as solar electric PV systems consistent with the energy efficiency standards in the City’s Green Building Code and CALGreen Code. The Project promotes the use of bicycles as it is located close to many Culver City bike paths and would CALGreen Code required number of bicycle parking spaces, which have the potential to reduce fuel consumption, as well as criteria pollutant and GHG emissions. The Project would also provide showers and clothes lockers for employees which has the potential to reduce secondary trips. The Project Site is also within a relatively short distance of existing transit stops. The Project would be designed to meet criteria for the LEED Certification level which would meet or exceed the current Title 24 Energy standards. The Project would incorporate project design features (refer to PDF-AIR-2 and PDF-AIR-3, above under Response II.b) that provide opportunities for improved energy efficiency that would exceed the regulatory standards. Overall, the Project’s features would support and promote the use of renewable energy and energy efficiency and would not conflict with or obstruct any applicable

[15] *Southern California Association of Governments, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, (2016) p16.*

renewable energy or energy efficiency plan, which emphasize energy efficiency and the use of renewable energy. Impacts would be less than significant.

VII. GEOLOGY AND SOILS

The following impact analysis pertaining to the Project Site's underlying geology and soils is based on information contained in the Geotechnical Engineering Investigation, prepared by Geotechnologies, Inc., dated November 7, 2017, which is available for review at the Culver City Planning Division.

Analysis for the paleontological resources topic (see Response VII.f, below) is based on information contained in the Cultural Resources Assessment, prepared by ESA, dated June 2019, which is available for review at the Culver City Planning Division.

Would the project:

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.

Less Than Significant Impact. Fault rupture is the displacement that occurs along the surface of a fault during an earthquake. Based on criteria established by the California Geological Survey (CGS), faults may be categorized as active, potentially active, or inactive. Active faults are those which show evidence of surface displacement within the last 11,000 years (Holocene-age). Potentially active faults are those that show evidence of most recent surface displacement within the last 1.6 million years (Quaternary-age). Faults showing no evidence of surface displacement within the last 1.6 million years are considered inactive. In addition, there are buried thrust faults, which are low angle reverse faults with no surface exposure. Due to their buried nature, the existence of buried thrust faults is usually not known until they produce an earthquake.

The CGS has established earthquake fault zones known as Alquist-Priolo Earthquake Fault Zones around the surface traces of active faults to assist cities and counties in planning, zoning, and building regulation functions. These zones, which extend from 200 to 500 feet on each side of a known active fault, identify areas where potential surface rupture along an active fault could prove hazardous and identify where special studies are required to characterize hazards to habitable structures.

The Project Site is located in the seismically active Southern California region and could be subject to moderate to strong ground shaking in the event of an earthquake on one of the many active Southern California faults. The Geotechnical Engineering Investigation conducted for the Project indicates that no currently known active or potentially active surface faults traverse the Project Site, and the Project Site is not located within a designated Alquist-Priolo Earthquake Fault Zone. The nearest fault zone to the Project Site is the Newport Inglewood Fault Zone is located approximately 1.6 miles east of the Project Site.[16] In addition, the Overland Avenue Fault is located approximately 2,000 feet east of the Project Site, along Overland Avenue.[17] It should be noted that no Special Studies Zones have been delineated by the State of California along any portion of the Overland Avenue

[16] *California Department of Conservation, Fault Activity Map of California (2010), http://maps.conservation.ca.gov/cgs/fam/, accessed October 2019.*

[17] *California Department of Conservation, Fault Activity Map of California (2010), http://maps.conservation.ca.gov/cgs/fam/, accessed October 2019.*

Fault. In addition, the as such, the potential for surface rupture due to faulting occurring on the Project Site during the design life of the Project is considered low. Furthermore, Project buildings would be designed and constructed to resist the effects of seismic ground motions as provided in the Culver City Building Code and the 2019 California Building Code. Therefore, the Project would not directly or indirectly cause potential substantial adverse impacts associated with the rupture of a known earthquake fault. Impacts would be less than significant.

ii. Strong seismic ground shaking?

Less Than Significant Impact With Mitigation Incorporated. The City, as with all of Southern California, is subject to strong ground shaking. As such the Project Site is located in a seismically active region. As discussed above, two nearby faults include the Newport-Inglewood Fault and Overland Avenue Fault. Earthquakes are unavoidable hazards although the resultant damage can be minimized through appropriate seismic design and engineering.

The City requires that all new construction meet or exceed the Culver City Building Code and the latest standards of the 2019 California Building Code for construction which requires structural design that can accommodate maximum ground accelerations expected from known faults. Furthermore, the Project would comply with the CGS Special Publications 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California, which provides guidance for evaluation and mitigation of earthquake-related hazards. The Project would also be required to comply with applicable seismic-related regulatory requirements. In addition, implementation of the site-specific structural and seismic design parameters and recommendations for foundations, retaining walls/shoring, and excavation of the Final Geotechnical Engineering Investigation per MM-GEO-1 would further ensure that seismic-related ground shaking impacts would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM-GEO-1: Site-specific structural and seismic design parameters and recommendations for foundations, retaining walls/shoring, and excavation shall be implemented per the Project's Final Geotechnical Engineering Investigation, subject to review and approval by the Culver City Building Safety Division.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact With Mitigation Incorporated. Liquefaction is a phenomenon in which saturated silty to cohesionless soils below the groundwater table are subject to a temporary loss of strength due to the buildup of excess pore pressure during cyclic loading conditions such as those induced by an earthquake. Liquefaction effects include loss of bearing strength, amplified ground oscillations, lateral spreading, and flow failures. Liquefaction typically occurs in areas where groundwater is less than 50 feet from the surface, and where the soils are composed of poorly consolidated, fine to medium-grained sand. In addition to the necessary soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to initiate liquefaction.

According to the State of California Seismic Hazard Zone Map of the Venice Quadrangle, provided in the Geotechnical Engineering Investigation, the Project Site is located within a liquefaction hazard zone. This determination is based on groundwater depth records, soil types, and distance to faults capable of producing a substantial earthquake. According to the Geotechnical Engineering Investigation, groundwater was encountered during exploration at depths between 24 and 24.5 feet below the ground surface. According to the Seismic Hazard Zone Map of the Venice Quadrangle, the historic high groundwater level for the Project Site was approximately 10 feet below ground surface.

To further evaluate the potential for liquefaction hazards, a site-specific liquefaction analysis was conducted following the Recommended Procedures for Implementation of the California Geologic Survey Special Publication 117A, Guidelines for Analyzing and Mitigation Seismic Hazards in California, and the EERI Monograph. Liquefaction analyses were performed utilizing the Standard Penetration Test data and the laboratory testing of the soil samples collected from exploratory borings, and supplemented by Cone Penetration Test soundings data. While the Standard Penetration Test liquefaction analysis determined that the soils on the Project Site would not be considered liquefiable, the Cone Penetration Test, which would provide a more accurate liquefaction assessment of the Project Site, determined that the soils on the Project Site are potentially liquefiable. As such, the Project would implement MM-GEO-1, which will provide site-specific design parameters and recommendations to mitigate the effects of liquefaction. Specifically, the Geotechnical Engineering Investigation recommends ground improvement methods, such as stone columns, to improve the underlying soft and saturated soils for support of the proposed foundation system. In addition, the Project would be required to comply with applicable seismic-related regulatory requirements of the Culver City Building Code and the 2019 California Building Code. With compliance of the regulatory requires as well as implementation of the site-specific design parameters and recommendations of the Final Geotechnical Engineering Investigation per MM-GEO-1 to be implemented during construction, seismic-related ground failure impacts, including liquefaction, would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

Refer to MM-GEO-1. No additional mitigation measures are necessary.

iv. Landslides?

No Impact. The Project Site is relatively flat and is approximately 15 feet above sea level across the property. The Project Site is located in a highly urbanized area of Culver City and is currently developed with a single-story commercial (retail) building and associated asphalt-paved surface parking lot. According to the Geotechnical Engineering Investigation, the probability of seismically induced landslide occurring on the Project Site is considered to be low due to the general lack of elevation difference slope geometry across or adjacent to the Project Site. Thus, the Project would not be subject to, or result in, landslides. No impacts would occur.

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

Less Than Significant Impact. Soil erosion refers to the process by which soil or earth material is loosened or dissolved and removed from its original location. Erosion can occur by varying processes and may occur in a Project area where bare soil is exposed to wind or moving water (both rainfall and surface runoff). The processes of erosion are generally a function of material type, terrain steepness, rainfall or irrigation levels, surface drainage conditions, and general land uses. Topsoil is used to cover surface areas for the establishment and maintenance of vegetation due to its high concentrations of organic matter and microorganisms.

The Project Site is currently developed with a single-story commercial (retail) building and associated asphalt-paved surface parking lot. Negligible, if any, native topsoil is likely to occur on the Project Site as it is currently developed with structures and surface parking. Project construction would result in ground surface disruption during excavation and grading that would create the potential for erosion to occur. Wind erosion would be minimized through soil stabilization measures required by the SCAQMD Rule 403 (Fugitive Dust), such as daily watering. Potential for water erosion would be reduced by implementation of standard erosion control measures imposed during site preparation and grading activities. As discussed in more detail under Response X.a, the Project would be subject to all existing regulations associated with the protection of water quality. Construction activities would be carried out in accordance with applicable Culver City standard erosion control practices required pursuant to the 2019 California Building Code and the requirements of the National Pollutant Discharge

Elimination System (NPDES) General Construction Permit issued by the Los Angeles Regional Water Quality Control Board (LARWQCB), as applicable. Best Management Practices (BMPs) to control water erosion during the Project's construction period would be implemented. Following Project construction, the Project Site would be covered completely by paving, structures, and landscaping. Therefore, with compliance with applicable regulatory requirements, the Project would not result in substantial soil erosion or the loss of topsoil. Impacts would be less than significant.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact With Mitigation Incorporated. As discussed in the Geotechnical Engineering Investigation, fill materials underlying the Project Site consist of sandy to silty clays and fill thickness on the order of three feet was encountered in the exploratory borings. Native soils consist of younger alluvial deposits to depths between 30 and 35 feet and consist primarily of sandy to silty clays. Older Alluvium was generally encountered below a depth of 35 feet and consist of sands to gravelly sands.

Impacts related to liquefaction and landslides are discussed above in Responses VI.a.iii. and VI.a.iv. Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The downslope movement is due to the combination of gravity and earthquake shaking. Such movement can occur on slope gradients of as little as one degree. Lateral spreading typically damages pipelines, utilities, bridges, and structures. Lateral spreading of the ground surface during a seismic activity usually occurs along the weak shear zones within a liquefiable soil layer and has been observed to generally take place toward a free face (i.e. retaining wall, slope, or channel) and to a lesser extent on ground surfaces with a very gentle slope. As stated in Response VI.a.iii, according to the site-specific liquefaction analysis within the Geotechnical Engineering Investigation, the soils on the Project Site are potentially liquefiable. As such, the Project would implement MM-GEO-1 to mitigate the effects of liquefaction, which would in turn reduce the potential for lateral spreading. Furthermore, no large-scale extraction of groundwater, gas, oil, or geothermal energy is occurring or planned at the Project Site. Thus, there appears to be little or no potential for ground subsidence due to withdrawal of fluids or gases at the Project Site.

The Project construction and design would be required to comply with the 2019 California Building Code, which is designed to assure safe construction, and implementation of the site-specific design measures including foundation design recommendations of the Final Geotechnical Engineering Investigation per MM-GEO-1 would further ensure that ground and soil stability hazards would not become unstable as a result of the Project. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

Refer to MM-GEO-1. No additional mitigation measures are necessary.

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

Less Than Significant Impact With Mitigation Incorporated. Soils with shrink-swell or expansive properties typically occur in fine-grained sediments and cause damage through volume changes as a result of a wetting and drying process. Structural damage may occur over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. As discussed in the Geotechnical Engineering Investigation, the on-site geologic materials are in the moderate to high expansion range. The Expansion Index was found to be between 58 and 90. As such, the Geotechnical Engineering

Investigation recommends reinforcement for the proposed slabs. As such, with the incorporation of the site-specific design measures including foundation design slabs on grade recommendations of the Final Geotechnical Engineering Investigation per MM-GEO-1, the Project would not create a substantial direct or indirect risk to life for property. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

Refer to MM-GEO-1. No additional mitigation measures are necessary.

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

No Impact. The Project Site is located in an urbanized area where municipal wastewater infrastructure already exists. The Project would be required to connect to the existing infrastructure and would not use septic tanks or alternative wastewater disposal systems. No impacts would occur.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact With Mitigation Incorporated. A paleontological records search was commissioned through the Natural History of Museum of Los Angeles to determine potential impacts of the Project on paleontological resources. Results of the records search indicated that no vertebrate fossil localities have been documented within the Project Site, but that localities do occur nearby in sedimentary deposits similar to those found within the Project Site.

As discussed in the Cultural Resources Assessment, the known fossil localities from older alluvial sediments are located with an approximate 3-mile radius of the Project Site. Included within these fossil localities is LACM 4232 (also known Los Angeles Man) which is located approximately 2.6 miles northeast of the Project Site (near the intersection of La Cienega Boulevard and Rodeo Road) and yielded the remains of a fossil human at a depth of 12 to 13 feet below ground surface. Other sites have produced a fossil horse and remains of a fossil mammoth at an unknown depth. Additional fossil localities are located along the Southern Pacific Railway and Rodeo Road, and between Crenshaw Boulevard and Ballona Creek. These fossil localities were collected during excavations for the Outfall Sewer area in the 1920s. Most of these fossil localities did not record the depth at which the specimens were recovered, and yielded remains of a fossil camel, fossil mastodon, and sabretooth cat. A fossil human was yielded at a depth of 19 to 23 feet below ground surface, while a fossil horse was yielded at a depth of 6 feet below ground surface.

Paleontological sensitivity was assigned as low-to-high sensitivity within the younger alluvium soils present on the Project Site, and the sensitivity increases with depth. As such, based on a review of geologic maps and fossil discoveries in the vicinity of the Project Site, there is a potential to encounter significant paleontological resources below a depth of 10 feet. Since the Project includes ground disturbance up to 35 feet in depth, the Project would implement MM-GEO-2 through MM-GEO-5 in order to reduce potential impacts to previously unknown paleontological resources. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM-GEO-2: Prior to issuance of a demolition permit, the Applicant shall retain a Qualified Paleontologist to develop and implement a paleontological monitoring program for construction excavations that exceed 10 feet in depth. A Qualified Paleontologist is defined as a paleontologist meeting the criteria established by the Society for Vertebrate Paleontology (SVP). The Qualified Paleontologist shall supervise a paleontological monitor who shall be present at such times as required by the Qualified Paleontologist during construction excavations exceeding 10 feet in depth. Paleontological resources monitoring shall be conducted for all ground disturbing activities that exceed 10 feet in depth in previously undisturbed sediments, and are therefore likely to impact high sensitivity alluvial sediments. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring inspections shall be determined by the Qualified Paleontologist and shall be based on the rate of excavation and grading activities, proximity to known paleontological resources or fossiliferous geologic formations (i.e., older alluvium deposits), the materials being excavated (i.e., native sediments versus artificial fill), and the depth of excavation, and if found, the abundance and type of fossils encountered. Full-time monitoring can be reduced to part-time inspections, or ceased entirely, if determined adequate by the Qualified Paleontologist.

MM-GEO-3: Prior to commencement of demolition or excavation activities, the Qualified Paleontologist shall attend a pre-grade/construction meeting to conduct construction worker paleontological resources sensitivity training for construction personnel. The training session, shall be carried out by the Qualified Paleontologist and shall focus on how to identify paleontological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event. In the event construction crews are phased, additional trainings shall be conducted for new construction personnel. Documentation shall be retained demonstrating that construction personnel attended the training.

MM-GEO-4: If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. An appropriate buffer area (usually 50 feet) shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the Qualified Paleontologist's discretion, and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock/sediment samples for initial processing and evaluation. If the fossil is determined to be significant, the Qualified Paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP. Any fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected shall be curated at a public, non-profit institution with a research interest in the material and with retrievable storage, such as the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school.

If construction personnel discover any potential fossils during construction while the paleontological monitor is not present, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery and recommended and implemented appropriate treatment as described earlier in this measure.

MM-GEO-5: Prior to the release of the grading bond, the Qualified Paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the Applicant to the City, the Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures.

VIII. GREENHOUSE GAS EMISSIONS

The following impact analysis pertaining to greenhouse gas (GHG) impacts is based on information contained in the Project's Greenhouse Gas (GHG) Technical Report prepared by ESA, dated November 2020, which is available for review at the Culver City Planning Division.

Would the project:

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

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

Less Than Significant Impact. State regulated GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). CO_2 is the most abundant GHG in the atmosphere. Not all GHGs exhibit the same ability to induce climate change; as a result, GHG contributions are commonly quantified in equivalent mass of CO_2, denoted as CO_2e. Mass emissions are calculated by converting pollutant specific emissions to CO2e emissions by applying the proper global warming potential (GWP) value. These GWP ratios are available from the U.S. Environmental Protection Agency (USEPA) and are published in the California Climate Action Registry (CCAR) General Reporting Protocol. By applying the GWP ratios, Project related CO_2e emissions can be tabulated in metric tons per year.

The City has not yet adopted a numerical significance threshold for assessing impacts related to GHG emissions and has not formally adopted a local plan for reducing GHG emission. When no guidance exists under CEQA, the lead agency may look to and assess general compliance with comparable regulatory schemes.[18] In its January 2008 CEQA and Climate Change white paper, the California Air Pollution Control Officer's Association (CAPCOA) identified a number of potential approaches for determining the significance of GHG emissions in CEQA documents. In its white paper, CAPCOA suggests making significance determinations on a case-by-case basis when no significance thresholds have been formally adopted by a lead agency.

The Office of Planning and Research released a technical advisory on CEQA and climate change that provided some guidance on assessing the significance of GHG emissions, and states that "lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice," and that while "climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily

[18] *See Protect Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal. App. 4th 1099, 1107 ["'[A] lead agency's use of existing environmental standards in determining the significance of a project's environmental impacts is an effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other environmental program planning and resolution."'"]. Lead agencies can, and often do, use regulatory agencies' performance standards. A project's compliance with these standards usually is presumed to provide an adequate level of protection for environmental resources. See, e.g., Cadiz Land Co. v. Rail Cycle (2000) 83 Cal.App.4th 74, 99 (upholding use of regulatory agency performance standard).*

be found to contribute to a significant cumulative impact on the environment."[19] Furthermore, the technical advisory states that "CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project."[20]

Amendments to Section 15064.4 of the CEQA Guidelines were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Consistent with existing CEQA practice, Section 15064.4 gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. If a qualitative analysis is used, in addition to quantification, this section recommends certain qualitative factors that may be used in the determination of significance (i.e., extent to which the project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and extent to which the project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs). The amendments do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (see Section 15064.7(c)). The California Natural Resources Agency has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and that they should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see Section 15064(h)(3)).[21]

Although GHG emissions can be quantified, CARB, SCAQMD, and the City of Culver City have not adopted project-level significance thresholds for GHG emissions that would be applicable to the Project. The Governor's Office of Planning and Research (OPR) released a technical advisory on CEQA and climate change that provided some guidance on assessing the significance of GHG emissions, and states that "lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice," and that while "climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment."[22] Furthermore, the technical advisory states that "CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project."[23]

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project.[24] To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement,

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[19] *Governor's Office of Planning and Research, Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review, (2008).*

[20] *Governor's Office of Planning and Research, Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review, (2008).*

[21] *See generally California Natural Resources Agency, Final Statement of Reasons for Regulatory Action (December 2009), pp. 11-13, 14, 16. http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf, accessed November 2019; see also Letter from Cynthia Bryant, Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, April 13, 2009. Available at http://www.valleyair.org/Programs/CCAP/documents/Transmittal_LetterOPRApril2009.pdf, accessed November 2019.*

[22] *Governor's Office of Planning and Research, Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review, (2008).*

[23] *Governor's Office of Planning and Research, Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review, (2008).*

[24] *14 CCR § 15064(h)(3).*

interpret, or make specific the law enforced or administered by the public agency.[25] Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions."[26] Thus, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with a program and/or other regulatory schemes to reduce GHG emissions.[27]

In the absence of any adopted, quantitative threshold, the Project would not have a significant effect on the environment if the Project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions, including the emissions reduction measures discussed within CARB's Climate Change Scoping Plan, SCAG's 2020-2045 RTP/SCS, and City of Culver City polices established for the purpose of increasing energy efficiency and reducing GHG emissions for new developments and the City's Green Building Code.

The California Supreme Court recently considered the CEQA issue of determining the significance of GHG emissions in its decision, Center for Biological Diversity v. California Department of Fish and Wildlife and Newhall Land and Farming (CBD vs. CDFW). The Court questioned a common CEQA approach to GHG analyses for development projects that compares project emissions to the reductions from BAU that will be needed statewide to reduce emissions to 1990 levels by 2020, as required by AB 32. The court upheld the BAU method as valid in theory, but concluded that the BAU method was improperly applied in the case of the Newhall project because the target for the project was incorrectly deemed consistent with the statewide emission target of a percent below BAU for the year 2020 as specified in the AB 32 Scoping Plan. In other words, the court said that the percent below BAU target specified in the AB 32 Scoping Plan is intended as a measure of the GHG reduction effort required by the State as a whole, and it cannot necessarily be applied to the impacts of a specific project in a specific location. The Court provided some guidance to evaluating the cumulative significance of a proposed land use project's GHG emissions, but noted that none of the approaches could be guaranteed to satisfy CEQA for a particular project. The Court's suggested four "pathways to compliance", as described further in the Greenhouse Gas Technical Report. However, the Court did not list the pathways in order of importance or intentional sequence, nor require that they be relied upon in an analysis. However, the Greenhouse Gas Technical Report considers the potential GHG emissions associated with the Project within the context of the Court's suggested pathways to compliance.

For purposes of this analysis, it was considered reasonable, and consistent with criteria pollutant calculations, to consider GHG emissions resulting from direct Project-related activities, including, e.g., use of vehicles, electricity, and natural gas, to be new emissions. These emissions include Project construction activities such as demolition, hauling, and construction worker trips, as well as operational emissions. This analysis also considers indirect GHG emissions from water conveyance, wastewater generation, and solid waste handling. Since potential impacts resulting from GHG emissions are long-term rather than acute, GHG emissions were

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[25] *14 CCR § 15064(h)(3).*

[26] *14 CCR § 15064(h)(3).*

[27] *See, for example, San Joaquin Valley Air Pollution Control District (SJVAPCD), CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation, APR-2025 (June 25, 2014), in which the SJVAPCD "determined that GHG emissions increases that are covered under ABR's Cap-and-Trade regulation cannot constitute significant increases under CEQA…" Furthermore, the SCAQMD has taken this position in CEQA documents it has produced as a lead agency. The SCAQMD has prepared three Negative Declarations and one Draft Environmental Impact Report that demonstrate the SCAQMD has applied its 10,000 $MTCO_2e$/yr significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold. See SCAQMD, Final Negative Declaration for Ultramar Inc. Wilmington Refinery Cogeneration Project, SHC No. 2012041014 (October 2014); SCAQMD Final Negative Declaration for Phillips 99 Los Angeles Refinery Carson Plant—Crude Oil Storage Capacity Project, SCH No. 2013091029 (December 2014); SCAQMD Final Mitigated Negative Declaration for Toxic Air Contaminant Reduction for Compliance with SCAQMD Rules 1420.1 and 1402 at the Exide Technologies Facility in Vernon, CA, SCH No. 2014101040 (December 2014); and SCAQMD Final Environmental Impact Report for the Breitburn Santa Fe Springs Blocks 400/700 Upgrade Project, SCH No. 2014121014 (August 2015).*

calculated on an annual basis. As discussed in the Greenhouse Gas Technical Report, the Project would remove existing structures and associated GHG emissions. Emissions removed would be applied as a credit toward the new emissions and the Project would be evaluated on its net (Project minus Existing) increase.

GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod) (Version 2016.3.2), which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.

Construction

Construction emissions were forecasted by assuming a conservative estimate of construction activities from each phase of the Project and incorporated PDF-AIR-1. Construction emissions are estimated using the CalEEMod (Version 2016.3.2) software, an emissions inventory software program recommended by the SCAQMD. CalEEMod is based on outputs from OFFROAD and EMFAC, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including off- and on-road vehicles. CalEEMod outputs construction-related GHG emissions of CO_2, CH_4, and CO_2e. It has been assumed that construction equipment would meet USEPA Tier 4 Final emissions standards and that the Project would implement dust control measures pursuant to SCAQMD Rule 403. The output values used in the Greenhouse Gas Technical Report were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the same construction subphasing assumptions used in the Air Quality Technical Report to generate GHG emissions values for each construction year. The results are shown in **Table B-8**, *Construction Greenhouse Gas Emissions*. Although construction-related GHGs are one-time emissions, any assessment of Project emissions should include construction emissions. The SCAQMD recommends that a project's construction-related GHG emissions be amortized over the project's 30-year lifetime in order to include these emissions as part of the project's annualized lifetime total emissions, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies. As indicated in Table B-8, Project construction emissions during the three-year construction period would generate an estimated 1,125 $MTCO_2e$, or 37 $MTCO_2e$ amortized over a 30-year period. A complete listing of the equipment by phase, emission factors, and calculation parameters used in this analysis is included within the emissions calculation worksheets provided in the Greenhouse Gas Technical Report.

Table B-8
Construction Greenhouse Gas Emissions

Emission Source	CO_2e (Metric Tons)[a]
Construction Year 1	558
Construction Year 2	369
Construction Year 3	198
Total	**1,125**
Annual (Amortized over 30 years)	**37**

[a] Totals may not add up exactly due to rounding in the modeling calculations

Source: ESA, 2020.

Operation

Operational impacts were assessed for the Project buildout year (i.e., conservatively assumed to be 2022 assuming construction begins in 2020). CalEEMod was used to estimate operational GHG emissions from electricity, natural gas, solid waste, water and wastewater, and landscaping equipment. CalEEMod was used to estimate mobile source emissions where emissions factors from CARB's updated version of the on-road vehicle emissions factor (EMFAC) model were input into CalEEMod to calculate mobile GHG emissions. The most recent version is EMFAC2017, which "represents CARB's current understanding of motor vehicle travel activities and their associated emission levels."[28] CalEEMod generated the VMT from Project uses based on the trip rates in the Traffic Study.[29] Conservatively, the Project's Traffic Study did not include transit credit from public transit stops and from walking and biking trips and used default trips rates in the Institute of Transportation Engineers, *Trip Generation, 10th Edition*.[30]

With regard to energy demand, the consumption of fossil fuels to generate electricity and to provide heating and hot water generates GHG emissions. Energy demand rates were estimated based on specific square footage of the new commercial uses, as well as predicted water supply needs for these uses. The Project electricity demands are supplied by SCE. Since the Project's first operational year was conservatively modeled for Year 2022 (would be less energy used for future years), the default CO_2 intensity factor in CalEEMod for SCE was linearly adjusted from 2020 to account for 42.4 percent renewable energy for 2022 based on the required renewables from year 2024 under SB 100. For 2012, SCE had 20.6 percent renewables and this was used to back calculate a CO_2 intensity factor where SCE had zero percent renewable. This value was then adjusted to reflect a CO_2 intensity factor with 42.4 percent renewables.

Emissions of GHGs from solid waste disposal were also calculated using CalEEMod software. The emissions are based on the waste disposal rate for the land uses, the waste diversion rate, and the GHG emission factors for solid waste decomposition. The GHG emission factors, particularly for CH4, depend on characteristics of the landfill, such as the presence of a landfill gas capture system and subsequent flaring or energy recovery. In addition, it was assumed 75 percent of solid waste will be diverted from landfills as AB 341 directs CalRecycle to develop and adopt regulations for mandatory commercial recycling and sets a Statewide goal for 75 percent disposal reduction by the year 2020.

Emissions of GHGs from water and wastewater result from the required energy to supply and distribute the water and treat the wastewater. Wastewater also results in emissions of GHGs from wastewater treatment systems. Emissions were calculated using CalEEMod and were based on the water usage rate for the land uses, the electrical intensity factors for water supply, treatment, and distribution and for wastewater treatment, the GHG emission factors for the electricity utility provider, and the emission factors for the wastewater treatment process.

Other sources of GHG emissions from operation of the Project include equipment used to maintain landscaping, such as lawnmowers and trimmers. The CalEEMod software uses landscaping equipment GHG emission factors from the CARB OFFROAD model and the CARB Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment (6/13/2003).

Emissions calculations for the Project include credits or reductions for GHG reducing measures that are required by regulation, such as reductions in energy and water demand from the current Title 24 standards and the

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[28] *California Air Resources Board, Mobile Source Emissions Inventory. Available at https://ww2.arb.ca.gov/node/3052/about, accessed November 2019.*

[29] *Crain & Associates, Jefferson Hotel Project Traffic Study, 2020.*

[30] *Crain & Associates, Jefferson Hotel Project Traffic Study, 2020.*

California Green Building Standards (CALGreen) Code as well as the Project's compliance with the portions of the City's Green Building Code and mandatory Green Building Program applicable to new developments. Physical and operational Project characteristics for which sufficient data is available to quantify the reductions from building energy and resource consumption have been included in the quantitative analysis, and include but are not limited to the following features: the City has adopted a Photovoltaic Requirement which requires 1 kilowatt (kw) of photovoltaic power installed per 10,000 square feet of new development. Based on the Project size, the Project's photovoltaic system is estimated to generate 21,771 kwh of electricity annually. As described above, the analysis assumes 75 percent of solid waste would be diverted from landfills. In accordance with the City's Green Building Program, the Project would be designed to meet criteria for the LEED Silver or equivalent certification level.

As previously stated operational GHG impacts are assessed based on the Project-related incremental increase in GHG emissions compared to baseline conditions and incorporation of emissions reduction strategies.

The results of the analysis for operational emissions are presented in **Table B-9**, *Annual Greenhouse Gas Emissions*. As shown, the net GHG emissions associated with the Project would be an estimated 1,537 metric tons of CO_2e without GHG reduction characteristics, features and measures. With the implementation of the Project's green building measures, the Project would achieve GHG reductions for electricity and water as compared to a scenario without GHG reducing features and measures and net GHG emissions would total 1,392 metric tons of CO_2e, a reduction of 144 metric tons of CO_2e. Emissions calculation worksheets for the existing operations, proposed Project operations without GHG reductions characteristics, features and measures, and Project operations are provided in the Greenhouse Gas Technical Report.

Project operational-related GHG emissions would decline in future years as emissions reductions from the State's Cap-and-Trade program are fully realized. Emissions reductions from the Project's two highest GHG-emitting sources, mobile and electricity, would occur over the next decade, and beyond, ensuring that the Project's total GHG emissions would be further reduced. Emissions from electricity would decline as utility providers, including SCE, meet their Renewables Portfolio Standard obligations to provide 60 percent of their electricity from renewable electricity sources by 2030 consistent with SB 100, which would achieve additional reductions in emissions from electricity demand although the actual reduction will depend on the mix of fossil fuels that SCE will replace with renewables and the relative CO2 intensities of those fossil fuels. Project emissions from mobile sources would also decline in future years as older vehicles are replaced with newer vehicles resulting in a greater percentage of the vehicle fleet meeting more stringent combustion emissions standards, such as the model year 2017-2025 Pavley Phase II standards.

Table B-9
Annual Greenhouse Gas Emissions

Emissions Sources	CO_2e (Metric Tons per Year) [a] Project
Existing Operational	
Area (Landscaping Equipment)	<1
Electricity and Natural Gas	50
Mobile Sources	253
Waste	6
Water	3
Existing Subtotal	**314**
Proposed Project Operational – Without GHG Reduction Characteristics	
Electricity[b]	~~359~~ <u>394</u>
Natural Gas	157
Mobile Sources	1,223
Solid Waste	48
Water	26
Area	<1
Proposed Subtotal	**~~1,813~~ <u>1,848</u>**
Net Operational	**~~1,499~~ <u>1,534</u>**
Construction (Amortized)	37
Total Annual Emissions	**~~1,537~~ <u>1,572</u>**

[a] Totals may not add up exactly due to rounding in the modeling calculations.
[b] For the purposes of estimating GHG emissions in the GHG Technical Report, the emissions analysis conservatively assumes Project would not switch electricity providers from SCE to the Clean Power Alliance (i.e., does not take any credit for 36%, 50%, or 100% renewable electricity, depending on the selected Clean Power Alliance plan). Should the Project switch electricity providers from SCE to the Clean Power Alliance, the Project's electricity-related emissions would be lower than disclosed in the GHG Technical Report.

Source: ESA, 2020.

Consistency with State Plan, Policies, or Regulations

The Project's GHG emissions are also evaluated by assessing the Project's consistency with applicable GHG reduction strategies and actions adopted by the State and City. As discussed previously, the City has adopted strategies and polices to reduce GHG emissions through its Green Building Program.

In the latest CEQA Guidelines amendments, which went into effect on March 18, 2010, the Office of Planning and Research encourages lead agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses. The City does not have a programmatic mitigation plan to tier from, such as a Greenhouse Gas Emissions Reduction Plan as recommended in the relevant amendments to the CEQA Guidelines. However, the City has adopted the Green Building Program and Green Building Code that encourage and require applicable projects to implement energy efficiency measures. In addition, the California CAT Report provides recommendations for specific emission reduction strategies for reducing GHG emissions and reaching the targets established in HSC Division 25.5. Thus, if the 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 State regulations on GHG reductions.

Project Consistency with AB 32

In support of AB 32, the state has promulgated specific laws aimed at GHG reductions applicable to the Project. The heating, ventilation, and air conditioning (HVAC) system would be sized and designed in compliance with the CALGreen Code and the City's Green Building Program to maximize energy efficiency caused by heat loss and heat gain. The Project Site is also located in an established commercial area with access to public transportation, which minimizes trips and trip lengths reducing mobile source GHG emissions. Therefore, the Project would be consistent with State efforts to reduce motor vehicle emissions and congestion. The Project would generate GHG emissions due to construction and operational activities; however, its annual GHG emissions, would be generated due to development located and designed to be consistent with relevant goals and actions designed to encourage development that results in the efficient use of public and private resources.

Project Consistency with Regional and Local Trip and VMT Reduction Goals, Actions, and Recommendations

The significance of the Project's GHG emissions was first evaluated based on whether the emissions would be generated in connection with development located and designed consistent with relevant regional and local goals, actions, and recommendations designed to encourage development to reduce trips and VMTs. Transportation-related GHG emissions are the largest source of GHG emissions from the Project. This Project characteristic is consistent with the assumption in many regional plans, such as the SCAG RTP/SCS, which recognizes that the transportation sector is the largest contributor to the State's GHG emissions.

Consistent with SCAG's RTP/SCS alignment of transportation, land use, and housing strategies, the Project would accommodate projected increases in travel demand by implementing smart land use strategies. As discussed previously, the Project would result in a commercial development with commercial uses located in close proximity to existing public transit stops, which would result in reduced VMT, as well as being within a reasonable walking distance from the Westfield Culver City shopping mall. The Project would create a pedestrian-friendly environment with direct access to the Westfield Culver City shopping mall and clear linkages to regional and local transportation systems. Within walking distance of several bus stops, including the Culver City Transit Center Bus Station that is located approximately 900 southeast of the Project Site that is served by the Culver City bus routes 3,4 and 6 and the Metro bus routes 108, 110 and 217, the Project would promote alternate modes of transit. In addition, the Project would be consistent with the 2020-2045 RTP/SCS strategies to promote active transportation and supports improvements in local bike networks as the Project promotes the use of bicycles as it is located close to many Culver City bike paths. Conservatively, the Project's Traffic Study did not include transit credit from public transit stops and from walking and biking trips and used default trips rates in the Institute of Transportation Engineers, Trip Generation, 10th Edition.

SCAG's 2020-2045 RTP/SCS states that 38 percent of all trips in the region are less than 3 miles. The RTP/SCS intends to decrease these trips by extending local bikeway networks. The Project would be consistent with this RTP/SCS goal by installing the CALGreen Code required number of bicycle parking spots. Therefore, the Project would be consistent with the SCAG 2020-2045 RTP/SCS regional and local trip and VMT reduction goals.

Project Consistency with City Goals and Actions

The significance of the Project's GHG emissions is also evaluated based on whether they would be generated in connection with a design that is consistent with relevant City of Culver City goals and actions designed to encourage development that results in the efficient use of public and private resources. **Table B-10**, *Project Consistency with Applicable Culver City Green Building Program Requirements*, contains mandatory items the Project would implement that would increase energy efficiency and reduce energy consumption, thus reducing Project GHG emissions. As discussed in Table B-10, the Project is consistent with the applicable requirements. Therefore, the Project's GHG emissions would be generated in connection with a development located and designed to be consistent with the applicable City goals and actions for GHG emission reductions.

Table B-10
Project Consistency with Applicable Culver City Green Building Program Requirements[a]

Source	Category / Description	Consistency Analysis
Culver City Green Building Program	Requires all new buildings of 10,000 or more of gross floor area to install 1kW of solar photovoltaic systems per 10,000 square feet of gross floor area	**Consistent:** The Project would consist of approximately 111,000 sf of new construction and would install a solar photovoltaic system that meets criteria for the LEED Silver or equivalent certification level and City requirements.
	Requires all new construction, additions, and major renovations of 50,000 square feet and greater of affected area are required to comply with Category 2 requirements, excluding single family and two family structures, where prior to the issuance of a construction permit, the permit applicant shall submit the following: 1. Evidence that a LEED-AP (Leadership in Energy and Environmental Design Accredited Professional) is one of the members of the project design team. 2. Evidence that the project has been registered with the appropriate USGBC (United States Green Building Council) LEED program. 3. A copy of the appropriate LEED checklist, which demonstrates that the project meets the appropriate LEED rating system at a "Certified" performance level or higher. 4. A signed declaration from the LEED-AP member of the project design team, stating that the plans and details have been reviewed for conformance with the appropriate LEED program and that the project meets the intent of the criteria for certification of the selected LEED program at the "Certified" performance level or higher. 5. Qualifying projects shall comply with a USGBC "3 point margin of error" for a minimum LEED "Certified" performance level. 6. The construction permit applicant shall submit to the Building Safety Division copies of all submissions and correspondence between the project team and the USGBC regarding the qualifying project.	**Consistent:** The Project would provide evidence that a LEED-AP (Leadership in Energy and Environmental Design Accredited Professional) is one of the members of the Project design team. The Project would provide evidence that the project has been registered with the appropriate USGBC LEED program. The Project would be designed to meet criteria for the LEED Silver or equivalent certified level. The Project would provide a signed declaration from the LEED-AP member of the Project design team, stating that the plans and details have been reviewed for conformance with the appropriate LEED program and that the project meets the intent of the criteria LEED Silver or equivalent certified level. The Project applicant shall submit to the Building Safety Division copies of all submissions and correspondence between the Project team and the USGBC.

[a] This table lists applicable City of Culver City requirements for Category 2 projects.

Source: ESA, 2020.

Project Consistency with Plans, Policies, Regulations, or Recommendations to Reduce GHG Emissions

The Project would also be consistent with statewide, regional and local plan, policies, regulations, and recommendations to reduce GHG emissions from development. The primary focus of many of the statewide and regional mandates, plans, policies and regulations is to address worldwide climate change. According to CAPCOA, "GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective." Due to the complex physical, chemical and atmospheric mechanisms involved in global climate change, there is no basis for concluding that the Project's annual GHG emissions would cause a measurable change in global GHG emissions sufficient to create a significant Project level impact on global climate change. Newer construction materials and practices, energy efficiency requirements, and newer appliances tend to emit lower levels of air pollutant emissions, including GHGs, as compared to those built years ago; however, the net effect is difficult to quantify. The GHG emissions of the Project alone is not expected to cause a direct physical change in the environment. It is global GHG emissions in their aggregate that contribute to climate change, not any single source of GHG emissions alone. Because of the lack of evidence indicating that the Project's GHG emissions would cause a measurable change in global GHG emissions sufficient to create a significant project-level impact on global climate change, and the fact that the Project incorporates physical and operational Project characteristics that would ensure its consistency with City goals and actions, Project emissions are not anticipated to contribute considerably to global climate change. The Project is also considered to be consistent with the GHG reduction goals of HSC Division 25.5 and associated GHG reduction plans such as SCAG's RTP/SCS, and it is not expected that Project development would impede their goals. In fact, as discussed above, the Project's location and development comply with the recommendations in these documents and would meet their goals.

As discussed in the Greenhouse Gas Technical Report, the Project is located in close proximity to existing public transit stops, which would result in reduced VMT, as well as being within a reasonable walking distance from the Westfield Culver City shopping mall. The Project would create a pedestrian-friendly environment with direct access to the Westfield Culver City shopping mall and clear linkages to regional and local transportation systems. Within walking distance of several bus stops, including the Culver City Transit Center Bus Station that is located approximately 900 southeast of the Project Site that is served by the Culver City bus routes 3,4 and 6 and the Metro bus routes 108, 110 and 217, the Project would promote alternate modes of transit. In addition, the Project would be consistent with the 2020-2045 RTP/SCS strategies to promote active transportation and supports improvements in local bike networks as the Project promotes the use of bicycles as it is located close to many Culver City bike paths. This would be consistent with regional plans to reduce transportation-related GHG emissions as part of the overall statewide strategy under AB 32. The Project would be consistent with and support the goals of the 2020-2045 RTP/SCS, which seeks improved access and mobility by placing destinations closer together, thereby decreasing the time and cost of traveling between them and has "strategies to prioritize areas for new development, like near destinations and mobility options."[31] According to SCAG, expanding transportation choices "may shift trips to less environmentally damaging modes, minimize negative environmental impacts associated with current vehicle use, increase system efficiency, improve safety, and reduce auto-related collisions and fatalities."[32]

Table B-11, *Project Consistency with Applicable Greenhouse Gas Reduction Strategies*, contains a list of statewide GHG emission reduction strategies and describes the Project's consistency. Furthermore, not only is the Project consistent with currently applicable GHG emission reduction strategies, but the Project also would not conflict with or impede the future statewide GHG emission reductions goals. CARB has outlined a number of potential strategies for achieving the 2030 reduction target of 40 percent below 1990 levels. These potential strategies include renewable resources for 60 percent of the State's electricity by 2030, increasing the fuel

[31] *Southern California Association of Governments (SCAG), 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS), September 2020, page 47.*

[32] *SCAG, 2020-2045 RTP/SCS, page 41.*

economy of vehicles and the number of zero-emission or hybrid vehicles, reducing the rate of growth in VMT, supporting and other alternative transportation options, and use of high efficiency appliances, water heaters, and HVAC systems. The Project would benefit from statewide and utility-provider efforts toward increasing the portion of electricity provided from renewable resources. The Project would also benefit from statewide efforts toward increasing the fuel economy standards of vehicles. The Project would be consistent with reducing the rate of growth in VMT by providing on-site bicycle parking facilities, being located in close proximity to public transit, and being located in an area with other commercial, retail, and residential land uses within walking distance. The Project would utilize energy-efficient lighting and equipment and would reduce its building energy consumption via compliance with City Green Building Program and the CALGreen Code.

Table B-11
Project Consistency with Applicable Greenhouse Gas Reduction Strategies

Source	Category / Description	Consistency Analysis
AB 1493 (Pavley Regulations)	Reduces greenhouse gas emissions in new passenger vehicles from model year 2012 through 2016 (Phase I) and model year 2017-2025 (Phase II). Also reduces gasoline consumption to a rate of 31 percent of 1990 gasoline consumption (and associated GHG emissions) by 2020.	**Consistent.** The Project would be consistent with this regulation and would not conflict with implementation of the vehicle emissions standards.
SB 1368	Establishes an emissions performance standard for power plants within the State of California.	**Consistent.** The Project would be consistent with this regulation and would not conflict with implementation of the emissions standards for power plants.
Low Carbon Fuel Standard	Establishes protocols for measuring life-cycle carbon intensity of transportation fuels and helps to establish use of alternative fuels.	**Consistent.** The Project would be consistent with this regulation and would not conflict with implementation of the transportation fuel standards.
California Green Building Standards Code Requirements	All bathroom exhaust fans shall be ENERGY STAR compliant.	**Consistent.** The Project would meet or exceed the energy standards in the Title 24 Building Energy Efficiency Standards.
	HVAC Systems will be designed to meet ASHRAE standards.	**Consistent.** The Project would utilize energy efficient equipment and would meet or exceed the energy standards in ASHRAE 90.1-2013, Appendix G and the Title 24 Building Energy Efficiency Standards.
	Energy commissioning shall be performed for buildings larger than 10,000 square feet.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Refrigerants used in newly installed HVAC systems shall not contain any CFCs.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to eight percent of total parking spaces will be designed for such vehicles.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Long-term and short-term bike parking shall be provided for up to five percent of vehicle trips.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Indoor water usage must be reduced by 20% compared to current California Building Code Standards for maximum flow.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code by using low-flow water fixtures.

Table B-11
Project Consistency with Applicable Greenhouse Gas Reduction Strategies

Source	Category / Description	Consistency Analysis
	All irrigation controllers must be installed with weather sensing or soil moisture sensors.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code and would use water efficient techniques, such as drip irrigation.
	Wastewater usage shall be reduced by 20 percent compared to current California Building Standards.	**Consistent.** The Project would meet or exceed this requirement as part of its compliance with the CALGreen Code by installing infrastructure for future grey water uses.
	Requires a minimum of 65 percent recycle or reuse of nonhazardous construction and demolition debris.	**Consistent.** The Project would meet or exceed this requirement as part of its compliance with the CALGreen Code.
	Requires documentation of types of waste recycled, diverted or reused.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Requires use of low VOC coatings consistent with AQMD Rule 1168.	**Consistent.** The Project would be consistent with this regulation and would meet or exceed the low VOC coating requirements.
	100 percent of vegetation, rocks, soils from land clearing shall be reused or recycled.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
	Requires installation of electrical conduit for future uses of electric vehicle charging parking spaces up to 6% of total parking spaces.	**Consistent.** The Project would meet this requirement as part of its compliance with the CALGreen Code.
Climate Action Team	Achieve California's 50 percent waste diversion mandate (Integrated Waste Management Act of 1989) to reduce GHG emissions associated with virgin material extraction	**Consistent.** CALGreen Code implements this goal, and the Project would be consistent with the requirements.
	Implement efficient water management practices and incentives, as saving water saves energy and GHG emissions.	**Consistent.** CALGreen Code implements this goal, and the Project would be consistent with the requirements.
	The California Energy Commission updates building energy efficiency standards that apply to newly constructed buildings and additions to and alterations to existing buildings. Both the Energy Action Plan and the Integrated Energy Policy Report call for ongoing updating of the standards.	**Consistent.** CALGreen Code implements this goal, and the Project would be consistent with the requirements.
	Reduce GHG emissions from electricity by reducing energy demand. The California Energy Commission updates appliance energy efficiency standards that apply to electrical devices or equipment sold in California. Recent policies have established specific goals for updating the standards; new standards are currently in development	**Consistent.** CALGreen Code implements this goal, and the Project would be consistent with the requirements.
	Apply strategies that integrate transportation and land-use decisions, including but not limited to promoting jobs/housing proximity, high-density residential/commercial development along transit corridors, and implementing intelligent transportation systems.	**Consistent.** The Project would be located in an infill location in proximity to existing residential and commercial businesses, which would minimize trip lengths and associated emissions.

Source: ESA, 2020.

Because the Project's location, land use characteristics, and design render it consistent with statewide and regional climate change mandates, plans, policies, and recommendations, and with the City's Green Building Program and CAL Green Code, the Project would be consistent with and would not conflict with any applicable plan, policy, regulation or recommendation to reduce GHG emissions.

Project Consistency with Executive Orders S-3-05 and B-30-15

At the state level, Executive Orders S-3-05 and B-30-15 establish goals for reducing GHG emissions. Executive Order S-3-05's goal to reduce GHG emissions to 1990 levels by 2020 was codified by the Legislature as AB 32. As analyzed above, the Project would be consistent with AB 32. Therefore, the Project does not conflict with the 2020 component of Executive Orders S-3-05 and B-30-15.

The Executive Orders S-3-05 and B-30-15 also establish goals to reduce GHG emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. These goals have not yet been codified by the Legislature. However, studies have shown that, to meet the 2030 and 2050 targets, aggressive technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. In its Climate Change Scoping Plan, CARB acknowledged that the "measures needed to meet the 2050 goal are too far in the future to define in detail." In the First Update, however, CARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately." Due to the technological shifts required and the unknown parameters of the regulatory framework and market conditions in 2030 and 2050, as well as uncertainties regarding the exact regulations that CARB will ultimately adopt for achieving the 2030 and 2050 reduction goal, quantitatively analyzing the Project's impacts further relative to the 2030 and especially the 2050 goals currently is speculative for purposes of CEQA.

Despite thorough investigation, due to the uncertainties regarding specific state and local actions and regulations that will be adopted to achieve the 2030 and 2050 GHG emission reduction targets, such as future Title 24 building energy standards and future vehicle emission standards beyond vehicle model year 2025, calculating Project emissions levels for 2030 and 2050 would be highly speculative. Nonetheless, statewide efforts are underway to facilitate the State's achievement of those goals and it is reasonable to expect the Project's emissions level to decline as the regulatory initiatives identified by CARB in the First Update and strategies in the 2017 Scoping Plan are refined and implemented, and other technological innovations occur. Stated differently, the Project's emissions total at buildout represents the maximum emissions inventory for the Project as California's emissions sources are being regulated (and foreseeably expected to continue to be regulated in the future) in furtherance of the State's environmental policy objectives. As such, given the reasonably anticipated decline in Project emissions once fully constructed and operational, the Project would be consistent with the Executive Orders' goals.

The Climate Change Scoping Plan recognizes that HSC Division 25.5 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the state on a path to meet the long-term 2050 goal of reducing California's greenhouse gas emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate." Also, CARB's First Update provides that it "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below

1990 levels by 2050," and many of the emission reduction strategies recommended by CARB would serve to reduce the Project's emissions level to the extent applicable by law:

- Energy Sector: Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the State's zero net energy building goals, would serve to reduce the Project's emissions level. Additionally, further additions to California's renewable resource portfolio would favorably influence the Project's emissions level.
- Transportation Sector: Anticipated deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the Project's emissions level.
- Water Sector: The Project's emissions level will be reduced as a result of further enhancements to water conservation technologies.
- Waste Management Sector: Plans to further improve recycling, reuse, and reduction of solid waste will beneficially reduce the Project's emissions level.

Under AB 398, the Cap-and-Trade Program has been extended to 2030. The Cap-and-Trade Program extension is built on the "recommended action" in the First Update to the Climate Change Scoping Plan for the Cap-and-Trade Program, which was to: "Develop a plan for a post-2020 Cap-and-Trade Program, including cost containment, to provide market certainty and address a mid-term emissions target."

In addition to CARB's First Update, in January 2015 during his inaugural address, Governor Jerry Brown expressed a commitment to achieve "3 ambitious goals" that he would like to see accomplished by 2030 to reduce the State's GHG emissions: (1) increasing the State's Renewables Portfolio Standard from 33 percent in 2020 to 50 percent in 2030; (2) cutting the petroleum use in cars and trucks in half; and (3) doubling the efficiency of existing buildings and making heating fuels cleaner. These expressions of Executive Branch policy may be manifested in adopted legislative or regulatory action through the state agencies and departments responsible for achieving the State's environmental policy objectives, particularly those relating to global climate change. As discussed previously, the Governor signed into law SB 350 (Chapter 547, Statues of 2015), which increased the Renewables Portfolio Standard to 50 percent by 2030 and included interim targets of 40 percent by 2024 and 45 percent by 2027. The utility provider for the Project Site, SCE, has committed providing an increasing percentage of electricity from renewable sources in compliance with the Renewables Portfolio Standard with 41.4 percent by 2020. The Project would also include the installation of on-site solar photovoltaic systems consistent with City requirements to increase energy efficiency and reduce GHG emissions.

Further, the State's existing and proposed regulatory framework can allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. According to the 2017 Scoping Plan (adopted in December 2017), reductions needed to achieve the 2030 target are expected to be achieved by targeting specific emission sectors, including those sectors that are not directly controlled or influenced by the Project, but nonetheless contribute to Project-related GHG emissions. For instance, the Project itself is not subject to the Cap-and-Trade regulation; however, Project-related emissions would decline pursuant to the regulation as utility providers and transportation fuel producers are subject to renewable energy standards, Cap-and-Trade, and the LCFS. The 2017 Scoping Plan also calls for the doubling of the energy efficiency savings, including demand-response flexibility for 10 percent of residential and commercial electric space heating, water heating, air conditioning and refrigeration. The strategy is in the process of being designed specifically to accommodate existing residential and commercial uses under the CEC's Existing Building Energy Efficiency Action Plan. This strategy requires the CEC in collaboration with the CPUC to establish the framework for the energy savings target setting outlines the necessary actions that will need to occur in future years, including workforce education and training institutions engaging with the building industry, mapping industry priorities for efficiency to major occupations that will provide services, identifying workforce competency gaps, and quantifying the work needed to build a workforce to implement high-quality efficiency projects at scale. Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the study could allow the State to meet the 2030 and 2050 targets.

For the reasons described above, the Project's emissions trajectory is expected to follow a declining trend, consistent with the establishment of the 2030 and 2050 targets. Therefore, given the Project's GHG emissions efficiency and the Project's consistency with applicable GHG plans, policies and regulations adopted for the purpose of reducing GHG emissions, impacts regarding GHG emissions and reduction plans would be less than significant.

IX. HAZARDS AND HAZARDOUS MATERIALS

The following hazardous materials discussion is based on the Remedial Action Plan (RAP), prepared by Stantec, dated July 15, 2014, which is available for review at the Culver City Planning Division. The RAP summarizes previous environmental site assessments dating back to 2007.

Would the project:

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

Less Than Significant Impact. Hazardous materials may be used during the construction phase of the Project. Hazardous materials that may be used include, but are not limited to, fuels (gasoline and diesel), paints and paint thinners, adhesives, surface coatings and possibly herbicides and pesticides. Generally, these materials would be used in concentrations that would not pose significant threats during the transport, use and storage of such materials. Furthermore, it is assumed that potentially hazardous materials would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations, including California Occupational Safety and Health Administration (OSHA) requirements, and Title 8 and 22 of the Code of California Regulations. Accordingly, risks associated with hazards to the public or environment posed by the transport, use or disposal of hazardous materials during construction are considered less than significant due to compliance with applicable and required standards and regulations.

Operation of the hotel and restaurant uses would involve the use and storage of small quantities of potentially hazardous materials in the form of cleaning solvents, painting supplies, and pesticides for landscaping. These hazardous materials are regulated by stringent federal and state laws mandating the proper transport, use, storage and disposal of hazardous materials in accordance with product labeling. The use and storage of these substances is not considered to present a health risk when used in accordance with manufacturer specifications and with compliance to applicable regulations.

Overall, based on the above, construction and operation of the Project would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials relative to the safety of the public or the environment. Impacts would be less than significant.

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

Less Than Significant With Mitigation Incorporated. As documented in the RAP, the Project Site was occupied by a former gasoline and service station that operated from 1953 through the early 1980's. According to historical records, an automotive repair facility was also located at the Project Site in association with the service station, with the last several years potentially only operating as an automotive repair station. The station building was demolished in 1985 and the current existing retail buildings were constructed in 1985.

Hazardous substances and petroleum products are typically associated with auto body and auto repair operations. Several underground storage tanks (USTs) were installed during operation of the gasoline and service station. All of the USTs appear to be removed by 1975 based on review of the historical records and a geophysical survey of the site in 2007 did not reveal the presence of any potential USTs. However, it cannot be determined with absolute certainty that no previously undocumented USTs occur beneath the site. No soil sample results are known to occur in association with the removed USTs.

In 2007 and 2008, initial borings were installed within the Project in the vicinity of the former service station to determine if soils and groundwater beneath the site were impacted by petroleum hydrocarbons, volatile organic compounds (VOCs), and metals. The borings revealed elevated concentrations of total petroleum hydrocarbons (TPH) typically associated with gasoline, diesel and oil constituents. As a result, numerous follow-up borings and groundwater monitoring wells were drilled and installed at the site up to 2013 to determine the extent of contamination beneath the site. The additional wells and borings confirmed that soils and groundwater beneath the site were adversely affected by petroleum hydrocarbons, as well as chlorinated hydrocarbons. Because of the site contamination, the Los Angeles Regional Water Quality Control Board (LARWQCB) required a Remediation Action Plan in 2014 to evaluate alternatives to clean-up or remediate such that petroleum hydrocarbon are reduced to a point where concentrations meet the State Water Resources Control Board (SWRCB) Low-Threat UST Tank Closure Policy (LTCP) criteria or are decreasing such that applicable LTCP criteria are met within a reasonable timeframe. The 2014 RAP identified a preferred remedial alternative involving a series of total fluids extraction (TFE) events that would directly remove, treat and dispose of contaminated soils and groundwater, and in some cases soil vapor. Since 2014, while monitoring at the site has continued, soils and groundwater beneath the site have yet to be fully remediated and the site remains an active remediation site with the LARWQCB.

At the time of the RAP preparation th site was occupied by its current uses and no new future development was contemplated at the project site. Thus, no direct, substantial excavation activities were contemplated in the RAP so as to retain the current retail operations and associated infrastructure improvements on the site. However, the Project would include subterranean parking, which by its nature would involve excavation of soils for the proposed 2-level parking structure. Therefore, with the Project, direct excavation and removal of contaminated soils and groundwater can occur in a manner that was not previously contemplated in the RAP.

Under the Project, site remediation would occur following the abatement and demolition of existing on improvements. This would include the excavation of hydrocarbon-impacted soils, and other groundwater management associated with remediation. During remediation activities, the site would be remediated to applicable commercial use regulatory standards. Based on the extent of contamination identified in the RAP, it is anticipated that approximately 1,000 cubic yards of hydrocarbon-impacted soil would be exported from the site as part of remediation activities, which is less than 2% of the anticipated excavation. However, the ultimate extent of such impacted would not be determined until the actual excavation activities are completed.

Because of the contaminated soils, groundwater and potentially vapors to occur beneath the Project Site, project implementation could result in a potentially significant impact or hazard to the public or the environment during excavation activities. Furthermore, other undocumented remnant steel structures, and possibly, USTs, may still be located on the subsurface of the project site that were associated with historic on-site automobile-related services and activities. To address potential hazards associated contaminated soils, groundwater, soil vapors and remnant steel structures, and possibly USTs, Mitigation Measure MM-HAZ-1 is required for the Project, which requires preparation of a Soils Management and Remediation Plan (SMRP) for the entire Project Site. The SMRP would establish policy and requirements for the management and disposal of soils and groundwater, as well as for any steel structures, including USTs, should they be encountered, during soil-disturbing activities performed at the Project Site (i.e., excavation, grading, trenching, utility installation or repair, and other human activities) that may disturb potentially contaminated soils or groundwater. The SMRP would describe specific soil-, groundwater- and UST-handing controls required to comply with local, State, and Federal overseeing agencies; prevent unacceptable exposure to contaminated soils, groundwater or vapors during construction or operation; and prevent the improper disposal of contaminated soils, groundwater or steel structures. Implementation of this mitigation measure would reduce soil contamination-related impacts to a less than significant level.

The location of the landfill sites used for soil disposal would depend on the disposal classification of the soil. Although not anticipated to be generated, Class 1 contaminated soils are hazardous and could be disposed at the Buttonwillow, California facility. Class 2 soils are contaminated, but non-hazardous, and could be disposed of at local landfills including Chiquita Canyon facility near Santa Clarita or the Waste Management Thermal Remediation Solutions facility located in Azusa, California.

In addition, Cal-OSHA regulates worker exposure to airborne contaminants (such as those identified in the subsurface soils) during construction under Title 8, Section 5155, Airborne Contaminants, which establishes which compounds are considered a health risk, exposure limits for such compounds, protective equipment, workplace monitoring, and medical surveillance required for compliance. Cal-OSHA also regulates worker exposure to airborne contaminants (such as those identified in the subsurface soils) during operation, requiring administrative or engineering controls, where required, to meet exposure limits, and implementation of written health and safety programs, worker training, emergency response training, and medical surveillance.

The Project would involve the demolition and removal of the existing on-site building. The current commercial structure on was constructed in 1985, which was after lead based paint (LBP) was banned in California in 1978. Thus, LBP is not assumed present a hazard at the project site. However, it is possible that asbestos containing materials (ACM) are present in the building, as ACM was not banned until 1989. If released into the environment, ACM could pose a significant hazard to construction workers or the public. Implementation of MM-HAZ-2 would require a comprehensive survey of the existing building prior to demolition in accordance with applicable regulations—including the National Emissions Standards for Hazardous Air Pollutants standards, SCAQMD Rule 1403, and California Division of Occupational Safety and Health (Cal/OSHA)—to verify the presence or absence of ACM. If ACM is encountered, MM-HAZ-2 requires remediation or abatement of these materials in accordance with all applicable regulations and standards before building demolition commences. Adherence with this mitigation measure would reduce risks associated with ACM to acceptable levels and associated impacts would be less than significant.

As discussed in Response IX.a, operation of the Project would not create a significant risk of exposure to hazardous materials towards the public or the environment through the routine transport, use, or disposal of hazardous materials. Types of hazardous materials to be used in association with the Project such as small quantities of potentially hazardous materials in the form of cleaning solvents, painting supplies, and pesticides for landscaping would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. The potential for creation of a significant hazard through routine transport of hazardous materials or the release of hazardous materials into the environment is considered less than significant.

Overall, implementation of MM-HAZ-1 and MM-HAZ-2 and compliance with applicable standards and regulations would ensure that potentially significant construction-related impacts associated with hazardous materials releases or accident conditions would be reduced to a less than significant level. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM-HAZ-1: The Applicant shall retain a qualified environmental consultant to prepare a Soil Management and Remediation Plan (SMRP) for review and approval by the Culver City Building Safety Division, Department of Toxic Substances Control (DTSC) and Los Angeles Regional Water Quality Control Board (LARWQCB), as necessary, prior to the commencement of excavation and grading activities. The plan would include measures to remove and/or treat/remediate the impacted soils and groundwater to a level determined by the LARWQCB to be protective of human health and the environment and compatible with commercial use, in compliance with all ~~acceptable per~~ applicable regulatory standards, under supervision of a certified environmental consultant licensed to oversee such remediation. The SMRP shall describe measures for (i) excavation of soils, (ii) characterization of soils to determine whether they qualify as hazardous waste under regulations such as 22 C.C.R. § 66262.11 or other regulations identified in the SMRP or otherwise identified by DTSC and/or LARWQCB, and (iii) disposal of excavated soils in compliance with all applicable regulations. The SMRP shall also describe measures for sampling, treatment and disposal of groundwater generated during construction as discussed in MM-HYD-1. The SMRP shall also provide measures for the evaluation of vapor intrusion risk at the Project site, and if necessary, modification of the Project design and/or installation of a vapor intrusion mitigation system consistent with the procedures and performance standards set forth in DTSC's October 2011 Vapor Intrusion Mitigation Advisory or as otherwise determined applicable by DTSC at the time of construction. Upon completion of the Soil Management and Remediation Plan, the Applicant shall contact the LARWQCB and DTSC, as necessary, to obtain a closure letter that states no further soils testing or remediation is required on the Project Site.

MM-HAZ-2: Prior to the issuance of any permit for the demolition or alteration of the existing on-site buildings, a comprehensive ACMs survey of the buildings shall be performed. If no ACMs are found, the Applicant shall provide a letter to the Culver City Building Safety Division from a qualified asbestos abatement consultant indicating that no ACMs are present in the on-site buildings. If ACMs are found to be present, they shall be abated in compliance with the South Coast Air Quality Management District's Rule 1403 as well as all other applicable State and Federal rules and regulations.

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

Less Than Significant With Mitigation Incorporated. El Marino Elementary School, located at 11450 Port Rd, is located approximately 0.17 miles northwest of the Project Site. Construction of the Project would involve the temporary use of hazardous substances in the form of paint, adhesives, surface coatings and other finishing materials, and cleaning agents, fuels, and oils. All materials would be used, stored, and disposed of in accordance with applicable laws and regulations and manufacturers' instructions.

As discussed in Response IX.b, remediation at the former gasoline and service station/automotive repair facility will be necessary to clean-up impacted soils and groundwater. All remediation would occur in adherence with MM-HAZ-1. Also, project demolition activities could involve the removal of ACM. However, any such removal would occur in adherence with MM-HAZ-2. The Project's remediation activities and demolition activities would be implemented pursuant to strict regulatory requirements, would be localized to the Project Site, and existing schools are sufficient distance from the Project Site to preclude impacts from the remediation and demolition activities. Implementation of the prescribed mitigation measures would reduce risks associated with remediation activities and LBPs and ACMs to acceptable levels and associated impacts would be less than significant.

Operation of the Project would not create a significant risk of exposure to hazardous materials for the public or the environment, including the schools. Occupancy of the proposed hotel and restaurant uses would not cause hazardous substance emissions or generate hazardous waste. Types of hazardous materials to be used in association with the Project such as small quantities of potentially hazardous materials in the form of cleaning solvents, painting supplies, and pesticides for landscaping would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. The Project would not emit hazardous emissions or handle hazards or acutely hazardous materials, substances, or waste within a quarter-mile of an existing or proposed school. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

Refer to MM-HAZ-1 and MM-HAZ-2. No additional mitigation measures are necessary.

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

Less Than Significant With Mitigation Incorporated. Government Code Section 65962.5, amended in 1992, requires the California Environmental Protection Agency (CalEPA) to develop and update annually the Cortese List, which is a list of hazardous waste sites and other contaminated sites. While Government Code Section 65962.5 makes reference to the preparation of a list, many changes have occurred related to web-based information access since 1992 and information regarding the Cortese List is now compiled on the websites of the Department of Toxic Substances Control (DTSC), the State Water Board, and CalEPA. The DTSC maintains the EnviroStor database, which includes sites on the Cortese List and also identifies potentially hazardous sites where cleanup actions (such as a removal action) or extensive investigations are planned or have occurred. The database provides a listing of Federal Superfund sites [National Priorities List (NPL)]; State Response sites; Voluntary Cleanup sites; and School Cleanup sites. Geotracker is the State Water Resources Control Board's data management system for managing sites that impact groundwater, especially those that require groundwater cleanup [USTs, Department of Defense, Site Cleanup Program] as well as permitted facilities such as operating USTs and land disposal sites. CalEPA's database includes lists of sites with active Cease and Desist Orders (CDO) or Cleanup and Abatement Orders (CAO) from the State Water Board.

Based on a review of the databases, the Project Site is identified on the list of Open Active Leaking Underground Storage Tank Sites from the State Water Board's GeoTracker database.[33] As discussed in Response IX.b, the Project Site has the potential to contain hazards related to the former gasoline and service station and the automotive repair facility, which could create a significant hazard to the public or the environment during

[33] *State Water Resources Control Board, Geotracker website, https://geotracker.waterboards.ca.gov/search?PAGE=8&CMD=search&business_name=&main_street_number=&main_street_name=&city=&zip=&county=&branch=&status=Open%2COpen+-+Active%2COpen+-+Assessment+%26+Interim+Remedial+Action%2COpen+-+Eligible+for+Closure%2COpen+-+Inactive%2COpen+-+Referred%2COpen+-+Remediation%2COpen+-+Reopen+Case%2COpen+-+Site+Assessment%2COpen+-+Verification+Monitoring&site_type=LUFT&cleanup_type=&npl=&reporttype=&reporttitle=PROJECT+SEARCH+RESULTS&federal_superfund=&state_response=&voluntary_cleanup=&school_cleanup=&permitted=&corrective_action=&spec_prog=&national_priority_list=&senate=&assembly=&critical_pol=&business_type=&case_type=&gwbasin=&display_results=&pub=&watershed=&ORDERBY=city&excludenc=False&next=Next+50). Accessed December 6, 2019.*

construction and operation of the Project. However, with implementation of MM-HAZ-1 provided under Response IX.b, potentially significant impacts regarding hazardous materials with the existing Project Site would be reduced to a less than significant level. Further, no off-site facilities were listed on the databases reviewed that would appear to present an environmental concern for the Project Site. Therefore, while the Project Site is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, development of the Project would not create a significant hazard to the public or the environment. Impacts would be less than significant with mitigation incorporated.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The Project Site is not located within an airport land use plan or within two miles of a public or private airport. The nearest airports are the Santa Monica Municipal Airport and the Los Angeles International Airport (LAX), located approximately 3.4 miles northwest and 2.5 miles to the south of the Project Site, respectively. Therefore, the Project would not result in an airport-related safety hazard or excessive noise for people residing or working in the Project area. No impacts would occur.

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

Less Than Significant Impact. The Project Site is located in an established urban area that is well served by a roadway network. The Project Site is not located on an established disaster route. The nearest disaster route to the Project Site is Centinela Avenue, located approximately 0.4 mile south of the Project Site.[34] While it is expected that the majority of construction activities for the Project would be confined on-site, construction activities may temporarily affect access on portions of adjacent streets during certain periods of the day. However, through-access for drivers, including emergency personnel, along all roads would still be provided. In these instances, the Project would implement traffic control measures (e.g., construction flagmen, signage, etc.) to maintain flow and access. Furthermore, in accordance with Culver City requirements, the Project would develop a Construction Traffic Management Plan (see MM-PS-1), which includes designation of a haul route, to ensure that adequate emergency access is maintained during construction. Therefore, construction is not expected to result in inadequate emergency access.

Project operation would generate traffic in the Project vicinity and would result in some modifications to access (i.e., new curb cuts for Project driveways) from the streets that surround the Project Site. However, emergency access to the Project Site and surrounding area would continue to be provided similar to existing conditions. Emergency vehicles and fire access for the Project Site would be provided at grade access from Slauson Avenue. Future driveway and building configurations would comply with applicable fire code requirements for emergency evacuation, including proper emergency exits for employees and visitors. Subject to review and approval of Project Site access and circulation plans by the Culver City Fire Department (CCFD), the Project would not impair implementation or physically interfere with adopted emergency response or emergency evacuation plans. As such, the Project would not cause significant impediments along a designated emergency evacuation routes, and the proposed mix of uses would not impair implementation of Culver City's emergency response plan. Impacts would be less than significant.

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[34] *County of Los Angeles Department of Public Works. https://dpw.lacounty.gov/dsg/DisasterRoutes/map/culver%20city.pdf, accessed October 2019.*

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

No Impact. The Project Site is not located in an area of moderate or very high fire hazard.[35,36] The nearest state responsibility area is located approximately 11 miles northwest of the Project in the City of Malibu[37] and the nearest very high fire hazard severity zone is located in an unincorporated area of Los Angeles County known as Baldwin Hills, approximately 2.3 miles northeast of the Project Site. In addition, the Project Site is surrounded by urban development and is not adjacent to any wildlands. The Project would not require the installation or maintenance of associated infrastructure that could exacerbate fire risk. The Project would involve the redevelopment of an infill site within an urbanized area. No impacts would occur.

X. HYDROLOGY AND WATER QUALITY

Would the project:

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact With Mitigation Incorporated. The Project Site is relatively flat and is approximately 15 feet above sea level across the property. Surface water at the Project Site consists of direct precipitation onto the Project Site. Much of this water drains as sheet flow to low-lying areas, area drains, off-site and/or to the street. In particular, surface water from Jefferson Boulevard flows to two existing catch basins along the frontage of the Project Site, and Slauson Avenue has three existing catch basins along the frontage of the Project Site.

Violations of water quality standards or waste discharge requirements, or degradation of water quality can result in potentially significant impacts to water quality and result in environmental damage or sickness in people. The Project would result in a significant impact to water quality if water quality standards, waste discharge requirements, or degradation of water quality occurred.

Point-source pollutants can be traced to their original source. Point-source pollutants are discharged directly from pipes or spills. Raw sewage draining from a pipe directly into a stream is an example of a point-source water pollutant. The Project is proposing a mix of hotel and restaurant uses and does not propose any uses that would generate significant point source pollutants. Therefore, water quality impacts due to point sources would be less than significant.

Non-point-source pollutants (NPS) cannot be traced to a specific original source. NPS pollution is caused by rainfall or snowmelt moving over and through surface areas. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even underground sources of drinking water. These pollutants can include:

- Excess fertilizers, herbicides and insecticides from agricultural lands and residential areas;
- Oil, grease, and toxic chemicals from urban runoff and energy production;

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[35] *Culver City Fire Department Very High Fire Hazard Severity Zones (VHFHSZ) Map, prepared by CAL FIRE, dated June 13, 2012.*

[36] *The Culver City Very High Fire Hazard Severity Zones in LRA as recommended by CAL FIRE, prepared by CAL FIRE, dated September 2011.*

[37] *Board of Forestry and Fire Protection, State Responsibility Area Viewer, https://bof.fire.ca.gov/projects-and-programs/state-responsibility-area-viewer/, accessed November 2019.*

- Sediment from improperly managed construction sites, crop and forest lands, and eroding stream banks;
- Salt from irrigation practices and acid drainage from abandoned mines;
- Bacteria and nutrients from livestock; pet wastes, and faulty septic systems; and
- Atmospheric deposition and hydro modification.

Impacts associated with water pollution include ecological disruption and injury or death to flora and fauna, increased need and cost for water purification, sickness or injury to people, and degradation or elimination of water bodies as recreational opportunities. Accidents, poor site management or negligence by property owners and tenants can result in accumulation of pollutant substances on parking lots, loading and storage areas, or result in contaminated discharges directly into the storm drain system.

The Project would be subject to existing regulations associated with the protection of water quality. Construction activities would be carried out in accordance with the requirements of the NPDES General Construction Permit issued by the Los Angeles Regional Water Quality Control Board (LARWQCB), as applicable. Best Management Practices (BMPs) to minimize pollutant runoff during the Project's construction period would be incorporated by preventing the off-site movement of potential contaminants such as petroleum products, paints and solvents, detergents, fertilizers, and pesticides.

As discussed under Response VII.a.iii, above, according to the Geotechnical Engineering Investigation, groundwater was encountered during exploration at depths between 24 and 24.5 feet below the ground surface. According to the Seismic Hazard Zone Map of the Venice Quadrangle, the historic high groundwater level for the Project Site was approximately 10 feet below the surface. As such, construction activities, which would require excavations down to 35 feet below ground surface could encounter groundwater. Typically, groundwater removed from a construction site is disposed of in the storm drain system. However, if any removed groundwater contain contaminates that exceed acceptable water quality regulatory standards of the LARWQCB or other appropriate agencies, this could be a potentially significant impact. As such, MM-HYD-1 is prescribed to address this potential impact, which requires implementation and completion of a dewatering plan that would dispose of contaminated groundwater in compliance with applicable regulatory requirements. Implementation of MM-HYD-1, along with MM-HAZ-1, would ensure that potentially significant impacts regarding groundwater contamination during dewatering activities on the Project Site are reduced to a less than significant level.

Overall, compliance with applicable stormwater requirements and implementation of the prescribed mitigation would ensure that impacts to water quality during the Project's construction activities would be less than significant.

With regard to long-term water quality impacts, per the applicable requirements of Chapter 5.05, Stormwater and Urban Runoff Pollution Control, Section 5.05.040, Standard Urban Stormwater Mitigation Plan (SUSMP) Requirements for New Development and Redevelopment Projects, of the CCMC, the Project would require a stormwater mitigation plan that complies with the most recent LARWQCB approved SUSMP. The preliminary concept for the site drainage and stormwater treatment implements several rainwater harvesting systems to be constructed either within the subterranean parking structure or the ground level of the Project Site. The surface drainage would be relayed to these structures via roof drains and podium deck area drains. The Project would also consider combination of pre-treatments upstream of the rainwater harvesting system, including flow-through planters, fossil filter inserts for catch basins, and/or flow treatment systems. Once the required treatment volume is stored in the rainwater harvesting system, the excess water for a higher rain event would overflow to the existing storm drain system in the surrounding streets via a high flow bypass system prior to the storage device or internal bypass outlet. The stormwater runoff captured and stored within the rainwater harvesting system would be reused for irrigation of proposed on-site landscape areas. The stormwater system would be subject to review and approval by the City to ensure that it would adequately comply with applicable water quality regulations.

Violations of water quality standards due to urban runoff can be prevented through the continued implementation of existing regional water quality regulations. The Project would not interfere with the implementation of NPDES water quality regulations and standards. Compliance with applicable SUSMP and long-term water quality requirements would be reviewed by the Culver City Department of Public Works during the plan check phase of the Project. Compliance with applicable stormwater requirements would ensure that development of the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM-HYD-1: If dewatering activities occur on-site during future redevelopment, samples shall be obtained from the water and analyzed for petroleum hydrocarbons, volatile organic compounds (VOCs) and oxygenates to ensure that they do not exceed applicable discharge requirements. Should the samples exceed any applicable discharge requirement, a dewatering plan shall be prepared by the Project applicant for submittal to the Los Angeles Regional Water Quality Control Board (LARWQCB), Los Angeles County, and other appropriate agencies determined appropriate in consultation with the LARWQCB for review and approval. The plan shall include but not be limited to sampling of groundwater generated during construction that may be contaminated; and treatment and disposal of contaminated groundwater generated during construction in compliance with applicable regulatory requirements. Written verification from the LARWQCB of approval of a dewatering plan completion shall be submitted to the Culver City Planning Division, Building Safety Division, and Department of Public Works prior to issuance of grading permit.

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

Less Than Significant Impact. The Project Site is located in a highly urbanized area of Culver City and is currently developed with a single-story commercial (retail) building and associated asphalt-paved surface parking lot. As such, the Project Site does not currently provide a substantial opportunity for recharge of groundwater. Furthermore, the Project does not propose the development of long-term groundwater production wells. Given that the Project Site is less than one acre and the temporary nature of construction activities, while some dewatering could be necessary during construction activities, such dewatering activities would not be of an extent that would substantially alter groundwater supplies. Therefore, the Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. Impacts would be less than significant.

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

i. Result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Currently, the Project Site is almost entirely developed with impermeable surfaces, however, there are small areas of exposed landscaped and disturbed soils. No streams or rivers occur on-site. The Project would not substantially change the amount of impervious surface area on the Project given the proposed above ground and subterranean structure. In addition, site-generated surface water runoff would continue to flow into the City's storm drain system following on-site treatment. Furthermore, the Project would include appropriate drainage improvements on Project Site to direct stormwater flows to the local drainage systems, similar to existing conditions. The current requirement for the City of Culver City's SUSMP follows closely to the Los Angeles County's Low Impact Development (LID) guidelines. The County LID manual states the following:

"All Designated Projects must retain 100 percent of the Stormwater Quality Design Volume (SWQDv) on-site through infiltration, evapotranspiration, stormwater runoff harvest and use, or a combination thereof unless it is demonstrated that it is technically infeasible to do so."

As discussed under Response X.a, the preliminary concept for the site drainage and stormwater treatment implements several rainwater harvesting systems to be constructed either within the subterranean parking structure or the ground level of the Project Site. The surface drainage would be relayed to these structures via roof drains and podium deck area drains. The Project will also consider a combination of pre-treatments upstream of the rainwater harvesting system, including flow-through planters, fossil filter inserts for catch basins, and/or flow treatment systems. Once the required treatment volume is stored in the rainwater harvesting system, the excess water for a higher rain event would overflow to the existing storm drain system, in the surrounding streets via high flow bypass system prior to the storage device or internal bypass outlet. The stormwater runoff captured and stored within the rainwater harvesting system would be reused for irrigation of proposed on-site landscape areas. The proposed drainage facilities would capture and treat the design storm for which the SWQDv is calculated, which for the Project Site is the 85th percentile, 24-hour rain event. With the proposed drainage system in place, the existing off-site drainage patterns would be maintained.

With the Project Site entirely developed, paved, or landscaped, the potential for erosion or siltation would be minimal. Impacts would be less than significant.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. While the Project Site is under construction, the rate and amount of surface runoff generated at the Project Site would fluctuate because exposed soils could absorb rainfall that currently leaves the Project Site as surface flow. However, the construction period is temporary and compliance with applicable regulations discussed above would preclude fluctuations that result in flooding on-or off-site.

As discussed in Responses X.a and X.c.i, above, Project implementation would implement the use of rain harvesting systems to capture and treat stormwater. With the proposed drainage system in place, the Project would not substantially change the amount of impervious surface area on-site and, thus, would not result in substantial increases in surface water runoff quantities. Additionally, with implementation of the Project, overall existing drainage patterns would be maintained, and the Project would include appropriate on-site drainage improvements to convey anticipated stormwater flows. Final plan check by the City would ensure that adequate capacity is available in the storm drain system in surrounding streets prior to Project approval. The Applicant would be responsible for providing the necessary on-site storm drain infrastructure to serve the Project Site, as well as any connections to the existing system in the area. It is also acknowledged that no BMPs are currently located on the Project Site and there are no known deficiencies in the existing storm drain system. Furthermore, the Project would not alter the course of any stream or rivers. Because runoff would not significantly increase over existing conditions, and rain harvesting systems would be implemented to capture and treat runoff, the Project would not result in on- or off-site flooding. Impacts would be less than significant.

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?

Less Than Significant Impact. As discussed in Response X.c.i, above, the Project is almost entirely developed with impermeable surfaces. The Project would not substantially change the amount of impervious surface area on the Project given the proposed above ground and subterranean structure. As such, the Project would maintain the existing percentage of impervious surfaces within the Project Site and would, therefore, not create new potential for runoff water to exceed the capacity of existing stormwater drainage systems. In addition, the proposed drainage facilities would capture and treat the design storm for which the SWQDv is calculated, which for the Project Site is the 85th percentile, 24-hour rain event. Therefore, stormwater flows from the Project Site would not increase due to the Project. In terms of polluted runoff, the Project's proposed uses would be typical of a hotel and restaurant use and would not introduce substantial sources of polluted water that a use such as an industrial use would generate, for example. Moreover, the Project will also consider combination of pre-treatments upstream of the rainwater harvesting system, including flow-through planers, fossil filter inserts for catch basins, and/or flow treatment systems, which would serve to address any potential polluted runoff generated by the Project. Therefore, the Project would not create or contribute additional runoff water that would exceed the capacity of the existing stormwater system or provide substantial sources of polluted runoff. Impacts would be less than significant.

iv. Impede or redirect flood flows?

Less Than Significant Impact. As discussed in Response X.c.i, above, the Project is almost completely developed with impermeable surfaces. The Project would not substantially change the amount of impervious surface area on the Project given the proposed above ground and subterranean structure. In addition, runoff from the Project Site would be directed to existing drainage facilities. Furthermore, the Project Site is mapped by the Federal Emergency Management Agency (FEMA) as located within an "Area of Minimal Flood Hazard".[38] The Project Site is also not is not located in a 100-year or 500-year flood zone as delineated by the City of Los Angeles or Culver City.[39] Therefore, the Project would not substantially alter the existing drainage pattern of the Project Site or area in a manner which would impede or redirect flood flows. Impacts would be less than significant.

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

Less Than Significant Impact. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant disturbance undersea, such as a tectonic displacement of sea floor associated with large, shallow earthquakes.

Aa discussed in Response X.c.iv, the Project Site is mapped by FEMA as an "Area o Minimal Flood Hazard". As such, the Project would have a less than significant impact related to risk of pollutants for a project within a flood hazard zone.

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38 FEMA Flood Map Service Center. FEMA Flood Map 06037C1760F, effective on 09/26/2008. https://msc.fema.gov/portal/search?AddressQuery=11469%20Jefferson%20Boulevard%20Culver%20City#searchresultsanchor, accessed October 2020.

39 Culver City, Natural Hazards – Fire and Flooding Map, February 1, 2007, https://www.culvercity.org/files/assets/public/documents/information-technology/maps/culver_city_natural_hazards_map.pdf, accessed October 2020.

According to the Tsunami Inundation Map for Emergency Planning, State of California, County of Los Angeles Venice Quadrangle, the Project Site is not located within the mapped tsunami inundation boundaries.[40] Therefore, the Project would not be subject to flooding hazards associated with tsunamis.

As provided in the Culver City Natural Hazards – Fire and Flooding Map, the Project Site is within the inundation area for the Mulholland Dam, Silverlake Dam, and the Stone Canyon Dam. However, a breach of the dam facilities is very unlikely. The Project Site is located approximately 9.43 miles away from the Mulholland Dam/Stone Canyon Dam and 10.39 miles from the Silver Lake Dam with a variety of development, hills, and terrain that would slow and limit any impacts of dam failures on the Project Site and surrounding area. In addition, the National Dam Safety Act of 2006 authorized a program to reduce the risks to life and property from dam failure by establishing a safety and maintenance program. The program requires regular inspection of dams to reduce the risks associated with dam failures. Reservoir water, were it to reach the Project Site, would generally flow along roadways adjacent to or within the vicinity of the Project Site. Thus, during the unlikely failure of the dams, impacts regarding flooding hazards associated with seiches would be less than significant.

Based on the above, the Project would not release of pollutants due to project inundation. Impacts would be less than significant.

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

Less Than Significant Impact. As required by Section 303(d) of the Clean Water Act, the State and the Regional Water Boards assess water quality data for California's waters every two years to determine if they contain pollutants at levels that exceed protective water quality criteria and standards.[41] As such, the LARWQCB most recently prepared a list of impaired waterbodies in the region as part of the 2016 assessment cycle. This list is referred to as the 303(d) list. All waterbodies on the 303(d) list are subject to the development of a Total Maximum Daily Load (TMDL). The nearest water body to the Project Site that has been identified as an impaired water body is Ballona Creek Reach 2, located between National Boulevard and Centinela Avenue, approximately 2.8 miles north of the Project Site. Impairment for Ballona Creek Reach 2 include trash, toxic pollutants, bacteria, metals, and sediment.

As previously discussed, in terms of polluted runoff, the Project's proposed uses would be typical of a hotel and restaurant use and would not introduce substantial sources of polluted water that a use such as an industrial use would generate, for example. Moreover, the Project will also consider combination of pre-treatments upstream of the rainwater harvesting system, including flow-through planers, fossil filter inserts for catch basins, and/or flow treatment systems, which would serve to address any potential polluted runoff generated by the Project. With implementation of the rainwater harvesting system and implementation of the pre-treatments, polluted runoff would be minimized under the Project Site and would provide an improvement in the surface water quality runoff as compared to the existing conditions. As such, the Project would not conflict with or obstruct any water quality control plans for Ballona Creek Reach 2. No other water quality control plans or sustainable groundwater management plans would be affected by development of the Project. Impacts would be less than significant.

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[40] *Tsunami Inundation Map for Emergency Planning, State of California, County of Los Angeles, Venice Quadrangle, dated March 1, 2009, https://www.conservation.ca.gov/cgs/Documents/Tsunami/Maps/Tsunami_Inundation_Venice_Quad_LosAngeles.pdf, accessed October 2019.*

[41] *State Water Resources Control Board, Impaired Water Bodies, https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml, accessed October 2019.*

XI. LAND USE AND PLANNING

Would the project:

a. Physically divide an established community?

Less Than Significant Impact. The Project Site is currently developed with a single-story commercial (retail) building and associated asphalt-paved surface parking lot. The Project vicinity is highly urbanized and generally built out. The local Project vicinity is characterized by a blend of commercial uses to the north, east, and south of the Project Site and low-rise residential uses west of the Project Site. The Project proposes the development of a 175-room hotel with restaurant uses located on the ground floor. As such, the Project would be an infill project providing uses in keeping with the commercial character of the surrounding area. The Project would not physically separate or otherwise disrupt an existing residential use on or adjacent to the Project Site. All proposed development would occur within the boundaries of the Project Site as it currently exists. Given the type of uses in the Project vicinity, and the infill character of the Project, the Project would not physically divide an established community. Impacts would be less than significant.

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

Less Than Significant Impact.

General Plan

The General Plan designation for the Project Site is General Corridor which allows for a range of small to medium scale commercial uses with an emphasis on community serving retail, office, and service uses along major corridors. The General Corridor designation is intended to support desirable existing and future neighborhood and community serving commercial uses and housing opportunities that are compatible with nearby residential neighborhoods. The Project is consistent with the General Corridor designation as it is proposing a hotel use with restaurant uses on the ground floor. No amendment to the Project Site's existing general plan designations are proposed by the Project. As such, the Project would have a less than significant impact with respect to the General Plan.

Zoning

The Project Site's existing Zoning designation is Commercial General (CG) and the Project Site is within a Commercial Zero Setback Overlay Zone. The CG Zoning District identifies areas that are long major corridors appropriate for small- to medium-scale commercial uses, emphasizing community-serving retail, office, and service uses. The Commercial Zero Setback Overlay Zone is intended to preserve the reinforce a traditional city streetscape and create a more pedestrian-friendly environment. As required under this overlay zone, the first story of proposed buildings that exceed 750 SF shall have a zero setback from the street-facing property of any street listed in Subsection 17.260.020.B. (i.e., Jefferson Boulevard and Slauson Avenue). No changes to the Project Site's existing Zoning designations are proposed by the Project. The Project is consistent with the General Corridor designation as it is proposing a hotel use with restaurant uses on the ground floor, a medium-scale use, along Jefferson Boulevard, a major corridor. In addition, proposed setbacks under the Project would be consistent with the Commercial Zero Setback Overlay Zone. The maximum building height for the CG zone is 56 feet, based on CCMC Section 17.220, Table 2-6. As noted in the CCMC, in non-residential zones, such as with the Project, architectural features that are non-habitable design elements, such as spires, turrets, bell towers, cupolas, and similar design elements shall be allowed up to a maximum of 13 feet and six inches of height of a building and are limited to 15 percent of the total roof area. As discussed in Attachment A, Project Description, the proposed building would reach up to 56 feet in height (with the elevator shaft reaching 69 feet and 6 inches in height), which would be within the height requirements for projects in non-residential zones as stated in Section 17.220 of the CCMC. As such, the Project would have a less than significant impact with respect to the Zoning Code.

Other

It is noted that other land use related approvals, programs, and/or or permits as part of the Project may include, but are not limited to, the following: demolition permits; grading, excavation, foundation, ~~and~~ building permits; ~~and~~ haul route permits; Site Plan Review; Conditional Use Permit; Administrative Use Permit; and/or other permits as needed, including, but not limited, permits associated with the sale and consumption of alcoholic beverages and outdoor dining. None of these would conflict with an applicable land use plan (i.e., General Plan), policy or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect. These approvals, programs, and permits have been assessed as part of the Project throughout this MND evaluation.

Conclusion

Based on the analysis above, the Project would be consistent with the applicable General Plan and Zoning provisions of the City. As demonstrated in this MND analysis, with implementation of the Project's design features and prescribed mitigation measures, all identified potentially significant impacts associated with the proposed uses and land use designations would be reduced to a less than significant level. Therefore, the Project would not result in conflicts with the applicable General Plan or Zoning Code or any other applicable land use plan, policy, or regulation such that significant physical impacts on the environment would occur. Impacts would be less than significant.

XII. MINERAL RESOURCES

Would the project:

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

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

No Impact (a-b). Minerals are defined as any naturally occurring chemical elements or compounds formed from inorganic processes and organic substances. The California Surface Mining and Reclamation Act of 1975 (SMARA) requires that all cities address significant mineral resources, classified by the State Geologist and designated by the State Mining and Geology Board, in their General Plans.

The Inglewood Oil Field (Oil Field) is located within Culver City and the unincorporated area of Los Angeles County known as Baldwin Hills. The current active Oil Field boundary is approximately 1,000 acres of which 100 acres are located within Culver City. The Oil Field is located approximately 1.28 miles northeast of the Project Site. The Project Site is located in a highly urbanized area of Culver City and is currently developed with a single-story commercial (retail) building and associated asphalt-paved surface parking lot. As such, the potential of uncovering mineral resources during Project construction is considered low. Therefore, the Project would not result in the loss of availability of a known mineral resource delineated on a local general plan, specific plan, or other land use plan as there are no known mineral resources or mineral resource recovery sites on or near the Project Site. No impact would occur.

XIII. NOISE

The following impact analysis pertaining to noise and vibration impacts is based on information contained in the Project's Noise and Vibration Technical Report prepared by ESA, dated November 2020, which is available for review at the Culver City Planning Division.

As part of the Project, the following Project Design Feature (PDF) would be implemented and is assumed within the analyses below. The PDF would be incorporated into the Project development as conditions of approval and included in the Mitigation Monitoring Program, included as Attachment C within this IS/MND.

Project Design Features

PDF-NOI-1: Noise Reduction Measures: Consistent with Policy 2.A of the Noise Element, the Project would install a temporary sound barrier during construction that blocks the line-of-sight between the Project Site and the residential uses to the west and northwest achieving a minimum 10 dBA reduction in noise.

Would the project result in:

a. Would the Project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact.

Applicable Noise Regulations

The City's noise standards are developed from those of several Federal and State agencies including the Federal Highway Administration (FHA), the Environmental Protection Agency (EPA), the Department of Housing and Urban Development (HUD), the American National Standards Institute (ANSI), and the State of California Department of Health Services. These standards set limits on the noise exposure level for various land uses. **Table B-12**, *Culver City Interior and Exterior Noise Standards*, lists interior and exterior noise level standards and the type of occupancy to which they should be applied.

Table B-12
Culver City Interior and Exterior Noise Standards

Zone	Interior Standard dBA (CNEL)	Exterior Standard dBA (CNEL)
Residential	45	65
Commercial Retail	55	--
Office Building	50	--
Open Space – Parks	--	65

Source: Culver City Noise Element.

Section 9.07.055 of Culver City's Noise Regulations Chapter 9.07 states that it shall be prohibited for any persons to operate a loud speaker or sound amplified equipment for the purposes of transmitting messages, giving instructions or providing entertainment which is audible at a distance of fifty (50) feet or beyond the subject's property line without first filing an application and obtaining a permit. According to Section 9.07.055, every user of sound amplifying equipment on public or private property, except block parties which have obtained a permit from the Chief of Police or activities in public parks which have obtained a permit for use of amplifying equipment from the Parks, Recreation and Community Services Department shall file an application with the Committee on Permits and Licenses at least ten (10) days prior to the day on which the sound amplifying equipment is to be used. The commercial and noncommercial use of sound amplifying equipment shall be subject to the following restrictions:

a. The only sounds permitted shall be either music or human speech, or both.

b. The operation of sound amplifying equipment shall occur only between the hours of:

8:00 AM through 8:00 PM Monday through Thursday,

8:00 AM through 10:00 PM Friday,

10:00 AM through 10:00 PM Saturday, and

10:00 AM through 8:00 PM Sunday and City specified holidays.

Table B-13, *Noise and Land Use Compatibility Matrix - California,* illustrates land use compatibility with regard to noise. These standards and criteria will be incorporated into the land use planning process to reduce future noise and land use incompatibilities. This table is the primary tool that allows the City to ensure integrated planning for compatibility between land uses and outdoor noise. Community Noise Equivalent Level (CNEL) for specific land uses are classified into four categories: (1) "Clearly Compatible" (2) "Compatible with Mitigation" (3) "Normally Incompatible" and (4) "Clearly Incompatible".

The City's General Plan Noise Element includes Policy 2.A, pertaining to stationary noise sources, as follows:

Policy 2.A Create a comprehensive ordinance establishing noise regulation criteria, and standards for noise sources and receptors to include but not be limited to the following:

- Noise reduction features during site planning to mitigate anticipated noise impacts on affected noise sensitive land uses, such as schools, hospitals, convalescent homes, and libraries.
- Temporary sound barrier installation at construction site if construction noise is impacting nearby noise sensitive land uses.
- Noise abatement and acoustical design criteria for construction and operation of any new development.

Chapter 9.07 of the CCMC provides specific noise restrictions and exemptions for noise sources within the City. CCMC noise regulations state that construction activity shall be prohibited, except between the hours of 8:00 A.M. and 8:00 P.M. Mondays through Fridays; 9:00 A.M. and 7:00 P.M. Saturdays; 10:00 A.M. and 7:00 P.M. Sundays. It is prohibited for any person to operate any radio, disc player or cassette player or similar device at a construction site in a manner that results in noise levels that are audible beyond the construction site property line.

Table B-13
Noise and Land Use Compatibility Matrix – California

Land Use Category	Normally Acceptable[a]	Conditionally Acceptable[b]	Normally Unacceptable[c]	Clearly Unacceptable[d]
Residential – Low density, Single-Family, Duplex, Mobile Homes	50 – 60	55 – 70	70 – 75	75 – 85
Residential – Multiple Family	50 – 65	60 – 70	70 – 75	70 – 85
Transient Lodging – Motel, Hotels	50 – 65	60 – 70	70 – 80	80 – 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 – 70	70 – 80	80 – 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 – 70	NA	65 – 85
Sports Arenas, Outdoor Spectator Sports	NA	50 – 75	NA	70 – 85
Playgrounds, Neighborhood Parks	50 – 70	NA	67.5 – 75	72.5 – 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 – 70	NA	70 – 80	80 – 85
Office Buildings, Business Commercial and Professional	50 – 70	67.5 – 77.5	75 – 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 – 75	70 – 80	75 – 85	NA

NA = Not Applicable

[a] **Normally Acceptable –** Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
[b] **Conditionally Acceptable –** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.
[c] **Normally Unacceptable –** New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
[d] **Clearly Unacceptable** – New construction or development should generally not be undertaken.

Source: Office of Planning and Research, State of California General Plan Guidelines, October 2003.

Thresholds of Significance

The following significance thresholds evaluate potential noise impacts of the Project based on the regulatory framework described above. The Project would result in potentially significant impacts under the following circumstances:

- Project construction activities occur between the hours of 8:00 PM and 8:00 AM Monday through Friday; 7:00 PM and 9:00 AM Saturdays; and 7:00 PM and 10:00 AM Sundays;

- The Project-related operations would cause ambient noise levels to increase by 5 dBA Leq or more.

Existing Conditions

The predominant existing noise source surrounding the Project Site is traffic noise from I-405 and from Slauson Avenue to the south, and Jefferson Boulevard to the southeast. Secondary noise sources include general commercial-related activities, such as loading dock/delivery truck activities, trash compaction, and refuse service activities, from the surrounding commercial land uses.

Existing noise sensitive uses within 500 feet of the Project Site include:

- Residential Uses: Existing one- and two-story single-family residences are located across the service alley to the north and west of the Project Site.

Figure B-1, *Noise Measurements and Existing Noise Sensitive Locations*, presents locations of noise measurements taken within and near the Project Site relative to the location of existing noise sensitive receptors. The results of ambient sound measurements taken to establish the existing environmental setting are summarized in **Table B-14**, *Summary of Ambient Noise Measurements*. As shown in Table B-14, daytime noise levels ranged from 59 dBA to 67 dBA Leq and nighttime noise levels ranged from 58 dBA to 67 dBA Leq.

Table B-14
Summary of Ambient Noise Measurements

Site ID	Monitoring Date(s)	Start Time	End Time	Daytime (7 a.m. to 10 p.m.) Hourly Leq	Daytime Average Hourly Leq	Nighttime (10 p.m. to 7 a.m.) Hourly Leq	Nighttime Average Hourly Leq
R1	1/26-1/24/19	12:00	12:00	59-64	62	58-66	62
R2	1/23-1/24/19	11:00	11:00	61-64	63	59-67	65
R3	1/23/19	11:03	11:18	67	--	--	--

[a] Detailed measured noise data, including hourly L_{eq} levels, are included in the Noise and Vibration Technical Report.

Source: ESA, 2020.

Existing roadway CNEL noise levels were calculated for nine roadway segments located in the vicinity of the Project Site. The roadway segments selected for analysis are considered to be those that are expected to be the most directly impacted by Project-related traffic, which, for the purpose of this analysis, includes the roadways that are located near and immediately adjacent to the Project Site.

The noise levels along these roadway segments are presented in **Table B-15**, *Predicted Existing Vehicular Traffic Noise Levels*. The calculated CNEL (at a distance of between 40 and 50 feet from the roadway right-of-way) from actual existing traffic volumes on the analyzed roadway segments ranged from 62.6 dBA to 69.5 dBA for residential areas and commercial areas.

Construction

The below assessment include construction noise impacts to the noise sensitive receivers in the vicinity of the Project Site due to the operation of construction equipment (on-site construction activities) and due to haul truck activities (off-site construction activities).

SOURCE: ESA, 20019; Open Street Map, 2019

The Jeff Hotel

Figure B-1
Noise Measurements and Existing Noise Sensitive Locations

ESA

Table B-15
Predicted Existing Vehicular Traffic Noise Levels

Roadway Segment	Existing CNEL (dBA) at Referenced Distances from Roadway Right-of-way
Jefferson Boulevard	
Between Mesmer Ave and I-405 Southbound Ramp	69.5
Between I-405 Southbound Ramp and I-405 Northbound Ramp	67.8
Between I-405 Northbound Ramp and Slauson Ave	68.2
North of Slauson Ave	67.4
Slauson Avenue	
West of Jefferson Blvd	62.6
Between Jefferson Blvd and Sepulveda Blvd	62.9
Between Sepulveda Blvd and SR-90 On-ramp	66.3
Sepulveda Blvd	68.7
North of Slauson Ave	68.5

Source: ESA, 2020.

On-Site Construction Activities

Noise impacts from construction activities are generally a function of the noise generated by construction equipment, equipment locations, the sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Construction would be completed in seven stages: (1) demolition; (2) shoring/excavation; (3) foundations/footings; (4) concrete pour, (5) building construction, (6) paving, and (7) architectural coatings. The Project would be constructed using typical construction techniques; no blasting or impact pile driving would be used.

Project construction would require the use of mobile heavy equipment with high noise-level characteristics. Individual pieces of construction equipment expected to be used during Project construction could produce maximum noise levels of 74 dBA to 90 dBA at a reference distance of 50 feet from the noise source, as shown in Table B-8 of the Noise and Vibration Technical Report.

A summary of the construction noise impacts at the existing nearby sensitive receptors is provided in **Table B-16,** *Estimated Construction Noise Levels at Existing Off-Site Sensitive Receptors*. As shown in Table 10, construction noise levels are estimated to reach a maximum of 70 dBA at the off-site receptor location R1, 70 dBA at the receptor locations R2, and 63 dBA at the receptor location R3.

Project construction activities would not occur between the hours of 8:00 P.M. and 8:00 A.M. Monday through Friday; 7:00 P.M. and 9:00 A.M. on Saturdays; 7:00 P.M. and 10:00 A.M. on Sundays. Therefore, on-site construction noise impacts would be less than significant.

Table B-16
Estimated Construction Noise Levels at Existing Off-Site Sensitive Receptors

Noise Sensitive Receptor	Construction Phases	Distance between Nearest Receptor and Construction Site, feet	Estimated Construction Noise Levels at Noise Sensitive Receptor by Construction Phase,[a,b] Hourly Leq (dBA)
R1 Northern property line near Single-family residential uses to the north and west	Demolition	50	69
	Shoring/Excavation	50	69
	Foundations/Footings	50	64
	Continuous Concrete Pour	50	63
	Construction/Paving/ Architectural Coatings	50	70
R2 Western property line near single-family residential uses to the north	Demolition	50	69
	Shoring/Excavation	50	69
	Foundations/Footings	50	64
	Continuous Concrete Pour	50	63
	Construction/Paving/ Architectural Coatings	50	70
R3 At the corner of Slauson Ave and Segrell Way near single-family residential uses.	Demolition	50	60
	Shoring/Excavation	50	61
	Foundations/Footings	50	53
	Continuous Concrete Pour	50	57
	Construction/Paving/ Architectural Coatings	50	63

[a] Estimated construction noise levels represent the worst-case condition when noise generators are located closest to the receptors and are expected to last the entire duration of each construction phase.

[b] Noise levels include a 10 dBA reduction from acoustic barrier implemented as part of PDF-NOI-1 and is consistent with ~~under~~ Policy 2.A of the City's Noise Element

Source: ESA, 2020.

Although no significant impacts are identified related to Project construction activities, Policy 2.A of the Noise Element requires noise reduction techniques be implemented to ensure that noise levels are reduces to the maximum extent feasible. Therefore, in accordance with Policy 2.A, the Project would ~~be required to~~ implement PDF-NOI-1 which includes the following noise reduction measures, as applicable:

- Noise reduction features during site planning to mitigate anticipated noise impacts on affected noise sensitive land uses, such as schools, hospitals, convalescent homes, and libraries.

- Temporary sound barrier installation at construction site if construction noise is impacting nearby noise sensitive land uses.
- Noise abatement and acoustical design criteria for construction and operation of any new development.

The measures identified above are included in the construction noise levels calculated in Table B-16 and represent a 10 dBA reduction from the installation of noise barriers.

Off-Site Construction Activities

Delivery and haul truck trips would occur throughout the construction period, although no truck trips would occur between 8:00 PM and 8:00 AM Monday Through Friday, before 9:00 AM or after 7:00 PM on Saturday, or before 10:00 AM and 7:00 PM on Sunday. Haul trucks would be anticipated to access the Project Site from Slauson Avenue to remove demolition materials and provide deliveries to the Project Site during construction activities. Therefore, off-site construction noise impacts would be less than significant.

Peak hour traffic volumes for Slauson Avenue, west of Jefferson Boulevard, are close to 800 vehicles, based on data from the Traffic Impact Analysis prepared by Crain & Associates.[42] The foundations pour phase has the highest volume of haul trucks (232 trips per day) and therefore has the highest potential to cause a noise impact. The addition of 232 haul truck trips per day would result in a negligible noise level increase and would not increase noise levels by a "clearly noticeable" increase of 5 dBA over the ambient condition. The 232 truck trips would be spread out of the entire day and would result in approximately 29 truck trips per hour. The addition of 29 truck trips per hour along Slauson Avenue would result in a noise level of 60.4 dBA Leq which would not exceed the 68 dBA Leq threshold for the nearest receptor. Additionally, the 232 truck trips per day would occur only for six days. During the remainder of the construction activities the maximum number of trucks accessing the Project Site would be 66 per day. Therefore, based on this additional supporting evidence, noise impacts from off-site construction traffic would be less than significant and no mitigation measures are required.

Operation – On-site

The existing noise environment in the Project vicinity is dominated by traffic noise from nearby roadways, as well as nearby commercial and residential activities. Long-term operation of the Project would have a minimal effect on the noise environment in proximity to the Project Site. Noise generated by the Project would result primarily from normal operation of the building mechanical equipment, outdoor/open space activities, parking garage, loading docks and refuse collection, and off-site traffic. Each is discussed separately below.

Fixed Mechanical Equipment

The operation of mechanical equipment such as air conditioning equipment may generate audible noise levels. However, mechanical equipment would be shielded from nearby noise sensitive uses to attenuate noise and avoid conflicts with adjacent uses. It is not anticipated that the mechanical equipment would be significantly different than the mechanical equipment that is currently present. In addition, the Project's mechanical equipment would need to comply with the City's noise standards, which establish maximum permitted noise levels from mechanical equipment. Project compliance with the City's noise standards would ensure that operational noise impacts are minimal.

Outdoor/Open Space Activities

There ~~is~~ would be an outdoor deck on the rooftop and outdoor courtyard spaces (ground floor, second and third floors) provided for the use of the hotel guests and visitors. The rooftop deck would serve as a potential noise source for the R1, R2, and R3 sensitive receptors. The pool deck and bar area face Jefferson Boulevard and are shielded from the sensitive receptors by the building envelope. Additionally, the pool deck and bar are

[42] *Crain & Associates, Jefferson Hotel Project Traffic Study, 2020.*

elevated off of street level and ambient noise levels on Jefferson Boulevard would dominate the noise environment at street-level. Therefore, the pool deck and bar's distance, elevation, and location opposite of the sensitive receptors would likely be imperceptible from the sensitive receptors and would not result in a substantial increase in ambient noise levels, and impacts would be less than significant. The courtyard areas would all be internal to the 5-story building and may be used as an outdoor extension of activities associated with on-site meeting rooms. Because of their internal locations at or below the 3rd floor, noise occurring within these internal spaces would be shielded by the 5-story building and likely imperceptible at the nearby sensitive receptors, and impacts would be less than significant. Furthermore, all on-site activities would be subject to compliance with applicable Culver City operational noise regulations and requirements, such as those included in the CCMC.

Parking Garage

The parking garage would consist of two subterranean levels accessed from the north of the Project Site. The entrance would be adjacent to the alleyway, but would include a barrier extending along its length to prevent noise from vehicles entering. All cars visiting the Project Site would enter from the southwest corner driveway on Slauson Avenue. Based on the Project's Traffic Study, the peak hour traffic volume would be 102 vehicles.[43] Using FTA's calculation for noise generated by parking lot traffic, the entering vehicles would create noise levels up to 46.5 dBA.[44] This value would be less than the measured daytime and nighttime ambient noise levels at R1 (62 dBA day/night) and R2 (63 dBA day/night). It should also be noted that the existing concrete block and wooden wall on the north side of the service alley would further attenuate noise from the Project Site at the residential sensitive receptors to the north and the actual noise levels at the residences would be expected to be lower than described above. Therefore, based on this conservative analysis, the noise impacts from the parking garage would be less than significant.

Loading Dock and Refuse Collection

The loading dock and refuse collection area for the Project would be located at the northern end of the Project Site along the service alley. The area would be completely enclosed and shielded from surrounding sensitive uses. Based on a noise survey that was conducted at a loading dock and trash collection facilities by ESA, loading dock activity (namely idling semi-trucks and backup alarm beeps) and trash compactors could generate noise levels of approximately 70 dBA L_{eq} and 66 dBA L_{eq}, respectively, at a reference distance of 50 feet.[45] Loading dock/trash collection noise levels have been calculated at each sensitive receptor accounting for a 20 dBA reduction in noise level provided by the enclosure.[46] Loading dock activity and trash compaction would be reduced to 50 dBA L_{eq} and 46 dBA L_{eq} at the closest noise sensitive receptors (R1 and R2), respectively. Furthermore, as discussed above, the existing concrete block and wooden wall on the north side of the service alley would further attenuate noise from the Project Site at the residential sensitive receptors to the north and the actual noise levels at the residences would be expected to be lower than described above. Therefore, the noise levels from the Project's loading dock and refuse collection area would be below the ambient noise levels captured at both R1 and R2 and impacts would be less than significant.

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43 *Crain & Associates, Jefferson Hotel Project Traffic Study, 2020.*

44 *FTA, Transit Noise and Vibration Impact Assessment. September, 2018, Tables 4-13 and 4-14.*

45 *The loading dock facility noise measurements were conducted at a loading dock facility at a Wal-Mart store using the Larson-Davis 820 Precision Integrated Sound Level Meter ("SLM") in May 2003. The Larson-Davis 820 SLM is a Type 1 standard instrument as defined in the American National Standard Institute S1.4. All instruments were calibrated and operated according to the applicable manufacturer specification. The microphone was placed at a height of approximately 5 feet above the local grade.*

46 *Federal Highway Administration. Noise Barrier Design Handbook, Section 3.4.2.*

Operation – Off-site

Existing Traffic Baseline Conditions

Existing roadway noise levels were calculated along various roadway segments near to the Project Site. Roadway noise attributable to Project development was calculated using the traffic noise model previously described and was compared to baseline noise levels that would occur under the "No Project" condition.

Project impacts are shown in **Table B-17**, *Off-Site Traffic Noise Impacts – Existing Baseline Conditions,* presents the change in traffic volumes under the existing baseline conditions resulting from Project implementation. As shown therein, the maximum increase in Project-related traffic noise levels over existing traffic noise levels would be 0.3 dBA, CNEL, which would occur along Slauson Avenue, west of Jefferson Boulevard. This increase in noise level would be well below a "clearly noticeable" increase of 5.0 dBA CNEL in an area characterized by normally acceptable noise levels, and the increase in sound level would be substantially lower at the remaining roadway segments analyzed. Therefore, Project-related noise increases would be less than the applicable threshold and therefore less than significant, and no mitigation measures would be required.

Table B-17
Off-site Traffic Noise Impacts – Existing Baseline Conditions

Roadway Segment	Calculated Traffic Noise Levels at 25 feet from Roadway, CNEL (dBA)			Exceed Threshold?
	Existing[a] (A)	Existing with Project[b] (B)	Project Increment (B - A)	
Jefferson Boulevard				
Between Mesmer Ave and I-405 Southbound Ramp	69.5	69.5	0	No
Between I-405 Southbound Ramp and I-405 Northbound Ramp	67.8	67.8	0	No
Between I-405 Northbound Ramp and Slauson Ave	68.2	68.2	0	No
North of Slauson Ave	67.4	67.4	0	No
Slauson Avenue				
West of Jefferson Blvd	62.6	62.9	0.3	No
Between Jefferson Blvd and Sepulveda Blvd	62.9	63.0	0.1	No
Between Sepulveda Blvd and SR-90 On-ramp	66.3	66.4	0.1	No
Sepulveda Boulevard				
North of Slauson Ave	68.7	68.7	0	No
Between Slauson Ave and Centinela Ave	68.5	68.5	0	No

Source: ESA, 2020.

Future Traffic Conditions

Future (2024) roadway noise levels were also calculated along various roadway segments near the Project to establish future baseline traffic noise levels that would occur with implementation of the related projects, to which the Project's off-site traffic noise during operations could be added. Project impacts are shown in **Table B-18**, *Off-Site Traffic Noise Impacts – Future 2024 Conditions.* As shown therein, the maximum increase in Project-related traffic noise levels over the future traffic noise levels would be 0.2 dBA CNEL, which would occur along Slauson Avenue, west of Jefferson Boulevard. This increase in noise level would be less than a "clearly noticeable" increase of 5.0 dBA CNEL in an area characterized by normally acceptable noise levels, and the increase in noise would be substantially lower at the remaining roadway segments analyzed. Therefore, Project-related noise increases, when measured against the 2024 conditions, would be less than the applicable threshold and therefore less than significant.

Table B-18
Off-site Traffic Noise Impacts – Future 2024 Conditions

	Calculated Traffic Noise Levels at 25 feet from Roadway, CNEL (dBA)				
Roadway Segment	**Existing (A)**	**Future No Project (B)**	**Future with Project [a] (C)**	**Future Project Increment [b] (C-B)**	**Exceed Threshold?**
Jefferson Boulevard					
Between Mesmer Ave and I-405 Southbound Ramp	69.5	70.2	70.2	0	No
Between I-405 Southbound Ramp and I-405 Northbound Ramp	67.8	68.5	68.5	0	No
Between I-405 Northbound Ramp and Slauson Ave	68.2	68.7	68.8	0.1	No
North of Slauson Ave	67.4	68.0	68.0	0	No
Slauson Avenue					
West of Jefferson Blvd	62.6	63.4	63.6	0.3	No
Between Jefferson Blvd and Sepulveda Blvd	62.9	63.7	63.8	0.1	No
Between Sepulveda Blvd and SR-90 On-ramp	66.3	67.2	67.2	0	No
Sepulveda Boulevard					
North of Slauson Ave	**68.7**	**69.7**	**69.7**	0	No
Between Slauson Ave and Centinela Ave	68.5	69.6	69.6	0	No

[a] Include future growth plus related (cumulative) projects and project traffic.
[b] Increase due to project-related traffic only at project build-out.

Source: ESA, 2020.

Cumulative Traffic Noise

Cumulative off-site traffic-generated noise impacts were assessed based on a comparison of the future cumulative base traffic volumes with the Project to the existing base traffic volumes without the Project. The results of that comparison are provided in **Table B-19**, *Off-Site Traffic Noise Impacts – Future (2024) Cumulative Increase*. The maximum cumulative noise increase from the Project plus related Project traffic would be 1.1 dBA CNEL, which would occur along Sepulveda Boulevard, between Slauson Avenue and Centinela Avenue. This increase in sound level would not exceed the significance thresholds of an increase of 5 dBA CNEL. As a result, cumulative off-site traffic-related noise impacts would not be cumulatively considerable and cumulative impacts would be less than significant.

Table B-19
Off-site Traffic Noise Impacts – Future (2024) Cumulative Increase

Roadway Segment	Calculated Traffic Noise Levels dBA CNEL[a] Existing (A)	Future with Project (B)	Cumulative Increment (B-A)	Exceed Threshold?
Jefferson Boulevard				
Between Mesmer Ave and I-405 Southbound Ramp	69.5	70.2	0.7	No
Between I-405 Southbound Ramp and I-405 Northbound Ramp	67.8	68.5	0.7	No
Between I-405 Northbound Ramp and Slauson Ave	68.2	68.8	0.6	No
North of Slauson Ave	67.4	68.0	0.6	No
Slauson Avenue				
West of Jefferson Blvd	62.6	63.6	1.0	No
Between Jefferson Blvd and Sepulveda Blvd	62.9	63.8	0.9	No
Between Sepulveda Blvd and SR-90 On-ramp	66.3	67.2	0.9	No
Sepulveda Boulevard				
North of Slauson Ave	68.7	69.7	1.0	No
Between Slauson Ave and Centinela Ave	68.5	69.6	1.1	No

[a] Based on noise levels at property lines of adjacent uses along roadways.

Source: ESA, 2020.

b. Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact.

Ground-Borne Vibration Guidelines

Culver City has not adopted policies or guidelines relative to ground-borne vibration. However, California Department of Transportation (Caltrans) has developed a guidance manual for evaluating potential vibration impacts ("Transportation and Construction Vibration Guidance Manual" dated September 2013). The manual gathers data from multiple sources including the Federal Transit Administration (FTA).

The threshold of vibration impact for human annoyance would apply for residential uses since commercial uses are not considered vibration sensitive uses.[47] This FTA document is used to identify the impacts for this Project. **Table B-20**, *Human Response to Transient Vibration*, and **Table B-21**, *Groundborne Vibration Impact Criteria for Structure Damage*, includes the vibration impacts criteria for human annoyance and for structure damage.

[47] *Transportation and Construction Vibration Manual, Caltrans, 2013.*

Table B-20
Human Response to Transient Vibration

Human Response	Transient Vibration PPV (in/sec)
Severe	2.0
Strongly Perceptible	0.9
Distinctly Perceptible	0.24
Barely Perceptible	0.035

Source: Transportation and Construction Vibration Manual, Caltrans, 2013.

Table B-21
Groundborne Vibration Impact Criteria for Structure Damage

Building Class	Continuous Source PPV (in/sec)
Class I: buildings in steel or reinforced concrete, such as factories, retaining wall, bridges, steel towers, open channels, underground chambers, and tunnels with and without concrete alignment.	0.5
Class II: buildings with foundation walls and flows in concrete, walls in concrete or masonry, stone masonry retaining walls, underground chambers and tunnels with masonry alignments, conduits in loose material	0.3
Class III: buildings as mentioned above but with wooden ceilings and walls in masonry	0.2
Class IV: construction very sensitive to vibration; objects of historic interest	0.12

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

Thresholds of Significance

The following significance thresholds evaluate potential vibration impacts of the Project based on the regulatory framework described above. The Project would result in potentially significant impacts under the following circumstances:

- Potential building damage – Project construction activities cause ground-borne vibration levels to exceed 0.2 inch-per-section PPV at the nearest buildings.
- Potential human perception - Project construction activities cause ground-borne vibration levels to exceed 0.035 inch-per-second PPV at the nearest residential buildings.

Construction

Construction activities can generate varying degrees of groundborne vibration, depending on the construction procedures and the construction equipment used. The operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site varies depending on soil type, ground strata, and construction characteristics of the receptor buildings. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibration from construction activities rarely reaches levels that damage structures. The Caltrans guidance manual incorporates FTA standard vibration velocities for construction equipment operations (Table 18 of the Caltrans guidance manual). The PPV for construction equipment pieces anticipated to be used during Project construction are listed in **Table B-22**, *Vibration Source Levels for Typical Project Construction Equipment*.

Table B-22
Vibration Source Levels for Typical Construction Equipment

Equipment	Approximate PPV (in/sec) at 25 feet	Approximate PPV (in/sec) at 50 feet
Large Bulldozer	0.089	0.031
Hoe Ram	0.089	0.031
Caisson Drilling	0.089	0.031
Loaded Trucks	0.076	0.027
Jackhammer	0.035	0.012
Small Bulldozer	0.003	0.001

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

Structure Damage

Construction of the Project would generate groundborne construction vibration during site clearing, grading and shoring activities. Based on the vibration data provided in Table B-22, vibration velocities from operation of construction equipment would range from approximately 0.001 to 0.031 inches per second PPV at 50 feet from the source of activity.

The nearest single-family residential buildings across the service alley (R1 and R2) are located approximately 50 feet from the Project Site. This value would not exceed the 0.2 inch per second PPV significance threshold for potential residential building damage. Impacts would be less than significant.

Oil Pipeline

Vibration impacts were also analyzed at the existing oil line that runs beneath the center of the service alley located approximately 18 feet (horizontal distance) from the closest edge of the Project Site. At a distance of 18 feet, construction activities associated with the Project, including from excavation activities would generate vibration levels at the pipeline up to approximately 0.146 inches per second PPV. Caltrans analyzed the effects of blasting on a variety of different vibration-sensitive sources including buried pipelines in its Transportation and Construction Vibration Manual (2013) and concluded that "buried pipelines can survive rather high-vibration intensities because they are constrained by the soil and bedding materials surrounding them."[48] Specifically, buried pipelines located near blasting activities could experience vibration levels between 25 and 150 inches per sec PPV without any discernible damage.[49] The Project would not require any blasting and construction activity would be a fraction of the vibration levels cited by Caltrans. Furthermore, construction of the Project would not require excavation of the buried oil pipeline or the soil and bedding materials surrounding the pipeline. In other words, the buried oil pipeline would continue to be constrained by the soil and bedding materials surrounding it

[48] *California Department of Transportation, Transportation and Construction Vibration Guidance Manual, September 2013, Page 76.*

[49] *California Department of Transportation, Transportation and Construction Vibration Guidance Manual, September 2013, Table 22.*

during excavation activities from construction of the Project. Therefore, the Project's construction would not cause any damage or rupture the existing oil line and impacts would be less than significant.

Human Annoyance

Sensitive uses are defined as residences, schools, motels and hotels, libraries, religious institutions, hospitals, nursing homes, and parks. Off-site non-residential uses such as retail and commercial uses are not considered vibration sensitive receptors for human annoyance under CEQA. The only uses in the Project vicinity that are sensitive uses are residential uses. The nearest existing off-site residential structure is located across the service alley from the Project Site approximately 50 feet north of the construction site, with other residential structures at greater distances to the north. These structures could be exposed to groundborne noise from construction activities that would range from approximately from 0.001 to 0.031 inch per second PPV during construction, when construction activities occur near the property line. The vibration from construction equipment would not exceed the 0.04 inch per second PPV significance threshold for human annoyance and therefore, impact would be less than significant.

Operation

Structure Damage

The Project's operations would include typical commercial-grade stationary mechanical and electrical equipment, such as air handling units, condenser units, and exhaust fans, which would produce vibration. In addition, the primary sources of transient vibration would include passenger vehicle circulation within the proposed parking area. Groundborne vibration generated by each of the above-mentioned activities would generate approximately up to 0.005 inches per second PPV adjacent to the Project Site. The potential vibration levels from all Project operational sources at the closest existing sensitive receptor locations would be less than the significance threshold of 0.2 inch per second PPV significance threshold for potential residential building damage. As such, vibration impacts associated with operation of the Project would be below the significance threshold and impacts would be less than significant.

Human Annoyance

Groundborne noise generated by operational activities would generate approximately up to 0.001 inch per second PPV adjacent to the Project Site.[50] The potential groundborne noise levels from all Project operational sources at the closest existing sensitive receptor locations would be less than the significance threshold of 0.04 inch per second PPV for perceptibility. As such, groundborne noise impacts associated with operation of the Project would be below the significance threshold and impacts would be less than significant.

As discussed above, operation of the Project would result in vibration levels substantially less than the significance threshold for groundborne vibration at vibration-sensitive receptors. For typical buildings, groundborne vibration results in groundborne noise levels approximately 25 to 40 decibels lower than the velocity level.[51] Given that the vibration level would be much lower than the perceptibility threshold at vibration-sensitive uses, and given that groundborne noise would be approximately 25 to 40 decibels lower than the velocity level, operational groundborne noise impacts would also be less than significant at vibration-sensitive uses.

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[50] *This vibration estimate is based on data presented in the USDOT Federal Transit Administration, 2018.*

[51] *Federal Transit Administration, Noise and Vibration Manual, 2018, Page 120.*

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

No Impact. The Project Site is not located within an airport land use plan or within two miles of an airport. The nearest airports are the Santa Monica Municipal Airport and LAX, located approximately 3.4 miles northwest and 2.5 miles to the south of the Project Site, respectively. Therefore, the Project would not expose people in the Project vicinity to excessive noise levels from airport use and no impact would occur. No impacts would occur.

XIV. POPULATION AND HOUSING

Would the project:

a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The Project does not include any residential uses that would directly increase in the population growth in the area. However, the Project proposes a new hotel use that will provide accommodations for visitors to the City, but would not provide long-term housing opportunities. The proposed building includes the development of a 111,000 SF (175 room) hotel, of which 2,900 SF restaurant uses would be provided on the ground floor. Any indirect population growth by the Project within Culver City and/or neighboring cities would be nominal and would not materially affect forecasted City or SCAG growth assumptions.

Based on a building area of approximately 111,000 square feet, the Project would generate approximately 130 employees.[52] According to SCAG, Culver City is forecasted to have an employment growth of 8,900 jobs between 2012 and 2040.[53] As such, the estimated 130 hotel employees generated by the Project are within SCAG's employment growth assumptions of Culver City. As such, the Project would not generate growth beyond the range of development anticipated within the established SCAG regional forecast for Culver City. In addition, it is anticipated that some of the employment opportunities offered by the Project would be filled by persons already residing in the vicinity of the Project Site and the potential growth associated with the Project employees who many relocate their place of residence would not be substantial. Furthermore, the Project would be located in an area already served by existing infrastructure and anticipated within applicable Culver City infrastructure plans (i.e., roadways, utility lines, etc.). As such, the Project would not induce substantial population growth in the area either directly or indirectly. Impacts would be less than significant.

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[52] *108,100 SF hotel X 0.00113 employees per average SF (per the Lodging factor from Table 12 of the 2018 Developer School Fee Justification Study, LAUSD, March 2018) = 122 employees. Also, 2,900 SF restaurant X 0.00271 (per the Neighborhood Shopping Centers factor from Table 12 of the 2018 Developer School Fee Justification Study, LAUSD, https://achieve.lausd.net/cms/lib/CA01000043/Centricity/Domain/921/LAUSD%20Dev%20Fee%20Study%202018%20FINAL.pdf, March 2018) = 8 employees. Thus, there would be a total of 130 employees on the Project Site.*

[53] *Southern California Association of Governments, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, Demographic and Growth Forecast Appendix, Table 11, Jurisdictional Forecast, page 23, April 2016.*

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

No Impact. Existing uses on the Project Site include commercial (retail) uses and surface parking along Jefferson Boulevard and Slauson Avenue, all of which would be demolished and removed to support development of the Project. As such, Project implementation would not displace existing housing or people. Therefore, development of the Project would not displace substantial numbers of existing local populations or housing such that construction of replacement housing would be necessary. No impacts would occur.

XV. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, 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:

a. Fire protection?

Less Than Significant Impact With Mitigation Incorporated. Fire protection and emergency medical services for the Project Site are provided by the Culver City Fire Department (CCFD), which is supported, as required, by the fire departments of the Cities of Los Angeles, Santa Monica, and Beverly Hills, and by the Los Angeles County Fire Department, through mutual aid agreements. The first responder is dispatched based on department availability and nearest unit to the Project Site during the time of the call for service.

The CCFD provides Paramedic Advanced Life Support Services, Fire Suppression Community Risk Reduction and Education programs to a 5.26-square-mile area, and an existing population of approximately 39,214 persons.[54] The CCFD is made up of a total of approximately 72 employees who are housed at three fire stations. Each fire station is equipped with unique equipment (e.g., three engines, one ladder truck, two paramedic rescues, one Basic Life Support ambulance and one battalion chief command vehicle) and a minimum staffing of 18 fire suppression personnel at all times.[55] The City is divided into three fire districts, two rescue/emergency medical services (EMS) districts, and 15 fire management zones. The fire districts and EMS districts are evenly distributed by population served and centerline miles (i.e., total length of all the roads in the City, excluding the size and number of lanes on each road). The fire management zones are defined by occupancies within a given geographical area that share common risk. The City includes three fire stations, including Fire Station 1 (located at 9500 Culver Boulevard), Fire Station 2 (located at 11252 Washington Boulevard, and Fire Station 3 (6030 Bristol Boulevard).

The Project Site is located within Fire District 3 and would be served by Fire Station 3, which is the closest fire station to the Project Site (approximately 0.62 miles southeast of the Project Site). Fire Stations 1 and 2 would provide back-up service. If all three of these fire stations are busy, response is provided by available units belonging to the mutual aid agreement agencies. According to the CCFD, no new fire stations are planned at this time.[56] However, the Fire Department needs to add a third rescue, which would be housed at Station 2, which would consist of six (6) paramedic/firefighters. This addition is not based solely on the development of this Project, but overall need in the City.

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[54] U.S. Census Bureau, QuickFacts – Culver City, https://www.census.gov/quickfacts/fact/table/culvercitycitycalifornia,US/PST045218, accessed October 2019.

[55] Culver City, Community Risk Assessment, Standards of Cover. Available at: https://www.culvercityfd.org/files/sharedassets/fire/crasoc_website_20190618.pdf. Accessed on October 14, 2019.

[56] Culver City Fire Department Correspondence from Chief Jeremy Debie, December 8, 2020.

The Project Site is not located in an area of moderate or very high fire hazard. The nearest state responsibility area is located approximately 11 miles northwest of the Project in the City of Malibu and the nearest very high fire hazard severity zone is located in an unincorporated area of Los Angeles County known as Baldwin Hills, approximately 2.3 miles northeast of the Project Site. In addition, the Project Site is surrounded by urban development and is not adjacent to any wildlands. Therefore, no fuel modification for fire fuel management would be required.

Construction activities associated with the Project may temporarily increase the demand for fire protection and emergency medical services, and may cause the occasional exposure of combustible materials, such as wood, plastics, sawdust, coverings and coatings, to heat sources including machinery and equipment sparking, exposed electrical lines, welding activities, and chemical reactions in combustible materials and coatings. However, in compliance with the requirements of OSHA, all construction managers and personnel would be trained in fire prevention and emergency response. In addition, fire suppression equipment specific to construction would be maintained on the Project Site. As applicable, construction activities would be required to comply with the 2019 California Building Code, the 2019 California Fire Code, and Title 9: General Regulations, Chapter 9.02: Fire Prevention, of the CCMC.

Construction activities may involve temporary lane closures for right-of-way frontage improvements and utility construction. Construction-related traffic could result in increased travel time due to flagging or stopping of traffic to accommodate trucks entering and exiting the Project Site during construction. As such, construction activities could increase response times for emergency vehicles to local business and/or residences within the Project vicinity, due to travel time delays to through traffic. However, the impacts of such construction activity would be temporary and on an intermittent basis. Further, a Construction Traffic Management Plan for the Project would be prepared in order to minimize disruptions to through traffic flow, maintain emergency vehicle access to the Project Site and neighboring land uses, and schedule worker and construction equipment delivery to avoid peak traffic hours (MM-PS-1). As part of the Construction Traffic Management Plan, the times of day and locations of all temporary lane closures would be coordinated so that they do not occur during peak periods of traffic congestion, to the extent feasible. Such events would be coordinated with neighboring construction projects, as necessary. Truck routes for material and equipment deliveries, as well as for soil export and disposal, would require approval by the Culver City Department of Public Works prior to construction activities. The Construction Traffic Management Plan would be prepared for review and approval by the Culver City Building and Safety, Planning and Engineering Divisions prior to commencement of any construction activity. These practices, as well as techniques typically employed by emergency vehicles to clear or circumvent traffic (i.e., lights and sirens), are expected to limit the potential for significant delays in emergency response times during Project construction. Therefore, impacts regarding emergency response times and emergency access during construction would be less than significant with the incorporation of the Project's Construction Traffic Management Plan (MM-PS-1).

Overall, with compliance to applicable CCFD requirements and implementation of the prescribed mitigation measure, and due to the temporary nature of the necessary construction activities, construction impacts on fire protection and emergency medical services would be less than significant.

Operational activities associated with the Project would incrementally increase the demand for fire protection and emergency medical services. As discussed under Response XIV.a, the Project could result in a nominal indirect population increase within the City. As mentioned above, up to three CCFD fire stations would provide fire protection and emergency medical services to the Project area. According to the CCFD, Fire Station 3 would provide primary fire protection services to the Project Site.

In 2018, the CCFD responded to a total of 6,791 incidents, including fire, rescue, hazardous materials, and others.[57] The CCPD's response time standards differentiate between the type of an emergency response call

[57] *Culver City, General Plan Update Parks, Public Facilities, and Public Services Existing Conditions Report, July 2020, page 25.*

(e.g., fire suppression, EMS, technical rescue, hazardous materials emergency response) and then by the type of risk (e.g., high, moderate, and low risk). The CCFD reports their response times based on the first due-in staff and the Effective Response Force (ERF). The first due-in staff is the first unit to arrive at the incident and has the responsibility of establishing command at the scene, evaluating the need for additional resources, and providing initial emergency response services. The ERF includes the total number of personnel necessary to address an emergency and/or terminate an incident.[58] **Table B-23**, *CCFD Response Times,* shows the response time goals, for 90 percent of the time, and the five-year aggregate response times from 2015 to 2019.

Table B-23
CCFD Response Times[a]

Incident Type	CCFD Goal	Aggregate 2015-2019 Response Time
High Risk Fire Incident		
First Due-In Unit	7:00	10:02
ERF	14:00	n/a
Moderate Risk EMS Incident		
First Due-In Unit	6:20	8:13
ERF	9:50	10:35
Moderate Risk Technical Rescue Incidents		
First Due-In Unit	7:30	9:40
ERF	12:00	N/A
Moderate Risk Hazardous Materials Incident		
First Due-In Unit	8:00	10:02
ERF	9:00	N/A

[a] Goals and response data provided by CCFD, Fire Chief Jeremy DeBie, correspondence dated December 8, 2020.

Per the CCFD, a rough estimate of response times to the Project Site, based on previous response times, would deliver the 1st due unit to the scene in 9:55 (9 minutes and 55 seconds) with the ERF arriving within 10:16 90% of the time.[59] The CCSD response time goal would remain at 7 minutes for the first-in unit 90% of the time; and 14-minutes for the EFR. While precise response times cannot be predicted, this information suggests that the first due-in unit response goal of 7 minutes might not be achieved, but that the goal for arrival of the total number of personnel necessary to address an emergency and/or terminate an incident would be well under the 14-minute goal for the EFR. The third rescue, as discussed above, would help to reduce response times overall in the City. Also, the CCFD is further looking to reduce response times via: alarm handling improvements with its new dispatch center; use of turnout timers in stations to better monitor turnout times; and use of HAAS alerting systems in new engines that send messages to drivers and connected vehicles that are predicted to be in the most probable path of the emergency vehicles as they are preparing to approach or arrive on-scene. Furthermore, emergency vehicles and fire access for the Project Site would be provided from the public alley. Project operation would increase traffic in the area, which could adversely affect CCFD emergency response times. However, the Project Site is located in an area that is well served by the surrounding roadway network, and multiple alternative routes exist for emergency vehicle access to the Project Site. Furthermore, pursuant to CVC Section 21806, emergency response is routinely facilitated, particularly for high priority calls, through use of sirens to clear a path of travel, driving in the lanes of opposing traffic, use of alternate routes, and multiple

[58] *Culver City, General Plan Update Parks, Public Facilities, and Public Services Existing Conditions Report, July 2020, pages 25 and 26.*

[59] *Culver City Fire Department Correspondence from Chief Jeremy Debie, December 8, 2020.*

station response such that adequate CCFD emergency response would be maintained with implementation of the Project. Based on the above and the close proximity of multiple fire stations, including the nearest station at 0.62 mile from the Project Site, and availability of current Fire Department resources, development of the Project is not anticipated to result in substantial adverse effects to the fire department's existing average response times.

The Project would be subject to compliance with fire protection design standards, as necessary, per the 2019 California Building Code, 2019 California Fire Code, the CCMC, and the CCFD, to ensure adequate fire protection. Culver City's standard conditions of approval generally require that plans for building construction, fire flow requirements, fire protection devices (e.g., sprinklers and alarms), fire hydrants and spacing, and fire access including ingress/egress, turning radii, driveway width, and grading would be prepared for review and approval by the CCFD. Another important component of ensuring fire protection services is the availability of adequate firefighting water flow. Fire flow requirements are closely related to land use. The quantity of water necessary for fire protection varies with the type of development, life hazard, occupancy, and the degree of fire hazards. The ability of the water service provider to provide water supply to the Project Site is discussed below in Section XVIII, *Utilities and Service Systems*. As discussed therein, adequate water supply would be available to serve the Project Site, including minimum fire flow requirements.

As stated above, the However, the Fire Department needs to add a third rescue, which would be housed at Station 2. This addition is not based solely on the development of this Project, but overall need in the City. Consistent with *City of Hayward v. Board of Trustees of California State University* (2015) 242 Cal.App.4th 833 ruling and the requirements stated in the California Constitution Article XIII, Section 35(a)(2), the obligation to provide adequate fire protection services is the responsibility of the City. Through the City's regular budgeting efforts, CCFD's resource needs, and possibly station expansions or new station construction, would be identified and allocated according to the priorities at the time. At this time, CCFD has not identified that it will be constructing a new station in the area impacted by this Project either because of this Project or other projects in the service area.

Overall, given the moderate rate of population growth in Culver City, the Project's conformance to expected growth scenarios for the City, the existing number of Fire staff, and the Project's planned on-site fire protection design features consistent with the applicable regulatory requirements of the 2019 California Building Code, 2019 California Fire Code, the CCMC, and the CCFD, the Project is not expected to be beyond the scope of available fire services. Accordingly, the CCFD's response times would not be substantially changed such that response time objectives are compromised in any significant manner. Further, according to the CCFD, Project implementation would not require the physical expansion of an existing fire station or a new fire station or require additional staffing to the fire protection facilities servicing the Project Site.[60] Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM-PS-1: Construction Traffic Management Plan – A Construction Traffic Management Plan shall be developed by the Project contractor in consultation with the Project's traffic and/or civil engineer and approved by Culver City's Building Official, Engineer and/or Planning Manager, as applicable, prior to issuance of any Project demolition, grading or excavation permit. The Final Plan shall also be reviewed and approved by Culver City's Fire and Police Departments. The Culver City's Building Official, City Engineer and/or Planning Manager, as applicable reserve the right to reject any engineer at any time and to require that the Plan be prepared by a different engineer.

[60] *Culver City Fire Department Correspondence from Chief Jeremy Debie, December 8, 2020.*

Prior to commencement of construction, the contractor shall advise the Public Works Inspector and Building Inspector (“Inspectors”) of the construction schedule and shall meet with the Inspectors. Also, biweekly construction management meetings with City Staff and other surrounding developments that will potentially be under construction at around the same time as the Project shall be required, as determined appropriate by City Staff, to ensure concurrent construction projects are managed in collaboration with one another.

The Construction Traffic Management Plan shall identify, at a minimum, the following to the satisfaction of the City:

- The name and telephone number of a contact person who can be reached 24 hours a day regarding construction traffic complaints or emergency situations.
- An up-to-date list of local police, fire, and emergency response organizations and procedures for the continuous coordination of construction activity, potential delays, and any alerts related to unanticipated road conditions or delays, with local police, fire, and emergency response agencies. Coordination shall include the assessment of any alternative access routes that might be required through the site, and maps showing access to and within the site and to adjacent properties.
- Procedures for the training and certification of the flag persons.
- The location, times, and estimated duration of any roadway closures, traffic detours, use of protective devices, warning signs, and staging or queuing areas.
- The location and travel routes of off-site staging and parking locations.
- The location of temporary power, portable toilet and trash and materials storage locations.
- The timing and duration of all street and/or lane closures and shall be made available to the City in digital format for posting on the City's website and distribution via email alerts on the City's "Gov Delivery" system. The Plans shall be updated weekly during the duration of Project construction, as determined necessary by the City Department of Public Works or designee determined appropriate by Public Works.
- Prior to approval of the Plan, the applicant shall conduct one (1) Community Meeting pursuant to the notification requirements of the City's Community Meeting guidelines, to discuss and provide the following information to the surrounding community:
  1) Construction schedule and hours.
  2) Framework for construction phases.
  3) Identify traffic diversion plan by phase and activity.
  4) Potential location of construction parking and office trailers.
  5) Truck hauling routes and material deliveries (i.e. identify the potential routes and restrictions. Discuss the types and number of trucks anticipated and for what construction activity).
  6) Emergency access plan.
  7) Demolition plan.
  8) Staging plan for the concrete pours, material loading and removal.
  9) Crane location(s).
  10) Accessible applicant and contractor contacts during construction activity and during off hours (relevant email address and phone numbers).

b. Police protection?

Less Than Significant Impact With Mitigation Incorporated. Police protection for the Project Site is provided by the Culver City Police Department (CCPD). In addition, it is acknowledged that the CCPD has mutual aid agreements with the Beverly Hills Police Department, Santa Monica Police Department, Los Angeles Police Department, and Los Angeles County Sheriff's Department on an as needed basis. The CCPD serves a nighttime population of approximately 40,000 persons and a daytime population of approximately 300,000 persons.[61] The CCPD consists of 153 full time employees, which includes 113 sworn officers, 14 reserve officers, 40 professional staff and 19 volunteers in patrol.[62] The CCPD is divided into three bureaus (Administration Bureau, Investigations and Traffic Bureau, and Operations Bureau) and five police car districts. The Project is located in Car District 4. The CCPD station is located at 4040 Duquesne Avenue, located approximately 2.2 miles north of the Project Site.[63]

During construction, equipment and building materials could be temporarily stored on the Project Site, which could result in theft, graffiti, and vandalism. However, the Project Site is located in an area with high vehicular activity from Jefferson Boulevard and Slauson Avenue. In addition, the construction site would be fenced along the perimeter, with the height and fence materials subject to review approval by Culver City's Engineer and Planning Manager, as required by Culver City's standard conditions of approval. As discussed above, temporary lane closures may be required for right-of-way frontage improvements and utility construction. However, these closures would be temporary in nature and in the event of partial lane closures, both directions of travel on area roadways and access to the Project Site would be maintained. All temporary lane closures would be coordinated so that they do not occur during peak periods of traffic congestion, to the extent feasible. Such events would be coordinated with neighboring construction projects, as necessary. Emergency vehicle drivers have a variety of options for avoiding traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Further, as discussed above, a Final Construction Traffic Management Plan for the Project would be prepared in order to minimize disruptions to through traffic flow, maintain emergency vehicle access to the Project Site and neighboring land uses, and schedule worker and construction equipment delivery to avoid peak traffic hours (MM-PS-1). Given the visibility of the Project Site from adjacent roadways and surrounding properties, existing police presence in Culver City, maintained emergency access, and construction fencing, the Project is not expected to increase demand on existing police services to a meaningful extent. Therefore, with the incorporation of the Project's Construction Traffic Management Plan (MM-PS-1), the Project would have a less than significant temporary impact on police protection during the construction phases.

Operational activities associated with the Project would incrementally increase demand for police protection services. As discussed under Response XIV.a, the Project could result in a nominal indirect population increase within the City. Implementation of the Project could also indirectly increase the need for police protection by permitting up to 111,000 square feet of hotel and restaurant uses which would increase the daytime population in the Project area given the new employees and hotel guests/patrons. As discussed in Attachment A, *Project Description*, of this IS/MND, the Project would incorporate comprehensive safety and security features to enhance public safety and reduce the demand for police services, including a 24-hour/seven-day video surveillance security program to ensure the safety of its hotel guests, employees, and visitors. Site security features would include building access/design to assist in crime prevention efforts and to reduce the demand for police protection services. The Project design would include lighting of entry-ways and public areas for site security purposes.

Patrol routes in the area currently include the Project Site and would continue to do so in a similar manner as under existing conditions. To ensure that police protection considerations are incorporated into the Project design, prior

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[61] *Culver City Police, About CCPD, https://www.culvercitypd.org/Office-of-the-Chief-of-Police/About-CCPD, accessed October 2020.*

[62] *Culver City Police, About CCPD, https://www.culvercitypd.org/Office-of-the-Chief-of-Police/About-CCPD, accessed October 2020.*

[63] *Culver City Police, Culver City CCPD Districts Map, https://www.culvercitypd.org/files/assets/police/images/maps/police-car-districts.jpeg?w=1561&h=1011, accessed October 2020.*

to the issuance of a building permit for the Project, the CCPD would be provided the opportunity to review and comment upon improvement plans in order to facilitate opportunities for improved emergency access and response; ensure the consideration of design strategies that facilitate public safety and police surveillance; and other specific design recommendations to enhance public safety and reduce potential demands upon police protection services. Per the CCPD, development of the Project could result in the need for additional police officers to handle the increase in call volume related to the Project. However, consistent with *City of Hayward v. Board of Trustees of California State University* (2015) 242 Cal.App.4th 833 ruling and the requirements stated in the California Constitution Article XIII, Section 35(a)(2), the obligation to provide adequate police protection services is the responsibility of the City. Through the City's regular budgeting efforts, CCPD's resource needs, and possibly station expansions or new station construction, would be identified and allocated according to the priorities at the time. At this time, CCPD has not identified that it will be constructing a new station in the area impacted by this Project either because of this Project or other projects in the service area. Given the overall moderate rate of population growth in Culver City, the Project's conformance to expected growth scenarios for the City, and the Project's planned on-site security measures, the Project is not expected to be beyond the scope of available police services. Additionally, the Project's on-site security would minimize the need for police services on the Project's public open space and public parking space areas. Accordingly, the CCPD's response times would not be substantially changed such that response time objectives are compromised in any significant manner. Also, per the CCPD, no new or expanded police facilities would be constructed as a result of the Project.[64] Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

Refer to Mitigation Measure MM-PS-1. No additional mitigation measures are necessary.

c. Schools?

Less Than Significant Impact. The Project Site is located within the boundaries of the Culver City Unified School District (CCUSD). The CCUSD includes one high school, one continuation high school, one middle school, five elementary schools, and one adult school. The Project Site is located within the attendance boundaries of the El Rincon Elementary School, Culver City Middle School, and Culver City High School. El Rincon Elementary School is located at 11177 Overland Ave, approximately 0.55 mile to the northeast of the Project Site. Culver City Middle School is located at 4601 Elenda Street, approximately 1.13 miles north of the Project Site. Culver City High School is located at 4401 Elenda Street, approximately 0.92 miles north of the Project Site.

Project operation would incrementally increase demand for school services due to nominal indirect population growth. If Project employees currently reside in neighboring communities and have school children, it is expected the children would remain enrolled in their current school. However, if some employees with school age children choose to move closer to work, or if some new employees with children are hired from the surrounding community or another City, there could be a negligible increase in student population in the nearby schools. Project impacts related to schools would be addressed through payment of required Senate Bill 50 (SB 50) development fees pursuant to Section 65995 of the California Government Code, as applicable. In accordance with SB 50, the payment of these fees are deemed to provide full and complete mitigation for impacts to school facilities. As such, the Project is not anticipated to result in substantial adverse physical impacts to schools that would alter existing school facilities or result in the need for new facilities, construction of which could cause significant environmental impacts. Impacts would be less than significant.

[64] *Culver City Police Department Correspondence from Assistant Chief Jason Sims, November 18, 2020.*

d. Parks?

Less Than Significant Impact. The Culver City Parks, Recreation and Community Services (PRCS) division oversees the maintenance and operations of 14 City parks totaling approximately 91.5 acres, a community garden, community and recreational facilities, senior centers, swimming pools, and a theater facility. A joint-use partnership between Culver City and CCUSD provides additional open space and park facilities for use by residents of Culver City during non-school hours. The Project Site is located within the vicinity of four park facilities. **Table B-24**, *Culver City Park Facilities Located in the Vicinity of the Project Site*, provides information on the park/facility, location, size, park amenities/activities, and the approximate distance/direction from the Project Site.

Table B-24
Culver City Park Facilities Located in the Vicinity of the Project Site

Park/Facility	Location	Size (acres)	Parks Amenities/Activities	Approximate Distance/Direction from Project Site[a]
El Marino Park	5301 Berryman Avenue	3.2	After school program, barbeques, child care, basketball courts, handball walls, kitchen areas, open picnic areas, playground, recreation building with room rentals, multi-purpose sports field, softball field	0.2 miles northwest
Blanco Park	5801 Sawtelle Boulevard	3.3	After school program, barbeques, child care, basketball courts, parcourse equipment, covered and open picnic areas, playgrounds, multi-purpose sports field, softball field	0.49 miles northeast
Fox Hills Park	Green Valley Circle & Buckingham Parkway	10	Barbeques, basketball courts, tennis courts, volleyball courts, parcourse equipment, open picnic area, playground, recreation hut, multi-purpose sports field, softball field, walking/jogging path	0.70 miles southeast
Lingberg Park	5041 Rhoda Way	4.4	After school program, barbeques, child care, basketball courts, tennis courts, kitchen areas, parcourse equipment, cover picnic area, playground, recreation building with room rentals, multi-purpose sports field, softball field	0.84 miles north

[a] Approximate distance/direction from Project Site in miles is a straight line distance, not a drive distance.

Source: Culver City, General Plan Update Parks, Public Facilities, and Public Services Existing Conditions Report, July 2020, pages 4 and 5.

Project operation would incrementally increase demand for park services. The Project would not generate a new direct residential population as no residential uses are proposed. As discussed under Response XIV.a, the Project could result in a nominal indirect population increase within the City.

Despite the incremental indirect population increase, most hotel and restaurant employees are not expected to use local parks given limited lunch time hours, and to the extent they do use local parks it would likely be for passive recreation (walking or eating lunch) on weekdays when use of these parks is not considered at peak (i.e., peak usage of parks often occurs on weekends when the office uses are not in operation). In addition, although there is the possibility that hotel guests may utilize local parks and recreational facilities, the demand is also expected to be negligible since hotel guests would likely utilize the recreation amenities provided within the hotel, including the pool uses that would be provided on the roof. As such, the Project is not anticipated to result in substantial adverse physical impacts to parks that would alter existing park facilities or result in the need for new facilities, construction of which could cause significant environmental impacts. Impacts would be less than significant.

e. Other public facilities?

Less Than Significant Impact. The Los Angeles County Public Library (LACPL) provides library services to Culver City. The Project Site is served by the LACPL Culver City Julian Dixon Branch Library, which is located at 4975 Overland Avenue, Culver City, approximately 1.20 miles north of the Project Site. Other nearby LACPL branches are the Lloyd Taber-Marina del Rey Library, View Park Library, and Lennox Library. The Lloyd Taber-Marina del Rey Library is located at 4533 Admiralty Way, Marina del Rey, approximately 2.65 miles west of the Project Site. The View Park Library is located at 3854 West 54th Street, Los Angeles, approximately 3.2 miles east of the Project Site. The Lennox Library is located at 4359 Lennox Boulevard, Lennox, approximately 4.34 miles southeast of the Project Site. Similar to park services, the introduction of new daytime employees and a nominal indirect population increase would not substantially affect the provision of library services.

The Project's employees and visitors would utilize and, to some extent, impact the maintenance of public facilities, including roads. However, implementation of the Project would result in a minimal indirect population increase. Therefore, development of the Project would not significantly increase the use of government services beyond current levels. Construction activities would result in a temporary increased use of the surrounding roads. However, the use of such facilities would not require maintenance beyond normal requirements. The Project applicant would need to pay all applicable impact fees of Culver City.

Based on the above, the Project is not anticipated to result in substantial adverse physical impacts to other public facilities that would alter existing public facilities or result in the need for new facilities, construction of which could cause significant environmental impacts. Impacts would be less than significant.

XVI. RECREATION

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

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

Less Than Significant Impact (a-b). As discussed under Response XIV.d, the use of existing parks is not expected to substantially increase as a result of the Project, given limited lunch time hours and minimal number of hotel and restaurant employees. In addition, although there is the possibility that hotel guests may utilize local parks and recreational facilities, the demand is also expected to be negligible since hotel guests would likely utilize the recreation amenities provided within the hotel, including the pool uses that would be provided on the roof. Impacts would be less than significant.

XVII. TRANSPORTATION

The following discussion is based, in part, on the Traffic Study for the Jeff Hotel Project Proposed at 11469 Jefferson Boulevard, Culver City (herein referred to as the "Traffic Study"), prepared by Crain & Associates, 2020, which is available for review at the Culver City Planning Division. The Traffic Study was conducted using procedures and criteria adopted by the Los Angeles Department of Transportation (LADOT) and Culver City staff, and addresses the Project's trip generation and potential impacts to the surrounding roadway network. The Traffic Impact Analysis evaluates four Project scenarios: 1) Existing (2018) Conditions, 2) Existing (2018) Plus Project Conditions, 3) Future (2024) Without Project Conditions, and 4) Future (2024) With Project Conditions.

Future conditions take into account the potential development of 32 related projects in the general Project vicinity, as identified by the City of Los Angeles and Culver City.

Would the project:

a. Conflict with program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycles, and pedestrian facilities?

Less Than Significant Impact With Mitigation Incorporated. Construction of the Project has the potential to increase traffic through the hauling of excavated materials and debris, the transport of construction equipment, the delivery of construction materials, and travel by construction workers to and from the Project Site. In addition, the proposed uses would have the potential to contribute to an increase in peak-hour traffic in the Project vicinity. An analysis of potential impacts to transit facilities, roadway facilities, bicycle facility, and pedestrian facilities.

Transit Facilities

As previously discussed, the Project Site is served by various bus routes operated by Metro and Culver City Bus with bus stops located in close proximity to the Project Site, including the Culver City Transit Center Bus Station that is located approximately 900 feet southeast of the Project Site that is served by the Culver City bus routes 3,4 and 6 and the Metro bus routes 108, 110 and 217. The Metro Expo Line Culver City light rail station is also located approximately two and three quarter miles north of the Project Site.

As there are no bus stops adjacent to the Project Site, no temporary impacts to transit facilities are expected during construction of the Project.

Analysis of operational impacts to transit facilities is provided in the Traffic Study. As discussed therein, the Project during operation would generate approximately seven person trips per hour during both the AM and PM peak hours. Compared to the service capacity of 1,680 persons per peak hour for those transit services within the vicinity of the Project Site, the Project person trips would represent less than one-half percent of this capacity during each peak hour. This amount of transit usage by the Project would not result in a significant transit impact. Therefore, impacts would be less than significant.

Bicycle Facilities

As discussed in the Traffic Study, there are no existing bicycle facilities within the City near the Project Site, except for short bicycle lane segments along the west and east sides of Sepulveda Boulevard, south of Centinela Avenue. These short sections are located in the City of Los Angeles and join the existing bicycle lanes to the south along Sepulveda Boulevard.

In the future, the City's Bicycle & Pedestrian Action Plan proposes to install Class II bicycle lanes on the following segments in the general Project study area:

- Berryman Avenue, between Hayter Avenue and Sepulveda Boulevard;
- Centinela Avenue, between Mesmer Avenue and Sepulveda Boulevard; and
- Hannum Avenue, between Playa Street and Slauson Avenue.

Class IV separated bikeways are proposed on the following roadway segments:

- Centinela Avenue, between Sepulveda Boulevard and Green Valley Circle;
- Jefferson Boulevard, between the City limit and Sepulveda Boulevard; and
- Sepulveda Boulevard, between the Ballona Creek Bike Path and Centinela Avenue.

A Class III bicycle roadway is proposed on the following roadway segment:

- Hannum Avenue, between Sawtelle Boulevard and Playa Street;

As discussed in the Traffic Study, the City of Los Angeles Mobility Plan 2035 identifies facilities as part of its Bicycle Enhanced Network (BEN), including bicycle paths and protected bicycle lanes, to be completed by 2035. As part of these BEN facilities, Sepulveda Boulevard is a Tier 1 Protected Bicycle Lane facility, south of Centinela Avenue to Manchester Avenue. Centinela Avenue is identified as a Tier 1 Protected Bicycle Lane improvement, from Mesmer Avenue to its intersection with Jefferson Boulevard which transitions to Inglewood Boulevard until it terminates at the Ballona Creek Bike Path.

The Project access driveway on Slauson Avenue would be required to conform to Culver City standards, and would be designed to provide adequate sight distance. Street trees and other potential impediments to adequate visibility would be minimal. The Project entrance-only and exit-only driveway connections to Slauson Avenue and the site-adjacent unnamed alley, respectively, would provide the most direct connection to and from the bicycle parking located on the Project's ground floor. The one-way operation of the Project's internal drive would have less potential for vehicle-bicycle conflicts than a two-way internal drive, providing enhanced safety for bicyclists accessing/egressing the Project.

Based on the above, the Project would not affect the ability of the City of Culver City or the City of Los Angeles to implement their bicycle plans or result in bicycle access impacts. Impacts to bicycle facilities would be less than significant.

Pedestrian Facilities

As discussed in Attachment A, Project Description, of this IS/MND, pedestrian access would be provided from a pedestrian entrance on Jefferson Boulevard that would lead to the hotel lounge and restaurant area. Pedestrian access would also be provided from the ride share drop-off and accessed from Slauson Avenue. This would lead to the hotel lobby. The pedestrian access locations at the Project Site would be designed to City standards and would provide adequate sight distance, sidewalks, crosswalks, and pedestrian movement controls that meet the City's requirements to protect pedestrian and bicyclist safety. Impacts would be less than significant.

Roadway Facilities

Seven (7) study intersections and three (3) study residential street segments were selected for evaluation in consultation with LADOT and Culver City based on Project-related traffic patterns; refer to **Table B-25**, *Study Intersections and Study Residential Street Segments*. An intersection level of service (LOS) analysis was performed at the study intersections to assess significant impacts resulting from the Project. **Figure B-2**, *Study Intersections and Study Residential Street Segments,* illustrates the location of each study area intersection.

Methodology

The traffic analysis was performed through the use of the Critical Movement Analysis (CMA) methodology. The analysis and evaluation of traffic operations at each signalized study intersection is based on procedures outlined in the Transportation Research Board Circular 212, Interim Materials on Highway Capacity. In the discussion of the CMA for signalized intersections, procedures were developed for determining operating characteristics of an intersection in terms of the "Level of Service" (LOS) provided for different levels of traffic volume and other variables, such as the number of traffic signal phases. The CMA methodology is also consistent with the Los Angeles County Congestion Management Program (CMP) procedures for transportation impact analyses.

Table B-25
Study Intersections and Study Residential Street Segments

No.	Intersection
Study Intersections	
1	Jefferson Boulevard & Mesmer Avenue[a]
2	Jefferson Boulevard & I-405 Southbound Ramps[b]
3	Jefferson Boulevard & I-405 Northbound Ramps[b]
4	Jefferson Boulevard & Slauson Avenue[c]
5	Slauson Avenue & Sepulveda Boulevard[c]
6	Slauson Avenue & SR-90[d]
7	Centinela Avenue & Sepulveda Boulevard[a]
Study Residential Street Segments	
1	Segrell Way, north of Slauson Avenue
2	Culver Park Drive, north of Slauson Avenue
3	Slauson Avenue, west of Segrell Way

[a] Indicates an intersection shared between the City of Culver City and the City of Los Angeles.
[b] Indicates an intersection shared between the City of Culver City, the City of Los Angeles, and Caltrans.
[c] Indicates an intersection within the City of Culver City.
[d] Indicates an intersection shared between the City of Culver City and Caltrans.

Source: Crain & Associates, 2020.

LOS is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS "A" to overload conditions at LOS "F". LOS "D" is typically recognized as the minimum acceptable LOS in urban areas. A determination of the LOS at an intersection can be obtained through a summation of the critical movement volumes, on a per lane basis, at that intersection. One the sum of the critical movement volumes has been obtained, the values in **Table B-26**, *Critical Movement Volume Ranges for Determining Level of Service*, can be used to determine the appropriate LOS. Capacity is the total maximum hourly volume of vehicles in the intersection critical lanes that has reasonable expectation of passing through the intersection under the prevailing roadway and traffic conditions, The CMA volume-to-capacity (V/C) ratio used in this study were calculated by dividing the sum of the critical movement volumes by the appropriate capacity value for the type of signal control present or proposed at the subject intersections. A description of the different LOS and their corresponding V/C value sis shown in **Table B-27**, *Level of Service Definitions for Signalized Intersections*. All of the study intersections are signalized.

These standard CMA calculations are also adjusted to account for signal enhancements not considered in the CMA methodology, including the effects of intersections operating under the City of Los Angeles's Automated Traffic Surveillance and Control (ATSAC) system or the upgraded Adaptive Traffic Control System (ATCS), as well as the City of Culver City's ATSAC-like system. Per City of Culver LADOT policies, the standard V/C ratios were decreased by 0.070 where only the ATSAC or the ATSAC-like systems are in effect and by 0.100 where the ATCS is in effect.

Based on discussions with LADOT staff, all three study intersections operated by the City of Los Angeles currently function under the upgraded ATCS system [i.e., Intersection No. 1 (Jefferson Boulevard & Mesmer Avenue), Intersection No. 2 (Jefferson Boulevard & I-405 Southbound Ramps), and Intersection No. 3 (Jefferson Boulevard & I-405 Northbound Ramps)]. The Culver City-operated study intersections [i.e., Intersection No. 4 (Jefferson Boulevard & Slauson Avenue), Intersection No. 5 (Slauson Avenue & Sepulveda), Intersection No. 6 (Slauson Avenue & SR-90), and Intersection No. 7 (Centinela Avenue & Sepulveda Boulevard)] all operate under the City's ATSAC-like system.

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SOURCE: Craine & Associates, 2019

11469 Jefferson Boulevard Project

Figure B-2
Study Intersections and Study Residential Street Segments

ESA

Table B-26
Critical Movement Volume Ranges for Determining Level of Service

Level of Service	Maximum Sum of Critical Volumes (Vehicles per Hour)		
	Two Phase	Three Phase	Four or More Phases
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	Not Applicable	Not Applicable	Not Applicable

Source: Transportation Research Board, Highway Capacity; Crain & Associates, 2020.

Table B-27
Level of Service Definitions for Signalized Intersections

Level of Service	V/C Ratio	Definition
A	0.000 – 0.600	**EXCELLENT.** No vehicle waits longer than one red light and no approach phase is fully used.
B	>0.600 – 0.700	**VERY GOOD**. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	>0.700 – 0.800	**GOOD.** Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.800 – 0.900	**FAIR.** Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>0.900-1.000	**POOR.** Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>1.000	**FAILURE.** Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: Transportation Research Board, Transportation Research Circular No. 212, Interim Materials on Highway Capacity, 1980; Crain & Associates, 2020.

Although both Project study area jurisdictions (Cities of Culver City and Los Angeles) utilize the CMA methodology for intersection LOS analyses, the City of Los Angeles maintains its own proprietary analysis spreadsheet, with adjustment factors and assumption override options unique to the City of Los Angeles. Therefore, a supplemental analysis, using the proprietary spreadsheet and all staff-recommended adjustments, was also made for the four study intersections located partially within the City of Los Angeles system [i.e., Intersection No. 1 (Jefferson Boulevard & Mesmer Avenue), Intersection No. 2 (Jefferson Boulevard & I-405 Southbound Ramps), Intersection No. 3 (Jefferson Boulevard & I-405 Northbound Ramps), and Intersection No. 7 (Centinela Avenue & Sepulveda Boulevard)].

Existing (2018) Conditions

Applying the above-mentioned analysis procedures, the CMA V/C ratios and corresponding LOS can be calculated for each study intersection for Existing (2018) Conditions. These results are provided in **Table B-28**, *Existing (2018) Intersection Level of Service Analysis*. Table B-28 indicates the existing V/C ratio during the morning and evening peak hours and the corresponding LOS at the study intersections. As illustrated in Table B-28, four of the seven study intersections would operate at LOS C or better during both peak hours. Two study intersections would operation at LOS D or better during both peak hours. The remaining location below is operating at LOS “E” or “F”:

- Jefferson Boulevard & I-405 Freeway Northbound Ramps: AM Peak Hour – LOS “F” and PM Peak Hour – LOS “E”

Table B-28
Existing (2018) Intersection Level of Service Analysis

		Existing (2018) Conditions			
		AM Peak Hour		PM Peak Hour	
No.	Intersection	V/C or Delay	LOS	V/C or Delay	LOS
1.	Jefferson Boulevard & Mesmer Avenue[a]	0.569	A	0.501	A
2.	Jefferson Boulevard & I-405 Southbound Ramps[a]	0.877	D	0.653	B
3.	Jefferson Boulevard & I-405 Northbound Ramps[a]	1.051	F	0.972	E
4.	Jefferson Boulevard & Slauson Avenue[b]	0.368	A	0.439	A
5.	Slauson Avenue & Sepulveda Boulevard[b]	0.485	A	0.495	A
6.	Slauson Avenue & SR-90[b]	0.729	C	0.613	B
7.	Centinela Avenue & Sepulveda Boulevard[a]	0.894	D	0.879	D

V/C - Volume to Capacity Ratio
LOS - Level of Service

[a] Analysis results based on City of Los Angeles CMA methodology and assumptions.
[b] Analysis results based on City of Culver City CMA methodology.

Source: Crain & Associates, 2020.

Project Trip Generation

To determine the Project’s impacts on area intersections, the Traffic Study calculated the number of vehicle trips generated by the Project using the trip generation rates outlined in the Institute of Transportation Engineers (ITE) handbook titled *Trip Generation, 10th Edition*. Trip generation rates and the resulting trips that would be generated by the Project are presented in **Table B-29**, *Estimated Project Trip Generation.* The Project is estimated to generate approximately 1,087 net daily trips of which 72 trips would occur during the morning peak hour and 67 trips during the evening peak hour.[65]

Table B-29
Estimated Project Trip Generation

Proposed Project	Size	Daily	A.M. Peak Hour IN	A.M. Peak Hour OUT	A.M. Peak Hour TOTAL	P.M. Peak Hour IN	P.M. Peak Hour OUT	P.M. Peak Hour TOTAL
Hotel	175 rooms	1,463	48	34	82	54	51	105
Proposed Project Trips		*1,463*	*48*	*34*	*82*	*54*	*51*	*105*
Existing Uses (to be removed)								
Shopping Center	13,301 square feet	502	8	5	13	24	27	51
Pass-By (25%) Trip Reduction		(126)	(2)	(1)	(3)	(6)	(7)	(13)
Existing Project Trips		*376*	*6*	*4*	*10*	*18*	*20*	*38*
Project Net Trip Generation Total		**1,087**	**42**	**30**	**72**	**36**	**31**	**67**

Source: Crain & Associates, 2020.

Existing (2018) Plus Project Traffic Volumes

The existing (2018) traffic volumes were combined with the Project-only traffic volumes to obtain the Existing (2018) Plus Project Conditions traffic volume forecasts. The Existing (2016) Plus Project Conditions traffic volumes during both AM and PM peak hours are presented in Figures 9(a) and 9(b) of the Traffic Study.

Existing (2018) Plus Project Conditions

The Existing (2018) Plus Project Conditions peak hour traffic volumes were analyzed using the CMA procedures at each of the study intersections to determine the V/C ratio and corresponding LOS. **Table B-30**, *Summary of Intersection Level of Service Analysis*, presents the results of the Existing (2018) Plus Project Conditions. As illustrated in Table B-30, four of the seven study intersections would continue to operate at LOS C or better during both peak hours. Two study intersections [Intersection No. 2 (Jefferson Boulevard & I-405 Southbound Ramps) and Intersection No. 7 (Centinela Avenue & Sepulveda Boulevard)] would continue to operate at LOS D or better during both peak hours. Lastly, Intersection No. 3 (Jefferson Boulevard & I-405 Northbound Ramps) would continue to operate at LOS F and LOS E during the AM and PM peak hours, respectively. However, the Project caused a significant impact at Intersection No. 3 (Jefferson Boulevard & I-405 Northbound Ramps), which is located in the City of Los Angeles.

[65] *The number of net daily trips subtracts the existing trips generated on the Project Site from the Project's new trips. See Table 5 in the Traffic Study for further detail.*

Table B-30
Summary of Intersection Level of Service Analysis

No.	Intersection	Peak Hour	Existing (2018) Conditions V/C	Existing (2018) Conditions LOS	Existing (2018) Plus Project Conditions V/C	Existing (2018) Plus Project Conditions LOS	Project Increase in V/C V/C	Significant Project Impact LOS	Future (2024) Without Project Conditions V/C	Future (2024) Without Project Conditions LOS	Future (2024) Plus Project Conditions V/C	Future (2024) Plus Project Conditions LOS	Project Increase in V/C	Significant Project Impact
1.	Jefferson Boulevard & Mesmer Avenue[a]	AM	0.569	A	0.572	A	0.003	No	0.695	B	0.697	B	0.002	No
		PM	0.501	A	0.502	A	0.001	No	0.572	A	0.573	A	0.001	No
2.	Jefferson Boulevard & I-405 Southbound Ramps[a]	AM	0.877	D	0.879	D	0.002	No	1.062	F	1.064	F	0.002	No
		PM	0.653	B	0.658	B	0.005	No	0.779	C	0.783	C	0.004	No
3.	Jefferson Boulevard & I-405 Northbound Ramps[a]	AM	1.051	F	1.068	F	0.017	Yes	1.145	F	1.163	F	0.018	Yes
		PM	0.972	E	0.988	E	0.016	Yes	1.182	F	1.198	F	0.016	Yes
4.	Jefferson Boulevard & Slauson Avenue[b]	AM	0.368	A	0.393	A	0.025	No	0.425	A	0.451	A	0.026	No
		PM	0.439	A	0.446	A	0.007	No	0.515	A	0.521	A	0.006	No
5.	Slauson Avenue & Sepulveda Boulevard[b]	AM	0.485	A	0.488	A	0.003	No	0.606	B	0.609	B	0.003	No
		PM	0.495	A	0.501	A	0.006	No	0.657	B	0.659	B	0.002	No
6.	Slauson Avenue & SR-90[b]	AM	0.729	C	0.732	C	0.003	No	0.799	C	0.802	D	0.003	No
		PM	0.613	B	0.613	B	0.000	No	0.700	B	0.700	B	0.000	No
7.	Centinela Avenue & Sepulveda Boulevard[a]	AM	0.894	D	0.896	D	0.002	No	0.957	E	0.959	E	0.002	No
		PM	0.879	D	0.881	D	0.002	No	1.109	F	1.110	F	0.001	No

V/C - Volume to Capacity Ratio, LOS - Level of Service

[a] Analysis results based on City of Los Angeles CMA methodology and assumptions.
[b] Analysis results based on City of Culver City CMA methodology.

Source: Crain & Associates, 2020.

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Future (2024) Base Traffic Projections

The Future (2024) Base traffic projections reflect growth in traffic from two primary sources: (1) the background or ambient growth to reflect the effects of overall area-wide regional growth both within and outside the study area; (2) traffic generated by specified related (cumulative) projects located within, or in the vicinity of, the study area.

The traffic in the vicinity of the study area was estimated to increase at a rate of approximately one percent per year. Future increases in background traffic volumes due to regional growth and development are expected to continue at this rate. With the assumed completion date of year 2024, the Existing 2018 traffic volumes were adjusted upward by a factor of approximately six percent to reflect this area-wide regional growth.

In addition, to ambient traffic growth, related projects in the study area could also contribute to traffic volume increases on the local roadway system. Related or cumulative projects are those developments that are planned and expected to be in place within the same timeframe as the Project. Data describing related projects in the area was solicited from Culver City and the City of Los Angeles. Thirty-two (32) related projects were identified within the study area and are listed in Table B-41, *Related Project List*, below, and within Table 7 of the Traffic Study. The locations of these projects are shown in Figure B-3, Location of Related Projects, below, and Figure 10 of the Traffic Study.

The trip generation estimates for the related projects were based on different sources including environmental sources, and, in the absence of other available data, trip generation rates contained in the ITE's Trip Generation Manual, 10th Edition. As summarized in Table 7 of the Traffic Study, the related projects are expected to generate approximately 73,898 total trips, including 6,477 trips during the morning peak hour and 7,602 trips during the evening peak hour. The geographic distribution and the traffic assignment of the related projects were performed and the results are shown in Figures 11(a) and 11(b) of the Traffic Study.

Future (2024) Base Traffic Volumes

The related project's traffic estimates were added to the Existing Plus Ambient Growth traffic to obtain the Future (2024) Base traffic volumes. Figures 12(a) and 12(b) of the Traffic Study, provides the Future (2024) Base traffic volumes at each of the analysis intersections during both AM and PM peak hours. These volumes represent Future (2024) Without Project Conditions.

Future (2024) Without Project Conditions

The Future (2024) Without Project Conditions peak hour traffic volumes were analyzed using the CMA procedures at each of the study intersections to determine the V/C ratio and corresponding LOS. Table B-30 presents the results of the Future (2024) Without Project Conditions. As illustrated in Table B-30, traffic operations are expected to degrade when compared with existing conditions due to ambient and related project traffic growth. Under Future (2024) Without Project conditions, four intersections are projected to operate at LOS C or better during both peak hours. Intersection No. 2 (Jefferson Boulevard & I-405 Southbound Ramps) would degrade to LOS F during the AM peak hour and LOS C during the PM peak hour, while Intersection No. 3 (Jefferson Boulevard & I-405 Northbound Ramps) would degrade to LOS F during the PM peak hour. Intersection No. 7 (Centinela Avenue & Sepulveda Boulevard) would degrade to LOS E and LOS F conditions during the AM and PM peak hours, respectively.

Future (2024) With Project Traffic Volumes

Utilizing the Project-only traffic estimates developed for both AM and PM peak hours, traffic forecasts for the Future (2024) With Project Conditions were developed. The Future (2024) Without Project traffic volume forecasts were combined with the Project-only traffic volumes to obtain the Future (2024) With Project traffic volume forecasts. The Future (2024) With Project traffic volumes during both AM and PM peak hours are presented in Figures 13(a) and 13(b) of the Traffic Study.

Future (2024) With Project Conditions

The Future (2024) With Project peak hour traffic volumes were analyzed to determine the V/C ratio and corresponding level of service at each of the analyzed intersections. The results of this analysis are also summarized on Table B-30. As in indicated in Table B-30, six of the seven study intersections would maintain the same LOS as the Future (2024) Without Project Condition scenario during both peak hours. The one intersection that would see a worsening LOS is Intersection No. 6 (Slauson Avenue & SR-90), which would degrade from LOS C (0.799 V/C ratio) to LOS D (0.802 V/C ratio) during the AM peak hour. Three intersections would continue to operate at LOS C or better during both peak hours. Intersection No. 2 (Jefferson Boulevard & I-405 Southbound Ramps), Intersection No. 3 (Jefferson Boulevard & I-405 Northbound Ramps), and Intersection No. 7 (Centinela Avenue & Sepulveda Boulevard) would continue to operate at LOS F during one or both peak hours.

Table B-30 identifies the individual impacts during both AM and PM peak hours at each of the analysis locations. Using the specified significant impact criteria, the Project would cause a potentially significant impact at Intersection No. 3 (Jefferson Boulevard & I-405 Northbound Ramps) under Future (2024) With Project Conditions and mitigation would be necessary to reduce this significant impact.

As discussed in the Traffic Study, two mitigation measures are identified to address the potentially significant impact at Intersection No. 3 (Jefferson Boulevard & I-405 Freeway Northbound Ramps). Mitigation Measure MM-TRANS-1 requires the Project to develop a Transportation Demand Management Plan (TDM Plan). The TDM Plan would include measures that would prioritize, to the extent possible, the reduction of Project vehicle trips, which would align with the requirements of the CCMC and the goals of the Circulation Element of the General Plan. The CCMC includes required measures such as a bulletin board, display case, or kiosk which to display current maps, routes, and schedules for public transit routes serving the Project Site, telephone numbers for referrals on transportation information, and bicycle route and facility information, among other information; reserved employee parking spaces that are close to employee for potential carpool and vanpool vehicles; and bicycle parking would also be provided above the City's required 20 percent by providing a total of 58 spaces (10 short-term and 48 long-term bicycle parking spaces) and long-term bicycle parking storage would be located in a bicycle room, among other required measures. In addition to the CCMC required TDM Measures, additional TDM Plan measures may also include: new employee orientation which would introduce employees to TDM and the resources available to all employees; annual employee orientation, which would review the resources available to employees and address current strength and shortcomings of the plan; commuter matching services; and bicycle tool and repair stand; and free on-site shared bicycles, to be used by Project employees, patrons, and visitors, among other measures. Although the implementation of the above-mentioned TDM plan would result in a reduction in Project vehicle trips, no percent decrease in Project vehicle trips was assumed in the Traffic Study to provide a more conservative mitigation analysis

Mitigation Measure MM-TRANS-2 requires the Project to contribute funding to support the installation of closed-circuit television (CCTV) cameras at Intersection No. 3 (Jefferson Boulevard & I-405 Freeway Northbound Ramps) in order to observe traffic operations and respond rapidly to traffic incidents that can interrupt vehicle flow and transit service. **Table B-31**, *Future (2024) With Project Mitigation Level of Service Analysis*, provides the results of the LOS analysis with implementation of Mitigation Measures MM-TRANS-1 and Mitigation Measure MM-TRANS-2. As shown therein, with implementation of mitigation measures, the Project's impacts at Intersection No. 3 (Jefferson Boulevard & I-405 Freeway Northbound Ramps) would be reduced to a less-than-significant level.

Table B-31
Summary of Intersection Level of Service Analysis

No.	Intersection	Peak Hour	Future (2024) Without Project		Future (2024) With Project With Mitigation		Project Increase in V/C	Significant Project Impact
			V/C	LOS	V/C	LOS		
1.	Jefferson Boulevard & Mesmer Avenue[a]	AM	0.695	B	0.697	B	0.002	No
		PM	0.572	A	0.573	A	0.001	No
2.	Jefferson Boulevard & I-405 Southbound Ramps[a]	AM	1.062	F	1.064	F	0.002	No
		PM	0.779	C	0.783	C	0.004	No
3.	Jefferson Boulevard & I-405 Northbound Ramps[a]	AM	1.145	F	1.153	F	0.008	No
		PM	1.182	F	1.188	F	0.006	No
4.	Jefferson Boulevard & Slauson Avenue[b]	AM	0.425	A	0.451	A	0.026	No
		PM	0.515	A	0.521	A	0.006	No
5.	Slauson Avenue & Sepulveda Boulevard[b]	AM	0.606	B	0.609	B	0.003	No
		PM	0.657	B	0.659	B	0.002	No
6.	Slauson Avenue & SR-90[b]	AM	0.799	C	0.802	D	0.003	No
		PM	0.700	B	0.700	B	0.000	No
7.	Centinela Avenue & Sepulveda Boulevard[a]	AM	0.957	E	0.959	E	0.002	No
		PM	1.109	F	1.110	F	0.001	No

V/C - Volume to Capacity Ratio, LOS - Level of Service

[a] Analysis results based on City of Los Angeles CMA methodology and assumptions.
[b] Analysis results based on City of Culver City CMA methodology.

Source: Crain & Associates, 2020.

Congestion Management Program Impact Analysis

Congestion Management Program (CMP) is a State-mandated program enacted by the State legislature to address the impacts that urban congestion has on local communities and the region as a whole. The traffic impact guidelines of the current 2010 CMP for Los Angeles County require analysis of all CMP arterial monitoring locations where a project could add a total of 50 or more trips during either peak hour. Additionally, all freeway monitoring locations where a project could add 150 or more trips in either direction during the peak hours are to be analyzed.

The CMP arterial monitoring intersections within three miles from the Project Site including the following:

- Sepulveda Boulevard & Manchester Avenue
- Overland Avenue & Venice Boulevard
- La Cienega Boulevard & Centinela Avenue

Based on the incremental Project trip generation estimates described above and the Project trip distribution patterns, the Project is expected to contribute minimal traffic volumes to these CMP monitoring intersections during the weekday AM and PM peak hours. Further, it is expected that Project traffic volume contributions to more distant CMP arterial monitoring locations would be even lower, given that Project traffic would disperse across an increasing number of roadways when farther from the Project Site. With Project traffic contributions well below the 50-trip threshold, no significant Project impacts to CMP arterial monitoring locations are forecast and no additional arterial intersection analysis is necessary.

With regard to the CMP freeway monitoring segment analysis, a review of Project's trip generation indicates that the Project would not generate more than 42 net directional (inbound or outbound) trips during either peak hour. Therefore, the Project would contribute well below the 150 directional-trip threshold to all CMP freeway monitoring segments, no significant Project impacts to CMP freeway monitoring locations are forecast, and no additional freeway analysis is necessary.

Caltrans Freeway Impact Screening Analysis

A freeway impact screening analysis was performed for the Project based on the criteria set forth in the October 2013 Agreement Between City of Los Angeles and Caltrans District 7 on Freeway Impact Analysis Procedures and the December 2015 First Amendment to the Agreement between LADOT and Caltrans District 7 on Freeway Impact Analysis Procedures. As per the criteria provided by the agreement and amendment, if the Project meets any of the following criteria, the Project Applicant would be directed to work with Caltrans to prepare a freeway impact analysis, utilizing Caltrans' "Guide for the Preparation of Traffic Impact Studies":

- The Project's peak hour trips would result in a one percent or more increase to the freeway mainline capacity of a freeway segment operating at LOS "E" or "F" (based on an assumed capacity of 2,000 vehicles per hour per lane); or
- The Project's peak hour trips would result in a two percent or more increase to the freeway mainline capacity of a freeway segment operating at LOS "D" (based on an assumed capacity of 2,000 vehicles per hour per lane); or
- The Project's peak hour trips would result in a one percent or more increase to the capacity of a freeway off-ramp operating at LOS "E" or "F" (based on an assumed ramp capacity of 1,500 vehicles per hour per lane); or
- The Project's peak hour trips would result in a two percent or more increase to the capacity of a freeway off-ramp operating at LOS "D" (based on an assumed ramp capacity of 1,500 vehicles per hour per lane).

The purpose of this analysis is to apply the above screening criteria to determine whether a Freeway Impact Analysis would be required for the Project. The methodologies used to conduct the screening analysis for the Project, and the results of the screening, are described below.

Project trip generation estimates were prepared in accordance with the latest version of LADOT's Traffic Study Policies and Procedures. The Project trip generation estimates as accepted by LADOT are shown in Table B-29, above. Project trip distribution patterns were also developed for the analysis based on Project uses, existing traffic patterns, characteristics of the surrounding roadway system, the geographic location of the Project Site and its proximity to freeways and major travel routes, and areas from and to which employees and patrons of the proposed hotel and existing commercial use would likely be attracted.

Freeway Mainline Segment Impact Analysis

The Mainline Segment locations analyzed included I-405, north of Jefferson Boulevard, and I-405, south of Jefferson Boulevard. A one percent trigger percentage was applied assuming LOS E/F freeway mainline operations. The Project added trips to each freeway mainline segment were compared to the trigger threshold. As shown on **Table B-32**, *Caltrans Freeway Impact Screening Analysis - Traffic Volume Contributions to Freeway Mainline*, the screening analysis determined that the screening threshold criteria would not be triggered at the two freeway mainline segments. Further, as the Project traffic did not trigger the screening thresholds at the mainline segments most likely to be used by Project traffic, there is no need to look at segments further away. As such, a freeway impact analysis is not required.

Table B-32
Caltrans Freeway Impact Screening Analysis – Traffic Volume Contributions to Freeway Mainline

Location	Peak Hour	Net Project Trips		Freeway Mainline Capacity [a]		Percentage Added by Project		Freeway Impact Analysis Required?
		SB	NB	SB	NB	SB	NB	
I-405, north of Jefferson Boulevard	AM	5.1	3.6	8,000	8,000	0.06%	0.05%	**No**
	PM	4.3	3.7	8,000	8,000	0.05%	0.05%	**No**
I-405, south of Jefferson Boulevard	AM	6.3	8.9	8,000	8,000	0.08%	0.11%	**No**
	PM	7.8	8.6	8,000	8,000	0.10%	0.11%	**No**

SB = southbound, NB = eastbound
[a] The freeway capacity is 2,000 vehicles per hour per lane.
[b] A 1% or more increase to the freeway mainline capacity for a freeway segment operating at LOS E or F would require a freeway impact analysis.

Source: Crain & Associates, 2020.

Freeway Ramp Analysis

The Freeway Off-Ramp locations analyzed included I-405 Northbound Off-Ramp to Jefferson Boulevard and I-405 Southbound Off-Ramp to Jefferson Boulevard. A one percent trigger percentage was applied assuming LOS E/F freeway off-ramp operations. Comparing the traffic volume contributions required to trigger a freeway off-ramp impacts analysis at LOS E/F with the anticipated Project volume contributions at each location, the study determined that the threshold may be triggered for the I-405 Freeway northbound off-ramp to Jefferson Boulevard during the AM and PM peak hours, as shown in **Table B-33**, *Caltrans Freeway Impact Screening Analysis – Traffic Volume Contributions to Off-Ramp Facilities*. Thus, further analysis of this location was performed to determine existing LOS operations during the AM and PM peak hours.

Manual turning movement counts were conducted at the freeway off-ramp terminus intersection during the weekday AM and PM peak hours on November 28, 2018 and intersection county data sheets are provided in the Traffic Study. The peak-hour LOS for freeway off-ramp terminus intersection was determined using the Highway Capacity Manual (HCM) operational methodology for signalized intersections, as required by Caltrans. **Table B-34**, *Freeway Off-Ramp Impact Analysis*, provides the results of the freeway off-ramp impact analysis. As shown therein, the off-ramp approach at the I-405 Freeway northbound off-ramp to Jefferson Boulevard terminus intersection currently operates at LOS B during both AM and PM peak hours. As there is no trigger percentage for off-ramps operating at LOS A through C, no further analysis is required.

Overall, as no further analysis of the CMP monitoring intersections, freeway mainline, or freeway ramps are required, impacts would be considered less than significant.

Table B-33
Caltrans Freeway Impact Screening Analysis – Traffic Volume Contributions to Off-Ramp Facilities

Location	Peak Hour	Net Project Trips	Freeway Off-Ramp Capacity[a]	Percentage Added by Project[b]	Off-Ramp Impact Analysis Required?
I-405 Freeway Northbound Off-Ramp to Jefferson Boulevard	AM	8.9	850	1.05%	Yes
	PM	8.6	850	1.01%	Yes
I-405 Freeway Southbound Off-Ramp to Jefferson Boulevard	AM	5.1	850	0.60%	No
	PM	4.3	850	0.51%	No

[a] The freeway off-ramp capacity is 850 vehicles per hour per lane.
[b] A 1% or more increase to the freeway off-ramp capacity for a freeway segment operating at LOS E or F would require a freeway off-ramp impact analysis.

Source: Crain & Associates, 2020.

Table B-34
Freeway Off-Ramp Impact Analysis

Location	Peak Hour	Existing Traffic Volume[a]	Existing Off-Ramp Delay[b]	Existing Off-Ramp LOS	Project Volume Contribution	Exceed Trigger?
I-405 Freeway Northbound Off-Ramp to Jefferson Boulevard	AM	848	19.1	B	8.9	No
	PM	762	14.1	B	8.6	No

[a] Existing off-ramp traffic volumes determined from manual turning movement counts conducted in November 2018.
[b] Off-ramp delay based on aggregate day for all off-ramp lane groups based on analysis results using the HCM operational methodology for signalized intersections.

Source: Crain & Associates, 2020.

Residential Street Segment Traffic Impact Analysis

As part of the Future (2024) With Project Conditions analysis, a residential street impact analysis was conducted to determine the potential impacts of Project trips to residential street segments within the nearby neighborhood of Sunkist Park. As provided above in Table B-25, study residential street segments include Segrell Way, north of Slauson Avenue; Culver Park Drive, north of Slauson Avenue; and Slauson Avenue, west of Segrell Way. The locations of the study residential street segments are provided in Figure B-2, above.

Street Segment Impact Criteria

As outlined in the Culver City Traffic Study Criteria, the following specific threshold criteria for Project impacts to any street segment detailed below were used in this analysis:

Project Average Daily Traffic (ADT) with Project	Project-Related Increase in Average Daily Traffic (ADT) Volume
999 or less	120 or more
1,000 to 1,999	12% or more of final ADT
2,000 to 2,999	10% or more of final ADT
3,000 or more	8% or more of final ADT

Source: Culver City Traffic Study Criteria; Crain & Associates, 2020.

Table B-35, *Residential Street Analysis: Existing (2018) and Future (2024) Conditions*, summarizes the existing and future ADT volumes at the three study residential street segment locations. In order to develop future condition segment volumes, the existing segment volumes were adjusted upward via a one percent ambient traffic growth factor and related project traffic volumes. The combined traffic volume increases from these two sources provided the basis for the analysis of the Future (2024) Without Project Condition. Project traffic was then analyzed as an incremental addition to the Future (2024) Without Project Condition traffic volumes, forming the traffic volumes for the Future (2024) With Project Condition.

Table B-35
Residential Street Analysis: Existing (2018) and Future (2024) Conditions

Residential Street Segment	Existing ADT	Future (2024) Without Project Condition ADT	Project-Related ADT	Future (2024) With Project ADT	Project % Increase in ADT	Significant Impact?
Segrell way n/o Slauson Avenue	1,540	1,635	74	1,709	4%	No
Culver Park Drive n/o Slauson Avenue	673	714	74	788	9%	No
Slauson Avenue w/o Segrell Way	3,925	4,641	58	4,699	1%	No

Source: Crain & Associates, 2020.

As discussed in the Traffic Study, the Project is not expected to contribute appreciable traffic volumes to these residential street segments, given that inbound Project traffic must enter from westbound Slauson Avenue and outbound Project traffic would egress onto the adjacent alley. The adjacent alley would provide the most convenient path northerly through the Sunkist Park neighborhood to Berryman Avenue and Sawtelle Boulevard, as it would not require traveling south first to then head north. Although the Project is not expected to contribute noticeable traffic volumes to the three study residential street segments, in order to provide a conservative analysis, an evaluation of these street segments was performed assuming the full five percent of Project traffic expected to utilize the adjacent alley would instead use Segrell Way, Culver Park Drive, or Slauson Avenue to traverse the Sunkist Park neighborhood. As shown in Table B-35, the Project-related increases in ADT volumes would represent less than 10 percent of the Future (2024) With Project ADT volumes. Based on the street segment impact criteria described above, the Project would not significantly impact any of the street study residential street segments.

Queuing Analyses (for informational purposes)

Multiple queuing analyses were conducted for the Project based on requests from City staff and community concern. The City requested two queuing analyses as part of the Traffic Study MOU process: 1) evaluate the Future (2024) With Project Conditions for the northeast-bound Jefferson Boulevard left-turn lane at Slauson Avenue to determine if there would be spillover impacts to the Jefferson Boulevard northeast-bound through lanes; and 2) evaluate potential inbound Project traffic spillover onto westbound Slauson Avenue at the Project Site entry driveways. Additionally, the Project had its first community meeting in the Sunkist Park neighborhood on April 16, 2019. During that meeting, Sunkist Park community members expressed concern regarding existing weekday PM peak-hour conditions along and adjacent to Slauson Avenue, near the Project Site. In order to address these concerns, a queuing and delay study was conducted to determine the existing queuing and delay conditions for vehicles traveling south on the unnamed alley, Segrell Way, and Culver Park Drive and turning left to travel eastbound on Slauson Avenue.

As discussed in further detail in the Traffic Study, with regard to the Future (2024) With Project Conditions for the northeast-bound Jefferson Boulevard left-turn lane at Slauson Avenue, implementation of the Project would increase existing vehicle spillover onto the northeast-bound through lane during both the AM and PM peak hours. An increase in the Jefferson Boulevard northeast-bound left-turn storage would help alleviate the Project's contribution to queuing spillover.

The City reviewed multiple alternatives for providing additional capacity to the northeast-bound left-turn lane including:

- Extending the existing northeast-bound left-turn lane by an additional 10 feet while reducing the southwest-bound left-turn lane to Selmaraine Drive by 25 feet;
- Removing the southwest-bound left-turn lane to Selmaraine Drive in order to provide additional storage capacity for the northeast-bound left-turn lane to Slauson Avenue; and
- Providing a second northeast-bound left-turn lane by reducing several of the lane widths on Jefferson Boulevard and reducing the southwest-bound left-turn storage lane to Selmaraine Drive, along with prohibiting parking and modifying striping and signage on Slauson Avenue to provide an additional westbound receiving lane.

The City determined the most feasible design for providing sufficient left-turn storage would be to provide an additional left-turn lane for the northeast-bound left-turn movement from Jefferson Boulevard to Slauson Avenue. Based on this direction, a conceptual striping plan has been prepared to illustrate the potential reconfiguration of Jefferson Boulevard and Slauson Avenue to provide dual left-turn lanes. The dual left-turn lanes on the northeast-bound Jefferson Boulevard approach would require an additional receiving lane on westbound Slauson Avenue. Currently, there is only one receiving lane on Slauson Avenue west of Jefferson Boulevard. Per direction from City staff, the conceptual design has been developed with a striped lane drop occurring between Jefferson Boulevard and Culver Park Drive. As part of this design, parking would be prohibited on the north side of Slauson Avenue. Appendix F of the Traffic Study, includes the conceptual striping plan as described above. The dual northeastbound left-turn lanes were not included in the CMA calculations for post-Project conditions. Although the conceptual plan has been reviewed by City staff, the final design has not been approved and, therefore, it is more conservative to assume only a single left-turn lane

With regard to the Project entry driveways, a queuing analysis was conducted to determine if inbound Project traffic would spillover onto westbound Slauson Avenue. As described in further detail in the Traffic Study, spillover onto Slauson Avenue is not expected to occur given the proposed parking layout and self-park with valet-assist parking operations of the Project. Additionally, during special events or when higher-than-expected demand is experienced, Project valet staffing can be augmented to provide an adequate number of valet attendants in order to process inbound vehicles more quickly. Therefore, spillover onto Slauson Avenue is not anticipated to occur based on the layout and operation of Project parking.

As discussed above, a queuing and delay study was conducted along Slauson Avenue, the unnamed alley, Segrell Way, and Culver Park Drive in the vicinity of the Project as a direct result of public comments provided at the first Project community meeting. Traffic volume, vehicle queue, and vehicle delay data was collected on April 25, 2019 and used as part of the queueing analysis provided in the Traffic Study. **Table B-36**, *Unnamed Alley, Segrell Way, and Culver Park Drive Queuing/Delay Summary*, summarizes the vehicle queuing and delays on the southbound approaches of the unnamed alley, Segrell Way, and Culver Park Drive.

Table B-36
Unnamed Alley, Segrell Way, and Culver Park Drive Queuing/Delay Summary

Intersection	Peak Hour	Average Delay (veh/sec)	LOS	Total Number of Delayed Vehicles	Maximum Queue Observed
Unnamed Alley & Slauson Avenue	8-9 AM	16.7	C	6 vehicles	1 vehicle
	5-6 PM	10.6	B	16 vehicles	1 vehicle
Segrell Way & Slauson Avenue	8-9 AM	10.9	B	7 vehicles	4 vehicles
	5-6 PM	8.9	A	16 vehicles	4 vehicles
Culver Park Drive & Slauson Avenue	8-9 AM	8.8	A	24 vehicles	3 vehicles
	5-6 PM	6.0	A	2 vehicles	1 vehicle

Source: Crain & Associates, 2020.

As illustrated in Table B-36, all intersections are operating at excellent-to-good levels of service (LOS A to LOS C). While there were instances of eastbound queues extending along Slauson Avenue from Jefferson Boulevard to Segrell Way as noted above, there were no occurrences when southbound left-turning vehicles were observed impeding westbound traffic on Slauson Avenue during the peak periods. This is further supported by the observations indicating that an overwhelming majority of southbound vehicles do not stop at the stop signs, which is a direct result of available gaps in Slauson Avenue traffic flow. The traffic counts and queue/delay data are provided in Appendix A of the Traffic Study.

Parking (for informational purposes)

While not required by CEQA, the Traffic Study included a parking evaluation for informational purposes only. The parking analysis was conducted for the Project to determine the anticipated overall peak parking demands and verify if the proposed parking supply would be sufficient to meet the peak demand. The parking analysis was prepared in accordance with the Alternative Parking Provisions of the CCMC, which include a shared parking option for developments with multiple non-residential land uses. The parking demand analysis was coordinated with the City. The analysis evaluated the Project's peak parking demands based on three approaches: a shared parking analysis of the Project land use components for which adequate parking must be provided based on CCMC parking ratios, a shared parking analysis of the Project land use components based on Urban Land Institute (ULI) recommended base parking ratios, and an empirically based parking demand analysis utilizing recently collected parking utilization data from three similar, nearby Culver City hotels.

Based on the peak parking demand rates developed conservatively using similar hotel parking utilization data, the Project's expected peak weekday and weekend parking demands were calculated. The Project is expected to have a maximum parking demand of 138 parking spaces, which would occur midday on a weekday. The subterranean parking structure would be designed to accommodate vehicles through a combination of standard, tandem and ADA spaces. The Project Site would include valet-assist parking in order to maintain safe and efficient use of the tandem spaces.

The Project would remove existing on-street parking on Slauson Avenue, adjacent to the Project Site and between the unnamed alley and Jefferson Boulevard. There are a total of approximately six existing parking spaces (three on either side of the existing site driveway). Although these existing parking spaces are currently unmetered, the City of Culver City has plans to install meters in the near future. Therefore, in order to accommodate the Project's site plan design, up to six parking spaces may be removed at a loss of $1,000 per meter per year (based on the City-wide parking meter revenue average). The Project shall pay the City a total of $30,000 for five years of lost parking revenue for six lost parking spaces along Slauson Avenue caused by the Project.

Voluntary Neighborhood Traffic Intrusion and Parking Measures

At the request of the City and based on concerns from the community, the Project will fund a study to identify potential neighborhood traffic intrusion measures. These measures may include peak-period turn restrictions at certain intersections to address the cut-through traffic concerns within the Sunkist Park neighborhood. City traffic engineering staff indicated that there is a recognized cut-through traffic problem on southbound Segrell Way and Culver Park Drive, between Sawtelle Boulevard and Slauson Avenue, during the weekday PM peak period. As such, City staff indicated they would be supportive of traffic measures involving weekday PM peak-period left-turn restrictions for the southbound approaches of Segrell Way and Culver Park Drive at Slauson Avenue (and possibly right-turn restrictions for the eastbound approaches of Sawtelle Boulevard at Segrell Way and Culver Park Drive). The study would follow the Neighborhood Traffic Management Program (NTMP) process, as required for local street traffic intrusion improvements in the Sunkist Park neighborhood.

An additional Project feature may include assisting the Sunkist Park neighborhood with expanding the residential permit parking program to ensure that parking along Segrell Way and Culver Park Drive is available primarily (or exclusively) for residents/guests on those roadways. Within five years of Project occupancy, if the City determines there is an intrusion of Project parking on nearby residential streets, the Project or subsequent property owner shall be responsible to pay for a parking study to be performed by a consultant selected by the City. If the parking study determines that mitigations are needed such as the establishment of permit parking, the Project shall pay for such mitigations including the cost of signage and one year of residential parking permits to alleviate the intrusion of Project parking on those streets.

Similarly, within five years after Project occupancy, if the City observes there is an intrusion of Project traffic onto nearby residential streets, the Project or subsequent property owner shall be responsible to conduct a NTMP with input from the community to study and pay for the implementation of any traffic calming measures that will minimize or eliminate Project traffic from using the nearby residential streets. The NTMP review, design, and construction would be carried out by consultants selected by the City.

Mitigation Measures

MM-TRANS-1: The Project shall implement a TDM Plan to encourage the use of non-auto modes of transportation and reduce vehicle trips. The TDM Plan shall be reviewed and approved by the City's Planning Division, Public Works/Engineering, and Transportation Staff for review prior to the issuance of the first building permit for the Project. The TDM Plan shall include, at a minimum, measures required by the CCMC. In addition, as recommended by the Project's Traffic Study, the TDM Plan shall also include, but not be limited to measures and strategies to reduce vehicle trips via amenity Improvements supporting alternative modes of transportation and a trip reduction program.

MM-TRANS-2: To enhance the traffic signal system in the Project study area and in response to the forecast significant Project impacts, the Applicant shall contribute a fixed-fee financial contribution toward funding traffic signal upgrades, including installation of closed-circuit television (CCTV) cameras at Intersection No. 3 (Jefferson Boulevard & 1-405 Northbound Ramps). The funding contributions toward Intersection No. 3 (Jefferson Boulevard & 1-405 Northbound Ramps) shall be based on coordination with Culver City's Planning Division and Public Works/Engineering Staff, as well as LADOT, as necessary. This, and any other required financial fair-share contributions, must be guaranteed prior to the issuance of the Project's building permit and completed prior to the issuance of the Project's certificate of occupancy. Temporary certificates of occupancy may be granted in the events of any delay through no fault of the applicant, provided that, in each case, the applicant has demonstrated reasonable efforts and due diligence to the satisfaction of the Culver City's Planning Division and Public Works/Engineering Staff, as well as LADOT, as necessary.

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

Less Than Significant Impact. CEQA Guidelines section 15064.3 describes specific considerations for evaluating a project's transportation impacts. Following the passage of Senate Bill (SB) 743, the State of California's Governor's Office of Planning and Research (OPR) was tasked with developing new guidelines for evaluating transportation impacts under CEQA. These guidelines were intended to shift the transportation performance metric from automobile delay and level of service (LOS) to one that would promote the reduction of greenhouse gas emissions and the development of multimodal and diverse transportation networks. As a result, OPR determined that, under the proposed update to the CEQA guidelines, vehicle miles traveled (VMT) would be established as the primary metric for evaluating environmental and transportation impacts.

In response to the updates to the CEQA guidelines, the City of Culver City updated its Transportation Study Criteria and Guidelines in July 2020 to conform to the requirements of SB 743. The new guidelines replaced the 2012 Traffic Study Criteria for the Review of Proposed Development Projects within the City of Culver City and shifted the performance metric for evaluating transportation impacts under CEQA from LOS to VMT for studies completed within the City. The new criteria and guidelines establish thresholds to identify development projects that would cause substantial VMT.

Under the new criteria and guidelines, the first step in performing a VMT analysis for a land use project is to perform a VMT screening analysis. A land use project that meets any of the following VMT screening thresholds is presumed to have a less-than-significant VMT impact and is therefore cleared from having to perform further VMT analysis:

1. Small land use projects that result in less than 250 daily or 25 peak-hour trips;
2. Land use projects within the 0.5-mile radius of these key Transit Priority Areas (TPAs): Metro E (Expo) Line Culver City Station, Metro E (Expo) Line La Cienega Station, Westfield-Culver City Transit Center, and Sepulveda/Venice Boulevard intersection;
3. Land use projects located within any TPA where at least 15 percent of the on-site residential units are affordable;
4. Affordable housing projects where 100 percent of the dwelling units are affordable; or
5. Local-serving retail projects with less than 50,000 square feet of floor area at a single store.

Given the Project's proximity (approximately one block) to the Westfield-Culver City Transit Center, the City considers the Project site to be in a key TPA. Therefore, based on the key TPA screening threshold, the Project is presumed to have a less-than-significant VMT impact and no further VMT analysis is required.

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

Less Than Significant Impact. The Project would result in lane restriping along Slauson and Jefferson Boulevard, as described above. However, the restriping is intended to decrease potential vehicle conflicts and improve traffic conditions. There are no existing hazardous design features such as sharp curves or dangerous intersections on-site or within the Project vicinity. The Project would also result in some modifications to access (i.e., new curb cuts for the Project driveway). As discussed in Attachment A, Project Description, direct vehicular access to the parking area would be provided from a driveway on Slauson Avenue in the western portion of the Project Site, which would include two drive aisles separated physically by a concrete column near the back-of-sidewalk. The drive aisle closer to the hotel (inner aisle) would serve as a passenger drop-off and pick-up area. The second drive aisle would allow entering vehicles to access the parking ramp down to the two subterranean parking levels. There would be two driveway exits onto the adjacent unnamed alley to egress onto the surrounding roadway systems. One exit driveway would be provided directly off of the dual drive aisles (which would merge into a single drive aisle approaching the alley), while the second exit would provide egress for vehicles exiting the subterranean parking garage. Existing vehicles would be allowed to travel north or south along the public alley towards Berryman Avenue or Slauson Avenue, respectively. All on-site roadway and site access improvements would be designed in compliance with applicable City standards. Therefore, the Project would not substantially increase hazards due to a geometric design feature or incompatible use. Impacts would be less than significant.

d. Result in inadequate emergency access?

Less Than Significant Impact. The Project Site is located in an established urban area that is well served by the surrounding roadway network. As discussed under Response IX.f, the nearest disaster route to the Project Site is Centinela Avenue, located approximately 0.4 mile south of the Project Site.[66] While it is expected that the majority of construction activities for the Project would be confined on-site, construction activities may temporarily affect access on portions of adjacent streets during certain periods of the day, including during construction of potential off-site infrastructure upgrades/improvements (i.e., water and sewer lines) (discussed below in Section XIX, *Utilities and Service Systems*). However, through-access for drivers, including emergency personnel, along all roads would still be provided. In these instances, the Project would implement traffic control measures (e.g., construction flagmen, signage, etc.) to maintain flow and access. Furthermore, in accordance with Culver City requirements, as applicable, the Project would develop a Construction Traffic Management Plan (see MM-PS-1), which includes designation of a haul route, to ensure that adequate emergency access is maintained during construction. Therefore, construction is not expected to result in inadequate emergency access.

Project operation would generate traffic in the Project vicinity and would result in some modifications to access (i.e., new curb cuts for the Project driveway). However, emergency access to the Project Site and surrounding area would continue to be provided similar to existing conditions. Emergency vehicles and fire access for the Project Site would be provided at grade access from Slauson Avenue. Future driveway and building configurations would comply with applicable fire code requirements for emergency evacuation, including proper emergency exits for employees and visitors. Subject to review and approval of Project Site access and circulation

[66] *County of Los Angeles Department of Public Works. https://dpw.lacounty.gov/dsg/DisasterRoutes/map/culver%20city.pdf, accessed October 2019.*

plans by the CCFD, as necessary, the Project would not result in inadequate emergency access. Impacts would be less than significant.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project:

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

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

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.

Less Than Significant Impact with Mitigation Incorporated. In accordance with Assembly Bill 52 (AB 52), the City submitted request to consult letters to five (5) Native American individuals and organizations on the City's Tribal Consultation List on December 5, 2019. Recipients were requested to respond within 30 days of receipt of the letter if they wished to engage in government-to-government consultation per AB 52. On December 13, 2019, the City received a letter via email from Mr. Andrew Salas, Chairman of the Kizh Nation that requested formal AB 52 consultation with the City for the Project.

The City consulted with the Kizh Nation on January 29, 2020 via conference call. The City provided an overview of the Project and the Kizh Nation provided their knowledge of the Project Site vicinity, including information about the natural environment and general history of the area, and known villages and trade routes/trails in the area. The Kizh Nation indicated that there could be archaeological resources and human remains related to prehistoric travel along trade routes, such as burials of those who may have died while on the trail. After the conference call, the Kizh Nation submitted an email to the City on January 31, 2020 that included similar information that they provided in the call.

While the Kizh Nation did not identify any known tribal cultural resources (as defined in PRC Section 21074) within the Project Site during consultation with the City, they have indicated that the Project Site has a high potential to encounter tribal cultural resources during construction given the Project Site's location near sacred villages (including the village of *Suangna*), water courses, major traditional trade routes, and its location within a cultural landscape. As a result, the Kizh Nation recommended Native American monitoring during construction of the Project. As a result, the City has required mitigation measure MM-CUL-2 which includes provisions for the Applicant to retain a Native American representative to monitor construction excavations associated with implementing the Project.

The AB 52 Native American notification letters and Mr. Salas' initial response letter are provided in the Native American Tribal Correspondence Tribal references materials to this MND. To date, no other responses from the Native American community have been received as part of the AB 52 tribal consultation effort. As a result of the

City's consultation efforts, no known tribal cultural resources have been identified within the Project Site or vicinity. Nonetheless, in the event that unknown tribal cultural resources are encountered during Project construction, mitigation measure MM-CUL-2 would ensure that the Project would not cause a significant impact to tribal cultural resources.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

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

Water

Less Than Significant Impact. During construction activities associated with the future development within the Project Site, there would be a temporary, intermittent demand for water for such activities as soil watering for site preparation, fugitive dust control, concrete preparation, painting, cleanup, and other short-term activities. Construction-related water usage is not expected to have an adverse impact on available water supplies or the existing water distribution system, and impacts would be less than significant.

Existing water lines are operated by the City of Los Angeles Department of Water and Power (DWP) and the water purveyor Golden State Water Company (GSWC), formerly known as Southern California Water Company. Although the Project lies wholly within the City of Culver City, it is possible to have water lines from another jurisdiction to service properties within a different jurisdiction. Within Jefferson Boulevard, there are several water lines, including a 26" water line approximately 19' north of the street centerline in the street; a 12" water line approximately 23' north of the street centerline in the street; and an 8" water line under the public sidewalk along the Project frontage that turns west towards Slauson Avenue. Within Slauson Avenue, there is an 8" water line 42 feet south of the street centerline. This line is a continuation from the 8" water line from Jefferson Boulevard. With regard to fire hydrants, there is an existing fire hydrant located at the westerly side of Jefferson Boulevard adjacent to the Project Site as well as an existing fire hydrant located across the street from the Project Site at the southwest corner of Jefferson Boulevard and Slauson Avenue. There is a 1-1/2" water meter located on Jefferson Boulevard approximately 5 feet from the hydrant on the corner serving 11467 through 11499 Jefferson Boulevard.

GSWC provided water pressure for the fire hydrant located on Jefferson Boulevard, directly adjacent to the Project Site. The fire hydrant has a high water pressure at 110 psi and a low water pressure at 90 psi).[67] The Project is planned to be fire protected with a fire sprinkler system. Separate meters for domestic and fire systems are planned. A fire flow test will need to be conducted at two existing fire hydrants along Jefferson Boulevard. The flows will be used to calculate the total available water pressure for the Project. The Project's plumbing engineer and/or fire service consultant would assess the Project water/fire service design requirements based on the preliminary pressure information provided by GSWC. The plumbing engineer will also need to assess the need for any booster pump for the Project in coordination with GSWC and CCFD.

All connections and water-related infrastructure improvements, including the proposed fire system designed for the Project, would be provided by the Project in consultation with the GSWC and CCFD. Further, all water line

[67] *KPFF Consulting Engineers, 2019.*

improvements and connections would be provided in consultation with the CCFD to ensure that the minimum fire flow requirements would be provided to serve the Project.

GSWC purchases water from the West Basin Municipal Water District (WBMWD). The 2015 WBMWD Urban Water Management Plan (UWMP) provides water demand and water supply projections in five-year increments from 2020 through 2040, which are based on regional demographic data provided by SCAG, as well as billing data for each major customer class, weather, and conservation. Year 2020 WBMWD water demand is 146,105 AFY while projected year 2040 water demand is 151,922 AFY; refer to **Table B-37**, *Projected West Basin Service Area Water Demand (AFY)*.

Table B-37
Projected West Basin Service Area Water Demand (AFY)

Year	2020	2025	2030	2035	2040
Baseline Demand[a]	135,719	136,447	136,466	136,706	136,284
Planned Conservation[a]	32,280	35,190	37,928	40,255	42,773
Final Total Retail Demand	**167,999**	**171,637**	**174,394**	**176,961**	**179,057**
Recycled Water Demand[b]	21,894	27,135	27,135	27,135	27,135
Final Potable Demand	**146,105**	**144,502**	**147,259**	**149,826**	**151,922**

[a] Projections based on Metropolitan Demand Forecasting Model.
[b] Projections based on the Capital Improvement Plan, 2015, (excludes replenishment deliveries to the Barrier and deliveries outside service area).
Source: West Basin Municipal Water District, 2015 Urban Water Manage Plan, Table ES-1: Projected West Basin Service Area Retail Demand (AFY), prepared by Arcadis and prepared by Westamerica Communications, dated June 2016.

According to the water supply section of the UWMP, Year 2020 WBMWD water supply is 189,893 AFY while projected 2040 water supply is 206,192 AFY; refer to **Table B-38**, *Projected West Basin Service Area Water Supply (AFY)*. Year 2020 has a water supply surplus of 43,788 AFY while projected year 2040 has a projected water supply surplus of 54,270 AFY. The WBMWD is projecting to increase current recycled water supplies as well as invest in over 20,000 AFY of ocean-water desalination supply. Coupled with additional conserved water supply through water use efficiency programs, the overall imported water use is expected to be reduced significantly by 2040. According to the UWMP, the water supplies available to the WBMWD in single dry and multiple dry years, will be sufficient to meet all present and future water supply requirements within the WBWMD's service area for at least the next 20 years.

The Project would result in an estimated net total peak water demand of 82,500 gpd, or 30,112,500 gallons per year (approximately 94.41 AFY) when fully occupied.[68] The Project's estimated water demand does not include potential credit for the existing use and existing water demand on the Project Site, which would further reduce the demand. The estimated 94.41 AFY water demand generated by the Project would constitute less than one percent of the WBMDW year 2020 for both water supply and water demand. Further, the Project would comply

[68] *The water demand would be consistent with the estimated wastewater generation of the project per Table B-39, Estimated Wastewater Generation. To be conservative, 20 percent was added (to account for outdoor water use).*

Proposed: 68,750 gpd X 1.20 = 82,500 gpd. 82,500 gpd X 365 days = 30,112,500 gallons per year = 94.41 AFY estimated Project water demand.

with Title 5: Public Works, Chapter 5.03: Water Conservation and Water Supply Shortage Program, of the CCMC. In addition, the Project would comply with the Culver City mandatory green building requirements. The Project would also comply with the WBMWD UWMP recommendations regarding drought management and water conservation.

Table B-38
Projected West Basin Service Area Water Supply (AFY)

Year	2020	2025	2030	2035	2040
Groundwater[a]	36,293	36,293	36,293	36,293	36,293
Imported Water[b]	98,426	77,654	77,673	77,913	77,491
Recycled Water[c]	21,894	27,135	27,135	27,135	27,135
Desalination[d]	1,000	22,500	22,500	22,500	22,500
Total	**157,613**	**163,582**	**163,601**	**163,841**	**163,419**
Conservation[e]	32,280	35,190	37,928	40,255	42,773
Total	**189,893**	**198,772**	**201,529**	**204,096**	**206,192**

[a] Groundwater production within West Basin service area only.
[b] Imported retail use only; does not include replenishment deliveries (i.e., Barrier).
[c] Recycled water does not include replenishment deliveries (i.e., Barrier) and deliveries outside the service area.
[d] Desalination include both brackish and ocean water.
[e] Conservation consistent of Active and Passive Savings according to Metropolitan's projected estimates.
Source: West Basin Municipal Water District, 2015 Urban Water Manage Plan, Table ES-3: West Basin's Service Area Projected Retail Water Supplies (AFY), prepared by Arcadis and prepared by Westamerica Communications, dated June 2016.

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

Wastewater

Less Than Significant Impact. The City's wastewater treatment and conveyance system includes four wastewater treatment and water reclamation plants operated by LA Sanitation (LASAN). LASAN provides service within two service areas: the Terminal Island Service Area and the Hyperion Service Area. The Project Site is within the Hyperion Service Area. The Hyperion Service Area includes the Hyperion Water Reclamation Plant (HWRP) in Playa del Rey, the Donald C. Tillman Water Reclamation Plant (TWRP) in the City of Van Nuys, and the Los Angeles-Glendale Water Reclamation Plant (LAGWRP) in the City of Los Angeles. The current treatment capacity of the Hyperion Service Area is approximately 550 mgd which consists of 450 mgd at HWRP, 80 mgd at TWRP, and 20 mgd at LAGWRP. The Project Site is located within the Hyperion Service Area, and its wastewater would be conveyed to and treated at the HWRP.

On average, 275 million gallons of wastewater enters the HWRP on a typical dry weather day. Because the amount of wastewater entering the HWRP can double on rainy days, the HWRP was designed to accommodate both dry and wet weather days with a maximum daily dry weather flow of 450 mgd and peak wet weather flow of 800 mgd.[69] As such, the HWRP's current remaining treatment capacity for dry weather flows is approximately 175 mgd on an average day.

[69] *LASAN, Hyperion Water Reclamation Plant, https://www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-p-hwrp?_adf.ctrl-state=1186mdvh8u_393&_afrLoop=10107387348315793#!, accessed November 2019.*

During construction of the Project, a negligible amount of wastewater would be generated by construction workers. However, any such wastewater generation would be temporary, only lasting as long as Project construction activities occur. It is anticipated that portable toilets would be provided by a licensed private vendor that would dispose of the wastewater off-site. Such wastewater generation is therefore anticipated to result in either no or negligible discharges to the City's wastewater treatment conveyance systems or treatment facilities, and would not be discharged through any service connections at or near the Project Site. No such service connections would be established during Project construction to handle wastewater generated by construction workers. Such minimal wastewater flows are not expected to exceed to applicable treatment requirements of the Hyperion Water Reclamation Plant, and such wastewater would be treated prior to discharge if discharged within the City. The minimal wastewater generation during construction would not require the construction of new or expansion of existing facilities, and, given their small amount, are not anticipated to exceed the capacity of existing wastewater conveyance and treatment systems.

Existing sewer lines within the City are maintained by the Culver City Department of Public Works. Existing sewer lines include a 15" sanitary sewer line in Jefferson Boulevard, a 15" sanitary sewer line in Slauson Boulevard, and a 10" sanitary sewer line in the alley. Under the Project, the proposed building would be connected to the 15" sewer line at either the Jefferson Boulevard side or Slauson Avenue side. Based on the determination by the City, an assessment for the sewer availability would be conducted. The Project proposes to utilize either one 8" main sewer line from the building or one 6" and one 5" sewer lines from the building. There are multiple utilities that will need to be crossed at the Jefferson Boulevard side, whereas there are fewer utilities to cross at the Slauson Avenue side.

As shown in **Table B-39,** *Estimated Wastewater Generation,* implementation of the Project would generate approximately 27,500 gallons per day (gpd) of wastewater. The Project would generate a peak total of 0.115 cubic feet per second (cfs) or a peak 68,750 gpd of additional sewer discharge to the existing 15" sewer line at either the Jefferson Boulevard side or Slauson Avenue side. This does not include potential credit for the existing use and sewer demand on the Project Site, which would help further reduce the proposed sewer demand.

Thus, construction of the Project would include all necessary on and off-site sewer pipe improvements and connections to adequately link the Project to the existing City sewer system based on the City requirements. The necessary improvements would be verified through the permit approval process of obtaining a sewer capacity and connection permit from the City. Construction-related impacts would be temporary, on an intermittent basis, and within the scope of impacts evaluated in this MND. Further, a Construction Traffic Management Plan (MM-PS-1) for the Project would be prepared in order to minimize disruptions to through traffic flow, which would consider any off-site utility improvements, as necessary. See Response XV.a above, for further discussion of the Project's Construction Traffic Management Plan.

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

Table B-39
Estimated Wastewater Generation

Land Use	Quantity	Factor[a]	Average Daily Flow (gpd)
Existing Land Uses			
Commercial	13,000 sf	80 gpd/1,000 sf	1,040 gpd
		Existing Total	*1,040 gpd*
Proposed Land Uses			
Hotel	175 rooms	130/room	22,750 gpd
Restaurant	193 seats	30/seat	5,790 gpd
		Project Total	*28,540 gpd*
		Net Total GPD	**27,500**
		Net Total CFS	**0.046**
		Net Total Peak GPD[c]	**68,750**
		Net Total Peak CFS[c]	**0.115**

sf = square feet; gpd = gallons per day; cfs = cubic feet per second
[a] The generates rates are based on the City of Los Angeles Bureau of Sanitation sewage generation factors.
[b] To calculate the number of seats, 1 sear per 15 square feet was assumed (2,900 sf/15 sf/seat = approximately 193 seats).
[c] Peak factor of 2.5 was used.

Source: ESA, 2019.

Stormwater Drainage

Less Than Significant Impact. As discussed in detail in Response X.c.ii, the Project would include proposed site drainage facilities and stormwater treatment which would implement several rainwater harvesting systems to be constructed either within the subterranean parking structure or the ground level of the Project Site. The surface drainage would be relayed to these structures via roof drains and podium deck area drains. The Project will also consider combination of pre-treatments upstream of the rainwater harvesting system, including flow-through planers, fossil filter inserts for catch basins, and/or flow treatment systems. Once the required treatment volume is stored in the rainwater harvesting system, the excess water for a higher rain event would overflow to an existing storm drain system, in the surrounding streets via high flow bypass system prior to the storage device or internal bypass outlet. The stormwater runoff captured and stored within the rainwater harvesting system would be reused for irrigation of proposed on-site landscape areas. The proposed drainage facilities would capture and treat the design storm for which the SWQDv is calculated, which for the Project Site is the 85th percentile, 24-hour rain event. Environmental impacts associated with development of the Project, including on-site drainage facilities, have been evaluated throughout this document. As concluded in this document, all potentially significant impacts associated with development of the Project, including on-site stormwater drainage facilities, would be less than significant. Therefore, based on the above, the Project would not require or result in the relocation or construction of new or expanded stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be less than significant.

Electric Power and Natural Gas

Less Than Significant Impact. The Project Site is located in a developed and urbanized area in the City that is served by existing electrical power and natural gas services. Electricity would be provided by SCE, which currently obtains 36 percent of its energy from renewable resources.[70] In addition, natural gas would be supplied by SoCalGas. As part of the Project, the proposed building developed on the Project Site would incorporate

[70] *Southern California Edison, 2018 Power Content Label, July 2019.*

energy efficient features and design elements aimed at reducing energy consumption, as detailed further in PDF-AIR-2 and PDF-AIR-3, described above in Response III.b. Some of the Project's "green building measures" as part of its design to reduce Project-related criteria pollutant emissions would include efficient HVAC systems, installation of low-flow water fixtures, and installation of a solar photovoltaic power systems equivalent to at least 1 percent of the Project's electricity demand and at least 1 kilowatt (kW) of solar photovoltaics per 10,000 SF of new development. As discussed above in Response VI.a, SCE and SoCalGas both would have sufficient capacity to serve the Project's operational electricity and natural gas demand. Existing off-site electricity and natural gas infrastructure would not have to be expanded and new infrastructure would not be required to provide electrical or natural gas service to the Project during construction or operation of the Project.

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

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

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

Telecommunications

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

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

Less Than Significant Impact. As described in Response XIX.a, above, the Project would fall within the 2015 WBMWD UWMP available and projected water supplies. According to the UWMP, the water supplies available in single dry and multiple dry years would be sufficient to meet all present and future water supply requirements within the applicable service areas for at least the next 20 years, including the Project. As a result, the Project is within the capacity of the GSWC to serve the Project as well as existing and planned future water demands of its service area.

Sections 10910-10915 of the State Water Code (Senate Bill [SB] 610) requires the preparation of a water supply assessment (WSA) demonstrating sufficient water supplies for a project that is: 1) a shopping center or business establishment that will employ more than 1,000 persons or have more than 500,000 square feet of floor space; 2) a commercial office building that will employ more than 1,000 persons or have more than 250,000 square feet of space, or 3) any mixed-use project that would demand an amount of water equal to or greater than the amount of water needed to serve a 500 dwelling unit subdivision. A typical 500 unit subdivision would typically consume 0.3 to 0.5 acre-feet of water per year, or approximately 150 to 250 AFY, depending upon several factors, including the regional climate.[71] As discussed under Response XIX.a, the Project would generate a water demand of approximately 94.41 AFY (without accounting for water conservation features or subtracting existing on-site water demand). With implementation of water conservation measures per the requirements cited above, the Project's actual water demand would be well below the conservative amount stated above and would not require preparation of a WSA. Impacts would be less than significant.

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

Less Than Significant Impact. As indicated in the Response XIX.a, implementation of the Project would generate a peak demand of 68,750 gpd of wastewater. The HWRP is designed to treat 450 mgd with an average dry water flow of approximately 362 mgd, leaving approximately 88 mgd of treatment capacity available. Given the current capacity of the HWRP, Project wastewater generation would account for a less than one percent increase in demand at the HWRP and there would be ample capacity to treat this increase. Impacts would be less than significant.

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

Less Than Significant Impact. Culver City's Public Works Environmental Programs and Operations Division collects municipal solid waste which includes, trash, recycling, organics, and construction and demolition debris from both the commercial and residential sectors. Both recyclables and organics are hauled to private processing facilities to recycle or compost material. Solid waste is disposed of in either a County or non-County landfill. Culver City operates a transfer station but, does not own or operate any landfill, recycling or composting facilities

Construction of the Project would result in generation of construction and demolition debris such as metal scrap, lumber, concrete which will be collected and diverted to a construction and demolition debris facility for materials

[71] *Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001, prepared by California Department of Water Resources, 2003.*

to be recycled and /or discarded. It is anticipated that a large amount of the construction debris would be recycled. Residual wastes such as trash packing materials, and plastics which could require disposal at landfill. Disposal and recycling of the construction debris would be required to comply with all federal, State, and local regulations. Culver City's standard conditions of approval specifically require the following:

- Reasonable efforts shall be used to reuse and recycle construction and demolition debris, to use environmentally friendly materials, and to provide energy efficient buildings, equipment and systems. A Demolition Debris Recycling Plan that indicates where select demolition debris is to be sent shall be provided to the Building Official prior to the issuance of a demolition permit. The Plan shall list the material to be recycled and the name, address, and phone number of the facility or organization accepting the materials.

In addition, the Project would comply with Title 5: Public Works, Chapter 5.01: Solid Waste Management, of the CCMC (as required by Culver City's conditions of approval). According to the CCMC, the Project applicant would submit a construction and demolition recycling and waste assessment plan prior to issuance of the permit. Monthly reports would be submitted throughout the construction of the Project. Further, summary reports with documentation would be submitted prior to final inspection. Additionally, as discussed in Attachment A, Project Description, of this IS/MND, the Project would recycle or salvage at least 65 percent of non-hazardous construction and demolition debris. Therefore, the Project would not cause any significant impacts from conflicting with statutes or regulations related to solid waste during construction.

The remaining disposal capacity for the County's Class III landfills is estimated at approximately 167.60 million tons as of December 31, 2017, the most recent data available.[72] In addition to in-County landfills, out-of County disposal facilities may also be available to the City. Aggressive waste reduction and diversion programs on a Countywide level have helped reduce disposal levels at the County's landfills, and based on the Los Angeles County Integrated Waste Management Plan (ColWMP), the County anticipates that future Class III disposal needs can be adequately met through 2032 through a combination of landfill expansion, waste diversion at the source, out-of-County landfills, and other practices. It should also be noted that with annual reviews of demand and capacity in each subsequent Annual Report, the 15-year planning horizon provides sufficient lead time for the County to address any future shortfalls in landfill capacity.

As illustrated in **Table B-40**, *Projected Solid Waste Generated During Operation,* and based on solid waste generation factors from the California Department of Resources and Recycling and Recovery (CalRecycle), the Project could generate approximately 130 lbs/day of solid waste, or approximately 71 lbs/day of solid waste beyond existing conditions. The annual amount of solid waste generated by the Project would represent a minor amount of the estimated 167.60 million tons of remaining disposal capacity for the County's Class III landfills. As such, the solid waste generated by the Project could be accommodated by the County's available regional landfills.

CalRecycle is the California State Agency that promotes the importance of reducing waste and oversees California's waste management and recycling efforts. CalRecycle has issued jurisdiction waste diversion rate targets equivalent to 50 percent of the waste stream as expressing in pounds per person per day. Thus, it is important to note that the estimate of solid waste generated by the Project is conservative, in that the amount of solid waste that would need to be landfilled would likely be less than this forecast based on the City's implementation of solid waste diversion targets. Therefore, the Project would not cause any significant impacts from conflicting with statutes or regulations related to solid waste during operation. Impacts would be less than significant.

[72] *County of Los Angeles, ColWMP 2017 Annual Report, page 34.*

Table B-40
Projected Solid Waste Generated During Operation

Land Uses	Quantity	Factor[a]	Solid Waste Generated (lbs/day)	Solid Waste Generated (tons/day)	Solid Waste Generated (tons/year)
Existing Land Uses					
Commercial	13,000	2.5 lbs/sf/day	325	0.1625	59
		Total	**325**	**0.1625**	**59**
Proposed Land Uses					
Hotel	175 rooms	4 lbs/room/day	700	0.35	128
Restaurant	2,900 sf	0.005 lbs/sf/day	14.5	0.00725	3
		Total	**714.5**	**0.3572**	**130**
		Net Increase (Existing/Proposed)	**390**	**0.1948**	**71**

sf = square feet; lbs. = pounds.
[a] Generation factors provided by the CalRecycle website, refer to Estimated Solid Waste Generation Rates. https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates, accessed November 2019.

Source: ESA, 2019.

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

Less Than Significant Impact. All local governments, including the City, are required under Assembly Bill 939 (AB 939), the Integrated Waste Management Act of 1989, to develop source reduction, reuse, recycling, and composting programs to reduce tonnage of solid waste going to landfills. Cities must divert at least 50 percent of their solid waste generation into recycling. If the City's target is exceeded, the City would be required to pay fines or penalties from the State for not complying with AB 939. The waste generated by the Project would be incorporated into the waste stream of the City, and diversion rates would not be substantially altered. Also, California's Green Building Standards Code (CALGreen) requires the diversion of at least 65 percent of the construction waste generated during most "new construction" projects. Project construction would divert at least 65 of its construction waste consistent with the CALGreen diversion requirements.[73] The Project does not include any component that would conflict with state laws governing construction or operational solid waste diversion and would comply pursuant to local implementation requirements. Impacts would be less than significant.

[73] *CalRecycle, California Green Building Code, Frequently Asked Questions. https://www.calrecycle.ca.gov/lgcentral/library/canddmodel/instruction/faq, accessed April 10, 2020.*

XX. WILDFIRES

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

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

b. **Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?**

c. **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

d. **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

No Impact (a-d). As discussed in Response XV.a, the Project Site is not located in an area of moderate or very high fire hazard. The nearest state responsibility area is located approximately 11 miles northwest of the Project in the City of Malibu and the nearest very high fire hazard severity zone is located in an unincorporated area of Los Angeles County known as Baldwin Hills, approximately 2.3 miles northeast of the Project Site. In addition, the Project Site is surrounded by urban development and is not adjacent to any wildlands. The Project would not require the installation or maintenance of associated infrastructure that could exacerbate fire risk. The Project would be the redevelopment of an infill site within an urbanized area. No impacts would occur.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

a. **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

Less Than Significant Impact With Mitigation Incorporated. The preceding analysis does not reveal any significant unmitigable impacts to the environment. Based on these findings, the Project is not expected to degrade the quality of the environment. The existing Project Site is developed with a single-story commercial (retail) building and associated asphalt-paved surface parking lot. As discussed above in Response V.a, no impacts regarding historical resources would occur with Project implementation.

The Project would not substantially impact any scenic vistas, scenic resources, or the visual character of the area, as discussed in Section I, and would not result in excessive light or glare. The Project Site is located within an urbanized area with no natural habitat. The Project would not significantly impact any sensitive plants, plant communities, fish, wildlife or habitat for any sensitive species, as discussed in Section IV. Potentially significant impacts to nesting birds would be reduced to a less than significant level with implementation of MM-BIO-1. Adverse impacts to archaeological and human remains resources could occur. However, construction-phase procedures would be implemented in the event any important archaeological resources or human remains are discovered during grading and excavation activities, consistent with MM-CUL-1 through MM-CUL-4. Adverse impacts to paleontological resources could also occur as well. MM-GEO-2 through MM-GEO-5 provide construction-phase procedures that would be implemented in the event any important paleontological resources are discovered during grading and excavation activities.

This Project Site is not known to have any association with an important example of California's history or prehistory. The environmental analysis provided in Section III and VIII concludes that impacts related to emissions of criteria pollutants, other air quality impacts, and impacts related to climate change will be less than significant. Section X concludes that impacts related to hydrology and water quality will be less than significant after implementation of the prescribed mitigation measures, where applicable. Based on the preceding analysis of potential impacts in the responses to items I thru XIX, no evidence is presented that this Project would degrade the quality of the environment. The City hereby finds that impacts related to degradation of the environment, biological resources, and cultural resources will be less than significant with mitigation incorporated, as necessary.

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

Less Than Significant Impact With Mitigation Incorporated. A description of 35 related projects in the Project study area is provided in **Table B-41**, *List of Related Projects*, below. Related projects are mapped in **Figure B-3**, *Locations of Related Projects*. The related projects are utilized to analyze cumulative impacts associated with Project implementation. Below is a discussion of cumulative impacts associated with the Project.

Table B-41
List of Related Projects

Map No.	Project Name	Location	Description
City of Culver City			
1	West Los Angeles College Master Plan	9000 Overland Avenue	Enrollment increase of 11,675 students
2	Office and Retail Project	700-701 Corporate Pointe	281,400 square feet of general office
3	Entrada Creative Office	6161 West Centinela Avenue	281,209 square feet of general office
4	Culver West Mixed-Use Washington/Inglewood	11924 Washington Boulevard	Mixed-use development with 3,750 square feet of restaurant, 11,250 square feet of retail, and 98 residential dwelling units
5	Commercial Project	5645 Sepulveda Boulevard	Four stories of commercial uses including 4,022 square feet of general office and 38,712 square feet of medical office

Table B-41
List of Related Projects

Map No.	Project Name	Location	Description
6	Office Project	11259 Sepulveda Boulevard	4,022 square feet of general office
7	Vista Del Sol – Assistant Living Expansion	11620 Washington Boulevard	72 assisted living beds
8	Bristol Parkway Mixed Use	6201 Bristol Parkway	Mixed-use development with 20,767 square feet of restaurant, 662 residential dwelling units, and 50 live/work units
9	Shall Gas Station	11224 Venice Boulevard	Gasoline station with 3,150 square feet of convenience market uses
10	Parcel B – Culver Steps	9300 Culver Boulevard	45,000 square feet of retail/restaurant, 65,000 of general office, 10,000 square foot public plaza
11	Ivy Station Washington/National TOD	8824 National Boulevard	Mixed-use development with 10,000 square feet of high-turnover restaurant, 10,000 square feet of quality restaurant, 200 residential dwelling units, 148 room hotel, 201,000 square feet of general office, and 24,000 square feet of specialty retail
12	Synapse Office and Retail/Restaurant (ICC Site)	8888 Washington Boulevard	59,324 square feet of general office, 2,878 square feet of retail, 3,184 square feet of high-turnover restaurant
13	Market Hall – Washington Centinela	12403 Washington Boulevard	21,605 square feet of dining, 5,230 square feet of retail
14	Culver City Innovation Plan Comprehensive Plan	9336 Washington Boulevard	345,007 square feet of production space
15	ECF Mixed-Use TOD	8700 Washington Boulevard	199 residential dwelling units, 17,250 square feet of commercial live/work, 5,000 square feet of restaurant, 17,750 square feet of retail
16	Federal Express Mixed-Use TOD	3710 Robertson Boulevard	141 residential dwelling units, 64,200 square feet of creative office, 30,042 square feet of retail/restaurant
City of Los Angeles			
17	Apartment Project	6733 Sepulveda Boulevard	176 residential dwelling units, 33,484 square feet of general office
18	Charter Middle School	8540 South La Tijera Boulevard	350 middle school students
19	Office Project	12575 Beatrice Street	199,500 square feet of general office
20	ICEF Vista Charter School Expansion	4471 Inglewood Boulevard	800 high school students
21	Jandy Creative Office	5405 South Jandy Place	93,950 square feet of creative office
22	Ocean Charter School	12870 West Panama Street	532 elementary/middle school students
23	Office Project	11811 South Teale Street	10,925 square feet of general office
24	Apartment Project	6711 Sepulveda Boulevard	180 residential dwelling units

Table B-41
List of Related Projects

Map No.	Project Name	Location	Description
25	The Palms Mixed-Use Project	10601 Washington Boulevard	132 residential dwelling units, 26,000 square feet of general office, 18,000 square feet of retail
26	LMU Master Plan	1 LMU Drive	Enrollment of 7,800 students
27	Office Project	12777 West Washington Boulevard	49,950 square feet of general office
28	Marina Island	5000 Beethoven	156 residential dwelling units
29	Coffee Bean & Tea Leaf	6024 West Jefferson Boulevard	53,762 square feet of manufacturing, 50,775 square feet of warehousing, 90,054 square feet of general office, 2,200 square foot coffee shop
30	Jefferson and La Cienega Project	3321, 3351 South La Cienega Boulevard	1,218 residential dwelling units, 200,000 square feet of general office, 50,000 square foot supermarket, 30,000 square feet of retail, 20,000 square feet of restaurant
31	Howard Hughes Center	6801 Center Drive	600 residential dwelling units, 488,659 square feet of remaining development potential
32	Apartment Project	11612 West Culver Boulevard	49 residential dwelling units, 1,700 square feet of restaurant

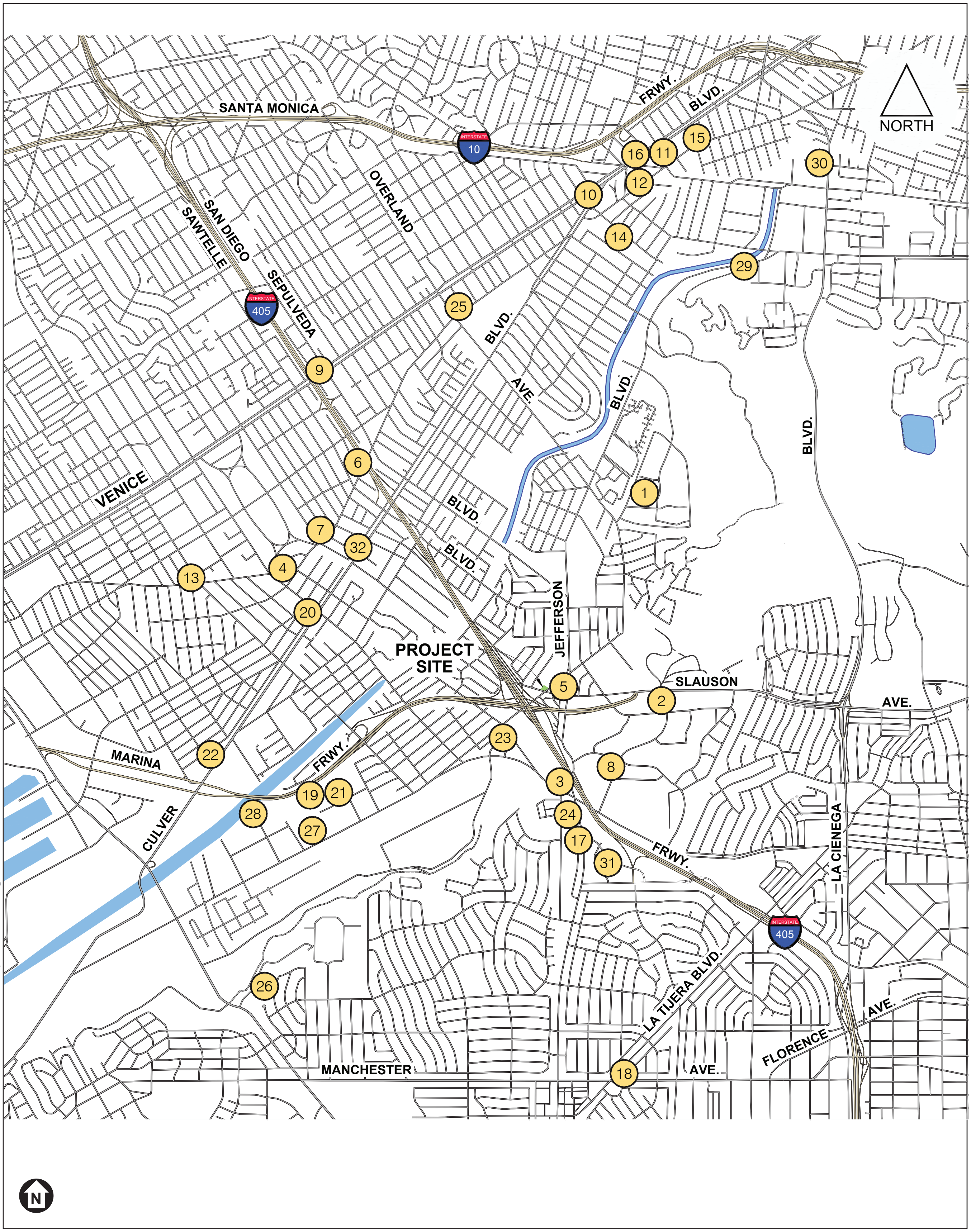
Source: Crain & Associates, 2020.

Aesthetics

Development of the Project in conjunction with the related projects would result in an incremental intensification of land uses in the heavily urbanized area of Culver City. The Project has been designed with the goal of bringing hotel and restaurant uses within a commercial corridor. New development and concentration of development, as are some of the related projects, is consistent with the objectives of the General Plan, which, under the designation for General Corridor, emphasizes the development of community serving retail, office, and service uses along major corridors.

The topography surrounding the Project Site is flat with no notable ocean, mountain or other scenic vistas that would be affected by the Project. In addition, although the Project proposes building heights up to 56 feet in height (with the elevator shaft reaching 69 feet and 6 inches in height), the immediate surrounding area consists of a range of low- to mid-rise buildings. Related projects would reach similar heights as the Project and surrounding area. As such, given the flat topography in the area, the proposed buildings of the Project and related projects would not substantially obstruct views not already obscured or blocked by other buildings and structures in the area. Further, the Project and related projects are not located in a scenic resource area or area with protected views designated by Culver City.

The Project Site and related projects are not located in the vicinity of a City or State-designated scenic highway and would, therefore, not damage any scenic resources located within a state scenic highway. In addition, the Project and related projects would be located within an urbanized area within Culver City. As related projects are located in an urban area, consistency with applicable zoning and other regulations governing scenic quality would be assessed on a project specific basis.



LAX18xxxx\D181251.01 - 11469 Jefferson Blvd MND\05 Graphics-GIS-Modeling\Illustrator

SOURCE: Craine & Associates, 2019

11469 Jefferson Boulevard Project

Figure B-3
Locations of Related Projects

ESA

Cumulative light and glare effects would be consistent with the existing urban environment, which is characterized by high ambient light levels. Because lighting, including illuminated signage and outdoor lighting would be subject to regulations contained within the CCMC, compliance would ensure that impacts regarding lighting for the Project and related projects would not cause a significant cumulative adverse effect on existing uses.

Building plans for new related projects would be reviewed on a case-by-case basis by the City Building and Safety Division to ensure that new construction would avoid the use of glare-prone materials. For new development projects, the use of high-performance materials such as tinted non-reflective glass or other non-reflective surface materials, cladding, and trim is required. With the implementation of standard City building requirements, cumulative glare impacts would be less than significant.

As indicated in the impact analysis for the Project, the Project would not significantly increase the shading of adjacent shadow-sensitive uses based on the significance thresholds. Therefore, the Project would not contribute to any cumulative shading of shadow-sensitive uses, and cumulative shading impacts would be less than significant.

Agricultural and Forest Resources

As indicated in the impact analysis for the Project, the Project Site is located in a highly urbanized area of Culver City and is currently developed with a single-story commercial (retail) building and an associated asphalt-paved surface parking lot. No agricultural or forestry uses are located on the Project Site. In addition, the Project Site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring Program, is not zoned for agriculture or forestry use, and is not under a Williamson Act contract. The same is likely true of all the related projects given their location within urbanized Culver City and the greater Los Angeles area. However, even if some of the related projects are exceptions to the above, the Project would not convert farmland, forest land, or designated Farmland, would not conflict with existing zoning for agricultural or forestry use, and would not conflict with a Williamson Act contract. Therefore, the Project would not contribute considerably to any cumulative impacts to agricultural and forestry resources, and cumulative impacts would be less than significant.

Air Quality

There are a number of related projects in the Project area that have not yet been built or are currently under construction. Since the applicant has no control over the timing or sequencing of the related projects, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be speculative. The SCAQMD recommends that Project-specific construction air quality impacts be used to determine the potential cumulative impacts to regional air quality.

With regard to Project operations, the SCAQMD's approach for assessing cumulative impacts related to operations or long-term implementation is based on attainment of ambient air quality standards in accordance with the requirements of the federal and State Clean Air Acts. As discussed earlier, the SCAQMD has developed a comprehensive plan, the AQMP, which addresses the region's cumulative air quality condition.

A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or state non-attainment pollutant. Because the Los Angeles County portion of the Air Basin is currently in nonattainment for ozone, NO_2, PM_{10}, and $PM_{2.5}$, related projects could exceed an air quality standard or contribute to an existing or projected air quality exceedance. Cumulative impacts to air quality are evaluated under two sets of thresholds for CEQA and the SCAQMD. In particular, Section 15064(h)(3) of the CEQA

Guidelines provides guidance in determining the significance of cumulative impacts. Specifically, Section 15064(h)(3) states in part that:

> *"A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency…"*

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the Project's incremental contribution to cumulative air quality impacts is determined based on compliance with the SCAQMD adopted 2012 AQMP. The Project would not conflict with or obstruct implementation of AQMP and would be consistent with the growth projections in the AQMP.

Nonetheless, SCAQMD no longer recommends relying solely upon consistency with the AQMP as an appropriate methodology for assessing cumulative air quality impacts. The SCAQMD recommends that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality.

As illustrated in Tables B-1 and B-2, regional burden emissions calculated for Project construction and operations are less than the applicable SCAQMD daily significance thresholds, which are designed to assist the region in attaining the applicable State and national ambient air quality standards. These standards apply to both primary (criteria and precursor) and secondary pollutants (ozone). Although the Project Site is located in a region that is in non-attainment for ozone and PM_{10}, the emissions associated with the Project would not be cumulatively considerable as the emissions would fall below SCAQMD daily significance thresholds. In addition, the Project would be consistent with the AQMP, which is intended to bring the Basin into attainment for all criteria pollutants. Therefore, cumulative impacts on air quality would be less than significant.

Biological Resources

With regard to cumulative biological resources impacts, the Project Site is located in an urbanized area and like the Project, other related projects would mostly occur on previously disturbed, urbanized land. The Project does not contain sensitive biological resources or habitat, including wetlands, and is not part of a wildlife corridor and, therefore, could not contribute to a cumulative effect in these regards. The Project would fully comply with City ordinances pertaining to tree removal, resulting in no net loss of trees from project implementation. Further, potentially significant impacts to nesting birds would be reduced to a less than significant level with implementation of the prescribed mitigation (MM-BIO-1). Related projects would also be required to comply with the City's street tree replacement requirements and implement mitigation for impacts to nesting birds. Therefore, cumulative impacts to biological resources would be less than significant.

Cultural Resources

Impacts related to cultural resources are site-specific and as such, are assessed on a site-by-site basis. As discussed previously, implementation of MM-CULT-1 through MM-CULT-5 would ensure the Project does not cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines and that the Project does not adversely affect human remains. It is anticipated that comparable implementation of similar mitigation measures and/or compliance with existing regulations would be incorporated into the approval of each related project. Further, the historic setting in the area around the Project Site is already eroded by contemporary development. Based on the above, the Project would not contribute to cumulatively considerable cultural resources impacts.

Energy

Development of the Project and related projects would increase the use of electricity, natural gas, and petroleum-based fuels. As discussed above, construction and operation of the Project would not result in wasteful, inefficient, or unnecessary consumption of energy and would not increase the need for new energy infrastructure. Related projects would similarly not be anticipated to generate a substantial increase in the demand for electricity and natural gas. In addition, as with the Project, related projects would be expected to incorporate applicable Title 24 standards and CalGreen requirements. Furthermore, as with the Project, the related projects are also expected to benefit from statewide efforts toward increasing the fuel economy standards of vehicles. Therefore, although the Project and related project development would result in the use of electricity and natural gas resources during construction and operation of the Project, the use of electricity and natural gas would be on a relatively small scale and would be consistent with the SCE and SoCalGas service areas. With regard to transportation fuel, according to the U.S. Energy Information Administration's International Energy Outlook 2017, the global supply of crude oil, other liquid hydrocarbons, and biofuels is expected to be adequate to meet the world's demand for liquid fuels through 2040, including those of the project and related projects. Therefore, the Project's contribution to cumulative impacts associated with energy would be less than cumulatively considerable.

Geology and Soils

Geological and geotechnical impacts are defined by site-specific conditions for the Project and related projects and are, therefore, typically confined to contiguous properties or to a localized area in which concurrent construction projects in close proximity could be subject to the same fault rupture system or other geologic hazard, or exacerbate erosion impacts. The Project Site is not underlain by an active earthquake fault and, thus, would not contribute to cumulative seismic rupture impacts. Although seismic shaking would occur on the Project Site as well as related project sites, applicable regulatory requirements require consideration of seismic loads in structural design for all related projects. As such, cumulative impacts associated with ground shaking would be less than significant. The Project Site is located within a State-designated hazard zone for liquefaction. However, with implementation of MM-GEO-1, which provides project-specific design parameters and recommendations to mitigate the effects of liquefaction, impacts would be less than significant. In addition, the Project Site is not prone to landslide hazards. As such, the Project would not cumulatively contribute to liquefaction or landslide impacts. While the loss of topsoil among the Project and related projects during construction could result in cumulative erosion impacts, the Project and related projects would be required to implement applicable local, regional and State regulations for grading and excavations during construction, including SWPPP requirements. As with the Project, related projects would be required to comply with approved geotechnical recommendations, the Project's contribution to potential cumulative impacts from lateral spreading, subsidence, liquefaction, collapse, and expansive soils would also be less than significant. In addition, the Project and related project sites are located in a highly urbanized area and would connect to existing wastewater infrastructure. Thus, the Project and related projects would not need to use septic tanks or alternative waste disposal systems and, as such, no cumulative impacts relative to waste disposal capacity would occur. With regard to paleontological resources, implementation of MM-GEO-2 through MM-GEO-5 would ensure that the Project does not directly or indirectly destroy a unique paleontological resource. It is anticipated that comparable implementation of similar mitigation measures and/or compliance with existing regulations would be incorporated into the approval of each related project. Because the Project would not contribute considerably to geology and soils impacts, the Project's cumulative geology and soil impacts would be less than significant.

Greenhouse Gas Emissions

GHG emissions impacts are cumulative. As such, the impact discussions included above in Responses VIII.a-b, address the Project's potential to result in a cumulatively considerable GHG impact. As discussed therein, impacts would be less than significant.

Hazards and Hazardous Materials

Many of the related projects would use, handle, store, and/or transport hazardous materials or require demolition of structures containing such materials. As with the Project, the related projects would be required to use and store all potentially hazardous materials in accordance with the manufacturers' instructions and handle materials in accordance with federal, state, and local health and safety standards and regulations. Like for the Project, compliance with existing standards and regulations would ensure that the related projects would not result in significant impacts to the public or the environment through the routine transport, storage, use, disposal, or handling of hazardous materials. Some of the related projects may be on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, like the Project, each related project would be required to comply with existing Federal, State, and local regulations related to hazardous materials sites, including cleanup sites, and hazardous materials generators. In addition, as with the Project, many of the related projects would also be subject to CEQA review, the need to prepare hazardous materials documentation (i.e., Phase I ESA), and the identification of mitigation measures necessary to remediate any hazardous materials concerns. Therefore, cumulative impacts with respect to creating a hazard through reasonably foreseeable upset and accident conditions involving hazardous materials would be less than significant.

Like the Project, one or more of the related projects could potentially be located within 0.25 mile of an existing school. However, with implementation of mitigation measures, the Project would not generate hazardous emissions. As such, the Project would not contribute considerably to any cumulative emission of hazardous materials within 0.25 mile of a school.

One or more of the related projects could potentially be located within the vicinity of an airport or private airstrip, or occur within a wildlands area potentially subject to wildland fires, and thus could potentially result in a safety hazard for people residing or working the Project area. However, as the Project would not be located within the vicinity of an airport or private airstrip, or within a wildlands area potentially subject to wildfires, it would not contribute considerably to any such potential cumulative impacts.

Like the Project, most if not all of the related projects are located in an established urban area with a fully developed roadway network, with multiple routes available between emergency responders and the project sites. While the Project and some of the related projects would not be located along designated disaster routes, some of the related projects could potentially be located along such routes such that their construction activities could potentially disrupt traffic on such routes during an emergency. However, related projects would be required to implement a Construction Traffic Management Plan to minimize construction traffic impacts and ensure continued emergency access on surrounding streets. Furthermore, while some of the related projects could potentially modify existing local access routes or otherwise close existing street segments, the Project would not, and any modifications of existing local access routes or closures of street segments by the related projects would be subject to Culver City or City of Los Angeles review to ensure that emergency access is maintained. Therefore, the Project and the related projects would not impair implementation or physical interfere with an adopted emergency response plan or emergency evacuation plan, and cumulative impacts in this regard would be less than significant.

Hydrology and Water Quality

The related projects would potentially increase the volume of stormwater runoff and contribute to pollutant loading in stormwater runoff within the local vicinity of the Project Site. However, as with the Project, the related projects are located within the highly urbanized areas, which are largely characterized by existing buildings and paved surfaces with limited landscaped areas. Accordingly, the potential to generate a notable amount of new impermeable surfaces is limited. Pursuant to the City's LID stormwater requirements, related projects would be required to capture and treat runoff flow during storm events similar to the Project. Further, the related projects would be subject to State NPDES permit requirements for both construction and operation. Each project greater than one-acre in size would be required to develop a SWPPP and would be evaluated individually to determine appropriate BMPs and treatment measures to avoid or minimize impacts to water quality. Smaller projects would be minor infill projects with drainage characteristics similar to existing conditions, with negligible impacts. In addition, the Culver City Department of Public Works reviews all construction projects on a case-by-case basis to ensure that sufficient local and regional drainage capacity is available. Thus, compliance with applicable regulatory requirements would avoid significant impacts on drainage/flooding conditions and the quality of water reaching the public drainage system. Cumulative impacts to hydrology and water quality would be less than significant.

Land Use and Planning

As indicated under the impact analysis for the Project, the Project would represent infill development that would provide uses in keeping with the commercial character of the surrounding area. In addition, the proposed development would occur within the boundaries of the Project Site as it currently exists. Therefore, the Project would not contribute considerably to any potential cumulative physical dividing of an established community, and cumulative impacts would be less than significant.

As discussed above, no amendment to the Project Site's existing general plan designations are proposed by the Project. No changes to the Project Site's existing Zoning designations are proposed by the Project. As with the Project, related projects would be reviewed on a case-by-case basis to ensure consistency with existing land use policies and regulations. Where inconsistencies occur, it is anticipated that appropriate actions would be undertaken to ensure that land use impacts would be less than significant. As the Project would result in less than significant land use and planning impacts, the project's contribution to cumulative land use and planning impacts would be less than cumulatively considerable.

Mineral Resources

As discussed above, the Project would have no impact on mineral resources. Because of the large number and broad extent of oil drilling districts and State-designated oil fields in the greater area, some of the related projects may be located within these designated areas. However, with implementation of new methodologies, such as slant drilling, related projects would not substantially reduce extraction capabilities, impede exploratory operations, or would cumulatively result in the significant loss of availability of oil resources. Regardless, because the Project would have no incremental contribution to the potential cumulative impact on mineral resources, the Project would have no cumulative impact on such resources.

Noise

The geographic context for the analysis of cumulative noise impacts depends on the impact being analyzed. Noise is by definition a localized phenomenon, and sound reduces significantly in magnitude as the distance from the source increases. As such, only projects expected to occur in the immediate Project area likely would contribute to cumulative noise impacts.

Construction Noise

Noise from construction of the Project and related projects would be localized, thereby potentially affecting areas immediately within 500 feet from either/both construction sites. There is one related project in the surrounding area within approximately 500 feet of the Project Site (Related Project No. 5) that could have construction concurrent with the Project. All other related projects with future potential concurrent construction are greater than 500 feet from the Project Site and would not contribute substantially to cumulative construction noise impacts. Because the timing of the construction activities for all cumulative projects cannot be defined and are beyond the control of the City and the applicant, quantitative analysis that assumes multiple, concurrent construction projects would be speculative. The cumulative noise levels would be intermittent, temporary and would cease at the end of the respective construction periods. It is not likely that maximum construction noise impacts from the cumulative projects would occur simultaneously, as sound levels vary from day to day depending on the construction activity performed that day and its location on the development site. Due to distance attenuation and intervening structures, construction noise from one site would not result in a noticeable increase in noise at sensitive receptors near the Project Site, which would preclude a cumulative noise impact. Furthermore, related projects would be required to comply with City noise standards and implement mitigation measures for identified significant impacts, as required under CEQA, similar to the Project. As such, cumulative impacts associated with construction noise would be less than significant.

Operational Noise

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to the Project and other projects in the Project vicinity. Therefore, cumulative traffic-generated noise impacts have been assessed in the analysis above based on the contribution of the Project to the future cumulative base traffic volumes in the Project vicinity. As shown in Table B-19, above, the maximum cumulative noise increase from the Project plus related Project traffic would be 1.1 dBA CNEL, which would occur along Sepulveda Boulevard, between Slauson Avenue and Centinela Avenue. This increase in sound level would not exceed the significance thresholds of an increase of 5 dBA CNEL. As such, with respect to roadway noise, there is no potential for the Project to result in a cumulatively considerable contribution when considered together with related project traffic volumes.

The Project's fixed mechanical equipment and other Project features (i.e., parking and loading areas) would be shielded from adjacent uses and/or located within the interior of the building such that noise levels would be less than significant at the property line. Noise levels for similar equipment and facilities for each related project would be subject to City noise ordinance requirements. For this reason, on-site noise produced by any related project would not result in a substantial or noticeable additive increase to project-related noise levels. As the Project's composite stationary-source and operational impacts would be less than significant, composite stationary-source and operational noise impacts attributable to cumulative development would also be less than significant.

Vibration

Due to the rapid attenuation characteristics of ground-borne vibration and distance of the related projects to the Project Site, there is no potential for the Project to result in a cumulatively considerable contribution, when considered together with the related projects, to cumulatively significant construction-related or operational impacts.

Population and Housing

The project would not generate a new residential population as no residential uses are proposed. The increase in area population and employment resulting from the project and the related projects would have a less than significant cumulative impact as these increases are anticipated to be within SCAG, Culver City, and City of Los

Angeles Subregion growth forecasts. Related projects in combination with the project would not result in the cumulative loss or reduction of housing. Therefore, cumulative impacts with respect to population and housing are considered to be less than significant.

Public Services

Fire Protection

The related projects would cumulatively generate, in conjunction with the Project, the need for additional fire protection and emergency medical services. Although there would be cumulative demand on fire protection services, cumulative impacts on fire protection and medical services would be reduced through regulatory compliance and site specific design and safety requirements, similar to the Project. All related projects would be subject to review by the CCFD and/or Los Angeles Fire Department (LAFD) for compliance with Fire Code and Building Code regulations related to emergency response, emergency access, fire flow, and fire safety. Also, similar to the Project, the related projects would be required to implement a Construction Traffic Management Plan to minimize temporary lane closures and impacts to traffic, access, and emergency response times during the construction period. Further, project-by-project traffic mitigation, multiple fire station response, and system wide upgrades to improve response times, and other requirements imposed by the CCFD and LAFD are expected to help support adequate response times. Even in consideration of the related projects, if a new fire station, or the expansion, consolidation, or relocation of a station was determined warranted, and was foreseeable, the Project study area is highly developed, and the site of a fire station would likely be an infill lot that would likely be less than an acre in size. Development at this scale is unlikely to result in significant unavoidable impacts, and projects involving the construction or expansion of a fire station are typically addressed pursuant to CEQA through categorical exemptions or negative declarations. Further, the protection of public safety is the first responsibility to local government, and local officials have an obligation to give priority to the provision of adequate public safety services, which are typically financed through the City general funds. Accordingly, the need for additional fire protection services as part of an unplanned fire station at this time is not an environmental impact that the project is required to mitigate. Therefore, the Project would not result in a cumulatively considerable contribution to cumulative impacts associated with the construction of new fire facilities.

Police Protection

The related projects would cumulatively generate, in conjunction with the Project, the need for additional police protection services. It is expected that the related projects (particularly those of a larger nature) would be subject to review by the CCPD and/or the Los Angeles Police Department (LAPD) on a project-by-project basis to ensure that sufficient security measures are implemented to reduce potential impacts to police protection services. Many of the related projects would also be expected to provide on-site security, personnel, and/or design features for their residents and patrons per standard development practices for the given uses. Also, similar to the Project, the related projects would be required to implement a Construction Traffic Management Plan to minimize temporary lane closures and impacts to traffic, access, and emergency response times during the construction period. Even in consideration of the related projects, if a new police station, or the expansion, consolidation, or relocation of a station was determined warranted, and was foreseeable, the Project study area is highly developed, and the site of a police station would likely be an infill lot that would likely be less than an acre in size. Development at this scale is unlikely to result in significant unavoidable impacts, and projects involving the construction or expansion of a police station are typically addressed pursuant to CEQA through categorical exemptions or negative declarations. Further, the protection of public safety is the first responsibility to local government, and local officials have an obligation to give priority to the provision of adequate public safety services, which are typically financed through the City general funds. Accordingly, the need for additional police protection services as part of an unplanned police station at this time is not an environmental impact that the Project is required to mitigate. Therefore, the Project would not make a cumulatively considerable contribution to cumulative impacts associated with the construction of new police facilities.

Schools

Pursuant to California Government Code Section 65995, the payment of developer fees under the provisions of SB 50 address the impacts of new development on school facilities serving that development. Compliance with the provisions of Section 65995 is deemed to provide full and complete mitigation of school facilities impacts. The Project as well as the related projects would be required to pay these fees as applicable. Therefore, the full payment of all applicable school fees would reduce potential cumulative impacts to schools to less than significant levels.

Parks

New related projects with proposed residential uses are anticipated to provide on-site open space and recreational amenities to meet the needs of projected residents. In addition to the provision of on-site recreational amenities for related residential uses of related projects, the implementation of required developer paid parks and recreational fees would allow for land purchase and expansion of existing facilities. As such, related projects are not anticipated to result in substantial physical deterioration or accelerated deterioration of recreational and parks facilities. Cumulative impacts to parks would be less than significant.

Other governmental services

The related projects would cumulatively generate, in conjunction with the Project, the need for additional library services. The related projects would generate revenue to the City's general funds that could be used to fund library expenditures as necessary to offset the cumulative incremental impact on library services. Similar to the Project, the related projects would pay applicable development fees based upon the projected population of the individual developments. The full payment of all applicable library fees would reduce potential cumulative impacts to libraries to less than significant levels.

The related projects' residents, employees, and visitors would utilize and, to some extent, impact the maintenance of public facilities, including roads. Construction activities would result in a temporary increased use of the surrounding roads. However, the use of such facilities would be typical of that experienced for the highly urbanized Project vicinity. Similar to the Project, the related projects would need to pay applicable development impact fees of Culver City or the City of Los Angeles, as applicable. The full payment of all applicable fees would reduce potential cumulative impacts to other governmental services/facilities to less than significant levels.

Recreation

Refer to discussion under Parks, above.

Transportation

Cumulative construction traffic impacts (e.g., intermittent reduction in roadway and intersection operating conditions) are typically considered short-term adverse, but not significant impacts. The Project would result in a less than significant traffic impact during construction with the implementation of a Construction Traffic Management Plan which would include identification of a haul route, notification and safety procedures regarding potential temporary lane closures and detours, and requirements for traffic controls and flagmen during construction. Each related project would similarly be required to implement a Construction Traffic Management Plan, whether in the City of Culver City, unincorporated Los Angeles County, or the City of Los Angeles, and would similarly result in less than significant short-term construction traffic impacts.

Cumulative operational traffic impacts (e.g., permanent reduction in roadway and intersection operating conditions) were quantified and evaluated at seven (7) study intersections. The future (2024) service level conditions presented in Table B-31, under Response XVII.a, represent a combination of estimated trips from all related projects, as well as incremental annual growth, and are cumulative in nature. As shown in Table B-31, cumulative operational traffic impacts would be less than significant with implementation of mitigation.

The regional transportation analysis, including transit facilities, is based on CMP procedures that have been developed to address countywide cumulative growth impacts on regional transportation facilities. The CMP Guidelines contain procedures for monitoring land use development levels and transit system performance by local jurisdictions and Metro, and are used to inform planning of infrastructure improvements to meet future needs. As indicated in the discussion of Project impacts above, the Project would not have a significant impact on transit facilities and the incremental impacts on the regional public transit system would not be cumulatively considerable. Also, while the Project would contribute trips to the freeway system, Project traffic did not trigger the screening thresholds at the ramps or freeway segments most likely to be used by Project traffic. As such, the Project would not contribute cumulatively considerable traffic to the freeway system.

With regard to impacts to pedestrian and bicycle facilities as well as hazards due to design features and emergency access, the Project would not result in a significant impact. Furthermore, each related project would be reviewed by the City during the development review process to ensure compliance with the City's requirements relative to the provision of pedestrian and bicycle facilities, ingress and egress design, and safe streets. Therefore, cumulative impacts related to these issues would be less than significant.

As discussed above under Response to Checklist Question XVII.b, under Culver City's new criteria and guidelines, the first step in performing a VMT analysis for a land use project is to perform a VMT screening analysis. Given the Project's proximity (approximately one block) to the Westfield-Culver City Transit Center, the City considers the Project site to be in a key TPA. Therefore, based on the key TPA screening threshold, the Project is presumed to have a less-than-significant VMT impact and no further VMT analysis is required. Accordingly, Project-level VMT impacts would be less than significant and the Project's contribution to cumulative VMT impacts would not be cumulatively considerable. Furthermore, as discussed in sub-sections III, Air Quality, and VIII, Greenhouse Gas Emissions, the Project would be consistent with, and would not conflict with, applicable plans, policies or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Finally, all related projects are required to consider consistency with CEQA Guidelines section 15064.3. Consistency with CEQA Guidelines section 15064.3 would be performed on a project-by-project basis and TDM measures would be implemented, as necessary, on a project-by-project basis to reduce VMT impacts consistent with CEQA Guidelines section 15064.3.

Tribal Cultural Resources

Impacts related to tribal cultural resources would be site-specific and as such, are assessed on a site-by-site basis. As discussed previously, implementation of MM-CULT-2 would ensure the Project does not cause a significant impact on tribal cultural resources. It is anticipated that comparable implementation of similar mitigation measures and/or compliance with existing regulations would be incorporated into the approval of each related project. Thus, the Project would not contribute to cumulatively considerable cultural resources impacts.

Utilities and Service Systems

Water Supply

Development of the Project in conjunction with the related projects would cumulatively increase water demand on the existing water infrastructure system. However, like the proposed Project, each related project would be subject to City review to assure that the existing public utility facilities would be adequate to meet the domestic and fire water demands of each project. Furthermore, GSWC, WBMWD and the Los Angeles Department of Water and Power (LADWP) conduct ongoing evaluations to ensure facilities are adequate, and require infrastructure system improvements. Lastly, any related project meeting the size criteria set forth in SB 610 would be required to have a WSA prepared demonstrating that water supplies are adequate to serve the project during normal, single-dry, and multiple dry years over at least a 20-year period. Therefore, cumulative impacts on the water infrastructure and system and water supplies would be less than significant.

Wastewater

Implementation of the Project in combination with the related projects and other projects within the service area of the HWRP would generate additional wastewater that would be treated at HWRP. On average, 275 million gallons of wastewater enters the HWRP on a typical dry weather day. Because the amount of wastewater entering the HWRP can double on rainy days, the HWRP was designed to accommodate both dry and wet weather days with a maximum daily dry weather flow of 450 mgd and peak wet weather flow of 800 mgd. As such, the HWRP's current remaining treatment capacity for dry weather flows is approximately 175 mgd on an average day. The City of Los Angeles has adopted an Integrated Resources Plan (IRP) that shows that the HWRP will be able to accommodate growth within its service area to the year 2025.[74] In addition, the potential need for the related projects to upgrade sewer lines to accommodate their wastewater needs is site-specific and there is minimal, if any, direct cumulative relationship between the development of the Project and the related projects. Therefore, no significant cumulative sewer infrastructure impacts are anticipated from the development of the Project and the related projects. Therefore, cumulative impacts on sewer service would be less than significant.

Stormwater Drainage

Refer to discussion under Hydrology and Water Quality, above.

Electricity, Natural Gas, and Telecommunications

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

Solid Waste

Solid waste disposal is a regional issue addressed by regional agencies, in this case the County of Los Angeles. The remaining disposal capacity for the County's Class III landfills is estimated at approximately 167.60 million tons as of December 31, 2017, the most recent data available. Thus, sufficient capacity would be available to meet the demand created by related projects. As discussed above, the Project impacts on solid waste disposal would be less than significant. In addition, similar to the Project, related projects would be required to comply with applicable regulations related to solid waste, including those pertaining to waste reduction and recycling. Detailed components regarding waste reduction and recycling would be finalized for each related project on a project-by-project basis at the time of plan submittal to the City for the necessary building permits and reviews conducted pursuant to checklist items in the City's Building Safety Division Mandatory Green Building Program, as applicable. As such, impacts to the solid waste system from cumulative development would be less than significant and thus, the Project would not contribute to a cumulatively significant solid waste impact.

[74] *Los Angeles Department of Public Works, City of Los Angeles Integrated Resources Plan – Implementation Strategy, September 2006.*

Wildfires

As previously discussed, the Project Site is surrounded by urban development and is not adjacent to any wildlands. The nearest state responsibility area is located approximately 11 miles northwest of the Project in the City of Malibu and the nearest very high fire hazard severity zone is located in an unincorporated area of Los Angeles County known as Baldwin Hills, approximately 2.3 miles northeast of the Project Site. Similarly, related projects in the vicinity of the project site are also not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Therefore, cumulative impacts related to wildfire would be less than significant. As a result, the Project would not contribute to cumulative wildfire impacts.

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

Less Than Significant Impact With Mitigation Incorporated. Based on the analysis of the Project's impacts in the Responses I thru XX, there is no indication that this Project could result in substantial adverse effects on human beings. While there would be a variety of effects during construction related to air quality, noise, and traffic, these impacts would be less than significant based on compliance with applicable regulatory requirements and established impact thresholds. Long-term effects would include increased vehicular traffic, traffic-related noise, periodic on-site operational noise, minor changes to on-site drainage, and changing of the visual character of the site, with a majority of these impacts affecting adjacent roadway segments and intersections. The analysis herein concludes that direct and indirect environmental effects would be less than significant. Based on the analysis in this Initial Study, the City finds that direct and indirect impacts to human beings will be less than significant with mitigation incorporated, as necessary.

XXII. EARLIER ANALYSIS

None.

REFERENCES

1. *Shade/Shadow Report* prepared by ESA, June 2019.
2. *Air Quality Technical Report* prepared by ESA, November 2020.
3. *Cultural Resources Assessment* prepared by ESA, June 2019.
4. *Energy Technical Report* prepared by ESA, November 2020.
5. *Geotechnical Engineering Investigation* prepared by Geotechnologies, Inc., dated November 7, 2017.
6. *Greenhouse Gas Technical Report* prepared by ESA, November 2020.
7. *Noise and Vibration Technical Report* prepared by ESA, November 2020.
8. *Remedial Action Plan*, prepared by Stantec, dated July 15, 2014.
9. *Traffic Impact Study for the Jeff Hotel Project Proposed at 11469 Jefferson Boulevard, Culver City,* prepared by Crain & Associates, October 2020.
10. Culver City Fire Department Correspondence, December 2020.
11. Culver City Police Department Correspondence, November 2020.
12. Native American Tribal Consultation Letters, prepared by Culver City.

ATTACHMENT C
MITIGATION MONITORING PROGRAM

The following environmental mitigation measures and project design features (PDFs) shall be incorporated into the Project development as conditions of approval. The Project applicant shall secure a signed verification for each of the mitigation measures and PDFs which indicate that mitigation measures or PDFs have been complied with and/or implemented, and fulfills the City environmental and other requirements (Public Resources Code Section 21081.6.). Final clearance shall require all applicable verification as included in the following table. The City of Culver City will have primary responsibility for monitoring and reporting the implementation of the mitigation measures and PDFs. The mitigation measures and PDFs have been identified by impact category and numbered for ease of reference.

MITIGATION MONITORING PROGRAM
P2019-0194-SPR; P2019-0194-CUP; and P2019-0194-AUP

Project Design Feature/Mitigation Measure	Implementing Action, Condition or Mechanism	Method of Verification	Timing of Verification	Responsible Persons
AIR QUALITY				
PDF-AIR-1: Construction Features: Construction equipment operating at the Project Site shall be subject to a number of requirements. These requirements shall be included in applicable bid documents and successful contractor(s) must demonstrate the ability to supply such equipment. Construction measures would include, but are not limited to the following: ▪ The Project shall require all off-road diesel construction equipment greater than 50 horsepower (hp) that will be used an aggregate of 40 or more hours to meet the U.S. Environmental Protection Agency Tier 4 Final off-road emission standards. A copy of each unit's certified tier specification or model year specification and California Air Resources Board or South Coast Air Quality Management District operating permit (if applicable) shall be available upon request at the time of mobilization of each applicable unit of equipment. This construction feature would allow for a reduction in diesel particulate matter and NO_X emissions during construction activities.	Condition of Approval	Plan Check Notes and Field Inspections	Prior to issuance of Building Permits	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division

MITIGATION MONITORING PROGRAM
P2019-0194-SPR; P2019-0194-CUP; and P2019-0194-AUP

Project Design Feature/Mitigation Measure	Implementing Action, Condition or Mechanism	Method of Verification	Timing of Verification	Responsible Persons
PDF-AIR-2: Design Elements: In accordance with CALGreen Building Standards, the Project shall incorporate the following mandatory energy and emission saving features: ▪ The Project shall recycle and/or salvage at least 65 percent of non–hazardous construction and demolition debris. ▪ The Project shall include easily accessible recycling areas dedicated to the collection and storage of non-hazardous materials such as paper, corrugated cardboard, glass, plastics, metals, and landscaping debris (trimmings). ▪ The Project shall include efficient heating, ventilation, and air conditioning (HVAC) systems. ▪ The Project shall install low-flow water fixtures that are consistent with U.S. Environmental Protection Agency WaterSense specifications.	Condition of Approval	Plan Check Notes and Field Inspections	Prior to issuance of Building Permits	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division
PDF-AIR-3: Voluntary Design Elements: The Project shall incorporate many operational energy and emission saving features including the following: ▪ The Project design would meet criteria for the LEED Silver or equivalent certification level. ▪ The Project shall install a solar photovoltaic power system equivalent to at least 1 percent of the Project's electricity demand and at least 1 kilowatt (kW) of solar photovoltaics per 10,000 square feet of new development.	Condition of Approval	Plan Check Notes and Field Inspections	Prior to issuance of Building Permits	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division
<u>**BIOLOGICAL RESOURCES**</u> **MM-BIO-1:** The Applicant shall be responsible for the implementation of mitigation to reduce impacts to migratory and/or nesting bird species to below a level of significance through one of two ways. Either: (1) Vegetation removal activities shall be scheduled outside the nesting season	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Demolition, Grading and Building Permits	Culver City Planning

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Project Design Feature/Mitigation Measure	**Implementing Action, Condition or Mechanism**	**Method of Verification**	**Timing of Verification**	**Responsible Persons**
which runs from February 15 to August 31 to avoid potential impacts to nesting birds. This would insure that no active nests are disturbed; or (2) If avoidance of the avian breeding season (February 15 through August 31) is not feasible, then: (a) A qualified biologist shall conduct a preconstruction nesting bird survey within 15 days and again within 72 hours prior to any ground disturbing activities (staging, grading, vegetation removal or clearing, grubbing, etc.). The survey shall be conducted to ensure that impacts to birds, including raptors, protected by the MBTA and/or the California Fish and Game Code are avoided. Survey areas shall include suitable nesting habitat within 200 feet of construction site boundaries. This two-tiered survey method is intended to provide the Applicant with time to understand the potential issue and evaluate solutions if nests are present, prior to mobilizing resources. If active nests are not identified, no further action is necessary. (b) If active nests are identified during pre-construction surveys, an avoidance buffer shall be demarcated for avoidance using flagging, staking, fencing, or another appropriate barrier to delineate construction avoidance until the nest is determined to no longer be active by a qualified biologist (i.e., young have fledged or no longer alive within the nest). An active nest is defined as a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. Given the high disturbance level, general avoidance buffers include a minimum 100-foot avoidance (for				

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Project Design Feature/Mitigation Measure	**Implementing Action, Condition or Mechanism**	**Method of Verification**	**Timing of Verification**	**Responsible Persons**
smaller birds more tolerant of human disturbance) to a 250-foot avoidance buffer for passerine and a 500-foot avoidance buffer from active raptor nests, or reduced buffer distances determined at the discretion of a qualified biologist familiar with local nesting birds and breeding bird behavior within the Project area. Construction personnel shall be informed of the active nest and avoidance requirements. A biological monitor shall review the site, at a minimum of one-week intervals, during all construction activities occurring near active nests to ensure that no inadvertent impacts to active nests occur. Pre-construction nesting bird surveys and monitoring results shall be submitted to the Culver City Planning Division via email or memorandum upon completion of the pre-construction surveys and/or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.				
<u>CULTURAL RESOURCES</u> **MM-CUL-1:** Prior to issuance of demolition permit, the Applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology (Qualified Archaeologist) to oversee an archaeological monitor who shall be present during construction excavations such as demolition, clearing/grubbing, grading, trenching, or any other construction excavation activity associated with the Project. Full-time monitoring shall be conducted in areas of high to moderate potential (as shown on Figure 14 of the Cultural Resources Assessment) to a depth of 10 feet (depth at which archaeological sensitivity decreases). Full-time monitoring of initial ground disturbance in areas of moderate to low sensitivity (also as shown on Figure 14) shall be conducted to determine if full-time or periodic monitoring is	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading Permit and Building Permit and On-Going during Construction	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division

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Project Design Feature/Mitigation Measure	Implementing Action, Condition or Mechanism	Method of Verification	Timing of Verification	Responsible Persons
warranted in these areas, as determined by the Qualified Archaeologist. Full-time monitoring in any area can be reduced to part-time inspections or ceased entirely if determined appropriate by the Qualified Archaeologist, based on field observations. Prior to commencement of excavation activities, an Archaeological and Cultural Resources Sensitivity Training shall be given for construction personnel. The training session shall be carried out by the Qualified Archaeologist and shall focus on how to identify archaeological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event.				
MM-CUL-2: Prior to issuance of demolition permit, the Applicant shall retain a Native American tribal monitor from the Gabrieleno Tribe. The appropriate Native American monitor shall be selected based on ongoing consultation under AB 52 and shall be identified on the most recent contact list provided by the Native American Heritage Commission. The Native American Monitor shall be present during construction excavations such as demolition, clearing/grubbing, grading, trenching, or any other construction excavation activity associated with the Project. The frequency of monitoring shall take into account the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (younger alluvium vs. older alluvium), and the depth of excavation, and if found, the abundance and type of prehistoric archaeological resources encountered. Full-time field observation can be reduced to part-time inspections or ceased entirely if determined appropriate by the Gabrielino Tribe.	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading Permit and Building Permit and On-Going during Construction	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division
MM-CUL-3: In the event that archaeological resources (e.g., Native American artifacts or features, etc.) are unearthed, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. An appropriate buffer area shall be established by the Qualified Archaeologist around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. All prehistoric or Native American archaeological resources unearthed by Project construction activities shall be evaluated	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading Permit and Building Permit and On-Going during Construction	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division

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by the Qualified Archaeologist and a Gabrielino Tribe. If the resources are Native American in origin, the Gabrielino Tribe shall consult with the City and Qualified Archaeologist regarding the treatment and curation of any prehistoric archaeological resources to ensure cultural values ascribed to the resources, beyond those that are scientifically important, are considered. If a resource is determined by the Qualified Archaeologist to constitute a "historical resource" pursuant to CEQA Guidelines Section 15064.5(a) or a "unique archaeological resource" pursuant to Public Resources Code Section 21083.2(g), the Qualified Archaeologist, preservation in place (i.e., avoidance) shall be the preferred manner of treatment. If preservation in place is not feasible, the Qualified Archaeologist shall coordinate with the Applicant and the City to develop a formal treatment plan that would serve to reduce impacts to the resources and that provides for the adequate recovery of the scientifically consequential information contained in the resources along with subsequent laboratory processing, analysis, evaluation, and reporting. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Sections 21083.2(b) for unique archaeological resources, and shall incorporate the Gabrielino Tribe's treatment and curation recommendations. The treatment plan shall include measures regarding the curation of the recovered resources that may include curation at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material, and/or the Gabrielino Tribe. If no institution nor the Gabrielino Tribe accept the resources, they may be donated to a local school or historical society in the area (such as the Culver City Historical Society) for educational purposes.				
MM-CUL-4: Prior to the release of the grading bond, the Qualified Archaeologist shall prepare a final report and appropriate California Department of Parks and Recreation Site Forms at the conclusion of archaeological monitoring. The report shall include a description of resources unearthed, if any, treatment of the resources, results of the artifact processing, analysis, and	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading Permit and Building Permit and On-Going during Construction	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning

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Project Design Feature/Mitigation Measure	**Implementing Action, Condition or Mechanism**	**Method of Verification**	**Timing of Verification**	**Responsible Persons**
research, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. The report and the Site Forms shall be submitted by the Applicant to the City, the South Central Coastal Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures.				Division
MM-CUL-5: If human remains are encountered unexpectedly during implementation of the Project, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the land owner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment. If the NAHC is unable to identify an MLD, or the	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading Permit and Building Permit and On-Going during Construction	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division

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MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance.				
GEOLOGY AND SOILS **MM-GEO-1:** Site-specific structural and seismic design parameters and recommendations for foundations, retaining walls/shoring, and excavation shall be implemented per the Project's Final Geotechnical Engineering Investigation, subject to review and approval by the Culver City Building Safety Division.	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading and Building Permits and a Foundation Plan	Culver City Building Safety Division and Building Safety Inspector
MM-GEO-2: Prior to issuance of a demolition permit, the Applicant shall retain a Qualified Paleontologist to develop and implement a paleontological monitoring program for construction excavations that exceed 10 feet in depth. A Qualified Paleontologist is defined as a paleontologist meeting the criteria established by the Society for Vertebrate Paleontology (SVP) (SVP, 2010). The Qualified Paleontologist shall supervise a paleontological monitor who shall be present at such times as required by the Qualified Paleontologist during construction excavations exceeding 10 feet in depth. Paleontological resources monitoring shall be conducted for all ground disturbing activities that exceed 10 feet in depth in previously undisturbed sediments, and are therefore likely to impact high sensitivity alluvial sediments. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring inspections shall be determined by the Qualified Paleontologist and shall be based on the rate of excavation and grading activities, proximity to known paleontological resources or fossiliferous geologic formations (i.e., older alluvium deposits),	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading Permit and Building Permit and On-Going during Construction	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division

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Project Design Feature/Mitigation Measure	**Implementing Action, Condition or Mechanism**	**Method of Verification**	**Timing of Verification**	**Responsible Persons**
the materials being excavated (i.e., native sediments versus artificial fill), and the depth of excavation, and if found, the abundance and type of fossils encountered. Full-time monitoring can be reduced to part-time inspections, or ceased entirely, if determined adequate by the Qualified Paleontologist.				
MM-GEO-3: Prior to commencement of demolition or excavation activities, the Qualified Paleontologist shall attend a pre-grade/construction meeting to conduct construction worker paleontological resources sensitivity training for construction personnel. The training session, shall be carried out by the Qualified Paleontologist and shall focus on how to identify paleontological resources that may be encountered during earthmoving activities and the procedures to be followed in such an event. In the event construction crews are phased, additional trainings shall be conducted for new construction personnel. Documentation shall be retained demonstrating that construction personnel attended the training.	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading Permit and Building Permit and On-Going during Construction	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division
MM-GEO-4: If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. An appropriate buffer area (usually 50 feet) shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the Qualified Paleontologist's discretion, and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock/sediment samples for initial processing and evaluation. If the fossil is determined to be significant, the Qualified Paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP (SVP, 2010). Any fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected shall be curated at a public, non-profit institution with a research interest in the material and with retrievable storage, such as the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading Permit and Building Permit and On-Going during Construction	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division

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Project Design Feature/Mitigation Measure	Implementing Action, Condition or Mechanism	Method of Verification	Timing of Verification	Responsible Persons
no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school. If construction personnel discover any potential fossils during construction while the paleontological monitor is not present, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery and recommended and implemented appropriate treatment as described earlier in this measure.				
MM-GEO-5: Prior to the release of the grading bond, the Qualified Paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the Applicant to the City, the Natural History Museum of Los Angeles County, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures.	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading Permit and Building Permit and On-Going during Construction	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division
HAZARDS AND HAZARDOUS MATERIALS **MM-HAZ-1:** The Applicant shall retain a qualified environmental consultant to prepare a Soil Management and Remediation Plan (SMRP) for review and approval by the Culver City Building Safety Division, Department of Toxic Substances Control (DTSC) and Los Angeles Regional Water Quality Control Board (LARWQCB), as necessary, prior to the commencement of excavation and grading activities. The plan would include measures to remove and/or treat/remediate the impacted soils and groundwater to a level determined by the LARWQCB to be protective of human health and the environment and compatible with commercial use, in compliance with all ~~acceptable per~~ applicable regulatory standards, under supervision of a certified environmental consultant licensed to oversee such remediation. The SMRP shall describe measures for (i) excavation of soils, (ii) characterization of soils to determine whether they qualify as hazardous waste under regulations such as 22 C.C.R. § 66262.11 or other regulations identified in the SMRP or otherwise	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading Permit and Building Permit and On-Going during Construction	Culver City Building Safety Division; Building Safety Inspector; Fire Prevention; Fire Inspector; Planning Division

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Project Design Feature/Mitigation Measure	Implementing Action, Condition or Mechanism	Method of Verification	Timing of Verification	Responsible Persons
identified by DTSC and/or LARWQCB, and (iii) disposal of excavated soils in compliance with all applicable regulations. The SMRP shall also describe measures for sampling, treatment and disposal of groundwater generated during construction as discussed in MM-HYD-1. The SMRP shall also provide measures for the evaluation of vapor intrusion risk at the Project site, and if necessary, modification of the Project design and/or installation of a vapor intrusion mitigation system consistent with the procedures and performance standards set forth in DTSC's October 2011 Vapor Intrusion Mitigation Advisory or as otherwise determined applicable by DTSC at the time of construction. Upon completion of the Soil Management and Remediation Plan, the Applicant shall contact the LARWQCB and DTSC, as necessary, to obtain a closure letter that states no further soils testing or remediation is required on the Project Site.				
MM-HAZ-2: Prior to the issuance of any permit for the demolition or alteration of the existing on-site buildings, a comprehensive ACMs survey of the buildings shall be performed. If no ACMs are found, the Applicant shall provide a letter to the Culver City Building Safety Division from a qualified asbestos abatement consultant indicating that no ACMs are present in the on-site buildings. If ACMs are found to be present, they shall be abated in compliance with the South Coast Air Quality Management District's Rule 1403 as well as all other applicable State and Federal rules and regulations.	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading Permit and Building Permit and On-Going during Construction	Culver City Building Safety Division; Building Safety Inspector; Fire Prevention; Fire Inspector; Planning Division
HYDROLOGY AND WATER QUALITY **MM-HYD-1:** If dewatering activities occur on-site during future redevelopment, samples shall be obtained from the water and analyzed for volatile organic compounds (VOCs) and oxygenates to ensure that they do not exceed applicable discharge requirements. Should the samples exceed VOC, oxygenates or any other applicable discharge requirement, a dewatering plan shall be prepared by the Project applicant for submittal to the Los Angeles Regional Water Quality Control Board (LARWQCB), Los Angeles County, and other appropriate agencies determined appropriate in consultation with the LARWQCB for review and approval. The plan shall include but not	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	On-Going During Construction	Culver City Planning, Public Works, and Building Safety Division

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Project Design Feature/Mitigation Measure	**Implementing Action, Condition or Mechanism**	**Method of Verification**	**Timing of Verification**	**Responsible Persons**
be limited to sampling of groundwater generated during construction that may be contaminated; and treatment and disposal of contaminated groundwater generated during construction in compliance with applicable regulatory requirements. Written verification from the LARWQCB of approval of a dewatering plan completion shall be submitted to the Culver City Planning Division, Building Safety Division, and Department of Public Works prior to issuance of grading permit.				
NOISE **PDF-NOI-1: Noise Reduction Measures** Consistent with Policy 2.A of the Noise Element, the Project would install a temporary sound barrier during construction that blocks the line-of-sight between the Project Site and the residential uses to the west and northwest achieving a minimum 10 dBA reduction in noise.	Condition of Approval	Plan Check and Field Inspections	On-Going during Construction	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division
PUBLIC SERVICES **MM-PS-1:** Construction Traffic Management Plan – A Construction Traffic Management Plan shall be developed by the Project contractor in consultation with the Project's traffic and/or civil engineer and approved by Culver City's Building Official, Engineer and/or Planning Manager, as applicable, prior to issuance of any Project demolition, grading or excavation permit. The Final Plan shall also be reviewed and approved by Culver City's Fire and Police Departments. The Culver City's Building Official, City Engineer and/or Planning Manager, as applicable reserve the right to reject any engineer at any time and to require that the Plan be prepared by a different engineer. Prior to commencement of construction, the contractor shall advise the Public Works Inspector and Building Inspector ("Inspectors") of the construction schedule and shall meet with the Inspectors. Also, biweekly construction management meetings with City Staff and other surrounding developments that will potentially be under construction at around the same time as the Project shall be required, as determined appropriate by City Staff, to ensure concurrent	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Demolition, Grading and Building Permits and On-Going during Construction	Culver City Planning, Public Works, Fire and Police Departments

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Project Design Feature/Mitigation Measure	**Implementing Action, Condition or Mechanism**	**Method of Verification**	**Timing of Verification**	**Responsible Persons**
construction projects are managed in collaboration with one another. The Construction Traffic Management Plan shall identify, at a minimum, the following to the satisfaction of the City: ▪ The name and telephone number of a contact person who can be reached 24 hours a day regarding construction traffic complaints or emergency situations. ▪ An up-to-date list of local police, fire, and emergency response organizations and procedures for the continuous coordination of construction activity, potential delays, and any alerts related to unanticipated road conditions or delays, with local police, fire, and emergency response agencies. Coordination shall include the assessment of any alternative access routes that might be required through the site, and maps showing access to and within the site and to adjacent properties. ▪ Procedures for the training and certification of the flag persons. ▪ The location, times, and estimated duration of any roadway closures, traffic detours, use of protective devices, warning signs, and staging or queuing areas. ▪ The location and travel routes of off-site staging and parking locations. ▪ The location of temporary power, portable toilet and trash and materials storage locations. ▪ The timing and duration of all street and/or lane closures and shall be made available to the City in digital format for posting on the City's website and distribution via email alerts on the City's "Gov Delivery" system. The Plans shall be updated weekly during the duration of Project construction, as determined necessary by the City Department of Public Works or designee determined appropriate by Public Works.				

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Project Design Feature/Mitigation Measure	**Implementing Action, Condition or Mechanism**	**Method of Verification**	**Timing of Verification**	**Responsible Persons**
▪ Prior to approval of the Plan, the applicant shall conduct one (1) Community Meeting pursuant to the notification requirements of the City's Community Meeting guidelines, to discuss and provide the following information to the surrounding community. 1) Construction schedule and hours. 2) Framework for construction phases. 3) Identify traffic diversion plan by phase and activity. 4) Potential location of construction parking and office trailers. 5) Truck hauling routes and material deliveries (i.e. identify the potential routes and restrictions. Discuss the types and number of trucks anticipated and for what construction activity). 6) Emergency access plan. 7) Demolition plan. 8) Staging plan for the concrete pours, material loading and removal. 9) Crane location(s). 10) Accessible applicant and contractor contacts during construction activity and during off hours (relevant email address and phone numbers).				
<u>TRANSPORTATION</u> **MM-TRANS-1:** The Project shall implement a TDM Plan to encourage the use of non-auto modes of transportation and reduce vehicle trips. The TDM Plan shall be reviewed and approved by the City's Planning Division, Public Works/Engineering, and Transportation Staff for review prior to the issuance of the first building permit for the Project. The TDM Plan shall include, at a minimum, measures required by the CCMC. In addition, as recommended by the Project's Traffic Study, the TDM Plan shall also include, but not be limited to measures and strategies to reduce vehicle trips via amenity Improvements	Condition of Approval	Approval of Plan	Prior to issuance of Building Permit	Culver City Traffic Engineering, Engineering/ Public Works , Transportation Department and Planning Division

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supporting alternative modes of transportation and a trip reduction program.				
MM-TRANS-2: To enhance the traffic signal system in the Project study area and in response to the forecast significant Project impacts, the Applicant shall contribute a fixed-fee financial contribution toward funding traffic signal upgrades, including installation of closed-circuit television (CCTV) cameras at Intersection No. 3 (Jefferson Boulevard & 1-405 Northbound Ramps). The funding contributions toward Intersection No. 3 (Jefferson Boulevard & 1-405 Northbound Ramps) shall be based on coordination with Culver City's Planning Division and Public Works/Engineering Staff, as well as LADOT, as necessary. This, and any other required financial fair-share contributions, must be guaranteed prior to the issuance of the Project's building permit and completed prior to the issuance of the Project's certificate of occupancy. Temporary certificates of occupancy may be granted in the events of any delay through no fault of the applicant, provided that, in each case, the applicant has demonstrated reasonable efforts and due diligence to the satisfaction of the Culver City's Planning Division and Public Works/Engineering Staff, as well as LADOT, as necessary.	Condition of Approval	Plan Check Notes and Field Inspections	Prior to issuance of Building Permit; installation prior to issuance of Certificate of Occupancy	Culver City Traffic Engineering, Engineering/ Public Works and Planning Division
<u>TRIBAL CULTURAL RESOURCES</u> Refer to Mitigation Measure CUL-2, above	Condition of Approval	Plan Check Notes, Reports, Surveys and Field Inspections	Prior to Grading Permit and Building Permit and On-Going during Construction	Culver City Building Safety Division, Building Safety Inspector, Public Works, Engineering and Planning Division

ATTACHMENT D
RESPONSES TO COMMENTS

A. INTRODUCTION

Section 15074(b) of the California Environmental Quality Act (CEQA) Guidelines states that "Prior to approving a project, the decision-making body of the lead agency shall consider the proposed negative declaration or mitigated negative declaration together with any comments received during the public review process." This chapter provides responses to written comments on the Draft MND, inclusive of one agency letter and nine (9) public comment letters received during the public comment period. **Table D-1**, *Comments Received in Response to the Draft MND*, provides a list of the comment letters received by the City.

Section B, *Responses to Comments*, below, presents the comment letters submitted during the public comment period for the Draft EIR. As indicated in Table D-1, the comment letters are organized by agencies (AG) and individuals (IND). Each letter/correspondence is assigned a number and each comment that requires a response within a given letter/correspondence is also assigned a number. For example, the agency letter from the California Department of Transportation (Caltrans) is designated Letter No. AG 1. The first comment received within Letter No. AG 1 is then labeled Comment No. AG 1-1. Each numbered comment is then followed by a corresponding numbered response, (i.e., Response to Comment No. AG 1-1). A copy of each comment letter is provided in Appendix A, Original Comment Letters, in this Final MND. The focus of the responses to comments is the disposition of significant environmental issues raised. Therefore, detailed responses are not provided to comments that do not relate to environmental issues. However, in some cases, additional information has been added for reference and clarity.

TABLE D-1
COMMENTS RECEIVED IN RESPONSE TO THE DRAFT MND

No.	From	Date Received	Project Description	Aesthetics	Air Quality	Greenhouse Gas Emissions	Hazards & Hazardous Materials	Land Use and Planning	Noise and Vibration	Traffic/Parking	Other CEQA	Other
Agencies												
AG 1	Miya Edmonson, IGR/Ceqa Branch Chief Department of Transportation District 7 – Office of Regional Planning 100 S. Main Street, MS 16 Los Angeles, CA 90012	February 18, 2021								X	X	
Individuals												
IND 1	Ramez Ethnasios & Samia Rafeedie: Segrell Way residents	January 27, 2021								X		
IND 2	Jonah Breslau, He/him/his Research Analyst Los Angeles Alliance for a New Economy (LAANE)	February 4, 2021									X	
IND 3	Jay Coury, President Premier World Discovery	February 4, 2021	X	X								
IND 4	Tieira Ryder	February 5, 2021										X
IND 5	David Steinitz C/O F.I.R.E./L.T.D. 12035 W. Jefferson Blvd. Los Angeles, CA. 90230-6219	February 9, 2021	X						X			
IND 6	Robin Turner 10650 Drakewood Ave. Culver City, CA 90230	February 10, 2021	X					X				
IND 7	Jordan Sisson (on behalf of UNITE HERE Local 11) 801 South Grand Avenue, 11th Floor Los Angeles, CA. 90017	February 11, 2021					X	X	X	X		

No.	From	Date Received	Project Description	Aesthetics	Air Quality	Greenhouse Gas Emissions	Hazards & Hazardous Materials	Land Use and Planning	Noise and Vibration	Traffic/Parking	Other CEQA	Other
IND 8	Arthur L. Kassan, P.E. Registered Traffic Engineer No. 152 5105 Cimarron Lane Culver City, CA 90230	February 17, 2021	X							X		
IND 9	Brian Flynn (on behalf of the Supporters Alliance for Environmental Responsibility (“SAFER”) Lozeau Drury, LLP 1939 Harrison Street, Suite 150 Oakland, CA 94612	February 19, 2021			X	X	X				X	

B. RESPONSES TO COMMENTS

Comment Letter No. AG 1

Miya Edmonson, IGR/Ceqa Branch Chief
Department of Transportation
District 7 – Office of Regional Planning
100 S. Main Street, MS 16 Los Angeles, CA 90012
Received February 18, 2021

Comment No. AG 1-1

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced MND. The Project would redevelop a 33,813 square foot (SF) property located in the northwest corner of the Jefferson Boulevard and Slauson Avenue intersection in Culver City. The existing single-story commercial building and parking lot would be removed as part of the Project. The Project includes the development of a new, five-story, 175-room boutique hotel building with food and beverage amenities and a two level, below-grade parking garage. Specifically, the 111,000 SF building would provide a total of approximately 67,030 SF in 175 hotel rooms, 8,536 SF of back of-house uses, 14,783 SF of hotel amenities, 630 SF of bicycle parking, 18,842 SF of circulation facilities, and 1,119 SF of loading area. In addition, 15,450 SF of open space area would be provided, as well as 56,300 SF of subterranean parking that would accommodate a minimum of 138 parking spaces. The City of Culver City is the Lead Agency under the California Environmental Quality Act (CEQA).

Response to Comment No. AG 1-1

This comment is a brief summary of the Project as set forth in the MND. As the comment does not raise any specific issues with respect to the content and adequacy of the Draft MND, no further response is warranted.

Comment No. AG 1-2

The project is located approximately 1,000 feet away from the State Route 90 and Interstate 405 interchange. From reviewing the MND, Caltrans has the following comments. As mentioned in the document, Senate Bill 743 (2013) mandates that Vehicle Miles Traveled (VMT) be used as the primary metric in identifying transportation impacts of all future development projects under CEQA, starting July 1, 2020. Since this implementation deadline has passed, Caltrans has reviewed this project from a VMT rather than a Level of Service (LOS) perspective.

For information on determining transportation impacts in terms of VMT on the State Highway System, see the Technical Advisory on Evaluating Transportation Impacts in CEQA by the California Governor's Office of Planningand Research (OPR), dated December 2018: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. The City can also refer to Caltrans' updated Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG), dated May2020: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg- a11y.pdf. Caltrans' new TISG is largely based on the OPR 2018 Technical Advisory.

Response to Comment No. AG 1-2

This comment introduces comments by Caltrans and indicates that Caltrans has reviewed this project from a VMT rather than a Level of Service (LOS) perspective. Reference documents pertaining to VMT are included in this comment. As the comment does not raise any specific issues regarding the content or adequacy of the Draft MND, no further response is warranted.

Comment No. AG 1-3

Due to the release of these guides, Caltrans no longer refers to the following agreements mentioned in the MND: the October 2013 Agreement Between the City of Los Angeles and Caltrans District 7 on Freeway Impact Analysis Procedures, and the December 2015 First Amendment to the Agreement between LADOT and Caltrans District 7 on Freeway Impact Analysis Procedures.

Response to Comment No. AG 1-3

This comment provides the perspective that Caltrans took in reviewing the MND. Specific State and Caltrans documents are cited for reference regarding VMT, and Caltrans indicates that previous non-VMT related transportation analysis agreements are no longer recognized. As such, no further response is warranted.

Comment No. AG 1-4

Regarding VMT, the MND states "Given the Project's proximity (approximately one block) to the Westfield- Culver City Transit Center, the City considers the Project site to be in a key TPA [Transit Priority Area]. Therefore, based on the key TPA screening threshold, the Project is presumed to have a less-than- significant VMT impact and no further VMT analysis is required." The OPR Technical Advisory states that a presumption of less-than-significant VMT impact may not apply if the project includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction. Thus, in the final MND please confirm that the project will not include more parking than required. For example, please state the maximum rather than the minimum number of parking spaces that will be provided.

Response to Comment No. AG 1-4

The Project will not provide more parking than required by the City of Culver City, as described in the April 3, 2020 Parking Demand Analysis prepared for the Project and included as Appendix E to the October 19, 2020 Traffic Impact Study. Through standard application of City of Culver City Municipal Code off-street parking requirement rates, the Project would require 387 automobile parking spaces. However, in coordination with City Planning staff, an empirical parking utilization study of similar, nearby hotels was conducted to determine current hotel parking demand rates in light of recent demand shifts due to the rise in customer travel via transportation network companies (TNCs) such as Lyft and Uber. That study determined conservatively that the Project would generate, at most, an automobile parking demand of 138 parked vehicles. Therefore, the Project parking supply includes 138 automobile parking spaces.

Comment No. AG 1-5

In addition, encroachment permits are required for any work performed on or near Caltrans' right of way. Such permits might be needed for the installation of closed-circuit television cameras at the Jefferson Boulevard & 1-405 Northbound Ramps intersection. However, Caltrans' Office of Permits will make the final determination on this. Also, the MND states that the project applicant will contribute a fixed-fee financial contribution toward funding these improvements. In the final MND, please clarify which entity will be asked to pay the balance of the needed funding.

Response to Comment No. AG 1-5

The City of Los Angeles Department of Transportation (LADOT) shares with Caltrans the operation and maintenance costs for the intersection of Jefferson Boulevard and the I-405 Freeway Northbound Ramps. Therefore, both the City of Los Angeles and Caltrans will review the traffic signal plan for the proposed mitigation improvement (installation of a closed-circuit television camera for use by the City of Los Angeles Automated Traffic Surveillance and Control [ATSAC] Division). The Project applicant will provide a fixed-fee financial contribution that will cover 100 percent of the improvement cost. Therefore, no public entity will be asked to pay for the installation of this improvement.

Comment No. AG 1-6

The following information is included for your consideration. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. Furthermore, Caltrans encourages Lead Agencies to implement Transportation Demand Management (TDM) strategies that reduce VMT and Greenhouse Gas (GHG) emissions. Thus, Caltrans supports this project implementing a TDM plan. For specific TDM options to include in this plan, please refer to:

- The 2010 Quantifying Greenhouse Gas Mitigation Measures report by the California Air Pollution Control Officers Association (CAPCOA), available at http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf, or

- Integrating Demand Management into the Transportation Planning Process: A Desk Reference (Chapter 8) by the Federal Highway Administration (FHWA), available at https://ops.fhwa.dot.gov/publications/fhwahop12035/index.htm.

Response to Comment No. AG 1-6

This comment provides background information on Caltrans and highlights their support for VMT and GHG reduction strategies to be considered by the City, as the Lead Agency, in their decision-making process. Also, the comment supports the Project implementing a TDM Plan. Consistent with this comment, the Project would be required to prepare a TDM Plan as required by Mitigation Measure MM-TRANS-1. As the comment does not raise any specific issues regarding the content or adequacy of the Draft MND, no further response is warranted.

Comment No. AG 1-7

Also, any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will need a Caltrans transportation permit. Caltrans supports the following measure: "Dirt hauling and construction material deliveries or removal would not be allowed during morning (7:00 AM – 9:00 AM) and afternoon (4:00 PM – 6:00 PM) peak traffic periods." If construction traffic is expected to cause delays on any State facilities, please submit the Construction Management Plan detailing these delays for Caltrans' review.

Response to Comment No. AG 1-7

The comment identifies Caltrans' permit requirements for oversized construction vehicles and recommends that large-size trucks trips be limited to off-peak hours. Project contractors would obtain transportation permits for any oversized transport vehicles on State highways. Efforts would be made to limit oversized transport during off-peak hours (such as mid-day hours) to facilitate the movement of such vehicles and reduce effects on State highway traffic.

As the comment does not raise any specific issues regarding the content or adequacy of the Draft EIR, no further response is warranted.

Comment No. AG 1-8

If you have any questions about these comments, please contact Emily Gibson, the project coordinator, at Emily.Gibson@dot.ca.gov, and refer to GTS # 07-LA-2021-03483.

Response to Comment No. AG 1-8

The comment provides contact information and is noted.

<u>Comment Letter No. IND 1-1</u>

Ramez Ethnasios & Samia Rafeedie: Segrell Way residents
Received January 27, 2021

Comment No. IND 1-1

On behalf of my wife, Samia Rafeedie, I would like to submit these comments regarding the above entitled project. We are resident owners of a house on Segrell Way and have reviewed the Traffic Impact Study dated 10-19-2020.

I have concerns regarding the traffic intrusion and parking mitigation measures. It appears there are not any current actions planned for mitigating potential disruptions in our street and parking situation on Segrell Way. We have concerns that without proper deterrents in place that traffic will increase and cars will freely park in front of our house. We do not want to wait for such a time in the future when this will occur to start the process with the city, wait for whatever studies to be done, then get whatever measures in place.

Thinking about the amount of parking spots the hotel will have, the 120 full and part time employees, and guests, one would surely guess that a number of these persons will seek to park in the adjacent street for a variety of reasons. For employees, there may be limits in the parking spaces and for guests they may not want to pay whatever nightly parking fees.

Response to Comment No. IND 1-1

A discussion of parking for the Project is provided on pages B-103 and B-104 of the Draft MND for informational purposes, as parking is not an issue subject to CEQA impact findings. Regardless, as discussed therein, the Project is expected to have a maximum parking demand of 138 parking spaces (inclusive of employees and all visitors), which would occur midday on a weekday. The project would provide at least 138 spaces to meet this peak demand. Furthermore, as discussed on page B-104 of the MND, at the request of the City and based on concerns from the community, the Project will fund a study to identify potential neighborhood traffic intrusion measures. These measures may include peak-period turn restrictions at certain intersections to address the cut-through traffic concerns within the Sunkist Park neighborhood. City traffic engineering staff indicated that there is a recognized cut-through traffic problem on southbound Segrell Way and Culver Park Drive, between Sawtelle Boulevard and Slauson Avenue, during the weekday PM peak period. As such, City staff indicated they would be supportive of traffic measures involving weekday PM peak-period left-turn restrictions for the southbound approaches of Segrell Way and Culver Park Drive at Slauson Avenue (and possibly right-turn restrictions for the eastbound approaches of Sawtelle Boulevard at Segrell Way and Culver Park Drive). The study would follow the Neighborhood Traffic Management Program (NTMP) process, as required for local street traffic intrusion improvements in the Sunkist Park neighborhood.

An additional Project feature may include assisting the Sunkist Park neighborhood with expanding the residential permit parking program to ensure that parking along Segrell Way and Culver Park Drive is available primarily (or exclusively) for residents/guests on those roadways. Within five years of Project occupancy, if the City determines there is an intrusion of Project parking on nearby residential streets, the Project or subsequent property owner shall be responsible to pay for a parking study to be performed by a consultant selected by the City. If the parking study determines that mitigations are needed such as the establishment of permit parking, the Project shall pay for such mitigations including the cost of signage and one year of residential parking permits to alleviate the intrusion of Project parking on those streets.

Similarly, within five years after Project occupancy, if the City observes there is an intrusion of Project traffic onto nearby residential streets, the Project or subsequent property owner shall be responsible to conduct a NTMP with input from the community to study and pay for the implementation of any traffic calming measures that will minimize or eliminate Project traffic from using the nearby residential streets. The NTMP review, design, and construction would be carried out by consultants selected by the City.

Comment No. IND 1-2

Please expedite the process for:

-peak period turn restrictions at certain intersections as noted on page 86 of the traffic impact study, and

-begin the process to expand the residential parking permit program on Segrell way.

Response to Comment No. IND 1-2

This comment requests expedited processes for assessing noted traffic restrictions and a parking permit program. This comment is noted; however, as this comment does not raise any specific issues with respect to the content or adequacy of the Draft MND, no further response is warranted.

Comment No. IND 1-3

Please feel free to contact me as needed and I would like an update about any mitigation of our traffic intrusion and parking concerns related to the hotel project in 11469 Jefferson Blvd.

Response to Comment No. IND 1-3

This conclusion comment is noted; however, as this comment does not raise any specific issues with respect to the content or adequacy of the Draft MND, no further response is warranted.

Comment Letter No. IND 2

Jonah Breslau
He/him/his
Research Analyst
Los Angeles Alliance for a New Economy (LAANE)
Received February 4, 2021

Comment No. IND 2-1

My name is Jonah Breslau. I am a research analyst at LAANE (https://laane.org/). I was wondering if there will be a public hearing for the Jeff Hotel project at 11469 Jefferson Boulevard Project (P2019-0194-SPR P2019-0194-CUP P2019-0194-AUP). If so, when would it be?

Response to Comment No. IND 2-1

Public hearings will be conducted for the Project. The public hearings will include hearings with the City Planning Commission and City Council. Notices of the public hearings will be posted on the City of Culver's website at https://www.culvercity.org/Public-Notices and specific meeting/agenda information will be posted at https://www.culvercity.org/City-Hall/Meetings-Agendas.

Comment Letter No. IND 3

Jay Coury, President
Premier World Discovery
Received February 4, 2021

Comment No. IND 3-1

I reside at 11430 Segrell Way, CC and was wondering if there is a rendering of the project available see view? While I am in favor of the project, living where I do, I wonder if guests on top floor will get a view into my yard. I am excited that the project will bring attention to the alley which has become a causeway for speeding and once the two bars re-open on Jefferson, the alley becomes something quite different. Thank you in advance for your reply.

Response to Comment No. IND 3-1

Rendering of the Project are included in the Draft MND on pages A-16 to A-18 (see Figures A-12, A-13 and A-14). Also, as discussed on page B-104 of the Draft MND, at the request of the City and based on concerns from the community, the Project will the Project will fund a study to identify potential neighborhood traffic intrusion measures. See Response to Comment No. IND 1-1 for additional details of this study. This study would address parking and traffic issues in the alley should they arise from the Project.

Comment Letter No. IND 4

Tieira Ryder
Received February 5, 2021

Comment No. IND 4-1

Culver City and all of the Westside cities should be coordinating better to create more affordable housing for long term, working class residents, students, seniors, those living with disabilities and others! The video attached is not OK, the number of unhoused residents has increased by over 50% in the last 10 years in LA!

Response to Comment No. IND 4-1

This comment asserts that Culver City and all of the Westside cities should be coordinating better to create more affordable housing. This comment is noted; however, as this comment does not raise any specific issues with respect to the content or adequacy of the Draft MND, no further response is warranted.

Comment Letter No. IND 5

David Steinitz C/O F.I.R.E./L.T.D.
12035 W. Jefferson Blvd.
Los Angeles, CA. 90230-6219
Received February 9, 2021

Comment No. IND 5-1

I live closer to Barryman on Segrell Way and I do not have any real issues with this new project other that it setting a strong precedence for 5 story structures around my area.

Response to Comment No. IND 5-1

This comment indicates the Project would set a precedence for 5-story structures in the area. As discussed on pages B-59 and B-60 of the Draft MND, the Project's building height would be consistent with the maximum 56-foot building height as allowed for in the City's Zoning Code for a Commercial General (CG) zone, based on CCMC Section 17.220, Table 2-6. This comment is noted; however, as this comment does not raise any specific issues with respect to the content or adequacy of the Draft MND, no further response is warranted.

Comment No. IND 5-2

Also having lived in the neighborhood for a long time I do not believe the developer has seriously considered the 24 hour traffic noise from the elevated freeway. No one is going to want to sit on a roof deck when the ambient noise level is high and as far up the street as I am,

Response to Comment No. IND 5-2

This comment asserts Project visitors would not want to sit on the roof deck due to traffic noise. This comment does not raise any specific issues with respect to the content or adequacy of the Draft MND. However, it is acknowledged that measured ambient daytime noise levels (7 a.m. to 10 p.m.) at the property line along Slauson Avenue (Location R2) were at an average of 63 dBA. As shown in Table B-13, Noise and Land Use Compatibility Matrix – California, on page B-63 of the Draft MND, noise levels between 50-70 dBA are normally acceptable for business commercial uses, as well as for hotels (50-65 dBA). Thus, the roof deck is expected to be compatible with the ambient noise environment.

Comment No. IND 5-3

I am constantly cleaning up the black soot from the freeway and as close as they will be it will be a constant issue.

Response to Comment No. IND 5-3

This comment asserts cleaning up black soot from the freeway will be an issue for the Project. This comment is noted; however, as this comment does not raise any specific issues with respect to the content or adequacy of the Draft MND, no further response is warranted.

Comment No. IND 5-4

I am a lighting consultant for the last 42 years with my own company and I have a number of these type of structures I am retained by to do their lighting and energy management designs and having city's like Bellflower and Azusz as clients I see a lot of bad designs but even worse locations and this one only has a fair chance of survival what with all the other new hotels competing for the bed use.

I realize this may take more than another year to break ground and maybe the economic environment will make more sense but this project seems to be asking more than it can justify in financial return and I for 1 would not like to see another large space like the Lowes building sitting empty or abandoned.

Just my concerned 2 cents.

As a side note I would love to see the power lines in the double wide alley converted to underground if there is ever a way to do it.

Response to Comment No. IND 5-4

This comment offers opinions on the Project's long-term economic outlook. Also, the commenter indicates he would like to see the power lines in the double wide alley converted to underground. The power lines are not within the Project Site boundaries and are beyond the scope of the Project. As this comment does not raise any specific issues with respect to the content or adequacy of the Draft MND, no further response is warranted.

Comment Letter No. IND 6

Robin Turner
10650 Drakewood Ave.
Culver City, CA 90230
Received February 10, 2021

Comment No. IND 6-1

I would like to comment on the 11469 Jefferson Boulevard Project. The Project has been designed to be 5 stories in height. This clearly violates the Measure 1 Height Initiative maximum limit that was voted on by the voters of Culver City in 1988. There are no variances or conditions that would allow this or any other building to be built over the 56 feet limit. An elevator shaG is not allowed above the 56 foot limit. There are no variances allowed for that. 56 feet is 56 feet. Period! By building this Project, the City of Culver City will be violating the law. In fact, ANY NEW 5 STORY BUILDING OVER 56 FEET IN CULVER CITY IS IN DIRECT VIOLATION OF THE LAW!!!!!!!!!!

Response to Comment No. IND 6-1

Michael Allen from the City of Culver City responded on February 10th to the above comment as follows, “Thank you for providing the below comment regarding the 11469 Jefferson Blvd. Project. Based on our analysis, the building is compliant with the 56' height limitation, as well as the allowances for mechanical equipment and the elevator shaft.” See also Response to Comment No. IND 6-1 below.

Comment No. IND 6-2

In response to Michael Allen, Ms. Turner responded, “Thank you for your comments. The 56 foot height limit does allow for minor mechanical equipment (roof HVAC equipment) but not for a full doorway to get on the roof. It is strictly allowed to have equipment such as a few feet allowance for elevator to hit the top floor but not for roof access.”

Response to Comment No. IND 6-2

The Culver City municipal code, Section 17.300.025.C.2b; allows for elevators, and mechanical penthouses and other mechanical rooms to exceed the building height (56'-0" in CG Zone) by a maximum of 19'-6" (elevators) and 13’-6”(all other mechanical equipment) respectively. Further, the roof level of the Project is accessible by maintenance personnel only.

<u>Comment Letter No. IND 7</u>

Jordan Sisson (on behalf of UNITE HERE Local 11)
801 South Grand Avenue, 11th Floor
Los Angeles, CA. 90017
Received February 11, 2021

Comment No. IND 7-1

On behalf of UNITE HERE Local 11 and its members (collectively "Local 11"), this Office provides the City of Culver City ("City") the following comments[1] regarding the Initial Study/Mitigated Negative Declaration ("IS/MND") for the above-referenced five-story, 175-room hotel development ("Project") located on a 33,813 square foot ("SF") site located at the northwest corner of the intersection at Jefferson Boulevard and Slauson Avenue ("Site").

In short, Local 11 finds that the IS/MND fails to adequately analyze Project impacts related to vehicle miles traveled ("VMT"), construction noise, and exposure to hazards. As such, Local 11 urges the City to stay any action on any Project approvals until the issues identified below have been addressed in an adequate environmental review pursuant to the California Environmental Quality Act ("CEQA").

[1] Please note that pages cited herein are either to the page's stated pagination (referenced herein as "p. ##") or the page's location in the referenced PDF document (referenced herein as "PDF p. ##").

Response to Comment No. IND 7-1

This comment provides a brief summary of the Project and introduces comments related to VMT, construction noise, and hazards. Responses to these comments are provided below in Response to Comment Nos. IND 7-2 to IND 7-6, below.

Comment No. IND 7-2

1. VMT ANALYSIS IS LACKING

Citing the VMT guidance provided by the Governor's Office of Planning and Research ("OPR"), the IS/MND presumed the Project's VMTs would be less than significant merely because the Site is near a transit priority area. (MND, p. B-105; IS/MND Traffic Study, pp. iv, 74-75.) However, OPR states explicitly that this "presumption would not apply, however, if project-specific or location-specific information indicates that the project will still generate significant levels of VMT."[2] Project-specific information that indicates a significant VMT includes the following:

i. The Project would generate 1,463 trips per day compared to the exiting 376 trips per day (IS/MND, p. B-92)—a net increase of 1,087 trips—which exceeds OPR's small project screening threshold of 110 trips.[3] So too, this increase would exceed the 250-trip screening threshold proposed under the City's Draft Transportation Study Criteria Guidelines.[4]

[2] OPR (Dec. 2018) Technical Advisory: On Evaluating Transportation Impacts In CEQA, pp. 13-14, https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

[3] Ibid. at p. 12.

[4] See City (May 2020) Draft Transportation Study Criteria and Guidelines, p. 4, https://culver-city.legistar.com/View.ashx?M=F&ID=8331543&GUID=B8DB9B35-E077-40E3-A0C3-AB70306081BF.

Response to Comment No. IND 7-2

The OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) provides guidance in the assessment of VMT, thresholds of significance, and mitigation measures. It is stated in both the Technical Advisory and within the CEQA Guidelines that these recommendations are not with the intent of enforcing, but instead to "provide advice and recommendations, which agencies and other entities may use at their discretion." As the lead agency, the City of Culver City has the legal authority to use rational and reasonable methods in order to determine the scope and methodology of the required CEQA VMT analysis. As such, the VMT analysis was conducted according to the City's *Transportation Study Criteria and Guidelines*, which were adopted by the City Council on July 13, 2020 and are the basis upon which all development projects are evaluated. Based on a review of the City's CEQA VMT guidelines and with the utilization of the City's VMT Tool, the Project does not require any further VMT analysis and is presumed to have a less-than-significant VMT impact based on its location within one-half mile of the Westfield-Culver City Transit Center.

The comment regarding transit priority area (TPA) guidelines is noted and will be forwarded to the decision-makers for consideration in future CEQA VMT guideline updates.

The 250 daily and 25 peak-hour vehicle trip thresholds for small projects contained in the City's *Transportation Study Criteria and Guidelines* do not apply to the Project. For land use projects, the VMT screening thresholds for small projects are separate and distinct from the screening thresholds for projects within a key TPA.

Comment No. IND 7-3

ii. The IS/MND's GHG Study shows the Project would generate 3.490 million annual VMTs as compared to the existing 0.636 million annual VMTs (GHG Study, PDF pp. 169, 224), which is more than a fivefold increase and exceeds OPR's no net increase threshold for redevelopment projects.[5]

[5] OPR, supra fn. 2, p. 17.

Response to Comment No. IND 7-3

The OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* states that, for redevelopment projects that result in a net overall increase in VMT, the recommended screening and significance thresholds should be applied as part of the VMT analysis. The recommended screening thresholds include the presumption of a less-than-significant VMT impact for land use projects proposed within one-half mile of an existing major transit stop or an existing stop along a high-quality transit corridor. This screening threshold, as defined in the City of Culver City's *Transportation Study Criteria and Guidelines*, was applied for the Project.

The comment about GHG emissions is noted and will be forwarded to the decision-makers for consideration in future CEQA VMT guideline updates.

Comment No. IND 7-4

iii. No less than nine hotels/lodging are within 1.5 miles of the Project Site.[6] suggesting the Site is hotel-rich and that the Project will not provide an alternative for hotel patrons that would otherwise be commuting from longer distances. Adding more hotels in a hotel-rich area will not further smart/mixed-use development.

[6] Google Maps, https://www.google.com/maps/place/Mayumi/@33.9823269,-118.4133479,14z/data=!4m17!1m8!2m7!1sHotels!3m5!1sHotels!2s33.9896,+-118.3973!4m2!1d 118.3973395!2d33.9895605!3m7!1s0x80c2ba021914d27f:0x2906349d35168b00!5m2!4m1!1i2!8m 2!3d33. 994924!4d-118.3942348.

Response to Comment No. IND 7-4

The Project complements the wide array of development that is occurring within the City, especially in Downtown and surrounding the Metro Ivy Station, along with areas to the south that include Playa Vista and Silicon Beach. The site is centrally located to serve a multitude of nearby businesses that rely on the use of hotel accommodations. The boutique nature of the hotel and its location will likely position itself to generate more locally-serving trips. Additionally, considering VMT from a broader scale, it should be noted that the Project may shorten vehicle trips and reduce VMT by diverting trips from other established hotels. The Project will also be the only hotel use within one-quarter mile of the Westfield-Culver City Transit Center, making the site particularly attractive for employees and patrons to use alternative travel modes.

Comment No. IND 7-5

iv. The existing uses are local serving retail (e.g., restaurants, nails salon, dentist, golf, flowers, etc.) (IS/MND Remedial Action Plan ["RAP"], PDF p. 52 [Fig. 2]), which provide convenient access to nearby residents that do not need to use a vehicle to access these services. In contrast, the Project is a hotel development, which is regional in nature and displaces these local services. Hence, the Project may induce further VMTs by individuals no longer able to access these local services without entering their vehicles.

Response to Comment No. IND 7-5

The Project will include restaurant, lounge, and conference/meeting room uses that will be available to nearby residents. At the request of residents of the Sunkist Park neighborhood, a discount program will also be provided at the hotel restaurant for local neighbors. Therefore, the Project will maintain a level of local-serving commercial use.

Comment No. IND 7-6

v. The City acknowledges that hotels generate large amounts of visitors that may access the site via Uber/Lyft,[7] but the IS/MND fails to discuss how the Project would handle these ridesharing services.

Based on the above, the less than significant VMT impact presumption does not apply, and an actual VMT analysis is warranted here. The CEQA compliance must be re-done.

[7] City, supra fn. 4, p. 7.

Response to Comment No. IND 7-6

Per the City of Culver City's *Transportation Study Criteria and Guidelines*, for land uses like hotels and theaters expected to generate large amounts of visitors, a project must provide on-site facilities with capacity to accommodate taxis and Transportation Network Companies (TNCs) like Lyft and Uber. The October 19, 2020 Traffic Impact Study for the Project provides a description of these on-site facilities, which include one of the two entry drive aisles from Slauson Avenue (the one closer to the hotel) dedicated for passenger drop-off and pick-up. With the dual entry lane configuration, valet-assist parking, and the option to utilize the first subterranean parking level for drop-offs and pick-ups during high-demand periods (e.g., due to an event in the Project's meeting/conference room space), the on-site facilities will have the capacity to handle taxi and TNC demands without spillover onto Slauson Avenue.

As described in aggregate via Responses to Comments Nos. IND 7-2 through IND 7-6, the Project's VMT analysis is sufficient, the Project's VMT impact will be less-than-significant, and no further VMT analysis is warranted.

Comment No. IND 7-7

2. CONSTRUCTION NOISE/VIBRATION ANALYSIS IS INCOMPLETE

The IS/MND finds no construction noise impacts based on a time/place threshold. (IS/MND, pp. B-63, B-66.) However, this ignores that construction noise levels will reach up to 70 dBA compared to the 62 and 63 dBA (daytime Leq) ambient levels at sensitive receptors R1 and R2 (i.e., residences 50 feet from the site), respectively. (IS/MND, Tbls. B-14 & B-16.) This amounts to a seven to eight dBA-increase that would exceed the 5-dBA Leq threshold applied to the Project's operational phase. (IS/MND, p. B-63.) Given construction is to last over 30-months (IS/MND, p. A-21), it is arbitrary to claim these noise levels are not significant to those residents over such a long period.

Furthermore, these construction noise levels are likely underestimated for various reasons. First, the IS/MND's Noise Study cites inconsistent construction equipment noise levels. (IS/MND Noise Study, PDF pp. 37, 234). Second, the IS/MND does not discuss whether pile driving will be used, which can create noise levels up to 101 dBA at 50 feet and present a unique potential for vibration impacts. (Id.) Third, the IS/MND assumed a 10-dBA reduction for "noise reduction features" like sound barriers "if construction noise is impacting nearby noise sensitive land uses," as well as noise "abatement and acoustical design criteria" for new development. (IS/MND pp. B-67– B-68.) However, what are those specific features, what constitutes sufficient impact to warrant sound barriers, what criteria are going to be required? These unspecified mitigation measures also are not included in the proposed Mitigation Monitoring Reporting Program ("MMRP"). (IS/MND, Attachment C.) As such, these measures are illusory mitigation measures lacking performance standards that violate CEQA.[8]

[8] See e.g., Federation of Hillside & Canyon Ass'ns v. City of Los Angeles (2000) 83 Cal.App.th 1252, 1260; Sierra Club v. County of Fresno (2018) 6 Cal.5th 502, 522; Cleveland Nat'l Forest Found v. San Diego Ass'n of Gov'ts (2017) 17 Cal.App.5th 413, 433.

Response to Comment No. IND 7-7

The Project noise analysis provided in the Draft MND is not arbitrary as it provides a reasoned analysis based on applicable specific requirements in the City's Noise Ordinance and Noise Element of the General Plan. As discussed on page B-62 of the Draft MND, Chapter 9.07 of the CCMC provides specific noise restrictions and exemptions for noise sources within the City, and states that construction activity shall be prohibited, except between the hours of 8:00 a.m. to 8:00 p.m., Monday through Friday, 9:00 a.m. to 7:00 p.m. on Saturdays, and 10:00 a.m. to 7:00 p.m. on Sundays per Culver City Municipal Code Section 9.07.035. Construction of the project would comply with these requirements to avoid the generation of excessive noise during nighttime hours. As discussed on page B-66 and as shown in Table B-16 of the Draft MND, the Project's construction noise levels during the hours allowed by Chapter 9.07 of the CCMC were estimated to reach a maximum of 70 dBA L_{eq} at the nearest off-site sensitive receptor location with a temporary sound barrier installation pursuant to Policy 2.A. As shown in the Noise and Vibration Technical Report (November 2020), which was prepared to inform the findings in the Draft MND and was provided by the City alongside the Draft MND, a noise level of 70 dBA is less than other commonly experienced noise levels in urban environments, such as the Project Site, including idling city buses and lawn mowers (see Figure B-5 on page 207 of Appendix D of the Noise and Vibration Technical Report). While the noise and land use compatibility matrix as shown in Table 7 of the Noise and Vibration Technical Report is applicable to operational noise and not temporary or periodic construction noise, a noise level of up to 70 dBA is also within the conditionally acceptable category. Thus, the Project's temporary and periodic construction noise level would not generate substantial noise uncharacteristic of an urban environment. In addition, as discussed on page B-62 of the Draft MND, the City's General Plan Noise Element includes Policy 2.A, which pertains to the use of temporary sound barrier installation at a construction site if construction noise is impacting nearby noise sensitive land uses. As discussed on page B-64 and as shown in Figure B-1 in the Draft MND, existing one- and two-story single-family residences are located across the service alley to the north and west of the Project Site. As stated on page B-66 of the Draft MND, Project construction would occur within the allowable hours specified in CCMC 9.07. In addition, as stated on page B-67 of the Draft MND, given the proximity of noise-sensitive residential uses as fully described in the Draft MND, consistent with the City's General Plan Noise Element Policy 2.A, the Project would include temporary sound barrier installation at the construction site and the analysis correctly accounts for this. The Applicant has had several community meetings to discuss the Project as required by the City and, as part of the community outreach, the Applicant has agreed to include a construction noise barrier to reduce the noise levels at the residences located northwest of the Project Site. The temporary sound barrier has been included as a project design feature (PDF) in this Final MND. Refer to Attachment B, *Explanation of Checklist Determinations*, and Attachment C, *Mitigation Monitoring Program*, of the Final MND. Therefore, it is not an illusory measure and it will be enforceable. Therefore, based on compliance with the applicable provision of the City's Noise Ordinance and Noise Element of the General Plan, and given the added clarification that the Project's noise levels would not exceed other noise levels already experienced in urban environments, such as the Project Site, the Draft MND concludes that temporary construction noise impacts would be less than significant as supported by substantial evidence as clarified herein.

The comment inappropriately references the 5 dBA greater than ambient threshold in relation to evaluating construction noise impacts. Page B-63 of the Draft MND states that the 5 dBA over ambient threshold applies to Project-related operational noise and does not apply to construction. Furthermore, while construction of the Project would last up to approximately 30 months, it is clear that the maximum construction noise levels at the noise sensitive receptor areas (i.e., 70 dBA L_{eq} at R1 and R2 and 63 dBA Leq at R3) would not occur during the entire construction duration. As shown in Table B-16 on page B-67 of the Draft MND, and in Table 9 on page 28 of the Noise and Vibration Technical Report, these maximum noise levels would be associated with the last phase of construction activity when overlapping building construction, paving, and architectural coating would occur. Furthermore, as stated on those same pages, construction noise levels represent the worst-case condition when noise generators are located closest to the receptors. During other phases of construction and when equipment would be located elsewhere on the Project Site further away from the sensitive receptor locations, noise levels would be substantially lower (i.e., reduced by a minimum of 6 dBA per doubling of distance away). Therefore, construction noise impacts are appropriately characterized as temporary based on substantial evidence provided in the Draft MND and Noise and Vibration Technical Report.

The comment is also incorrect regarding the alleged inconsistency of the construction equipment noise levels and potentially underestimated noise levels. The construction equipment noise levels provided in Table 8 on page 27 of the Noise and Vibration Technical Report (e.g., page 37 when numbered based on the portable document format [PDF] file; the reference to page 234 is unclear as it does not pertain to any relevant information in this comment but is assumed to be referencing the Federal Transit Administration *Transit Noise and Vibration Impact Manual*]) cited in the Noise Technical Report are not inconsistent with information provided in the analysis. The construction equipment noise levels presented in Table 8 contains a footnote clearly stating FHWA's *Roadway Construction Noise Manual* as the source of the referenced noise levels. The noise level information that the commenter appears to be referencing are from a different and wholly separate source altogether (i.e., the Federal Transit Administration *Transit Noise and Vibration Impact Manual*), which are not used for the construction noise analysis. The Federal Transit Administration *Transit Noise and Vibration Impact Manual* is used for vibration analysis since the FHWA's *Roadway Construction Noise Manual* and the Roadway Construction Noise Model do not evaluate vibration. Therefore, the noise levels are not inconsistent as the source of the data are clearly provided in Table 8.

As stated on page B-66 of the Draft MND and on page 26 of the Noise and Vibration Technical Report, pile driving would not be used for Project construction. Therefore, the noise and vibration levels described by the commenter would not occur and construction noise and vibration impacts were adequately addressed.

The 10-dBA reduction from an installed noise barrier and implementation of noise abatement and acoustical design criteria are required under the Culver City General Plan Noise Element Policy 2.A and are not mitigation measures. Therefore, they are rightly excluded from the MMRP and are not subject to the performance standards as defined under CEQA. As stated above, the measure would be enforceable as a condition of approval.

Comment No. IND 7-8

3. HAZARDS ANALYSIS MUST BE UPDATED

The Site was formerly used as a gasoline/service station, currently contains constituents of concern, and is not fully remediated. (IS/MND, p. B-20, B-46; IS/MND RAP, pp. 2.1-2.11.) The IS/MND proposes a future Soil Management and Remediation Plan ("SMRP") to be prepared premised on a 2014 RAP that was prepared when no project was anticipated (IS/MND, pp. B-48, C-11) and where remedial activities were limited due to existing retail tenants at the site (IS/MND RAP, pp. 5.2 – 5.11.) Much has changed since then, including the now proposed removal of existing tenants – as well as the consideration of new guidance on vapor intrusion by the Water Board and its sister agency Department of Toxics Substance Control ("DTSC").[9] For these reasons, the City should have a revised RAP and detailed SMRP analyzed in a compliant CEQA document in hand before considering approval of the Project.

[9] See Water Board (2020) Vapor Intrusion, https://www.waterboards.ca.gov/water_issues/programs/site_cleanup_program/vapor_intrusion/; DTSC (2020) Vapor Intrusion, https://dtsc.ca.gov/vapor-intrusion/; CalEPA/Water Board/DTSC (Feb. 2020) Supplemental Guidance: Screening and Evaluating Vapor Intrusion, https://dtsc.ca.gov/wp-content/uploads/sites/31/2020/02/Public-Draft-Supplemental-VI-Guidance_2020- 02-14.pdf.

Response to Comment No. IND 7-8

The comment is correct that the RAP cited in the Draft MND did not contemplate development of the Project currently being proposed. However, the analysis on pages B-48 to B-50 of the Draft MND is clear that under the Project, site remediation overseen by the LARQCB would occur following the abatement and demolition of existing on site improvements. This would include the excavation of hydrocarbon-impacted soils, and other groundwater management associated with remediation. During remediation activities, the site would be remediated to levels deemed acceptable by the LARWQCB for commercial use pursuant to all applicable regulatory standards. Based on the extent of contamination identified in the RAP, it is anticipated that approximately 1,000 cubic yards of hydrocarbon-impacted soil would be exported from the site as part of remediation activities, which is less than 2% of the anticipated excavation. The Draft MND's Mitigation Measure MM-HAZ-1 requires the Applicant to retain a qualified environmental consultant to prepare a Soil Management and Remediation Plan (SMRP) for review and approval by the Culver City Building Safety Division, DTSC and LARWQCB, as necessary, prior to the commencement of excavation and grading activities. Mitigation Measure MM-HAZ-1 has been modified to clarify that the SMRP would include a plan for (i) removal, characterization, and offsite disposal, and/or (ii) remediation of hydrocarbon impacted soils to a level determined by the LARWQCB to be acceptable for commercial use, in compliance with all applicable rules and regulations. The SMRP shall also include a plan for treatment and/or remediation of hydrocarbon impacted groundwater to a level determined acceptable for commercial use, in compliance with all applicable rules and regulations. including all applicable guidance on vapor intrusion from the LARWQCB and/or DTSC. The SMRP will be conducted under supervision of a certified environmental consultant licensed to oversee such remediation. This mitigation measure can reasonably be expected to avoid or reduce a potential significant impact from underlying hazardous materials and is enforceable by identifying the timing of the SMRP implementation and requirement to obtain a closure letter from the LARWQCB and DTSC (as necessary) that states no further soils testing or remediation is required on the Project Site. Effectively, with the SMRP requiring remediation to comply with all applicable regulatory standards and a closure letter from LARWQB and DTSC (as necessary) being required, these performance criteria would ensure that impacts from remediation of hazardous materials below the site are less than significant. Rather, by requiring remediation of subsurface contamination, this mitigation measure ensures a net benefit to the environment. The requirement for DTSC to review and approve the SMRP and issue a closure letter, in addition to the LARWQCB, has been added to Mitigation Measure HAZ-1 in this Final MND.

Comment No. IND 7-9

4. CODE-REQUIRED FINDINGS CANNOT BE MADE

The IS/MND specifies that only construction-related permits from the City, such as demolition, haul route, and building permits at issue. (IS/MND, pp. EC-2, A-22, B-60.) However, the Project's case numbers (i.e., P2019-0194-SPR, P2019-0194-CUP, P2019-0194-AUP) suggest that the Project requires City approval of Site Plan Review, Conditional Use Permit, and/or Administrative Use Permit. (IS/MND, pp. EC-1, C-1.)

These types of discretionary approvals are subject to specific findings required under the Culver City Municipal Code ("CCMC" or "Code"). (CCMC §§ 17.530.020, 17.540.020.)

The environmental and CEQA impacts and deficiencies discussed herein invalidate any public health/welfare findings (id.)—these impacts and deficiencies must be resolved if the City intends to make Code-required findings supported by substantial evidence.

Response to Comment No. IND 7-9

This comment asserts that approvals such as approval of Site Plan Review, Conditional Use Permit, and/or Administrative Use Permit were not addressed in the MND and that the environmental and CEQA impacts and deficiencies discussed herein invalidate any public health/welfare findings (id.). Page EC-2 has been corrected in this Final MND to list the potential for Site Plan Review, Conditional Use Permit, and/or Administrative Use Permit. Section XI, Land Use and Planning, in the Draft MND analyzed land use and planning impacts. On page B-60 of the Draft MND, it is stated that "other land use related approvals, programs, and/or or permits as part of the Project may include, but are not limited to, the following: demolition permits; grading, excavation, foundation, and building permits; and haul route permits." The addition of other permits or actions such as Site Plan Review, Conditional Use Permit, and/or Administrative Use Permit does not change the conclusion that, "None of these would conflict with an applicable land use plan (i.e., General Plan), policy or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect." The Project's physical and operational characteristics were fully evaluated in the Draft MND, to which the MND fully discloses the Project's potential for physical impacts on the environment. Thus, these actions or permits do not substantively or materially change the impact analyses or conclusions in the MND. Furthermore, based on Response to Comment Nos. IND 7-2 to IND 7-10, no substantive deficiencies have been identified herein that would invalidate any public health/welfare findings.

Comment No. IND 7-10

In closing, Local 11 urges the City to stay all action on the Project until the issues discussed herein are resolved in a recirculated MND or Environmental Impact Report, as required under CEQA. On behalf of Local 11, this Office requests, to the extent not already on the notice list, all notices of CEQA actions and any approvals, determinations, or public hearings to be held on the Project under state or local law requiring local agencies to mail such notices to any person who has filed a written request for them. (Pub. Res. Code §§ 21092.2, 21167(f) and Gov. Code § 65092 and CCMC § 17.630.010.A.d.) Please send notice by electronic and regular mail to: Jordan R. Sisson, Esq., 801 S. Grand Avenue, 11th Fl., Los Angeles, CA 90017, jordan@gideonlaw.net.

Thank you for your consideration of these comments. We ask that this letter and any attachments are placed in the administrative record for the Project.

Response to Comment No. IND 7-11

Responses to all comments have been addressed in Response to Comment Nos. IND 7-1 to IND 7-10. Based on the responses therein, the Draft MND environmental analysis was sufficient to meet CEQA requirements and no substantive deficiencies were identified that require a recirculated MND or preparation of an Environmental Impact Report. The City will provide notices as required and applicable per the referenced regulatory requirements.

<u>Comment Letter No. IND 8</u>

Arthur L. Kassan, P.E.
Registered Traffic Engineer No. 152
5105 Cimarron Lane
Culver City, CA 90230
Received February 17, 2021

Comment No. IND 8-1

Thank you for the opportunity to review the Traffic Impact Study For The Jeff Hotel Project Proposed At 11469 Jefferson Boulevard, Culver City prepared by Crain & Associates in October 2020. The study is part of the Mitigated Negative Declaration for the proposed project.

To introduce myself to you, I am a Registered Traffic Engineer in California with over 50 years of experience. For many years, I performed the functions of the Culver City Traffic Engineer as a consultant to the City. I have been a resident of Culver City for 33 years.

I have comments on three issues addressed in the Crain report: 1) adequacy of the proposed on-site parking supply; 2) operation of the dual left-turn lane proposed for northbound Jefferson Boulevard at Slauson Avenue; and 3) truck maneuvering from and to the alley west of the hotel.

Response to Comment No. IND 8-1

This comment introduces the commenter and issues raised below. Responses to the referenced issues are provided below in Response to Comment Nos. IND 8-2 to IND 8-13.

Comment No. IND 8-2

On-Site Parking Supply

The following comments are based on information in Appendix E, Project Demand Parking Analysis, which consists of a letter dated April 3, 2020, to Michael Allen from Crain & Associates, plus the accompanying calculations upon which the letter text is based. The analysis in the Crain letter uses empirical data from three existing hotels in Culver City, near the subject site, to calculate estimates of the maximum potential parking demand for the Jeff Hotel.

For comparison, the letter also presents parking demand calculations based on the parking rates in the Culver City Municipal Code and in Urban Land Institute publications dealing with parking demands. There is great variance among the estimated parking demands using the rates from the three sources. After applying shared parking analysis methods, the estimates of maximum parking demands presented by Crain are:

> 138 spaces based on the rates derived from the local hotels;
> 299 spaces based on the Culver City Municipal Code rates;
> and 401 spaces based on the Urban Land Institute rates.

The derived-rate estimate is less than half the estimates using either of the other two sources.

Response to Comment No. IND 8-2

This comment provides summary information from the April 3, 2020 Parking Demand Analysis prepared for the Project and included as Appendix E to the October 19, 2020 Traffic Impact Study. Therefore, no further response is warranted.

Comment No. IND 8-3

For the three local hotels studied by Crain, actual parking counts were conducted during the summer months of the years, 2018 and 2019. From those counts, peak parking usage rates (number of parked vehicles per guest room) were derived for each hotel, and the highest of the three rates was applied to the proposed number of guest rooms for the Jeff Hotel. The letter provides no information on the room occupancy rates at the study hotels during the parking counts. Were they at or near 100%? In addition to varying from month-to-month, as acknowledged in the letter, hotel occupancy rates vary from year-to-year based on numerous factors, such as the local economy and schedules of events in the area served. Were 2018 and 2019 high room-occupancy years for the hotels? If the study hotels operated at substantially below full occupancy during those years, the derived rates should be adjusted upward for that.

Response to Comment No. IND 8-3

Hotel room occupancy data were available for only one of the three local hotels surveyed as part of the hotel empirical parking utilization study -- the DoubleTree by Hilton Hotel at 6161 Centinela Avenue (the "DoubleTree"). However, the peak hourly parking demand ratio applied for the Project was conservatively determined based only on the DoubleTree parking demand data, given that it was shown to have the highest parking demands on a per room basis of the three surveyed hotels. Occupancy data provided for 2018 by DoubleTree staff showed that June and July room occupancies were approximately 95.3 and 93.8 percent, respectively, while the hotel's annual average occupancy was approximately 89.2 percent. The DoubleTree experienced its highest occupancy rate for the 2018 calendar year during the month of June. Based on hospitality sector data provided by STR, hotels in Los Angeles County experienced an occupancy rate of approximately 79.7 percent during the first half of 2018, while those in the LAX/Inglewood/Culver City submarket were observed to be approximately 86.4 percent occupied. Compared with these average occupancy rates for local hotels, the occupancy rates experienced by the DoubleTree are considerably higher during June and July conditions. As such, the data collected represent well peak occupancy conditions and, therefore, are conservative and appropriate for use in determining the Project's peak parking demands.

Comment No. IND 8-4

Do any of the three study hotels have a rooftop bar/lounge or similar facility comparable to that proposed for the Jeff Hotel? Such an amenity will attract non-guests to the hotel to meet guests or to enjoy the view. That will result in additional parking demand. If the hotel upon which the derived parking rate is based does not have a comparable amenity, the derived rate is too low to be applied to the Jeff Hotel analysis.

Response to Comment No. IND 8-4

As described in Response to Comment No. IND 8-3, the peak hourly parking demand ratio applied for the Project was based on data from only the DoubleTree location, given that it experienced the highest parking demands of the three surveyed hotels. The DoubleTree provides an on-site restaurant, bar/lounge, and outdoor pool area, which makes it substantially similar to the Project. In addition, the DoubleTree location provides approximately 15,969 square feet of meeting/conference space, which equates to approximately 42.6 square feet of meeting/conference space per guest room. The Project, with approximately 4,800 square feet of meeting/conference space and 175 guest rooms, will average approximately 27.4 square feet of meeting/conference space per guest room. Thus, when accounting for the added parking demands of meeting/conference space, the use of the DoubleTree parking data is conservative and appropriate for estimating the Project's peak parking demands.

Comment No. IND 8-5

The parking facility that is proposed for the Jeff Hotel will consist of two subterranean levels beneath the building. Once that facility is built, there will be no opportunity to expand it on or near the hotel site. Therefore, the original supply must be adequate to serve maximum hotel parking demands, or the unsatisfied overflow parking demand will have to be accommodated elsewhere, such as in the adjacent residential neighborhood or in the adjacent shopping center.

The above concerns result in significant statistical uncertainty that should lead to the prudent conclusion that a "safety factor" must be applied to the estimate of an adequate parking supply. Safety factors are commonly used in engineering analysis and design when there is the possibility that there could be unaccounted for variance in the data upon which the estimate is based and when the estimate is to be used to design a permanent structure that cannot be expanded. In this case, it would be reasonable to add a 15% safety factor, or 21 spaces, to the predicted maximum demand of 138 spaces, for a statistically safe total of 159 spaces.

Response to Comment No. IND 8-5

As described in Responses to Comment Nos. IND 8-3 and IND 8-4, the peak hourly parking demand ratio applied for the Project was determined conservatively. Instead of averaging peak parking demand ratios for the three surveyed hotel uses, data were only used from the DoubleTree location which experienced the highest parking demands of the surveyed hotels. The DoubleTree provides on-site amenities similar to the Project, along with substantially more expansive meeting/conference space, and therefore is appropriate for establishing the peak parking demands of the Project. In addition, the parking demand analysis does not account for the Project's proximity to the Westfield-Culver City Transit Center, which is less than one-quarter mile away. As a hotel use closer to high-quality transit than any of the surveyed hotels, the Project's automobile parking demands are expected to be even lower due to the attractiveness of alternative travel mode options. Accounting for all of these considerations, the predicted maximum automobile parking demand of 138 parking spaces already has a built-in safety factor.

Comment No. IND 8-6

There is nothing in the analysis to indicate whether there will be a fee charged for parking in the hotel facility. Most hotels in the vicinity of the site, especially those with parking structures instead of surface lots, charge fees for parking, and the fees are usually substantial. That could be a disincentive for people to park at the hotel, especially those patronizing the restaurant or rooftop bar or those attending on-site meetings. They will be tempted to park in the neighborhood or at the adjacent shopping center, because their stays would be costly at the hotel parking structure. There should be an analysis of parking impacts on the nearby developments taking into consideration the effects of hotel parking fees.

Response to Comment No. IND 8-6

The Project will charge guests and patrons for parking in the subterranean parking facility. However, the parking fees for guests will be nominal so as not to incentivize off-site parking. There will also be a validation system for customers of the Project's commercial components that will reduce parking fees substantially for those patronizing these uses. As such, off-site parking impacts are not expected for the Project. Still, as described in the October 19, 2020 Traffic Impact Study, if the City determines there is an intrusion of Project parking on nearby residential streets, the Project shall pay for a parking study to determine if mitigation measures are needed and pay for the cost of implementing those mitigation measures.

Comment No. IND 8-7

As stated in the Jeff Hotel description, the parking supply will include tandem spaces. However, no number or percentage of such spaces is specified. Will tandem spaces constitute a majority of the total spaces? "Valet-assisted services" are proposed to assist with the tandem spaces. Will the valets be on duty at all times (7 days a week and 24 hours a day)? If not, when valets are not on duty, how many spaces will be effectively out of use, because self-parking guests will park in the outer tandem spaces leaving the inner spaces inaccessible?

Response to Comment No. IND 8-7

The Project will provide a minimum of 138 automobile parking spaces across two levels of subterranean parking. The 138 spaces will include 43 standard spaces, 90 tandem spaces, 4 ADA accessible spaces, and 1 ADA van accessible space. Valets will be available to assist Project guests and patrons with parking and retrieving their vehicles, 24 hours per day and 7 days per week, in order to ensure safe and efficient use of the tandem parking spaces. Valet staffing will be monitored and adjusted, as needed, to ensure that the parking supply will meet anticipated demands. With the vast majority of hotel guests expected to book their rooms in advance and restaurant patrons allowed to make reservations, the Project will be able to determine approximate traffic and parking demands in advance and adjust the number of valet staff accordingly.

Comment No. IND 8-8

The provision of valet-assisted services is an "operational measure", not a structural measure. An operational measure is one that can be changed or discarded at any time by the operators of the hotel. The integrity of an operational measure depends on strict and frequent monitoring by the City. Does the City have the necessary personnel to monitor hotel operations at various times throughout the week, such as between 10 p.m. and 6 a.m. on several days per week and on Saturdays and Sundays throughout the year? If strict and frequent monitoring cannot be achieved by the City, the reliance on the valet services is invalid.

Response to Comment No. IND 8-8

The Project has no intent of changing or discarding the planned valet-assist operation, as it is critical to the hotel's successful business. Therefore, as long as the hotel is operating, so will its 24-hour valet services. Further, the City has determined that the Project's parking demand analysis is adequate and, therefore, the Project should not require ongoing monitoring as a condition of development.

Comment No. IND 8-9

The hotel will have a large labor force. Will employees be allowed to park on-site at no cost? If not, where will hotel employees park – in the neighborhood or the adjacent shopping center? What were the policies for employee parking at the three study hotels during the parking counts? There should be adjustments to the derived parking rates to account for on-site employee parking if employees were not parked on-site at the existing hotels. On-site employee parking is another operational measure that could be eliminated by hotel management quickly. Does the City have the capability to monitor employee parking frequently? If not, the impacts of potential off-site employee parking should be included in an analysis of parking impacts on the adjacent neighborhood and shopping center.

Response to Comment No. IND 8-9

The Project will employ approximately 80 full-time and 40 part-time employees. Employees will pay no fees to park on-site, which mirrors the policy of the DoubleTree location used to develop the Project's peak parking demand. Therefore, no adjustment to the derived peak parking demand rate is needed. It should be noted that the Project will implement a TDM Plan designed to, among other things, reduce employee travel by personal automobile. Proposed TDM measures intended to increase the awareness and attractiveness of alternative travel mode options for employees include, but are not limited to, the following:

- A prominent display providing employees with current public transit route maps and schedules, rideshare materials, bicycle route and facility information, and a listing of all other resources available for employees not traveling by personal automobile;
- Preferential carpool/vanpool vehicle parking;
- Short-term and long-term bicycle parking;
- Bicycle tool and repair stand;
- Free on-site shared bicycles;
- Shower and changing room for employees who bike or walk;
- Public-accessible parking for shared mobility devices (e.g., bikeshare and scooter share systems);
- New and continuing employee orientation on the concept and goals of the TDM Plan;
- Commuter carpool matching and bicycle group-ride matching services;
- Transit pass discount program;
- On-site TDM coordinator;
- Marketing plan on available alternative mobility options;
- Guaranteed ride home for employees who use alternative travel modes to commute; and
- Financial incentive program for employees who use alternative travel modes (e.g. monthly subsidy for employees in vanpool program).

With the implementation of these TDM measures in place, a reduction in Project employee vehicle trips and automobile parking demand is expected. However, no reduction was assumed in the October 19, 2020 Traffic Impact Study in order to provide a more conservative parking analysis. As such, the Project is not expected to have off-site employee parking impacts. Further, the City has determined that the Project's parking demand analysis is adequate and, therefore, the Project should not require ongoing monitoring as a condition of development.

Comment No. IND 8-10

Operation of Dual Left-Turn Lane on Jefferson Boulevard

In the plan shown in Appendix F of the Crain report, the vehicles using the two proposed northbound left-turn lanes will turn onto two lanes of westbound Slauson Avenue. Those intersection exit lanes are proposed to be 11 feet and 12 feet wide, for a total of 23 feet from the curb to the center island of Slauson Avenue.

Response to Comment No. IND 8-10

This comment provides a brief description of the conceptual design changes proposed at the intersection of Jefferson Boulevard & Slauson Avenue to accommodate development of the Project, as shown in Appendix F to the October 19, 2020 Traffic Impact Study. Therefore, no further response is warranted.

Comment No. IND 8-11

Years of experience with the operations of dual left-turn lanes has led traffic engineers to recommend that the exit roadway for a dual left-turn movement be a minimum of 26 feet wide, with a more desirable width of 28 feet. That is based on years of observations at existing dual left-turn lanes that the drivers in the inner lane (i.e., the lane closer to the centerline) tend to drift to their right away from the center island or the opposite direction vehicles during their turns, and the drivers in the outer lane compensate for that by drifting to their right, also. The extra width in the curbside exit lane provides the outer lane driver with the room to complete the turn efficiently and safely. Without that extra width, outer lane drivers have been observed to hesitate to complete their turns until the adjacent inner lane vehicle has completed the turn ahead of them. That results in reduction of outer lane capacity plus the potential for side-swipe accidents with inner lane vehicles and rear-end accidents between outer lane vehicles. Adequate exit lane width must be provided for the proposed dual left-turn lanes if they are to be effective and safe. The striping plan for Slauson Avenue west of Jefferson must be modified to provide the additional exit lane width.

Response to Comment No. IND 8-11

The comment regarding the conceptual striping plan for the intersection of Jefferson Boulevard & Slauson Avenue (Appendix F to the October 19, 2020 Traffic Impact Study) and the inadequate widths of the receiving lanes for the proposed northeastbound dual left-turn lanes has been noted. There was extensive coordination between City Department of Public Works/Mobility & Traffic Engineering staff and the Project team on the conceptual striping design of this intersection. First, the left receiving lane is approximately 16 feet wide at the start of the painted median island, meaning the total receiving width is approximately 28 feet at the intersection. Avoidance of the island by drivers in the centerline-adjacent left-turn lane is not expected. It should be mentioned that the dual left-turn lanes will serve a residential area to the west of the Project Site on a Local Street with no transit service. Therefore, larger commercial and transit vehicles are not expected to utilize these lanes in high numbers. Further, since the plan is only conceptual at this time, modifications to the plan may occur prior to the final striping design. The Slauson Avenue eastbound left-turn lane width could be reduced from 11 feet to 10 feet and/or the eastbound through lane width could be reduced from 12 feet to 11 feet to provide another 1-2 feet of width for the westbound receiving lanes. This would increase the westbound receiving width to 29-30 feet at the intersection. Another consideration for providing more westbound receiving lane width would involve replacing the painted median island in front of the Project Site with a center median with Qwick Kurb and object markers on flexible barrier posts (paddles). This modification would reallocate the 5 feet of painted median island width, apportioning 2 feet for the center median with Qwick Kurb and paddles and 3 feet for the westbound receiving lanes. This would widen the two westbound receiving lanes to 26 feet past the Project driveway. Such plan modifications will be considered as the plan progresses from conceptual- to construction-level.

Comment No. IND 8-12

As part of the dual left-turn plan, Crain recommends the elimination of all vehicle stopping (via red curb) along the north side of Slauson Avenue between the alley west of the project site and Culver Park Drive, a distance of one and one-half blocks, to provide the two proposed exit lanes. Seven existing curbside parking spaces would be eliminated in the adjacent residential neighborhood, and there is photographic evidence that those spaces were being used, until they were temporarily blocked by a construction project. There is no analysis of the impacts of that loss of curbside parking, nor are any measures to mitigate the loss of neighborhood parking proposed in the report. That will be a significant issue in the event of any overflow parking from the hotel, such as employees who may not be permitted to park within the hotel facility, hotel facility patrons who choose to park off-site, or hotel patron vehicles that are moved to street parking by the valets when the on-site facility is full.

Response to Comment No. IND 8-12

As outlined in Responses to Comments Nos. IND 8-3 through IND 8-9, the Project's automobile parking supply is expected to accommodate the peak demands of all users. Overflow parking is not expected from the hotel. Employees will be permitted to park within the subterranean parking facility. Hotel guests and patrons are unlikely to park off-site as parking fees will be nominal and there will be a validation system for users of the hotel's commercial components. Valet attendants will not move automobiles from the parking facility to neighboring roadways.

While there will be a loss of curbside parking along the north side of Slauson Avenue, west of the site-adjacent alley, the loss was determined in conjunction with City staff to be necessary in order for the intersection of Jefferson Boulevard & Slauson Avenue to operate safely and efficiently. Although an on-street parking analysis was not conducted, the Project has recognized the Sunkist Park neighborhood's concerns about parking overflow. As described in the October 19, 2020 Traffic Impact Study, if the City determines there is an intrusion of Project parking on nearby residential streets, the Project shall pay for a parking study to determine if mitigation measures are needed and pay for the cost of implementing those mitigation measures.

Comment No. IND 8-13

Truck Turning From and To the Alley West of the Hotel Site

Appendix G of the Crain report consists of diagrams illustrating the truck turning paths of a large truck:

a) backing into the hotel loading area from the northbound alley, and b) leaving the loading area to the northbound alley. As shown in the diagrams, the two maneuvers will each require the entire width of the alley, with the driver's side of the truck virtually touching the western edge of the alley.

Response to Comment No. IND 8-13

This comment provides a brief description of the Project loading area truck turn analysis provided in Appendix G of the Project's October 19, 2020 Traffic Impact Study. As the comment does not raise any specific issues regarding the content or adequacy of the Draft MND, no further response is warranted.

Comment No. IND 8-14

However, there is a large utility pole in the alley across from the northern part of the hotel site that is not shown in the Figure G diagrams. If that pole remains in place, the alley width available for the truck turn is reduced by three to four feet. The trucks could not make either of the maneuvers as illustrated. It is very expensive to move such a large utility pole. Will the hotel developers do so, or will they provide a more feasible truck turning plan?

Response to Comment No. IND 8-14

The commenter raises concern that the Project loading area truck turn analysis illustrated truck maneuvers without sufficient consideration of the power poles that line the western edge of the north-south alley. This unnamed north-south alley forms the western boundary of the Project Site and serves as access to the ground floor loading dock and egress from the outer Project drive aisle and subterranean parking garage. There are power poles located on the western side of the north-south alley which were not shown in the Project loading area truck turn analysis included in Appendix G of the October 19, 2020 Traffic Impact Study. To confirm that the power poles will not interfere with truck access/egress to/from the loading dock, the topographic survey was overlaid on the Project Site plan and the existing utility poles were added to the truck turn analysis. Attached at end of this response letter, please find the revised Appendix G exhibit (Figure D-1) showing the truck turns and utility pole locations. As shown, trucks as large as a WB-50 design vehicle will be able to maneuver along the alley in both inbound and outbound directions without conflicting with any of the existing utility poles

Comment No. IND 8-15

The three areas that I have addressed should be of significant concern to the City officials and staff, if the proposed hotel is to have less-than-significant impacts on the bordering streets and the adjacent residential neighborhood. I would be pleased to discuss my comments with you and other members of the City staff. My telephone number is 310-558-0808 and my email address is artraffic@aol.com.

Response to Comment No. IND 8-15

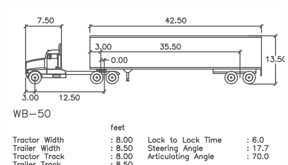
The three areas references in this comment are addressed above in Response to Comment Nos. IND 8-2 to IND 8-15. The comment also provides contact information and is noted.

INBOUND

NORTH

OUTBOUND

WB-50



LEGEND

EXISTING UTILITY POLE LOCATION

APPENDIX G

4/8/2021

FN: JeffersonHotelCulverCity\TruckTurn\TruckTurn20210408

Figure D-1 PROJECT LOADING AREA TRUCK TURN ANALYSIS
(WB-50 DESIGN VEHICLE)

CRAIN

<u>Comment Letter No. IND 9</u>

Brian Flynn (on behalf of the Supporters Alliance for Environmental Responsibility ("SAFER")
Lozeau Drury, LLP
1939 Harrison Street, Suite 150
Oakland, CA 94612
Received February 19, 2021

Comment No. IND 9-1

I am writing on behalf of the Supporters Alliance for Environmental Responsibility ("SAFER") regarding the Mitigated Negative Declaration ("MND") prepared for the 11469 Jefferson Boulevard Project ("Project") (P2019-0194-SPR; P2019-0194-CUP; P2019-0194- AUP) in the City of Culver City ("City"). SAFER is a California nonprofit public benefit corporation whose purposes include contributing to the preservation and enhancement of the environment and advocating for programs, policies, and development projects that promote not only good jobs but also a healthy natural environment and working environment.

After reviewing the MND, it is clear that there is a "fair argument" that the Project may have unmitigated adverse environmental impacts. The written expert comments of Francis Offermann, Certified Industrial Hygienist, and SWAPE (attached hereto as Exhibit A and Exhibit B, respectively), as well as the comments below, identify substantial evidence of a fair argument that the Project may have significant environmental impacts. Accordingly, an environmental impact report ("EIR") is required to analyze these impacts and to propose all feasible mitigation measures to reduce those impacts. We urge the City to refrain from approving the MND, and instead to prepare an EIR for the Project prior to any Project approvals as required by CEQA.

Response to Comment No. IND 9-1

This comment introduces the commenter and provides background information on SAFER. The comment introduces the comments below and asserts that the Project may have unmitigated adverse environmental impacts which requires preparation of an EIR. Responses to specific comments on the Draft MND are provided below in Response to Comments Nos IND 9-4 to IND 9-32. As this comment does not raise any specific issues with respect to the content or adequacy of the Draft MND, no further response is warranted.

Comment No. IND 9-2

I. PROJECT BACKGROUND

The Project would redevelop a 33,813 square foot (sf) (0.78-acre) property located in the northwest corner of the intersection at Jefferson Boulevard and Slauson Avenue. The existing single- story commercial (retail/restaurant) building and associated asphalt-paved surface parking lot would be removed as part of the Project.

The Project Site is currently improved with an approximately 13,000 sf main single-story, wood-framed commercial shopping center which includes both retail and restaurant uses. The remainder of the site consists of an asphalt-paved surface parking lot and ornamental landscaped areas. Ingress/egress to the Project Site is available via a driveway from Jefferson Boulevard and a driveway from Slauson Avenue.

The Project includes the development of a new, five-story, 175-room boutique hotel building with food and beverage amenities and a two level, below-grade parking garage. A pool and roof top bar would be located on the fifth floor. The 111,000 sf building would be up to 56 feet in height (with the elevator shaft reaching 69 feet and 6 inches in height) and surrounded by landscaped areas located on site and within the public right of way. Parking for the proposed uses would be provided on site within a subterranean parking structure that would accommodate a minimum of 138 parking spaces.

The Project Site is located at the south-end of the commercial corridor that runs along Jefferson Boulevard perpendicular to Interstate 405 (I-405) freeway within the Fox Hills area of Culver City. Downtown Los Angeles is approximately eight (8) miles east of the Project Site.

The Project Site is bounded by the intersection at Jefferson Boulevard and Slauson Avenue with commercial uses directly north of the Project Site and a public alley adjacent to the western Project boundary with residential uses just beyond the alley. Commercial uses are also located east and south of the Project Site across Jefferson Boulevard and Slauson Avenue. Both the I-405 and State Route 90 (SR-90) freeways are located less than 400 feet west and south of the Project Site.

Response to Comment No. IND 9-2

This comment provides an overview of the Project and its location. As this comment does not raise any specific issues with respect to the content or adequacy of the Draft MND, no further response is warranted.

Comment No. IND 9-3

As the California Supreme Court held, "[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR." (*Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 319-320 (*CBE v. SCAQMD*) [citing *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504–505.].) "Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." (Pub. Res. Code ["PRC"] § 21068; see also 14 CCR § 15382.) An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial." (*No Oil, Inc., supra*, 13 Cal.3d at 83.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Communities for a Better Env't v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 109 (CBE v. CRA).)

The EIR is the very heart of CEQA. (*Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1214 (*Bakersfield Citizens); Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927.) The EIR is an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return." (*Bakersfield Citizens, supra*, 124 Cal.App.4th at 1220.) The EIR also functions as a "document of accountability," intended to "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." (*Laurel Heights Improvements Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 392.) The EIR process "protects not only the environment but also informed self-government." (*Pocket Protectors, supra*, 124 Cal.App.4th at 927.)

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." (PRC § 21080(d); see also *Pocket Protectors, supra,* 124 Cal.App.4th at 927.) In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (14 Cal. Code Regs. § 15371), only if there is not even a "fair argument" that the project will have a significant environmental effect. (PRC, §§ 21100, 21064.) Since "[t]he adoption of a negative declaration

. . . has a terminal effect on the environmental review process," by allowing the agency "to dispense with the duty [to prepare an EIR]," negative declarations are allowed only in cases where "the proposed project will not affect the environment at all." (*Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440.) A mitigated negative declaration is proper only if the project revisions would avoid or mitigate the potentially significant effects identified in the initial study "to a point where clearly no significant effect on the environment would occur, and…there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment." (PRC §§ 21064.5 and 21080(c)(2); *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 331.) In that context, "may" means a reasonable possibility of a significant effect on the environment. (PRC §§ 21082.2(a), 21100, 21151(a); *Pocket Protectors, supra*, 124 Cal.App.4th at 927; *League for Protection of Oakland's etc. Historic Res. v. City of Oakland* (1997) 52 Cal.App.4th 896, 904– 905.)

Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency's decision. (14 CCR § 15064(f)(1); *Pocket Protectors, supra*, 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-51; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602.) The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. (*Pocket Protectors, supra*, 124 Cal.App.4th at 928.)

The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

> This 'fair argument' standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency's decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

(*Kostka & Zishcke, Practice Under CEQA,* §6.29, pp. 273-74.) The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with a preference for resolving doubts in favor of environmental review." (*Pocket Protectors, supra*, 124 Cal.App.4th at 928.)

Response to Comment No. IND 9-3

This comment provides background CEQA information, including information relevant to EIRs and the "fair argument" standard. This comment is noted; however, as this comment does not raise any specific issues with respect to the content or adequacy of the Draft MND, no further response is warranted.

Comment No. IND 9-4

III. DISCUSSION

A. Substantial Expert Evidence Establishes a Fair Argument that the Project's Indoor Air Quality Will Have a Significant Impact on Human Health Due to Formaldehyde Emissions.

The MND fails to address the significant health risks posed by the Project from formaldehyde, a toxic air contaminant ("TAC"). Certified Industrial Hygienist, Francis Offermann, PE, CIH, has conducted a review of the Project, the MND, and relevant documents regarding the Project's indoor air emissions. Mr. Offermann is one of the world's leading experts on indoor air quality, in particular emissions of formaldehyde, and has published extensively on the topic. As discussed below and set forth in Mr. Offermann's comments, the Project's emissions of formaldehyde to air will result in very significant cancer risks to future residents at the Project's apartments. Mr. Offermann's expert opinion and calculation present a "fair argument" that the Project may have significant health risk impacts as a result of these indoor air pollution emissions, which were not discussed, disclosed, or analyzed in the MND. These impacts must be addressed in n EIR. Mr. Offermann's comment and curriculum vitae are attached as Exhibit A.

Formaldehyde is a known human carcinogen and listed by the State as a TAC. SCAQMD has established a significance threshold of health risks for carcinogenic TACs of 10 in a million and a cumulative health risk threshold of 100 in a million. The MND fails to acknowledge the significant indoor air emissions that will result from the Project. Specifically, there is no discussion of impacts or health risks, no analysis, and no identification of mitigations for significant emissions of formaldehyde to air from the Project.

Mr. Offermann explains that many composite wood products typically used in home and apartment building construction contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states, "The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particle board. These materials are commonly used in residential, office, and retail building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims." (Ex. A, pp. 2-3.)

Mr. Offermann states that future employees of the hotel will be exposed to a cancer risk from formaldehyde of approximately 17.7 per million, ***even assuming that*** all materials are compliant with the California Air Resources Board's formaldehyde airborne toxics control measure. (Ex. A, p. 4.) This exceeds SCAQMD's CEQA significance thresholds for airborne cancer risk of 10 per million. (Id.)

Mr. Offermann concludes that these significant environmental impacts must be analyzed in an EIR and mitigation measures should be imposed to reduce the risk of formaldehyde exposure. (Ex. A, pp. 5, 10-12.) He prescribes a methodology for estimating the Project's formaldehyde emissions in order to do a more project-specific health risk assessment. (Id., pp. 5- 9.). Mr. Offermann also suggests several feasible mitigation measures, such as requiring the use of no-added-formaldehyde composite wood products, which are readily available. (Id., pp. 11-13.) Mr. Offermann also suggests requiring air ventilation systems which would reduce formaldehyde levels. (Id.) Since the MND does not analyze this impact at all, none of these or other mitigation measures have been considered.

Response to Comment No. IND 9-4

The comment letter and supporting memorandum from Francis Offerman states that the MND fails to address significant health risks by the Project from formaldehyde. Mr. Offerman references his most recent research paper (Singer, B.C, Chan, W.R, Kim, Y., Offermann, F.J., and Walker I.S. 2020. *Indoor Air Quality in California Homes with Code-Required Mechanical Ventilation*. Indoor Air, Vol 30, Issue 5, 885-899) as evidence that there is a "fair argument" for significant health risks resulting from poor indoor air quality by the Project. The research paper collected data from 70 homes about ventilation practices and indoor air quality and measured indoor air concentrations of formaldehyde emitted from composite wood products that might contain formaldehyde-based glues. According to the research paper, the study characterized 70 homes built between 2011 and 2017. In order to be part of the study, buildings also had to meet several other conditions. According to the research paper, to be included in the study, the building had to be a single-family detached structure, located in California, and built in 2011 or later. According to the research paper, the "built in 2011 or later" requirement was used as a proxy for single-family detached homes built to comply with the 2008 version of the California Title 24 standards.

First, Mr. Offerman incorrectly refers to the Project's "future residents at the Project's apartments." The Project analyzed in this Draft MND is hotel development and contains no residential uses. Thus, the comment references an entirely different project unrelated to the Project analyzed in this Draft MND and no further response is required.

However, even when considering the comment, the building conditions in the research paper are highly dissimilar to the Project, as the Project does not propose single-family detached structures. Furthermore, the building conditions in the research paper are also highly dissimilar to the Project because the research paper was seeking to study homes built to comply with the 2008 version of the California Title 24 standards, whereas the Project would be built to the most current 2019 California Title 24 standards and would meet the criteria for LEED Silver or equivalent certification level pursuant to PDF-AIR-3 described in the MND. The 2019 version of the Title 24 standards include new ventilation requirements that improve indoor air quality protecting residents from air pollution originating from outdoor and indoor sources.[1] The commenter fails to note that the research paper, *Ventilation and Indoor Air Quality in New California Homes with Gas Appliances and Mechanical Ventilation*, discussed indoor air quality and the effect of fan sizing for ventilation with respect to Title 24. The research paper noted in its findings that the adopted fan sizing method in the 2019 version of the Title 24 includes requirements that ensures there is no structural bias towards higher pollutant exposure in homes using unbalanced ventilation systems, unlike the previous 2013 Title 24 standards, which could worsen indoor air quality by 20 percent on average.[2] Further, while the study found many recently constructed homes (at the time of the field study) had ventilation equipment with more airflow capacity than the minimum requirements of Title 24 for when they were built and would meet the higher air flow requirements of the 2019 version of the Title 24 standards, the 2019 Title 24 requirements ensured the system consistently demonstrated lower indoor air quality exposures across various home types (e.g., homes with more air leakage, homes with more airtightness) than prior standards.[3] Therefore, while it is misleading to directly apply results from the research paper to the Project's hotel uses, the research paper wholly acknowledges that California regulations have been effective in reducing formaldehyde concentrations in homes and states that "[c]omparisons of indoor formaldehyde…levels with those from a prior study of new homes in California (conducted in 2007-08) suggest that contaminant levels are lower in recently built (after 2008) homes. California's regulation to limit formaldehyde emissions from composite wood products appears to have substantially lowered its emission rate and concentration in new homes."[4] The research paper

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1 *CEC, News Release, May 9, 2018, https://www.energy.ca.gov/news/2018-05/energy-commission-adopts-standards-requiring-solar-systems-new-homes-first.*

2 *Chan, W., Kim, Y., Singer, B., and Walker I. 2019. Ventilation and Indoor Air Quality in New California Homes with Gas Appliances and Mechanical Ventilation. Lawrence Berkeley National Laboratory, Energy Technologies Area, LBNL-2001200, DOI: 10.20357/B7QC7X.*

3 *Chan, W., Kim, Y., Singer, B., and Walker I. 2019. Ventilation and Indoor Air Quality in New California Homes with Gas Appliances and Mechanical Ventilation. Lawrence Berkeley National Laboratory, Energy Technologies Area, LBNL-2001200, DOI: 10.20357/B7QC7X.*

4 *Chan, W., Kim, Y., Singer, B., and Walker I. 2019. Ventilation and Indoor Air Quality in New California Homes with Gas Appliances and Mechanical Ventilation. Lawrence Berkeley National Laboratory, Energy Technologies Area, LBNL-2001200, DOI: 10.20357/B7QC7X.*

also states that "[indoor air quality] satisfaction was also similar in the newer homes as compared to homes built in years prior. These results indicate the success of standards."[5]

The State of California's own regulatory agency with authority over this issue, the California Air Resources Board (CARB), has stated that the control measures it has approved for reducing emissions, including formaldehyde, from composite wood products provide a level of control that protects health and safety. CARB makes this point by stating directly in its Frequently Asked Questions for Consumers on Reducing Emissions from Composite Wood Products that, from a public health standpoint, the CWP Regulation's emission standards are set at low levels intended to protect public health.[6] The first emission standards (Phase 1) went into effect in 2009. The more stringent Phase 2 standards are now in effect for all composite wood panels and finished goods sold in California. Prior to the CWP Regulation, formaldehyde emissions were often ten to twenty-fold higher than the current allowable levels. The regulation also includes provisions for no-added formaldehyde and ultra-low emitting formaldehyde-based resins, to encourage the use of these lower-emitting resins in composite wood products.[7]

The Project would be required to comply with all applicable City, State, and Federal requirements pertaining to the use of indoor building materials. As the Project will include efficient heating, ventilation, and air conditioning (HVAC) systems pursuant to PDF-AIR-2 in the Draft MND, and as the Project will be built to the 2019 version of the Title 24 standards (the 2019 version of the Title 24 standards is the current version as of the date of this response letter), evidence demonstrates that compliance with applicable regulations will be effective in reducing indoor formaldehyde concentrations. Therefore, the research paper does not represent credible evidence that the Project would pose significant health risks to Project workers and temporary hotel guests from indoor air quality.

Moreover, the Appellant speculates that the Project could have an effect on the Project's users, which is not considered to be an impact under CEQA and need not be analyzed in the Project's MND. See, e.g., *Parker Shattuck Neighbors v. Berkeley City Council* (2013) 222 Cal.App.4th 768, 782 (Court concluded that alleged health risks to project residents and construction workers from contaminated soils did not constitute a fair argument of an impact to the environment under CEQA. "In general, CEQA does not regulate environmental changes that do not affect the public at large: "the question is whether a project [would] affect the environment of persons in general, not whether a project [would] affect particular persons." [Citations omitted]). Furthermore, the calculations provided in the comment amount to speculation given that the underlying report is based on highly dissimilar uses compared to the Project and do not reflect the actual Project uses or compliance with current regulations and are thus unsupported by substantial evidence.

With regard to operational toxic air contaminant emissions, ESA has provided additional clarifying information regarding operational health risk impacts to the environment, which is provided in Appendix B of this Final MND. As shown therein, health risk impacts to the environment would have a cancer risk of less than 10 in one million,

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5 *Chan, W., Kim, Y., Singer, B., and Walker I. 2019. Ventilation and Indoor Air Quality in New California Homes with Gas Appliances and Mechanical Ventilation. Lawrence Berkeley National Laboratory, Energy Technologies Area, LBNL-2001200, DOI: 10.20357/B7QC7X.*

6 *California Air Resources Board, Frequently Asked Questions for Consumers, Reducing Formaldehyde Emissions from Composite Wood Products, https://ww3.arb.ca.gov/toxics/compwood/consumer_faq.pdf?_ga=2.32900281.682464648.1573169874-1026610208.1565143819. Accessed November 2019.*

7 *California Air Resources Board, Frequently Asked Questions for Consumers, Reducing Formaldehyde Emissions from Composite Wood Products, https://ww3.arb.ca.gov/toxics/compwood/consumer_faq.pdf?_ga=2.32900281.682464648.1573169874-1026610208.1565143819. Accessed November 2019.*

consistent with the findings already disclosed in the Draft MND (see pages B-14 and B-15 of the Draft MND), which would be a less than significant impact to the environment, as defined by CEQA and the SCAQMD.

Therefore, based on the above, the commenter does not present a fair argument that the project would result in significant indoor air quality impacts and the preparation of an EIR is not required. Nonetheless, this comment will be made available to the public and decision makers as information.

Comment No. IND 9-5

When a Project exceeds a duly adopted CEQA significance threshold, as here, this alone establishes substantial evidence that the project will have a significant adverse environmental impact. Indeed, in many instances, such air quality thresholds are the only criteria reviewed and treated as dispositive in evaluating the significance of a project's air quality impacts. (See, e.g. Schenck v. County of Sonoma (2011) 198 Cal.App.4th 949, 960 [County applies Air District's "published CEQA quantitative criteria" and "threshold level of cumulative significance"]; see also *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-111 ["A 'threshold of significance' for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant"].) The California Supreme Court made clear the substantial importance that an air district significance threshold plays in providing substantial evidence of a significant adverse impact. (*Communities for a Better Environment v. South Coast Air Quality Management Dist*. (2010) 48 Cal.4th 310, 327 ["As the [South Coast Air Quality Management] District's established significance threshold for NOx is 55 pounds per day, these estimates [of NOx emissions of 201 to 456 pounds per day] constitute substantial evidence supporting a fair argument for a significant adverse impact."].) Since expert evidence demonstrates that the Project will exceed the SCAQMD's CEQA significance threshold, there is substantial evidence that an "unstudied, ***potentially significant environmental effect***[]" exists. (See *Friends of Coll. of San Mateo Gardens v. San Mateo Cty. Cmty. Coll. Dist.* (2016) 1 Cal.5th 937, 958 [emphasis added].) As a result, the City must prepare an EIR for the Project to address this impact and identify enforceable mitigation measures.

Response to Comment No. IND 9-5

The comment references alleged expert evidence that demonstrates that the Project will exceed the SCAQMD's CEQA significance threshold with respect to NO_X emissions of 201 to 456 pounds per day, which would exceed the SCAQMD established significance threshold for NOx of 55 pounds per day. The comment relies on incorrect information that substantially overestimates the Project's NO_X emissions. As shown on pages B-9 and B-10 and with supporting information provided in Appendix B, the Project would not exceed the SCAQMD established significance threshold for NOx of 100 pounds per day during construction and 55 pounds per day during operations. Therefore, the City is not required to prepare an EIR for the Project and no mitigation measures are required. This comment is further responded to in greater detail in Response to Comment No. 9-20.

Comment No. IND 9-6

The failure of the MND to address the Project's formaldehyde emissions is contrary to the California Supreme Court's decision in *California Building Industry Ass'n v. Bay Area Air Quality Mgmt. Dist*. (2015) 62 Cal.4th 369, 386 ("CBIA"). In that case, the Supreme Court expressly holds that potential adverse impacts to future users and residents from pollution generated by a proposed project ***must be addressed*** under CEQA. At issue in CBIA was whether the Air District could enact CEQA guidelines that advised lead agencies that they must analyze the impacts of adjacent environmental conditions on a project. The Supreme Court held that CEQA does not generally require lead agencies to consider the environment's effects on a project. (*CBIA*, 62 Cal.4th at 800-01.) However, to the extent a project may exacerbate existing environmental conditions at or near a project site, those would still have to be considered pursuant to CEQA. (Id. at 801.) In so holding, the Court expressly held that

CEQA's statutory language required lead agencies to disclose and analyze "impacts on a ***project's users or residents*** that arise ***from the project's effects*** on the environment." (Id. at 800 [emphasis added].)

The carcinogenic formaldehyde emissions identified by Mr. Offermann are not an existing environmental condition. Those emissions to the air will be from the Project. People will be residing in and using the Project once it is built and begins emitting formaldehyde. Once built, the Project will begin to emit formaldehyde at levels that pose significant direct and cumulative health risks. The Supreme Court in CBIA expressly finds that this type of air emission and health impact by the project on the environment and a "project's users and residents" must be addressed in the CEQA process. The existing TAC sources near the Project site would have to be considered in evaluating the cumulative effect on future residents of both the Project's TAC emissions as well as those existing off-site emissions.

The Supreme Court's reasoning is well-grounded in CEQA's statutory language. CEQA expressly includes a project's effects on human beings as an effect on the environment that must be addressed in an environmental review. "Section 21083(b)(3)'s express language, for example, requires a finding of a 'significant effect on the environment' (§ 21083(b)) whenever the 'environmental effects of a project will cause substantial adverse effects *on human beings*, either directly or indirectly.'" (*CBIA*, 62 Cal.4th at 800 [emphasis in original].) Likewise, "the Legislature has made clear—in declarations accompanying CEQA's enactment—that public health and safety are of great importance in the statutory scheme." (Id., citing e.g., §§ 21000, subds. (b), (c), (d), (g), 21001, subds. (b), (d).) It goes without saying that the thousands of future residents at the Project are human beings and the health and safety of those residents must be subjected to CEQA's safeguards.

The City has a duty to investigate issues relating to a project's potential environmental impacts. (See *County Sanitation Dist. No. 2 v. County of Kern*, (2005) 127 Cal.App.4th 1544, 1597–98. ["[U]nder CEQA, the lead agency bears a burden to investigate potential environmental impacts."].) The proposed office buildings will have significant impacts on air quality and health risks by emitting cancer-causing levels of formaldehyde into the air that will expose future residents to cancer risks potentially in excess of SCAQMD's threshold of significance for cancer health risks of 10 in a million. Likewise, when combined with the risks posed by the nearby TAC sources, the health risks inside the project may exceed SCAQMD's cumulative health risk threshold of 100 cancers in a million. Currently, outside of Mr. Offermann's comments, the City does not have any idea what risks will be posed by formaldehyde emissions from the Project or the residences. As a result, the City must include an analysis and discussion in an EIR which discloses and analyzes the health risks that the Project's formaldehyde emissions may have on future residents and identifies appropriate mitigation measures.

Response to Comment No. IND 9-6

The comment cites to a California Supreme Court opinion, *California Building Industry Ass'n v. Bay Area Air Quality Mgmt. Dist*. (2015) 62 Cal.4th 369, 386 ("CBIA"). However, the CBIA does not support the comment's position that the City must analyze the impact of the Project's formaldehyde emissions on the Project's future residents and users – CBIA in fact supports the opposite conclusion.

As stated in the comment, the Supreme Court in CBIA held that "[A]gencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users." *Id*. at 377. In other words, a project's environmental impact on the project's future residents or users only need to be analyzed where some environmental hazards or conditions already exist, and could be exacerbated by the proposed project. The Court clarified that a project's potentially significant exacerbating effects on existing environmental hazards are usually "effects that arise because the project brings development and people into the area affected." *Id*. at 388.

Here, the comment points to no existing environmental hazards or conditions that would be exacerbated by the Project's alleged formaldehyde emissions. In fact, the comment acknowledges that "The carcinogenic formaldehyde emissions identified by Mr. Offermann are not an existing environmental condition. Those emissions to the air will be from the Project." Therefore, the situation that the Supreme Court identified in CBIA, which requires the analysis of the project's environmental impacts on its future residents and users, is not present here. The comment's reliance on CBIA is thus misplaced and CBIA's general rule should apply instead – CEQA does not require agencies to analyze the impact of existing environmental conditions on a project's future users and residents.

Furthermore, operational air quality emissions, including operational emissions of VOCs (formaldehyde is a VOC), were found to be below SCAQMD significance thresholds (Table B-2 *Maximum Regional Operational Emissions* of Section III. Air Quality of the Draft MND). The Project would not result in significant operational emissions and would comply with all applicable City, State, and Federal requirements pertaining to the use of indoor building materials. Please refer to Response to Comment No. IND 9-4.

Based on the above, the alleged health risks to Project users do not constitute a fair argument of an impact to the environment under CEQA.

Comment No. IND 9-7

B. The MND Relies on Unsubstantiated Input Parameters to Estimate Project Emissions and Thus Fails to Provide Substantial Evidence of the Project's Air Quality Impacts.

Matt Hagemann, P.G., C.Hg., and Paul E. Rosenfeld, Ph.D., of the Soil/Water/Air Protection Enterprise ("SWAPE") reviewed the air quality analysis in the MND. SWAPE's comment letter and CVs are attached as Exhibit B and their findings are summarized below.

The MND for the Project relies on emissions calculated from the California Emissions Estimator Model Version CalEEMod.2016.3.2 ("CalEEMod"). This model relies on recommended default values based on site specific information related to a number of factors. The model is used to generate a project's construction and operational emissions. SWAPE reviewed the Project's CalEEMod output files and found that the values input into the model were inconsistent with information provided in the MND. This results in an underestimation of the Project's emissions. As a result, the MND's air quality analysis cannot be relied upon to determine the Project's air quality impacts. Instead, the City must prepare an EIR to adequately evaluate the impacts that construction and operation of the Project will have on local and regional air quality.

Response to Comment No. IND 9-7

The CalEEMod model offers default data that can be used when site-specific information is not available, as discussed on Page 1 of the CalEEMod Users Guide.[8] Site-specific Project information was gathered and inputted into the CalEEMod model or other emissions tools and is consistent with the information provided in the MND. The MND relies on EMFAC2017, which was approved by the U.S. Environmental Protection Agency (USEPA) in 2019. CalEEMod was used to calculate Project emissions from sources other than on-road mobile sources while EMFAC2017 was used to calculate emissions for on-road mobile sources.

[8] California Air Pollution Control Officers Association, California Emissions Estimator Model, User's Guide, Version 2016.3.2, November 2017, http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4.

Therefore, the comment is inaccurate in the claim that the values inputted into CalEEMod were inconsistent with information provided in the MND as well as the claim that the Project's emissions were underestimated. The specific claims are addressed in further detail below in Response to Comment Nos. IND 9-8 through 9-20.

Comment No. IND 9-8

1. The MND's air quality model improperly reduced the default CO2 intensity factor.

SWAPE's review of the Project's CalEEMod output files found that the CO2 intensity factor was manually reduced by approximately 28%, from the default value of 702.44 pounds per megawatt hour ("lbs/MWh") to 509.22 lbs/MWh. (Ex. B, p. 3.) The "User Entered Comments & Non-Default Data" section attempted to justify these changes by stating: "CO2e intensity factor was linearly projected for year 2022 anticipated RPS based on SB 100 target of 44% RPS by 12/31/2024 projected and from SCE contract with the CPUC to have 41.4% RPS by 2020" (MND, Appendix A, pp. 489, 539).

SWAPE found that the alteration to the CO2 intensity factor was unjustified for two reasons: "First, the IS/MND cannot simply interpolate its own CO2 intensity factor based on estimates of future increases in renewable energy use. Second, simply because the state has renewable energy goals for 2024 does not ensure that these goals will be achieved locally on the Project site or by the Project's specific utility company. As a result, we cannot verify the revised CO2 intensity factor." (Ex. B, p. 3.) SWAPE concluded that the unsubstantiated reduction to the default CO2 intensity factor may underestimate the Project's GHG emissions and, therefore, cannot be relied upon to determine Project's impacts. (Ex. B, p. 4.)

Response to Comment No. IND 9-8

SWAPE's comment that adjusting CO_2 intensity factors is unjustified is misleading and disingenuous. Changes to the default CO_2 intensity factors in CalEEMod are appropriate and necessary to more accurately calculate the Project's GHG impacts. CalEEMod was designed with default assumptions, supported by substantial evidence to the extent available at the time of programming. However, CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA.[9] The Project assumptions clearly express the reasoning for modifying the default intensity factors based on regulatory mandates that utilities providers are required to achieve in accordance with the State of California Renewables Portfolio Standards (RPS). SWAPE appears to misleadingly characterize the RPS as State goals. This is factually incorrect. As discussed in detail on pages 19 and 20 of the Greenhouse Gas Technical Report (November 2020), which was prepared to inform the findings in the Draft MND and was provided by the City alongside the Draft MND, it is abundantly clear that the RPS sets legislative mandate and not voluntary goals. As stated on page 20 of the Greenhouse Gas Technical Report, "retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030." California electricity utilities are obligated to meet the RPS under the supervision of the California Public Utilities Commission (CPUC) as required by State law. SWAPE's comment seems to suggest that a utility would either ignore State law or reach the RPS only at the RPS target year. A linear projection of CO_2 intensity factor reductions is a reasonable approach assuming that a utility incrementally increases its renewable energy mix year-over-year. This is a reasonable assumption because utilities are required to submit an RPS compliance report annually to CPUC to ensure progress is being made towards the established target

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[9] CalEEMod was designed with default assumptions supported by substantial evidence to the extent available at the time of programming. However, CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA. CalEEMod User's Guide, pp. 12-13.

years and renewable energy percentages. Further, the analysis provided in the Draft MND is likely conservative given that the City of Culver City recently transitioned to a new utility provider, Clean Power Alliance (CPA). CPA is the default utility provider to the City as of early 2019 and has three rate options for commercial and residential customers to choose from; lean power (36% renewable sources), clean power (50% renewable sources), and green power (100% renewable sources). Customers are automatically enrolled in the green power option unless they decide to opt to a different rate option or opt out and receive power from SCE. CPA is also subject to all RPS compliance enforced by CPUC. Given that CPA has rate options that offer a much higher renewable percentage (and therefore lower intensity factors) than SCE and that they are the default provider, it is reasonable to conclude that the prepared analysis is conservative and represents the worst-case scenario in which the Project opts out of CPA and uses power provided by SCE. Thus, the change to the default CO_2 intensity factor is not unsubstantiated and does not underestimate the Project's GHG emissions. The analysis can therefore be relied upon to determine Project impacts.

Comment No. IND 9-9

2. The MND's air quality model underestimated the Project's land use size for parking.

SWAPE's review of the Project's CalEEMod output files found that the air model underestimated the proposed parking space by 22,483 sf. (Ex. B, p. 4.) According to the MND, the Project proposes to provide 56,300 sf of subterranean parking but the air model includes only 33,817 sf of parking space. (Id.) SWAPE concluded that the model may therefore underestimate the Project's construction-related and operational emissions and cannot be relied upon to determine Project significance. (Id.)

Response to Comment No. IND 9-9

The MND, page A-9, discusses that the Project will have a minimum of 138 parking spaces in two subterranean levels, and it was estimated that these levels would utilize 56,300 square feet. The Air Quality Technical Report (November 2020), which was prepared to inform the findings in the Draft MND and was provided by the City alongside the Draft MND, included CalEEMod outputs that indicates that parking was modeled based on 199 spaces and 33,817 square feet. The inputs for the parking component were based on a proposed installation of an automated parking system. However, in response to community input, the automated parking system was removed and replaced with a traditional valet serviced parking structure. The changes to the project construction program based on the removal of the automated parking system and replacement with a traditional valet serviced parking structure are captured in the construction schedule, construction equipment and vehicles, and construction workers utilized for the Draft MND (see also Response to Comment No. IND 9-15). Therefore, no changes to these emissions would result from a correction of the modeling for 138 parking spaces and 56,300 square feet.

A correction to the modeling for 138 parking spaces and 56,300 square feet would result in minor changes to fugitive VOC emissions (e.g., from parking structure architectural coating) and minor changes to electricity GHG emissions (e.g., from lighting and elevator electricity). This correction is summarized in **Table D-2**, *Revised Emissions from Parking Structure Correction*, and calculation details are provided in Appendix B of this Final MND. The correction would result in maximum VOC and GHG emissions as follows:

TABLE D-2
REVISED EMISSIONS FROM PARKING STRUCTURE CORRECTION

Project Phase	Maximum VOC Emissions (pounds per day)			Maximum GHG Emissions ($MTCO_2e$ per year)		
	Draft MND	Final MND	Percent Change	Draft MND	Final MND	Percent Change
Construction	15.3	15.4	0.5%	No Changes		
Operations	6.00	6.04	0.6%	1,537	1,572	2.26%

Source: ESA, 2021

As shown in Table D-2, the change in emissions would be very minimal (less than 1 percent for VOC and less than 3 percent for GHG) and would not be substantial. This change would not in any way result in conflicts with applicable GHG reduction plans, policies, or regulations as the Project would still be compliant with applicable energy efficiency standards. No new impacts or substantially greater impacts would occur. Therefore, the Project's construction-related and operational emissions can be relied upon to determine Project significance and no new analysis is required.

Comment No. IND 9-10

3. The MND's air quality model failed to model all proposed land uses.

SWAPE's review of the Project's CalEEMod output files found that the air model failed to model the Project's 3,313 sf of restaurant space and 700 sf of fitness space. (Ex. B, pp. 4-5.) SWAPE found that the model failed to distinguish between the Project's hotel land use and restaurant/fitness land use (Id. at p. 5.) SWAPE explained that "CalEEMod includes 63 different land use types that are each assigned a distinctive set of energy usage emission factors" and that "each land use type includes a specific trip rate that CalEEMod uses to calculate mobile-source emissions." (Id.) SWAPE concluded that the model may therefore underestimate the Project's construction-related and operational emissions and cannot not be relied upon to determine Project impacts. (Id. at pp. 5-6.)

Response to Comment No. IND 9-10

SWAPE incorrectly concluded that the model may underestimate the Project's construction-related and operational emissions. The Project CalEEMod emissions modeling did not exclude any land uses or emissions sources from the analysis and was correct in using the hotel land use subtype. Table 1 on page 24 of the CalEEMod User's Guide provides descriptions of the various land use subtypes available. The description for the hotel land use subtype reads, "Hotels are places of lodging that provide sleeping accommodations and supporting facilities such as restaurants; cocktail lounges; meeting and banquet rooms or convention facilities; limited recreational facilities and other retail and service shops."[10] The land use description clearly includes any supporting facilities (e.g. restaurants, bars, lounges, and recreational facilities) that are commonly found in a hotel. Therefore, the Project's emissions do include restaurant/fitness land uses as part of the hotel land use subtype and emissions were accounted for correctly. Additionally, the Project conservatively modeled a total of

[10] CAPCOA, CalEEMod User's Guide, 2017. Page 24. Available: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4

122,000 square feet instead of the 111,111 square feet listed in MND, Table A-1, to conservatively calculate construction-related and operational emissions.

Comment No. IND 9-11

4. The MND's air quality model made unsubstantiated changes to individual construction phase lengths.

SWAPE's review of the Project's CalEEMod output files found that the air model made unsubstantiated changes to individual construction phase lengths. (Ex. B, p. 6.) The specific changes made were:

- the demolition phase was increased by approximately 430%, from the default of 10 to 53 days;
- the grading phase was increased by approximately 3,650%, from the default of 2 to 75 days;
- the building construction phases were collectively increased by approximately 84%, from the cumulative default value of 300 to 553 days;
- the paving phase was increased by approximately 120%, from the default value of 5 to 11 days; and
- the architectural coating phase was increased by 1,440%, from the default value of 5 to 77 days.

(Id.)

According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "see construction assumptions" (MND, Appendix A, pp. 82, 115). However, as noted by SWAPE, the MND and associated documents provide no "construction assumptions," as purported by the "User Entered Comments and Non-Default Data" table. (Ex. B, p. 7.)

Additionally, for the changes to construction-related inputs, the MND's Air Quality Technical Report ("AQ Technical Report") explained that "[t]he input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule" and that "[d]etailed construction equipment lists, construction scheduling, and emissions calculations are provided in Appendix A." (AQ Technical Report, pp. 41-42.)

However, as noted by SWAPE, Appendix A of the AQ Technical Report does not include fail a detailed construction schedule, as purported by the AQ Technical Report. (Ex. B, p. 7.)

Response to Comment No. IND 9-11

SWAPE maintains that the manual changes to the construction schedule in the CalEEMod are unsubstantiated. This is untrue. Changes to the default construction schedule in CalEEMod are appropriate and necessary to more accurately calculate the Project's emissions. CalEEMod was designed with default assumptions, supported by substantial evidence to the extent available at the time of programming. However, CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA.[11]

The Project's construction schedule was prepared in consultation with the Applicant and their construction consultant and applied in the air quality modeling as provided in Appendix A-1 of the Air Quality Technical Report (November 2020), which was prepared to inform the findings in the Draft MND and was provided by the City

[11] *CalEEMod was designed with default assumptions supported by substantial evidence to the extent available at the time of programming. However, CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA. CalEEMod User's Guide, pp. 12-13.*

alongside the Draft MND. The Air Quality Technical Report anticipates that construction would occur with some potential overlap of the construction activities. The potential overlap of the construction activities was assumed in order to estimate maximum emissions that could occur in a day to provide a conservative impact analysis. Notably, the comment provides no evidence whatsoever that the construction schedule is unreasonable or inappropriate.

We also note that CalEEMod is designed to allow the user to change the defaults to reflect site or project-specific information, when available, provided that information is supported by substantial evidence. (CalEEMod User's Guide, p.12-13) The CalEEMod instructions state on page 17: "[t]o indicate when construction of the project will begin, the user will need to insert a date in the Start of Construction field. The date when construction will start triggers a rolling calendar that starts with the construction start date and follows by various construction phases that will be populated with default date ranges in the Construction screen." In this case, the default date ranges for the subphases were changed based on the project-specific information as provided by the Applicant and noted in Section 1.3 in the CalEEMod output files (Appendix A-1 of the Air Quality Technical Report). Thus, construction schedules as inputted into CalEEMod are appropriately adjusted to be Project-specific.

Based on the above, the detailed construction schedule inputted into CalEEMod was a reasonable forecast of anticipated construction period and SWAPE offers no evidence whatsoever to the contrary. The construction subphases for each phase were accounted for in the construction assumptions and maximum daily Project emissions were not underestimated in this regard.

Comment No. IND 9-12

Lastly, regarding the construction schedule, the AQ Technical Report states,

“This analysis assumes construction of the Project is estimated to require up to 26 months, starting as early as the second quarter of 2020.” (AQ Technical Report, p. 42.) However, as noted by SWAPE, the AQ Technical Report only indicates that the total construction period is estimated as 26 months but says nothing about the individual construction phase lengths. (Ex. B, p. 7.)

SWAPE concluded that the MND may underestimate the Project’s construction-related emissions because of unsubstantiated changes to the default individual construction phase lengths and, therefore, cannot be relied upon to determine Project impacts. (Ex. B, p. 8.)

Response to Comment No. IND 9-12

As discussed above in Response to Comment No. IND 9-11, the Project's construction schedule was prepared in consultation with the Applicant and their construction consultant and applied in the air quality modeling as provided in Appendix A-1 of the Air Quality Technical Report (November 2020), which was prepared to inform the findings in the Draft MND and was provided by the City alongside the Draft MND. The Air Quality Technical Report anticipates that construction would occur with some potential overlap of the construction activities. The potential overlap of the construction activities was assumed in order to estimate maximum emissions that could occur in a day to provide a conservative impact analysis. Notably, the comment provides no evidence whatsoever that the construction schedule is unreasonable or inappropriate. As such, the changes to the construction schedule were substantiated and emissions can be relied upon to determine Project impacts.

Comment No. IND 9-13

5. The MND’s air quality model improperly altered the number of construction days per week without justification.

SWAPE's review of the Project's CalEEMod output files found that the Project's number of construction days per week was manually changed from the CalEEMod default. (Ex. B, p. 8.) SWAPE found that the "User Entered Comments & Non-Default Data" table (located in Appendix A of the MND) states "see construction assumptions" (MND, Appendix A, pp. 82, 115). However, the MND and associated documents fail to provide any "construction assumptions" pertaining to the number of days a week for construction (Id.) As such, SWAPE concludes that the MND may underestimate the Project's construction-related emissions and should not be relied upon to determine Project's impacts. (Ex. B, p. 9.)

Response to Comment No. IND 9-13

Similar to the above Response to Comment No.'s IND 9-11 and IND 9-12, SWAPE maintains that the manual changes to the construction schedule in CalEEMod are unsubstantiated. Again, SWAPE acknowledges that the construction assumptions provided in the MND reflect the changes manually inputted into CalEEMod and contend that they cannot trust that the construction schedule is correct. Once again, this is untrue. The Project's construction schedule, as applied in the air quality modeling in Appendix A-1 of the Air Quality Technical Report (November 2020), was prepared in consultation with the Applicant and their construction consultant. SWAPE does not claim nor provide any evidence that the assumption itself is inaccurate or inappropriate. Thus, the maximum daily Project emissions were not underestimated in this regard.

Comment No. IND 9-14

6. The MND's air quality model made unsubstantiated changes to off-road equipment unit amounts and usage hours.

SWAPE's review of the Project's CalEEMod output files found that the Project's off-road equipment unit amounts and usage hours were manually changed from the CalEEMod defaults. (Ex. B, p. 9.)

According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "see construction assumptions" (MND, Appendix A, pp. 82, 115). However, as noted by SWAPE, the MND and associated documents provide no "construction assumptions," as purported by the "User Entered Comments and Non-Default Data" table. (Ex. B, p. 10.)

Furthermore, for the changes to construction-related inputs, the MND's Air Quality Technical Report ("AQ Technical Report") explained that "[t]he input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule" and that "[d]etailed construction equipment lists, construction scheduling, and emissions calculations are provided in Appendix A." (AQ Technical Report, pp. 41-42.)

However, as noted by SWAPE, Appendix A of the AQ Technical Report does not include fail a detailed construction schedule, as purported by the AQ Technical Report. (Ex. B, p. 10.)

SWAPE concluded that the MND may underestimate the Project's emissions because of unsubstantiated changes to the Project's off-road construction equipment unit amounts and usage hours and, therefore, cannot be relied upon to determine Project impacts. (Ex. B, p. 8.)

Response to Comment No. IND 9-14

SWAPE contends that several manual changes to the defaults for off-road construction equipment unit amounts and usage hours in the models used to determine the air quality impacts associated with the construction were unsubstantiated. That is incorrect. The model defaults referenced in the comment were modified to incorporate

Project-specific information for off-road equipment and usage hours that conservatively would result in maximum daily construction emissions. These default modifications were necessary to accurately calculate the Project's construction air quality impacts. The changes to the off-road construction equipment units and hours are shown in the CalEEMod runs under sections 1.3 and 3.0.

SWAPE's assertion that it cannot rely on the project-specific information for off-road equipment and usage hours is incorrect. The Project's off-road equipment and usage hours for the Project were prepared in consultation with the Applicant and their construction consultant. It reasonably anticipates that phase construction would occur over a 26-month period with some potential overlap in the construction of certain phases. In accordance with the CalEEMod User's Guide (page 32), Project-specific off-road equipment that would be used during construction activities and daily usage hours were used based on information from the Applicant and their construction consultant as documented in Appendix A-1. As it is acceptable to change the default inputs for project specific details, CalEEMod is an adequate representation of Project emissions and thus the analysis appropriately evaluated the Project's local and regional air quality impacts. SWAPE fails to present any reason or evidence that the project information is unreasonable or inappropriate. For these reasons, the manual changes to off-road equipment unit amounts and usage were substantiated and maximum daily Project emissions were not underestimated in this regard.

Comment No. IND 9-15

7. The MND's air quality model failed to model all required material export.

SWAPE's review of the Project's CalEEMod output files found that the MND's air model underestimated the amount of required material export by 12,524 cubic yards (cy). (Ex. B, p. 10. According to the AQ Technical Report, "[t]he Project would export approximately 43,836 cubic yards of soil during grading and excavation activities" (AQ Technical Report, p. 42.) However, as SWAPE notes, the model included only 31,312 cy of material export rather than 43,836 cy. (Ex. B, p. 10.) SWAPE concluded that the MND may underestimate the Project's emissions by failing to model all the required material export and, therefore, cannot be relied upon to determine Project impacts. (Ex. B, p. 10.)

Response to Comment No. IND 9-15

SWAPE's assertion that the MND incorrectly modeled the appropriate amount of export material is incorrect. CalEEMod converts material export amounts to haul trips (CalEEMod Users Guide, page 33) for emissions calculations. As discussed above, EMFAC2017 was used to calculate on-road emissions in the Air Quality Technical Report (November 2020), which was prepared to inform the findings in the Draft MND and was provided by the City alongside the Draft MND. EMFAC2017 was approved by the U.S. Environmental Protection Agency (USEPA) in 2019. Thus, the material export values seen in the CalEEMod output files were not used for on-road haul truck emissions calculations. The above-referenced 43,836 cubic yards was indeed used to model on-road haul truck emissions from material export in the file titled "Construction Mobile Emissions (2019-1127)-AQ" provided in Appendix A-1 of the Air Quality Technical Report (hauling emissions start on page 132/590 of the PDF). Therefore, the appropriate amount of export material was modeled, Project emissions were not underreported, and the emissions can be relied upon for determining Project impacts. Additional clarification regarding the excavation quantity of 43,836 cubic yards in the construction emissions modeling has been provided in Appendix B of this Final MND.

Comment No. IND 9-16

8. The MND's air quality model made unsubstantiated reductions to hauling, worker, and vendor trip numbers.

SWAPE's review of the Project's CalEEMod output files found that the MND's air model made unsubstantiated reductions to hauling, worker, and vendor trip numbers. (Ex. B, p. 10.) Specifically, the hauling, worker, and vendor trip numbers were reduced to zero. (Id. at p. 11.)

SWAPE found that the MND and associated documents failed to provide a source or any calculations explaining how the trip numbers were derived. (Ex. B, p. 11-12.) By failing to provide this information, the MND fails to provide substantial evidence to justify the modifications to the CalEEMod defaults. (Id. at 12.) SWAPE also found that the MND and associated documents failed to provide the total on-road construction-related emissions for hauling, vendor, and worker trips, or demonstrate how the on-road construction-related emissions were summed with the construction-related emissions estimated in CalEEMod. (Id.)

SWAPE concluded that the MND may underestimate the Project's emissions by including unsubstantiated changes to the default hauling, vendor, and worker construction trips, and, therefore, cannot be relied upon to determine Project impacts. (Ex. B, p. 10.)

Response to Comment No. IND 9-16

As discussed above, on-road emissions were calculated outside of CalEEMod. EMFAC2017 was used to calculate emissions for on-road mobile sources in the Air Quality Technical Report (November 2020). EMFAC2017 was approved by the USEPA in 2019. CalEEMod was used to calculate Project emissions from sources other than on-road mobile sources. Thus, the trip number values seen in the CalEEMod output files were zeroed out because emissions associated with on-road vehicles were performed outside of CalEEMod in order to utilize the more conservative EMFAC2017 emission factors. Again, the claim by SWAPE the Project emissions were underreported and are unreliable is incorrect.

The worker, vendor and hauling trips were indeed included and used to calculate Project construction emissions, as seen in file titled "Construction Mobile Emissions (2019-1127)-AQ" provided in Appendix A-1 of the Air Quality Technical Report (November 2020) (starting on page 132/590 of the PDF). Therefore, the Draft MND does not underestimate the Project's emissions based on the Project's hauling, vendor, and worker construction trips, and the Draft MND can be relied upon to determine Project impacts.

Comment No. IND 9-17

9. The MND's air quality model made unsubstantiated changes to the Project's operational vehicle fleet mix.

SWAPE's review of the Project's CalEEMod output files found that the MND's air model made several changes to the default operational vehicle fleet mix percentages. (Ex. B, 13.) However, no justification for the modifications was given and the MND and associated documents do not mention any revised operational vehicle fleet mix percentages. (Id. at 14.)

SWAPE concluded that the model may underestimate the Project's mobile-source operational emissions and cannot be relied upon to determine Project significance. (Id.)

Response to Comment No. IND 9-17

As outlined in the CalEEMod output files, the Project operational fleet mix percentages were changed based on values obtained from the Project traffic study. Trip percentages were adjusted to account for 25% pass-by trips in the traffic study. Additionally, the appropriate emission factors from the updated USEPA approved EMFAC2017 database were manually changed in CalEEMod to replace the model's use of the EMFAC2014 emission factors. It was appropriate to update these values in order to prepare an analysis using the updated

EMFAC2017 emission factors. Therefore, the changes made to the Project's operational vehicle fleet mix are based on substantial evidence and do not underestimate the Project's operational mobile-source emissions and these emissions can be relied upon to determine Project significance.

Comment No. IND 9-18

10. The MND's air quality model made unsubstantiated changes to operational vehicle emission factors.

SWAPE's review of the Project's CalEEMod output files found that the MND's air model made several changes to the default operational vehicle emission factors. (Ex. B, 15.) According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated to EMFAC2017 EFs" (MND, Appendix A, pp. 489, 539). As explained by SWAPE, EMFAC refers to an entire database, not a specific set of vehicle emission factors. (Ex. B, p. 15.) The MND did not specify which input parameters were used to obtain the vehicle emission factors nor provide the revised vehicle emission factors themselves. (Id.) Because the vehicle emission factors are used to calculate the Project's operational emissions associated with on-road vehicles, the model may underestimate the Project's mobile- source operational emissions by including several unsubstantiated changes to the default operational vehicle emission factors and, therefore, cannot be relied upon to determine Project significance. (Id.)

Response to Comment No. IND 9-18

Similar to the above comment, the CalEEMod emissions factors were changed based on values obtained from the EMFAC2017 database using the same assumptions CalEEMod would otherwise use from the EMFAC2014 database (like the same calendar and model year(s), region, vehicle types, aggregated speeds, etc.). It was appropriate to update these values in order to prepare an air quality analysis using the updated USEPA approved EMFAC2017 emission factors. Therefore, the changes made to the Project's operational vehicle fleet mix are based on substantial evidence and do not underestimate the Project's operational mobile-source emissions and these emissions can be relied upon to determine Project significance.

Comment No. IND 9-19

11. The MND's air quality model improperly included construction-related mitigation measures.

SWAPE's review of the Project's CalEEMod output files found that the MND assumed that the Project will implement construction-related mitigation measures, including a 15 miles per hour (mph) vehicle speed. (Ex. B, p. 15.) However, as explained by SWAPE, with the exception of Tier 4 Final engines, the "User Entered Comments & Non-Default Data" fails to justify the inclusion of the other construction- related mitigation measures. (Id. at p. 16.)

For the 15 mph speed limit, SWAPE noted that although the MND claimed that the Project would comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403, SCAQMD Rule 403 does not require a 15 mph speed limit. (Ex. B, p. 16.) Pursuant to SCAQMD Rule 403, the Project may either water unpaved roads 3 times per day, water unpaved roads 1 time per day and limit vehicle speeds to 15 mph, or apply a chemical stabilizer. (Id. at p. 17.) Therefore, SCAQMD Rule 403 does not explicitly require any of the measures included in the CalEEMod model. (Id.)

SWAPE concluded that the MND may underestimate the Project's emissions by including several construction-related mitigation measures without properly committing to their implementation and enforcement, and, therefore, cannot be relied upon to determine Project impacts. (Ex. B, p. 17.)

Response to Comment No. IND 9-19

As discussed in Section 2.3 of the Air Quality Technical Report (November 2020), SCAQMD Rule 403 requires restrictions on visible fugitive dust and PM10 emissions with specific requirements in Subpart d of Rule 403, which includes prohibiting dust that remains visible in the atmosphere beyond the property line of the emission source or prohibiting dust emission that exceeds 20 percent opacity if the dust emission is the result of movement of a motorized vehicle. Further as stated in Subpart d of Rule 403, "No person shall conduct active operations without utilizing the applicable best available control measures included in Table 1 of this Rule to minimize fugitive dust emissions from each fugitive dust source type within the active operation." SCAQMD Rule 403 does not state that only one measure can be applied. On the contrary, projects may implement several of the best available control measures to meet requirements of the Rule.

CalEEMod incorporates industry standard best available control measures to quantify reductions in fugitive dust emissions based on several best available control measure listed in Rule 403, which includes a 15 miles per hour speed limit on unpaved roads and application of water on disturbed areas and unpaved roads three times per day or application of a non-toxic chemical stabilizer. These control measures are not mitigation measures as stated by SWAPE, but rather best management practice techniques implemented to quantify and meet the regulatory requirements under Subpart d of Rule 403. Excluding fugitive dust control measures from the Project's modeling analysis means the Project would be non-compliant with Rule 403. Therefore, the Air Quality Technical Report and Draft MND appropriately considers industry standard best available control measures and does not underreport Project emissions. The emissions analysis can be relied upon to determine Project impacts.

Comment No. IND 9-20

C. Substantial Expert Evidence Establishes a Fair Argument That the Project Will Have Significant Emissions of ROG/VOC and NOx.

In an effort to accurately determine the Project's construction and operational emissions, SWAPE prepared an updated CalEEMod model that includes more site-specific information and correct input parameters, as provided by the MND. (Ex. B, p. 17.) SWAPE's model included all proposed land use types and sizes as described by the MND; corrected the amount of material export; omitted the unsubstantiated changes to the individual construction phase lengths, off-road construction equipment unit amounts and usage hours, construction trip numbers, operational vehicle emission factors, and operational vehicle fleet mix percentages; and excluded the unsubstantiated construction-related mitigation measures. (Id.)

SWAPE's updated model found that the ROG/VOC and NOx emissions associated with Project construction exceed the 75- and 100-pounds per day ("lbs/day") thresholds set by the SCAQMD, respectively. (Ex. B, p. 17.)

SWAPE's updated model demonstrates that when the Project's construction and operational emissions are estimated based on site-specific information provided in the MND, the Project would result in a potentially significant air quality impact that was not previously identified or addressed in the MND. As such, the City must prepare an EIR to include an updated air pollution model to properly estimate the Project's construction and operational emissions and incorporate mitigation to reduce these emissions to a less than significant level.

Response to Comment No. IND 9-20

SWAPE claims that regional construction-related and operational air quality emissions for the Project are significant based on its new CalEEMod modeling. Above, SWAPE claimed that several inputs to the CalEEMod modeling were incorrect. Response to Comment Nos. IND 9-8 through 9-19 provide specific responses explaining that the manual inputs for the air quality analysis were appropriate and why SWAPE's conclusions are incorrect.

Based on review of the comments related to the emissions analysis presented in the Air Quality Technical Report (November 2020) and the Draft MND, SWAPE's misunderstanding and misapplication of CalEEMod and the Project-specific analysis renders their comment as without credibility and merit. SWAPE's use of default values for the construction schedule and off-road equipment are not representative of the Project nor the emissions that would be anticipated for the Project. Furthermore, no required or conditioned emission control measures were applied to SWAPE's model, which is an inappropriate misrepresentation of Project emissions. For these reasons, SWAPE's analysis misleads the public and decision makers as to the Project's emissions impacts.

As discussed in Responses to Comment Nos. IND 9-8 through 9-19, the emissions analysis presented in the Air Quality Technical Report and the Draft MND adequately and conservatively represent the Project emissions and can relied upon for a determination of Project impacts.

Comment No. IND 9-21

D. The MND Fails to Adequately Evaluate Health Risks from Diesel Particulate Matter Emissions

Based on based on a quantified construction health risk assessment ("HRA") and a localized significance ("LST") analysis, the MND concluded that the Project would have a less- than-significant health risk impact. (Ex. B, p. 18.) However, SWAPE's review of the MND found that MND's evaluation of the Project's potential health risk impacts and the less-than- significant impact conclusion were improper. (Id.)

Response to Comment No. IND 9-21

SWAPE is incorrect in their assessment that the less-than-significant impact conclusions of the HRA and LST analysis were improper. Refer to Response to Comment Nos. IND 9-23 through IND 9-29 for responses to the specific comments raised.

Comment No. IND 9-22

First, SWAPE notes that, as discussed above, the MND's HRA relied on a flawed air model and therefore underestimated PM10 emissions. (Ex. B, p. 18.) By using an inaccurate PM10 value, the HRA underestimated the diesel particulate matter ("DPM") concentration to calculate the cancer risk associated with Project construction. (Id. at p. 19.) Therefore, the MND underestimated the Project's construction-related cancer risk and cannot be relied upon to determine Project impacts. (Id.)

Response to Comment No. IND 9-22

As detailed in Response to Comment Nos. IND 9-8 through 9-20, SWAPE is incorrect in their assessment that the MND underestimated PM10 emissions. As detailed above, the MND incorporated the appropriate emission factors, construction schedule, off-road equipment amounts and usage hours, etc. to produce PM10 and DPM emission impacts from the Project. Therefore, the assertion that emissions presented in the Air Quality Technical Report (November 2020) and in the Draft MND cannot be relied upon to determine the Project's health risk impacts is also incorrect. The Air Quality Technical Report and the Draft MND do not underestimate the Project's construction-related cancer risk from diesel particulate matter (DPM) emissions and the Draft MND can be relied upon to determine Project impacts. Refer to Response to Comment Nos. IND 9-23 through IND 9-29 for responses to the specific health risk comments raised.

Comment No. IND 9-23

Second, SWAPE disputes the MND's conclusion that operational health risks would be less-than-significant because the Project would not "generate a substantial number of daily truck trips." (Ex. B, p. 19.) However, the MND stated that Project operation would generate 1,463 new daily vehicle trips, which, according to SWAPE, would result in additional exhaust emissions and continue to expose nearby sensitive receptors to DPM emissions. (Id.) The MND makes no effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, and, therefore, should not conclude that the Project's operational health risk impact would be less than significant. (Id.)

Response to Comment No. IND 9-23

Here SWAPE provides a misleading comment by not differentiating the vehicle trips associated with the operation of the Project and diesel-fueled vehicle trips. Of the 1,463 new vehicle trips generated per day, only approximately 4.3 percent would be diesel-fueled while the vast majority will be light duty passenger vehicles. The operational mobile source exhaust PM10 emissions are from a combination of primarily gasoline-fueled vehicles, such as passenger vehicles and light-duty pick-up trucks, and a smaller number of diesel-fueled trucks, as provided in the vehicle fleet percentages in the CARB on-road EMFAC model. It is highly inappropriate and factually incorrect to analyze non-diesel fuel exhaust PM10 emissions as DPM. This results in substantially overestimated and, therefore, unrealistically high health risk impacts.

To provide additional clarifying information that the Project would not result in a significant TAC impact, ESA has prepared an operational Project HRA (provided in Appendix B of this Final MND), which demonstrates that the cancer (0.4 in one million) and non-cancer (HI of 0.0001) health risks associated with the Project's TAC emissions from operational DPM emissions are well below the significance thresholds. Thus, as stated in the MND, the Project's operational health risk impact would be less than significant.

Comment No. IND 9-24

Third, SWAPE found that the MND's omission of a quantified operational HRA is inconsistent with the most recent guidance published by the Office of Environmental Health Hazard Assessment ("OEHHA"). (Ex. B, p. 19.) OEHHA recommends that exposure from projects lasting more than 6 months be evaluated for the duration of the project and recommends that an exposure duration of 30 years be used to estimate individual cancer risk. (Id.) SWAPE concluded that the MND should include an operational HRA to evaluate health risk impacts with a 30-year exposure duration. (Id.)

Response to Comment No. IND 9-24

The SCAQMD has clarified that the OEHHA Guidance Manual does not include CEQA significance thresholds applicable to construction activities, nor to the operation of non-stationary source projects such as this Project. SCAQMD staff is still evaluating how to implement the OEHHA Guidance Manual under CEQA. The SCAQMD has stated that it "currently does not have guidance on construction Health Risk Assessments."[12] To date, the SCAQMD has not conducted public workshops nor developed any policy relating to the applicability of the revised

[12] *South Coast Air Quality Management District, Final Environmental Assessment for: Proposed Amended Rule 307.1 – Alternative Fees for Air Toxics Emissions Inventory; Proposed Amended Rule 1401 – New Source Review of Toxic Air Contaminants; Proposed Amended Rule 1402 – Control of Toxic Air Contaminants from Existing Sources; SCAQMD Public Notification Procedures for Facilities Under the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and Rule 1402; and, SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk, page 2-23, September 2016. The SCAQMD only applies the revised OEHHA Guidelines for operational impacts at stationary industrial source facilities that are in the AB 2588 Air Toxics Hot Spots program, which does not apply to the Project.*

2015 OEHHA Guidance Manual for projects prepared by other public/lead agencies subject to CEQA or for mixed-use residential and commercial projects. SCAQMD's Mobile Source Toxics Analysis states that it will serve as an interim technical guidance for estimating potential DPM impacts from the following activities: 1) truck idling and movement (such as, but not limited to, truck stops, warehouse/distribution centers, or transit centers), 2) ship hoteling at ports, and 3) train idling. The Project is a hotel and will not be a truck stop, warehouse/distribution center or transit center. The number of large trucks visiting the site will be limited as the Project is a hotel and will be associated primarily with light-duty passenger vehicles. Therefore, operational health risks would be less than significant.

Nevertheless, to provide additional clarifying information that the Project would not result in a significant TAC impact, ESA has prepared an operational Project HRA (provided in Appendix B of this Final MND), which demonstrates that the cancer (0.4 in one million) and non-cancer (HI of 0.0001) health risks associated with the Project's TAC emissions from operational DPM emissions are well below the significance thresholds. Thus, as stated in the MND, the Project's operational health risk impact would be less than significant.

Comment No. IND 9-25

Fourth, SWAPE found that the MND failed to evaluate the cumulative lifetime cancer risk to nearby, existing receptors as a result of Project construction and operation together. (Ex. B, p. 19.) SWAPE concluded that, per OEHHA Guidance, the Project's combined construction and operational cancer risks must be quantified and compared to the SCAQMD threshold 10 in one million. (Id.)

Response to Comment No. IND 9-25

This comment is addressed in Response to Comment Nos. IND 9-23 and 9-24.

Furthermore, the results of the Project's quantitative construction and operational HRA demonstrate that the combined worst-case construction (9.2 in one million per Table 10 of the Air Quality Technical Report (November 2020) and Table B-5 of the Draft MND) plus the 30-year operational (0.4 in one million) cancer risks associated with the Project's TAC emissions from DPM emissions would be approximately 9.6 in one million, which would be below the significance threshold of 10 in one million. Thus, the MND significance determination of less than significant operational cancer risk is correct and further substantiated by this clarifying information, the details of which are provided in Appendix B of this Final MND.

Comment No. IND 9-26

Lastly, SWAPE found that the MND improperly concluded that the Project's PM2.5 and PM10 emissions would not exceed LSTs. (Ex. B, p. 20.) SWAPE's review of the CalEEMod output files demonstrates that the PM10 and PM2.5 emissions associated with Project construction exceed the 1- and 2-lbs/day LSTs set by the SCAQMD, respectively. (Id.) Therefore, the MND's claim that emissions associated with Project construction would not exceed the applicable SCAQMD LSTs is incorrect and cannot be relied upon.

Response to Comment No. IND 9-26

SWAPE is incorrect in their assessment that the MND underestimated emissions, including those of PM10 and PM2.5. The comment inaccurately refers to "1- and 2-lbs/day LSTs set by the SCAQMD" for construction. Consistent with the SCAQMD Localized Significance Thresholds (LSTs), Table 8 of the Air Quality Technical Report (November 2020) shows the appropriate construction LSTs for the Project, which are 4 pounds per day for PM10 and 3 pounds per day for PM2.5. As a result, the assertion that the emissions presented in the Air Quality Technical Report (November 2020) cannot be relied upon for comparison to SCAQMD LSTs is also incorrect. The Air Quality Technical Report and the Draft MND do not underestimate the Project's localized emissions and localized impacts and the Draft MND can be relied upon to determine Project impacts.

Comment No. IND 9-27

E. Substantial Expert Evidence Establishes a Fair Argument that the Project May Have a Significant Impact on Human Health from Diesel Particulate Matter

SWAPE prepared a screening-level HRA to evaluate potential impacts from the construction and operation of the Project. (Ex. B, p. 21.) SWAPE used AERSCREEN, the leading screening-level air quality dispersion model. (Id.) SWAPE used a sensitive receptor distance of 25 meters and analyzed impacts to individuals at different stages of life based on OEHHA and SCAQMD guidance. (Ex. B, pp. 22-13.)

SWAPE found that the excess cancer risk for adults, children, and infants, at the closest sensitive receptor located approximately 25 meters away, over the course of Project construction and operation, are approximately 16, 150, and 17 in one million, respectively. (Ex. B, p. 23.) SWAPE found that the excess cancer risk over the course of a residential lifetime is approximately **180 in one million**. (Id.)

These values appreciably exceed the SCAQMD's threshold of 10 in one million.

SWAPE's HRA constitutes a "fair argument" that the Project will have significant impacts on human health. As such, the City must prepare an EIR to properly evaluate the Project's health risk impact.

Response to Comment No. IND 9-27

SWAPE erroneously contends that the MND's health risk assessment was improper. SWAPE goes a step further by preparing a simple screening-level HRA, which not surprisingly estimates cancer-risk values that far exceed the various thresholds for a significant TAC impact. SWAPE acknowledges that "If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project." (Exhibit B, page 21), which is exactly what was provided in the Air Quality Technical Report (November 2020).

This screening-level HRA lacks any semblance of credibility for a number of reasons. To start with, SWAPE's simple screening-level HRA relied upon AERSCREEN, which is a screening-level air quality dispersion model. This screening-level HRA indicates a screening risk of 16 in one million without age sensitivity factors and 180 in one million with age sensitivity factors. These risk values are immediately suspect as misleading and unreasonable because they are substantially higher than typical risk values for industrial source projects and are therefore an entirely unexpected result for a hotel development project, which would have significantly lower DPM emissions than an industrial source project.

For example, an HRA was conducted for the Phillips 66 Wilmington refinery facility in the City of Wilmington, California, which generates TAC emissions from oil refinery operations and associated industrial processes and determined a 30-year residential risk at nearby residential receptors located adjacent to the east of the facility of 33.8 in one million. The Phillips 66 Wilmington facility analysis included age sensitivity factors. Unlike the Phillips 66 Wilmington facility, which generates long-term ongoing emissions from its continuous industrial operations, construction of the Project would not generate DPM emissions on an ongoing and continuous basis over a lifetime (70-year) or a residential exposure duration (30 years). Operation of the Project would generate a relatively small amount of ongoing operational DPM emissions from a minimal number of diesel-fueled vehicles (e.g., delivery trucks), as compared to an industrial oil refinery facility that has numerous heavy-duty industrial-sized equipment and industrial processes. Thus, the unexpectedly high results reported in SWAPE's screening-level HRA do not appear to be credible whatsoever and mislead the public and decision-makers as to the human health risks associated with the Project's DPM emissions.

In addition, upon further examination of the data, the screening-level HRA has several significant flaws that account for the misleading and incorrect analysis and explain the unrealistically high results. The first flaw is that SWAPE used incorrect and non-representative construction emissions to determine health risk impacts (discussed above related to their “updated” model in Comment 9-20).

The second flaw is that SWAPE assumed the Project's "operational activities will generate approximately 45 pounds of diesel particulate matter ("DPM") per year (Exhibit B, page 21). SWAPE calculated this value by multiplying the total daily exhaust PM10 emissions by 365 days per year. The total exhaust PM10 includes all area, energy, and mobile source exhaust PM10 emissions in the CalEEMod operational output files. This is not a valid assumption. SWAPE incorrectly assumed the 45 pounds of exhaust PM10 emissions were the result of diesel fuel combustion. In fact, only a small portion of these operational emissions are DPM. In reality, most of the area and energy exhaust PM10 emissions are the result of gasoline-fueled landscaping equipment and natural gas combustion for building heating and cooking. Similarly, the operational mobile source exhaust PM10 emissions are from a combination of primarily gasoline-fueled vehicles, such as passenger vehicles and light-duty pick-up trucks, and a smaller number of diesel-fueled trucks. These details were provided in the vehicle fleet percentages in the CARB on-road vehicle emissions factor (EMFAC) model, as well as further detailed in the operational HRA attached in response to the comments above. It is highly inappropriate and factually incorrect to analyze non-diesel fuel exhaust PM10 emissions as diesel particulate matter. This results in substantially overestimated and, therefore, unrealistically high health risk impacts.

The third flaw is that SWAPE's screening-level HRA modeled all of the DPM emissions from mobile sources as if the emissions were occurring at a single location. This was also improper because mobile sources, by their very nature, do not generate emissions at a single location but rather along the entire vehicle trip, which would disperse the emissions along regional roadways and not concentrate the emissions at a single location. The trip lengths vary between 5.9 and 16.6 miles and therefore all the vehicle emissions would not emit from a single point. When conducting HRAs, dispersion of pollutants is a critical and important consideration because health risk impacts are a direct result of TAC concentrations. The screening operational HRA incorrectly assumed that all mobile source emissions would occur at a single location, which results in concentrations at sensitive receptors that are artificially elevated to highly unreasonable levels (like that of a hotel having higher risk than a large refinery).

In addition, it is worthwhile to note the technical limitations in the model SWAPE used. As stated above, SWAPE "relied upon AERSCREEN which is a screening level air quality dispersion model". AERSCREEN assumes calm wind conditions at all times and a stable atmosphere (i.e., no atmospheric mixing) and does not have the capability to incorporate locally measured wind speed and wind direction data. Thus, AERSCREEN does not account for the dispersion of pollutants that occurs from wind. This is a significant limitation because wind directed away from sensitive receptor locations relative to a source of emissions would disperse pollutants away from sensitive receptors and thereby reduce the impact of TAC emissions on those receptors. Because the AERSCREEN model fails to account for local wind speed and wind direction, its application results in artificially elevated pollutant concentrations at sensitive receptors and, therefore, artificially elevated health risk levels. The wind rose presented in the operational HRA files provided in Appendix B of this Final MND shows that the highest wind speeds occur in directions away from the nearby sensitive receptors, thus producing lesser impacts than those produced by AERSCREEN.

For all of these reasons, SWAPE's health risk results are highly misleading and inaccurate and lack credibility. In other words, SWAPE's conclusions are not supported by any credible evidence, much less substantial evidence. Even SWAPE acknowledged the serious limitations in its screening-level study, stating (actually, understating) that "[o]ur analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection." Thus, the MND accurately evaluated the Project's health risks to sensitive receptors during construction and operation and the preparation of an EIR is not required.

Comment No. IND 9-28

E. The MND Fails to Adequately Assess Greenhouse Gas Impacts

SWAPE concluded that the MND failed to adequately analyze the Project's greenhouse gas ("GHG") impacts. (Ex. B, p. 24.) Although the MND calculated the Project's annual GHG emissions as 1,537 metric tons of carbon dioxide equivalents per year ("MT CO2e/yr"), the MND failed to compare the Project's emissions to any objective threshold. (Id. at pp. 24, 27.) Furthermore, the MND's calculation for 1,537 MT CO2e/yr was based on an inaccurate air model, as discussed above, and likely underestimated. (Id. at p. 26.) However, assuming that the Project's 1,537 MT CO2e/yr is accurate, the Project exceeds the proper threshold of 2.6 MT CO2e/SP/year. (Id. at pp. 27-28.) SWAPE concluded that the exceedance of this threshold results in a significant GHG impact not previously identified or addressed by the MND. (Id. at p. 28.) Therefore, an EIR must be prepared and mitigation must be implemented where necessary. SWAPE provided several mitigation measures that could be implemented to mitigate the Project's significant GHG impact. (Id. at pp. 32-39.)

Response to Comment No. IND 9-28

The Draft MND included a quantified analysis of GHG emissions. As discussed in Response to Comment Nos. IND 9-9 through IND 9-20, the air modeling emissions are sufficiently analyzed. As shown in Table D-2 in Response to Comment No. IND 9-9, the change in the Project's emissions from the correction to the parking structure square footage would be very minimal (less than a 3 percent change in annual GHG emissions), would not be substantial and would not in any way result in conflicts with GHG reduction plans, policies, or regulations. No new impacts or substantially greater impacts would occur. Therefore, the Project's construction-related and operational emissions can be relied upon to determine Project significance and no new analysis is required.

Regarding the significance threshold, as stated in the Draft MND (refer to pages B-33 through B-36), "the City has not yet adopted a numerical significance threshold for assessing impacts related to GHG emissions and has not formally adopted a local plan for reducing GHG emission. When no guidance exists under CEQA, the lead agency may look to and assess general compliance with comparable regulatory schemes.[13]". Pursuant to Section 15064.4(a) of the CEQA Guidelines, the lead agency has the discretion, with respect to a project's GHG emissions, to (1) quantify GHG emissions and/or (2) rely on a quantitative analysis or performance-based standards. Section 15064.4(b)(3) of the CEQA Guidelines further provides that, in determining whether a project's GHG impact is significant, the lead agency should consider "[t]he extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions," as well as "a project's consistency with the State's long-term climate goals or strategies." SWAPE engages in the pretense that a quantitative analysis is required.

[13] *See Protect Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal. App. 4th 1099, 1107 ["'[A] lead agency's use of existing environmental standards in determining the significance of a project's environmental impacts is an effective means of promoting consistency in significance determinations and integrating CEQA environmental review activities with other environmental program planning and resolution."'"]. Lead agencies can, and often do, use regulatory agencies' performance standards. A project's compliance with these standards usually is presumed to provide an adequate level of protection for environmental resources. See, e.g., Cadiz Land Co. v. Rail Cycle (2000) 83 Cal.App.4th 74, 99 (upholding use of regulatory agency performance standard).*

The Draft MND includes, an 8-page analysis which demonstrates that the Project would be consistent with the applicable plans, policies and regulations adopted by the State and the City for the purpose of reducing GHG emissions, including the emissions reduction measures discussed within CARB's Climate Change Scoping Plan, SCAG's 2020-2045 RTP/SCS, and City of Culver City polices established for the purpose of increasing energy efficiency and reducing GHG emissions for new developments and the City's Green Building Code. The Draft MND therefore concluded that the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs and the Project's GHG impact would be less than significant (see pages B-39 through B-47 of the Draft MND). Since the Project's GHG impact is less than significant, no mitigation measures are required and an EIR is not required.

Comment No. IND 9-29

Additionally, the MND relied upon the Project's consistency with the CARB's Scoping Plan, SCAG's RTP/SCS, the City's energy efficiency policies, and the City's Green Building Code in order to conclude that the Project would have a less-than-significant GHG impact. (Ex. B, p. 25.)

However, these regulatory plans do not meet the criteria for an officially adopted GHG reduction program, commonly referred to as a Climate Action Plan ("CAP"), for use as a threshold of significance for GHG emissions. (Ex. B, p. 26.) As CEQA Guideline section 15064.4(b)(3) makes clear, a qualified CAP "must be adopted by the relevant public agency through a public review process," and, as explained by CEQA Guideline section 15183.5(b)(1), the CAP should include:

(1) Inventory: Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities (e.g., projects) within a defined geographic area (e.g., lead agency jurisdiction);

(2) Establish GHG Reduction Goal: Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;

(3) Analyze Project Types: Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;

(4) Craft Performance Based Mitigation Measures: Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;

(5) Monitoring: Establish a mechanism to monitor the CAP progress toward achieving said level and to require amendment if the plan is not achieving specified levels; and

Here, the MND fails to demonstrate that the CARB's Scoping Plan, SCAG's RTP/SCS, the City's energy efficiency policies, and the City's Green Building Code include the above- listed requirements to be considered a qualified CAP for the City. Furthermore, the MND failed to consider performance-based standards under CARB's Scoping Plan (Ex. B, pp. 28-30) and SCAG's RTP/SCS (id. at pp. 30-32). As such, the MND leaves an analytical gap and fails to demonstrate that compliance with said plans can be used for project-level significance determination. (Ex. B, p. 27.)

Response to Comment No. IND 9-29

SWAPE erroneously conflates a GHG reduction plan with a Climate Action Plan. As discussed in the Draft MND and Greenhouse Gas Technical Report (November 2020), per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project will comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project.[14] To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.[15] Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] **plans or regulations for the reduction of greenhouse gas emissions**."[16] Therefore, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with the California Cap-and-Trade Program or other regulatory schemes to reduce GHG emissions. While a qualified CAP is considered a GHG reduction plan that can be used to determine project significance, it is by no means the only type of GHG reduction plan that can be used. As stated in response No. IND 9-28 above, the City has not adopted a numeric threshold and has not developed a qualified CAP. In the absence of both, the lead agency may assess general compliance with comparable regulatory schemes. The Project would be consistent with the applicable plans, policies and regulations adopted by the State and the City for the purpose of reducing GHG emissions, including the emissions reduction measures discussed within CARB's Climate Change Scoping Plan, SCAG's 2020-2045 RTP/SCS, and City of Culver City polices established for the purpose of increasing energy efficiency and reducing GHG emissions for new developments and the City's Green Building Code. Therefore, the analysis in the Draft MND and supporting Greenhouse Gas Technical Report, which was prepared to inform the findings in the Draft MND and was provided by the City alongside the Draft MND are consistent with the State CEQA Guidelines and no further analysis or response is warranted.

Comment No. IND 9-30

F. The MND's Mitigation for Hazards and Hazardous Materials is Inadequate.

In order to mitigate the Project's significant impacts related to hazardous materials, the MND required MM-HAZ-1. MM-HAZ-1 requires a qualified environmental consultant to prepare a Soil Management and Remediation Plan and "[u]pon completion of the Soil Management and Remediation Plan, the Applicant shall contact the LARWQCB to obtain a closure letter that states no further soils testing or remediation is required on the Project Site." (MND, p. B-50.) However, the MND fails to disclose that MND the recent status of the site in Geotracker, which concludes there are two impediments to closure: (1) free product in groundwater; and (2) threat for vapor intrusion. (Ex. B, p. 2.) Without disclosing and accounting for these impediments to closure, the MND fails to provide substantial evidence that MM-HAZ-1 would reduce the Project's impacts to a less-than-significant level.

Response to Comment No. IND 9-30

This comment asserts that the MND fails to disclose the Project's status on Geotracker which concludes there are two impediments to closure: (1) free product in groundwater; and (2) threat for vapor intrusion. Contrary to the comment, page B-51 of the MND states "the Project Site is identified on the list of Open Active Leaking Underground Storage Tank Sites from the State Water Board's GeoTracker database." Further, page B-49 of the MND indicates that, "Because of the contaminated soils, groundwater and potentially vapors to occur beneath the Project Site, project implementation could result in a potentially significant impact or hazard to the public or

[14] *14 CCR § 15064(h)(3).*

[15] *Ibid.*

[16] *Ibid. (emphasis added).*

the environment during excavation activities." Thus, potential groundwater impacts and vapor intrusion are identified within the impact analysis for hazardous materials.

The analysis on pages B-48 to B-50 of the Draft MND is clear that under the Project, site remediation overseen by the RWQCB would occur following the abatement and demolition of existing on improvements. This would include the excavation of hydrocarbon-impacted soils, and other groundwater management associated with remediation. During remediation activities, the site would be remediated to levels deemed acceptable for commercial use pursuant to all applicable regulatory standards. Based on the extent of contamination identified in the RAP, it is anticipated that approximately 1,000 cubic yards of hydrocarbon-impacted soil would be exported from the site as part of remediation activities, which is less than 2% of the anticipated excavation. The Draft MND's Mitigation Measure MM-HAZ-1 requires the Applicant to retain a qualified environmental consultant to prepare a Soil Management and Remediation Plan (SMRP) for review and approval by the Culver City Building Safety Division, DTSC and LARWQCB, as necessary, prior to the commencement of excavation and grading activities. Mitigation Measure MM-HAZ-1 has been modified to clarify that the SMRP would include a plan for (i) removal, characterization, and offsite disposal, and/or (ii) remediation of hydrocarbon impacted soils to a level determined by the LARWQCB to be acceptable for commercial use, in compliance with all applicable rules and regulations. The SMRP would also include a plan for treatment and/or remediation of hydrocarbon impacted groundwater to a level determined acceptable for commercial use, in compliance with all applicable rules and regulations, including any relevant guidance on vapor intrusion from the LARWQCB and/or DTSC. The SMRP will be conducted under supervision of a certified environmental consultant licensed to oversee such remediation. This mitigation measure can reasonably be expected to avoid or reduce a potential significant impact from underlying hazardous materials and is enforceable by identifying the timing of the SMRP implementation and requirement to obtain a closure letter from the LARWQCB and DTSC (as necessary) that states no further soils testing or remediation is required on the Project Site. Effectively, with the SMRP requiring remediation to comply with all applicable regulatory standards and a closure letter from LARWQB and DTSC (as necessary) being required, these performance criteria would ensure that impacts from remediation of hazardous materials below the site are less than significant. Rather, by requiring remediation of subsurface contamination, this mitigation measure ensures a net benefit to the environment. The requirement for DTSC to review and approve the SMRP and issue a closure letter, in addition to the LARWQCB, has been added to Mitigation Measure HAZ-1 in this Final MND.

Comment No. IND 9-31

SWAPE also noted that MND failed to disclose contamination on the Project site because the extent of contamination is not known. (Ex. B, p. 2.) As a result, the MND failed to identify impacts of remediation because: "(1) an informed estimate of the amount of soil to be excavated has not been made, therefore construction impacts for excavation and truck trips for proper disposal have not been estimated; and (2) magnitude of groundwater plume and vapor intrusion impacts have not been determined – these will result in impacts including construction and operation emissions associated with groundwater investigations, well drilling, and groundwater pumping and treatment system installation and operation." (Id.) Without disclosing and accounting for the extent of contamination and the impacts of remediation, the MND fails to provide substantial evidence Project's impacts related to hazards and hazardous materials are less-than-significant.

Response to Comment No. IND 9-31

The Comment asserts that "the extent of contamination is not known." Contrary to the comment, the RAP concluded that adsorbed-phase and dissolved-phase hydrocarbon impacts are "considered to be adequately delineated." (RAP, section 3.) Based on the technical studies to date, including the previous site assessments outlined in Section 2.5 of the RAP, and as discussed in Response to Comment IND-9-30 and as stated on page

B-48 of the MND, it is anticipated that approximately 1,000 cubic yards of hydrocarbon-impacted soil would be exported from the site as part of remediation activities, which is less than 2% of the total anticipated excavation. The extent of these daily truck trips would be well within the number of daily trips analyzed as part of grading/excavation activities for the Project on a peak day, which estimated up to 59 trucks (118 truck trips) in a day. These trips have also been assumed as part of the Project's overall extent of excavation, which is over 48,000 cubic yards of soil (including the estimated 1,000 cubic yards of impacted soil). Thus, maximum daily emissions associated with haul trucks as a result of remediation activities would be subsumed within the maximum daily emissions during typical Project construction excavation activities. Further, the heavy-duty equipment used for the remediation activities would be similar to or less than the total horsepower rating for the equipment already analyzed during the grading/excavation activities for the Project, which included a concrete/industrial saw, excavator, rubber-tired dozer, and two tractors/loaders/backhoes. Therefore, the emissions analysis fully accounts for the remediation activities.

Comment No. IND 9-32

IV. CONCLUSION

For the foregoing reasons, the MND for the Project should be withdrawn, an EIR should be prepared, and the draft EIR should be circulated for public review and comment in accordance with CEQA. Thank you for considering these comments.

Response to Comment No. IND 9-32

Responses to all comments have been addressed in Response to Comment Nos. IND 9-1 to IND 9-32. Based on the responses therein, the Draft MND environmental analysis was sufficient to meet CEQA requirements and no substantive deficiencies were identified that require preparation of an Environmental Impact Report.

Appendix A
Original Comment Letters

DEPARTMENT OF TRANSPORTATION
DISTRICT 7 – Office of Regional Planning
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-0475
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

February 18, 2021

Lisa Edwards
City of Culver City
9770 Culver Boulevard
Culver City, CA 90232

RE: 11469 Jefferson Boulevard Project –
Mitigated Negative Declaration (MND)
SCH # 2021010247
GTS # 07-LA-2021-03483
Vic. LA-90/PM: 2.748

Dear Lisa Edwards:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced MND. The Project would redevelop a 33,813 square foot (SF) property located in the northwest corner of the Jefferson Boulevard and Slauson Avenue intersection in Culver City. The existing single-story commercial building and parking lot would be removed as part of the Project. The Project includes the development of a new, five-story, 175-room boutique hotel building with food and beverage amenities and a two level, below-grade parking garage. Specifically, the 111,000 SF building would provide a total of approximately 67,030 SF in 175 hotel rooms, 8,536 SF of back of-house uses, 14,783 SF of hotel amenities, 630 SF of bicycle parking, 18,842 SF of circulation facilities, and 1,119 SF of loading area. In addition, 15,450 SF of open space area would be provided, as well as 56,300 SF of subterranean parking that would accommodate a minimum of 138 parking spaces. The City of Culver City is the Lead Agency under the California Environmental Quality Act (CEQA).

The project is located approximately 1,000 feet away from the State Route 90 and Interstate 405 interchange. From reviewing the MND, Caltrans has the following comments. As mentioned in the document, Senate Bill 743 (2013) mandates that Vehicle Miles Traveled (VMT) be used as the primary metric in identifying transportation impacts of all future development projects under CEQA, starting July 1, 2020. Since this implementation deadline has passed, Caltrans has reviewed this project from a VMT rather than a Level of Service (LOS) perspective.

For information on determining transportation impacts in terms of VMT on the State Highway System, see the *Technical Advisory on Evaluating Transportation Impacts in CEQA* by the California Governor's Office of Planning and Research (OPR), dated December 2018: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. The City can also refer to Caltrans' updated Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG), dated May 2020: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf. Caltrans' new TISG is largely based on the OPR 2018 Technical Advisory.

Due to the release of these guides, Caltrans no longer refers to the following agreements mentioned in the MND: the October 2013 Agreement Between the City of Los Angeles and Caltrans District 7 on Freeway Impact Analysis Procedures, and the December 2015 First Amendment to the Agreement between LADOT and Caltrans District 7 on Freeway Impact Analysis Procedures.

Regarding VMT, the MND states “Given the Project’s proximity (approximately one block) to the Westfield-Culver City Transit Center, the City considers the Project site to be in a key TPA [Transit Priority Area]. Therefore, based on the key TPA screening threshold, the Project is presumed to have a less-than-significant VMT impact and no further VMT analysis is required.” The OPR Technical Advisory states that a presumption of less-than-significant VMT impact may not apply if the project includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction. Thus, in the final MND please confirm that the project will not include more parking than required. For example, please state the maximum rather than the minimum number of parking spaces that will be provided.

In addition, encroachment permits are required for any work performed on or near Caltrans’ right of way. Such permits might be needed for the installation of closed-circuit television cameras at the Jefferson Boulevard & 1-405 Northbound Ramps intersection. However, Caltrans’ Office of Permits will make the final determination on this. Also, the MND states that the project applicant will contribute a fixed-fee financial contribution toward funding these improvements. In the final MND, please clarify which entity will be asked to pay the balance of the needed funding.

The following information is included for your consideration. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California’s economy and livability. Furthermore, Caltrans encourages Lead Agencies to implement Transportation Demand Management (TDM) strategies that reduce VMT and Greenhouse Gas (GHG) emissions. Thus, Caltrans supports this project implementing a TDM plan. For specific TDM options to include in this plan, please refer to:

- The 2010 *Quantifying Greenhouse Gas Mitigation Measures* report by the California Air Pollution Control Officers Association (CAPCOA), available at http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf, or
- *Integrating Demand Management into the Transportation Planning Process: A Desk Reference* (Chapter 8) by the Federal Highway Administration (FHWA), available at https://ops.fhwa.dot.gov/publications/fhwahop12035/index.htm.

Also, any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will need a Caltrans transportation permit. Caltrans supports the following measure: “Dirt hauling and construction material deliveries or removal would not be allowed during morning (7:00 AM – 9:00 AM) and afternoon (4:00 PM – 6:00 PM) peak traffic periods.” If construction traffic is expected to cause delays on any State facilities, please submit the Construction Management Plan detailing these delays for Caltrans’ review.

If you have any questions about these comments, please contact Emily Gibson, the project coordinator, at Emily.Gibson@dot.ca.gov, and refer to GTS # 07-LA-2021-03483.

Sincerely,

Miya Edmonson

MIYA EDMONSON
IGR/CEQA Branch Chief
cc: Scott Morgan, State Clearinghouse

Re: 11469 Jefferson Blvd project

Samia Rafeedie <otshr@hotmail.com>
Tue 2/9/2021 10:20 AM
To: Edwards, Lisa <Lisa.Edwards@culvercity.org>

Thanks Lisa! Appreciate that,
Samia.

Sent from my iPhone

On Feb 9, 2021, at 10:15 AM, Edwards, Lisa <Lisa.Edwards@culvercity.org> wrote:

Hi Ramez,

Thank you for your input. I will forward your concerns to our environmental team for incorporation into the MND.

From: Ramez Ethnasios <ethnasios@yahoo.com>
Sent: Wednesday, January 27, 2021 9:41 AM
To: Edwards, Lisa <Lisa.Edwards@culvercity.org>
Cc: Samia Rafeedie <otshr@hotmail.com>
Subject: 11469 Jefferson Blvd project

Dear Lisa Edwards,

On behalf of my wife, Samia Rafeedie, I would like to submit these comments regarding the above entitled project.

We are resident owners of a house on Segrell Way and have reviewed the Traffic Impact Study dated 10-19-2020.

I have concerns regarding the traffic intrusion and parking mitigation measures. It appears there are not any current actions planned for mitigating potential disruptions in our street and parking situation on Segrell Way. We have concerns that without proper deterrents in place that traffic will increase and cars will freely park in front of our house. We do not want to wait for such a time in the future when this will occur to start the process with the city, wait for whatever studies to be done, then get whatever measures in place.

Thinking about the amount of parking spots the hotel will have, the 120 full and part time employees, and guests, one would surely guess that a number of these persons will seek to park in the adjacent street for a variety of reasons. For employees, there may be limits in the parking spaces and for guests they may not want to pay whatever nightly parking fees.

Please expedite the process for:
-peak period turn restrictions at certain intersections as noted on page 86 of the traffic impact study, and
-begin the process to expand the residential parking permit program on Segrell way.

Please feel free to contact me as needed and I would like an update about any mitigation of our traffic intrusion and parking concerns related to the hotel project in 11469 Jefferson Blvd.

Ramez Ethnasios
818-231-6601
And Samia Rafeedie
Segrell Way residents

Re: Jeff Hotel: Public Hearing?

Jonah Breslau <jbreslau@laane.org>
Fri 2/19/2021 9:39 AM
To: Edwards, Lisa <Lisa.Edwards@culvercity.org>

Thank you for the update!

Take care,
Jonah

On Wed, Feb 17, 2021 at 6:23 PM Edwards, Lisa <Lisa.Edwards@culvercity.org> wrote:

Hi Jonah,

My apologies for the delay. We were still coordinating with the applicant regarding a tentative Planning Commission hearing date. As of late, this project is scheduled to be heard at the March 10th meeting.

From: Jonah Breslau <jbreslau@laane.org>
Sent: Thursday, February 4, 2021 1:46 PM
To: Edwards, Lisa <Lisa.Edwards@culvercity.org>
Subject: Jeff Hotel: Public Hearing?

Hi Ms. Edwards,

My name is Jonah Breslau. I am a research analyst at LAANE (https://laane.org/). I was wondering if there will be a public hearing for the Jeff Hotel project at 11469 Jefferson Boulevard Project (P2019-0194-SPR P2019-0194-CUP P2019-0194-AUP). If so, when would it be?

Thank you,
Jonah Breslau

--
Jonah Breslau
He/him/his
Research Analyst
Los Angeles Alliance for a New Economy (LAANE)
jbreslau@laane.org
C:773 603 5174

RE: The Jeff Hotel project

Jay Coury <jcoury@premierworlddiscovery.com>
Tue 2/9/2021 10:52 AM
To: Edwards, Lisa <Lisa.Edwards@culvercity.org>

Thank you Lisa

Jay Coury
President
Premier World Discovery

From: Edwards, Lisa <Lisa.Edwards@culvercity.org>
Sent: Tuesday, February 9, 2021 10:23 AM
To: Jay Coury <jcoury@premierworlddiscovery.com>
Subject: Re: The Jeff Hotel project

Hi Jay,

Thank you for your input. I will forward your concerns to our environmental team for incorporation into the MND.

I will contact the developer to see if we can electronically send a rendering of the project for you.

From: Jay Coury <jcoury@premierworlddiscovery.com>
Sent: Thursday, February 4, 2021 12:30 PM
To: Edwards, Lisa <Lisa.Edwards@culvercity.org>
Subject: The Jeff Hotel project

Hello Ms. Edwards
I reside at 11430 Segrell Way, CC and was wondering if there is a rendering of the project available see view? While I am in favor of the project, living where I do, I wonder if guests on top floor will get a view into my yard. I am excited that the project will bring attention to the alley which has become a causeway for speeding and once the two bars re-open on Jefferson, the alley becomes something quite different. Thank you in advance for your reply.

Jay Coury
President
Premier World Discovery

Re: Culver City needs more affordable housing!!!!!!!

Edwards, Lisa <Lisa.Edwards@culvercity.org>
Tue 2/9/2021 10:41 AM
To: DiaryofTieira Ryder <tie.ryder@gmail.com>

Hi Tieira,

Thank you for your input. I will forward your concerns to our environmental team for incorporation into the MND.

From: DiaryofTieira Ryder <tie.ryder@gmail.com>
Sent: Friday, February 5, 2021 12:20 PM
To: Edwards, Lisa <Lisa.Edwards@culvercity.org>
Subject: Culver City needs more affordable housing!!!!!!!

Culver City and all of the Westside cities should be coordinating better to create more affordable housing for long term, working class residents, students, seniors, those living with disabilities and others! The video attached is not OK, the number of unhoused residents has increased by over 50% in the last 10 years in LA!

Best,
Tieira

Re: New Proposed Project At 11469 Jefferson Blvd. From David@FIRE. 1-21-21

Edwards, Lisa <Lisa.Edwards@culvercity.org>
Tue 2/9/2021 10:14 AM
To: David Steinitz <david@fireltd.com>

Hi David,

Thank you for your input. I will forward your concerns to our environmental team for incorporation into the MND.

From: David Steinitz <david@fireltd.com>
Sent: Thursday, January 21, 2021 11:29 AM
To: Edwards, Lisa <Lisa.Edwards@culvercity.org>
Subject: New Proposed Project At 11469 Jefferson Blvd. From David@FIRE. 1-21-21

Dear Ms. Edwards
I live closer to Barryman on Segrell Way and I do not have any real issues with this new project other that it setting a strong precedence for 5 story structures around my area.
Also having lived in the neighborhood for a long time I do not believe the developer has seriously considered the 24 hour traffic noise from the elevated freeway. No one is going to want to sit on a roof deck when the ambient noise level is high and as far up the street as I am , I am constantly cleaning up the black soot from the freeway and as close as they will be it will be a constant issue. I am a lighting consultant for the last 42 years with my own company and I have a number of these type of structures I am retained by to do their lighting and energy management designs and having city's like Bellflower and Azusz as clients I see a lot of bad designs but even worse locations and this one only has a fair chance of survival what with all the other new hotels competing for the bed use.
I realize this may take more than another year to break ground and maybe the economic environment will make more sense but this project seems to be asking more than it can justify in financial return and I for 1 would not like to see another large space like the Lowes building sitting empty or abandoned.
Just my concerned 2 cents.
As a side note I would love to see the power lines in the double wide alley converted to underground if there is ever a way to do it.
Your concerned citizen,

David Steinitz C/O
F.I.R.E./L.T.D.
12035 W. Jefferson Blvd.
Los Angeles, CA. 90230-6219
Ph 424.835.4769
Fx 424.835.4765
www.FIRELTD.com
Serving all your lighting
needs for over 41 years.

RE: 11469 Jefferson Boulevard Project

rturner@archaeopaleo.com <rturner@archaeopaleo.com>
Wed 2/10/2021 6:11 PM
To: Allen, Michael <Michael.Allen@culvercity.org>
Cc: Edwards, Lisa <Lisa.Edwards@culvercity.org>

Hi Michael,
Thank you for your comments. The 56 foot height limit does allow for minor mechanical equipment (roof HVAC equipment) but not for a full doorway to get on the roof. It is strictly allowed to have equipment such as a few feet allowance for elevator to hit the top floor but not for roof access.
Thank you,
Robin

From: Allen, Michael <Michael.Allen@culvercity.org>
Sent: Wednesday, February 10, 2021 5:23 PM
To: rturner@archaeopaleo.com
Cc: Edwards, Lisa <Lisa.Edwards@culvercity.org>
Subject: Re: 11469 Jefferson Boulevard Project

Good afternoon Ms. Turner,

Thank you for providing the below comment regarding the 11469 Jefferson Blvd. Project. Based on our analysis, the building is compliant with the 56' height limitation, as well as the allowances for mechanical equipment and the elevator shaft.

We will continue to evaluate this as we work through the currently available MND, and project analysis as we prepare for any upcoming public hearings.

Best,

Michael Allen, AICP
Planning Manager
City of Culver City, Current Planning Division
9770 Culver Boulevard
Culver City, CA 90232
Ph: 310.253.5727

> **From:** rturner@archaeopaleo.com
> **Date:** February 10, 2021 at 5:12:05 PM EST
> **To:** "Edwards, Lisa" <Lisa.Edwards@culvercity.org>
> **Subject: 11469 Jefferson Boulevard Project**
>
> Good Afternoon Ms. Edwards,
> I would like to comment on the 11469 Jefferson Boulevard Project. The Project has been designed to be 5 stories in height. This clearly violates the Measure 1 Height Initiative maximum limit that was voted on by the voters of Culver City in 1988. There are no variances or conditions that would allow this or any other building to be built over the 56 feet limit. An elevator shaft is not allowed above the 56 foot limit. There are no variances allowed for that. 56 feet is 56 feet. Period! By building this Project, the City of Culver City will be violating the law. In fact, ANY NEW 5 STORY BUILDING OVER 56 FEET IN CULVER CITY IS IN DIRECT VIOLATION OF THE LAW!!!!!!!!!!
> Thank you,
> Robin Turner
> 10650 Drakewood Ave.
> Culver City,
> CA 90230
> (424) 248-3316 o
> (310) 915-4536 c

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February 11, 2021

VIA EMAIL:

Lisa Edwards, Contract Planner
City of Culver City Current Planning Division
9770 Culver Boulevard
Culver City, CA 90232
lisa.edwards@culvercity.org

RE: 11469 JEFFERSON BOULEVARD PROJECT IS/MND COMMENTS

Dear Ms. Edwards:

On behalf of UNITE HERE Local 11 and its members (collectively "**Local 11**"), this Office provides the City of Culver City ("**City**") the following comments[1] regarding the Initial Study/Mitigated Negative Declaration ("**IS/MND**") for the above-referenced five-story, 175-room hotel development ("**Project**") located on a 33,813 square foot ("**SF**") site located at the northwest corner of the intersection at Jefferson Boulevard and Slauson Avenue ("**Site**").

In short, Local 11 finds that the IS/MND fails to adequately analyze Project impacts related to vehicle miles traveled ("**VMT**"), construction noise, and exposure to hazards. As such, Local 11 urges the City to stay any action on any Project approvals until the issues identified below have been addressed in an adequate environmental review pursuant to the California Environmental Quality Act ("**CEQA**").

1. VMT ANALYSIS IS LACKING

Citing the VMT guidance provided by the Governor's Office of Planning and Research ("**OPR**"), the IS/MND presumed the Project's VMTs would be less than significant merely because the Site is near a transit priority area. (MND, p. B-105; IS/MND Traffic Study, pp. iv, 74-75.) However, OPR states explicitly that this "presumption would not apply, however, if project-specific or location-specific information indicates that the project will still generate significant levels of VMT."[2] Project-specific information that indicates a significant VMT includes the following:

[1] Please note that pages cited herein are either to the page's stated pagination (referenced herein as "**p. ##**") or the page's location in the referenced PDF document (referenced herein as "**PDF p. ##**").
[2] OPR (Dec. 2018) Technical Advisory: On Evaluating Transportation Impacts In CEQA, pp. 13-14, https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

i. The Project would generate 1,463 trips per day compared to the exiting 376 trips per day (IS/MND, p. B-92)—*a net increase of 1,087 trips*—which exceeds OPR's small project screening threshold of 110 trips.[3] So too, this increase would exceed the 250-trip screening threshold proposed under the City's Draft Transportation Study Criteria Guidelines.[4]

ii. The IS/MND's GHG Study shows the Project would generate 3.490 million annual VMTs as compared to the existing 0.636 million annual VMTs (GHG Study, PDF pp. 169, 224), which is *more than a fivefold increase* and exceeds OPR's no net increase threshold for redevelopment projects.[5]

iii. No less than nine hotels/lodging are within 1.5 miles of the Project Site,[6] suggesting the Site is hotel-rich and that the Project will not provide an alternative for hotel patrons that would otherwise be commuting from longer distances. Adding more hotels in a hotel-rich area will not further smart/mixed-use development.

iv. The existing uses are local serving retail (e.g., restaurants, nails salon, dentist, golf, flowers, etc.) (IS/MND Remedial Action Plan ["**RAP**"], PDF p. 52 [Fig. 2]), which provide convenient access to nearby residents that do not need to use a vehicle to access these services. In contrast, the Project is a hotel development, which is regional in nature and displaces these local services. Hence, the Project may induce further VMTs by individuals no longer able to access these local services without entering their vehicles.

v. The City acknowledges that hotels generate large amounts of visitors that may access the site via Uber/Lyft,[7] but the IS/MND fails to discuss how the Project would handle these ridesharing services.

Based on the above, the less than significant VMT impact presumption does not apply, and an actual VMT analysis is warranted here. The CEQA compliance must be re-done.

2. CONSTRUCTION NOISE/VIBRATION ANALYSIS IS INCOMPLETE

The IS/MND finds no construction noise impacts based on a time/place threshold. (IS/MND, pp. B-63, B-66.) However, this ignores that construction noise levels will reach up to 70 dBA compared to the 62 and 63 dBA (daytime Leq) ambient levels at sensitive receptors R1 and R2 (i.e., residences 50 feet from the site), respectively. (IS/MND, Tbls. B-14 & B-16.) This amounts to a *seven to eight dBA-increase that would exceed the 5-dBA Leq threshold applied to the Project's operational phase*. (IS/MND, p. B-63.) Given construction is to last over 30-months (IS/MND, p. A-21), it is arbitrary to claim these noise levels are not significant to those residents over such a long period.

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[3] Ibid. at p. 12.
[4] See City (May 2020) Draft Transportation Study Criteria and Guidelines, p. 4, https://culver-city.legistar.com/View.ashx?M=F&ID=8331543&GUID=B8DB9B35-E077-40E3-A0C3-AB70306081BF.
[5] OPR, supra fn. 2, p. 17.
[6] Google Maps, https://www.google.com/maps/place/Mayumi/@33.9823269,-118.4133479,14z/data=!4m17!1m8!2m7!1sHotels!3m5!1sHotels!2s33.9896,+-118.3973!4m2!1d-118.3973395!2d33.9895605!3m7!1s0x80c2ba021914d27f:0x2906349d35168b00!5m2!4m1!1i2!8m2!3d33.994924!4d-118.3942348.
[7] City, supra fn. 4, p. 7.

Furthermore, these construction noise levels are likely underestimated for various reasons. First, the IS/MND's Noise Study cites inconsistent construction equipment noise levels. (IS/MND Noise Study, PDF pp. 37, 234). Second, the IS/MND does not discuss whether pile driving will be used, which can create noise levels up to 101 dBA at 50 feet and present a unique potential for vibration impacts. (Id.) Third, the IS/MND assumed a 10-dBA reduction for "noise reduction features" like sound barriers "if construction noise is impacting nearby noise sensitive land uses," as well as noise "abatement and acoustical design criteria" for new development. (IS/MND pp. B-67 – B-68.) However, what are those specific *features*, what constitutes sufficient *impact* to warrant sound barriers, what *criteria* are going to be required? These unspecified mitigation measures also are not included in the proposed Mitigation Monitoring Reporting Program ("**MMRP**"). (IS/MND, Attachment C.) As such, these measures are illusory mitigation measures lacking performance standards that violate CEQA.[8]

3. HAZARDS ANALYSIS MUST BE UPDATED

The Site was formerly used as a gasoline/service station, currently contains constituents of concern, and is not fully remediated. (IS/MND, p. B-20, B-46; IS/MND RAP, pp. 2.1-2.11.) The IS/MND proposes a future Soil Management and Remediation Plan ("**SMRP**") to be prepared premised on a 2014 RAP that was prepared when no project was anticipated (IS/MND, pp. B-48, C-11) and where remedial activities were limited due to existing retail tenants at the site (IS/MND RAP, pp. 5.2 – 5.11.) Much has changed since then, including the now proposed removal of existing tenants – as well as the consideration of new guidance on vapor intrusion by the Water Board and its sister agency Department of Toxics Substance Control ("**DTSC**").[9] For these reasons, the City should have a revised RAP and detailed SMRP analyzed in a compliant CEQA document in hand before considering approval of the Project.

4. CODE-REQUIRED FINDINGS CANNOT BE MADE

The IS/MND specifies that only construction-related permits from the City, such as demolition, haul route, and building permits at issue. (IS/MND, pp. EC-2, A-22, B-60.) However, the Project's case numbers (i.e., P2019-0194-SPR, P2019-0194-CUP, P2019-0194-AUP) suggest that the Project requires City approval of Site Plan Review, Conditional Use Permit, and/or Administrative Use Permit. (IS/MND, pp. EC-1, C-1.)

These types of discretionary approvals are subject to specific findings required under the Culver City Municipal Code ("**CCMC**" or "**Code**"). (CCMC §§ 17.530.020, 17.540.020.)
The environmental and CEQA impacts and deficiencies discussed herein invalidate any public health/welfare findings (id.)—these impacts and deficiencies must be resolved if the City intends to make Code-required findings supported by substantial evidence.

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[8] See e.g., *Federation of Hillside & Canyon Ass'ns v. City of Los Angeles* (2000) 83 Cal.App.th 1252, 1260; *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 522; *Cleveland Nat'l Forest Found v. San Diego Ass'n of Gov'ts* (2017) 17 Cal.App.5th 413, 433.

[9] See Water Board (2020) Vapor Intrusion, https://www.waterboards.ca.gov/water_issues/programs/site_cleanup_program/vapor_intrusion/; DTSC (2020) Vapor Intrusion, https://dtsc.ca.gov/vapor-intrusion/; CalEPA/Water Board/DTSC (Feb. 2020) Supplemental Guidance: Screening and Evaluating Vapor Intrusion, https://dtsc.ca.gov/wp-content/uploads/sites/31/2020/02/Public-Draft-Supplemental-VI-Guidance_2020-02-14.pdf.

In closing, Local 11 urges the City to stay all action on the Project until the issues discussed herein are resolved in a recirculated MND or Environmental Impact Report, as required under CEQA. On behalf of Local 11, this Office requests, to the extent not already on the notice list, all notices of CEQA actions and any approvals, determinations, or public hearings to be held on the Project under state or local law requiring local agencies to mail such notices to any person who has filed a written request for them. (Pub. Res. Code §§ 21092.2, 21167(f) and Gov. Code § 65092 and CCMC § 17.630.010.A.d.) Please send notice by electronic and regular mail to: Jordan R. Sisson, Esq., 801 S. Grand Avenue, 11th Fl., Los Angeles, CA 90017, jordan@gideonlaw.net.

Thank you for your consideration of these comments. We ask that this letter and any attachments are placed in the administrative record for the Project.

Sincerely,

Jordan R. Sisson
Attorney for Local 11

5105 Cimarron Lane
Culver City, CA 90230

February 17, 2021

Ms. Lisa Edwards, Contract Planner
City of Culver City Current Planning Division
9770 Culver Boulevard
Culver City, CA 90232

Subject: Traffic Impact Study
Jeff Hotel
11469 Jefferson Boulevard

Dear Ms. Edwards:

Thank you for the opportunity to review the *Traffic Impact Study For The Jeff Hotel Project Proposed At 11469 Jefferson Boulevard, Culver City* prepared by Crain & Associates in October 2020. The study is part of the Mitigated Negative Declaration for the proposed project.

To introduce myself to you, I am a Registered Traffic Engineer in California with over 50 years of experience. For many years, I performed the functions of the Culver City Traffic Engineer as a consultant to the City. I have been a resident of Culver City for 33 years.

I have comments on three issues addressed in the Crain report: 1) adequacy of the proposed on-site parking supply; 2) operation of the dual left-turn lane proposed for northbound Jefferson Boulevard at Slauson Avenue; and 3) truck maneuvering from and to the alley west of the hotel.

On-Site Parking Supply

The following comments are based on information in Appendix E, Project Demand Parking Analysis, which consists of a letter dated April 3, 2020, to Michael Allen from Crain & Associates, plus the accompanying calculations upon which the letter text is based. The analysis in the Crain letter uses empirical data from three existing hotels in Culver City, near the subject site, to calculate estimates of the maximum potential parking demand for the Jeff Hotel.

For comparison, the letter also presents parking demand calculations based on the parking rates in the Culver City Municipal Code and in Urban Land Institute publications dealing with parking demands. There is great variance among the estimated parking demands using the rates from the three sources. After applying shared parking analysis methods, the estimates of maximum parking demands presented by Crain are:

138 spaces based on the rates derived from the local hotels;
299 spaces based on the Culver City Municipal Code rates; and
401 spaces based on the Urban Land Institute rates.

The derived-rate estimate is less than half the estimates using either of the other two sources.

For the three local hotels studied by Crain, actual parking counts were conducted during the summer months of the years, 2018 and 2019. From those counts, peak parking usage rates (number of parked vehicles per guest room) were derived for each hotel, and the highest of the three rates was applied to the proposed number of guest rooms for the Jeff Hotel. The letter provides no information on the room occupancy rates at the study hotels during the parking counts. Were they at or near 100%? In addition to varying from month-to-month, as acknowledged in the letter, hotel occupancy rates vary from year-to-year based on numerous factors, such as the local economy and schedules of events in the area served. Were 2018 and 2019 high room-occupancy years for the hotels? If the study hotels operated at substantially below full occupancy during those years, the derived rates should be adjusted upward for that.

Do any of the three study hotels have a rooftop bar/lounge or similar facility comparable to that proposed for the Jeff Hotel? Such an amenity will attract non-guests to the hotel to meet guests or to enjoy the view. That will result in additional parking demand. If the hotel upon which the derived parking rate is based does not have a comparable amenity, the derived rate is too low to be applied to the Jeff Hotel analysis.

The parking facility that is proposed for the Jeff Hotel will consist of two subterranean levels beneath the building. Once that facility is built, there will be no opportunity to expand it on or near the hotel site. Therefore, the original supply must be adequate to serve maximum hotel parking demands, or the unsatisfied overflow parking demand will have to be accommodated elsewhere, such as in the adjacent residential neighborhood or in the adjacent shopping center.

The above concerns result in significant statistical uncertainty that should lead to the prudent conclusion that a “safety factor” must be applied to the estimate of an adequate parking supply. Safety factors are commonly used in engineering analysis and design when there is the possibility that there could be unaccounted for variance in the data upon which the estimate is based and when the estimate is to be used to design a permanent structure that cannot be expanded. In this case, it would be reasonable to add a 15% safety factor, or 21 spaces, to the predicted maximum demand of 138 spaces, for a statistically safe total of 159 spaces.

There is nothing in the analysis to indicate whether there will be a fee charged for parking in the hotel facility. Most hotels in the vicinity of the site, especially those with parking structures instead of surface lots, charge fees for parking, and the fees are usually substantial. That could be a disincentive for people to park at the hotel, especially those patronizing the restaurant or rooftop bar or those attending on-site meetings. They will be tempted to park in the neighborhood or at the adjacent shopping center, because their stays would be costly at the hotel parking structure. There should be an analysis of parking impacts on the nearby developments taking into consideration the effects of hotel parking fees.

As stated in the Jeff Hotel description, the parking supply will include tandem spaces. However, no number or percentage of such spaces is specified. Will tandem spaces constitute a majority of the total spaces? “Valet-assisted services” are proposed to assist with the tandem spaces. Will the valets be on duty at all times (7 days a week and 24 hours a day)? If not, when valets are not on duty, how many spaces will be effectively out of use, because self-parking guests will park in the outer tandem spaces leaving the inner spaces inaccessible?

The provision of valet-assisted services is an “operational measure”, not a structural measure. An operational measure is one that can be changed or discarded at any time by the operators of the hotel. The integrity of an operational measure depends on strict and frequent monitoring by the City. Does the City have the necessary personnel to monitor hotel operations at various times throughout the week, such as between 10 p.m. and 6 a.m. on several days per week and on Saturdays and Sundays throughout the year? If strict and frequent monitoring cannot be achieved by the City, the reliance on the valet services is invalid.

The hotel will have a large labor force. Will employees be allowed to park on-site at no cost? If not, where will hotel employees park – in the neighborhood or the adjacent shopping center? What were the policies for employee parking at the three study hotels during the parking counts? There should be adjustments to the derived parking rates to account for on-site employee parking if employees were not parked on-site at the existing hotels. On-site employee parking is another operational measure that could be eliminated by hotel management quickly. Does the City have the capability to monitor employee parking frequently? If not, the impacts of potential off-site employee parking should be included in an analysis of parking impacts on the adjacent neighborhood and shopping center.

Operation of Dual Left-Turn Lane on Jefferson Boulevard

In the plan shown in Appendix F of the Crain report, the vehicles using the two proposed northbound left-turn lanes will turn onto two lanes of westbound Slauson Avenue. Those intersection exit lanes are proposed to be 11 feet and 12 feet wide, for a total of 23 feet from the curb to the center island of Slauson Avenue.

Years of experience with the operations of dual left-turn lanes has led traffic engineers to recommend that the exit roadway for a dual left-turn movement be a minimum of 26 feet wide, with a more desirable width of 28 feet. That is based on years of observations at existing dual left-turn lanes that the drivers in the inner lane (i.e., the lane closer to the centerline) tend to drift to their right away from the center island or the opposite direction vehicles during their turns, and the drivers in the outer lane compensate for that by drifting to their right, also. The extra width in the curbside exit lane provides the outer lane driver with the room to complete the turn efficiently and safely. Without that extra width, outer lane drivers have been observed to hesitate to complete their turns until the adjacent inner lane vehicle has completed the turn ahead of them. That results in reduction of outer lane capacity plus the potential for side-swipe accidents with inner lane vehicles and rear-end accidents between outer lane vehicles. Adequate exit lane width must be provided for the proposed dual left-turn lanes if they are to be effective and safe. The striping plan for Slauson Avenue west of Jefferson must be modified to provide the additional exit lane width.

As part of the dual left-turn plan, Crain recommends the elimination of all vehicle stopping (via red curb) along the north side of Slauson Avenue between the alley west of the project site and Culver Park Drive, a distance of one and one-half blocks, to provide the two proposed exit lanes. Seven existing curbside parking spaces would be eliminated in the adjacent residential neighborhood, and there is photographic evidence that those spaces were being used, until they were temporarily blocked by a construction project. There is no analysis of the impacts of that loss of curbside parking, nor are any measures to mitigate the loss of neighborhood parking proposed in the report. That will be a significant issue in the event of any overflow parking from the hotel, such as employees who may not be permitted to park within the hotel facility, hotel facility patrons who choose to park off-site, or hotel patron vehicles that are moved to street parking by the valets when the on-site facility is full.

Truck Turning From and To the Alley West of the Hotel Site

Appendix G of the Crain report consists of diagrams illustrating the truck turning paths of a large truck:
a) backing into the hotel loading area from the northbound alley, and b) leaving the loading area to the northbound alley. As shown in the diagrams, the two maneuvers will each require the entire width of the alley, with the driver's side of the truck virtually touching the western edge of the alley.

However, there is a large utility pole in the alley across from the northern part of the hotel site that is not shown in the Figure G diagrams. If that pole remains in place, the alley width available for the truck turn is reduced by three to four feet. The trucks could not make either of the maneuvers as illustrated. It is very expensive to move such a large utility pole. Will the hotel developers do so, or will they provide a more feasible truck turning plan?

The three areas that I have addressed should be of significant concern to the City officials and staff, if the proposed hotel is to have less-than-significant impacts on the bordering streets and the adjacent residential neighborhood. I would be pleased to discuss my comments with you and other members of the City staff. My telephone number is 310-558-0808 and my email address is artraffic@aol.com.

Very truly yours,

Original signed by Arthur L. Kassan, P.E.

Arthur L. Kassan, P.E.
Registered Traffic Engineer No. 152

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February 19, 2021

Via E-Mail

Lisa Edwards, Contract Planner
City of Culver City
Current Planning Division
9770 Culver Boulevard
Culver City, CA 90232
Lisa.Edwards@culvercity.org

Re: 11469 Jefferson Boulevard Project MND
P2019-0194-SPR; P2019-0194-CUP; P2019-0194-AUP

Dear Ms. Edwards and the Current Planning Division of Culver City:

I am writing on behalf of the Supporters Alliance for Environmental Responsibility ("SAFER") regarding the Mitigated Negative Declaration ("MND") prepared for the 11469 Jefferson Boulevard Project ("Project") (P2019-0194-SPR; P2019-0194-CUP; P2019-0194-AUP) in the City of Culver City ("City"). SAFER is a California nonprofit public benefit corporation whose purposes include contributing to the preservation and enhancement of the environment and advocating for programs, policies, and development projects that promote not only good jobs but also a healthy natural environment and working environment.

After reviewing the MND, it is clear that there is a "fair argument" that the Project may have unmitigated adverse environmental impacts. The written expert comments of Francis Offermann, Certified Industrial Hygienist, and SWAPE (attached hereto as Exhibit A and Exhibit B, respectively), as well as the comments below, identify substantial evidence of a fair argument that the Project may have significant environmental impacts. Accordingly, an environmental impact report ("EIR") is required to analyze these impacts and to propose all feasible mitigation measures to reduce those impacts. We urge the City to refrain from approving the MND, and instead to prepare an EIR for the Project prior to any Project approvals as required by CEQA.

I. PROJECT BACKGROUND

The Project would redevelop a 33,813 square foot (sf) (0.78-acre) property located in the northwest corner of the intersection at Jefferson Boulevard and Slauson Avenue. The existing single- story commercial (retail/restaurant) building and associated asphalt-paved surface parking lot would be removed as part of the Project.

The Project Site is currently improved with an approximately 13,000 sf main single-story, wood-framed commercial shopping center which includes both retail and restaurant uses. The remainder of the site consists of an asphalt-paved surface parking lot and ornamental landscaped areas. Ingress/egress to the Project Site is available via a driveway from Jefferson Boulevard and a driveway from Slauson Avenue.

The Project includes the development of a new, five-story, 175-room boutique hotel building with food and beverage amenities and a two level, below-grade parking garage. A pool and roof top bar would be located on the fifth floor. The 111,000 sf building would be up to 56 feet in height (with the elevator shaft reaching 69 feet and 6 inches in height) and surrounded by landscaped areas located on site and within the public right of way. Parking for the proposed uses would be provided on site within a subterranean parking structure that would accommodate a minimum of 138 parking spaces.

The Project Site is located at the south-end of the commercial corridor that runs along Jefferson Boulevard perpendicular to Interstate 405 (I-405) freeway within the Fox Hills area of Culver City. Downtown Los Angeles is approximately eight (8) miles east of the Project Site. The Project Site is bounded by the intersection at Jefferson Boulevard and Slauson Avenue with commercial uses directly north of the Project Site and a public alley adjacent to the western Project boundary with residential uses just beyond the alley. Commercial uses are also located east and south of the Project Site across Jefferson Boulevard and Slauson Avenue. Both the I-405 and State Route 90 (SR-90) freeways are located less than 400 feet west and south of the Project Site.

II. LEGAL STANDARD

As the California Supreme Court held, "[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR." (*Communities for a Better Env't v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 319-320 (*CBE v. SCAQMD*) [citing *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504–505.].) "Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." (Pub. Res. Code ["PRC"] § 21068; *see also* 14 CCR § 15382.) An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial." (*No Oil, Inc., supra*, 13 Cal.3d at 83.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Communities for a Better Env't v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 109 (*CBE v. CRA*).)

The EIR is the very heart of CEQA. (*Bakersfield Citizens for Local Control v. City of Bakersfield (*2004) 124 Cal.App.4th 1184, 1214 (*Bakersfield Citizens*); *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927.) The EIR is an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return." (*Bakersfield Citizens, supra*, 124 Cal.App.4th at 1220.) The EIR also functions as a "document of accountability," intended to "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." (*Laurel Heights Improvements Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 392.) The EIR process "protects not only the environment but also informed self-government." (*Pocket Protectors*, *supra*, 124 Cal.App.4th at 927.)

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." (PRC § 21080(d); see also *Pocket Protectors*, *supra*, 124 Cal.App.4th at 927.) In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (14 Cal. Code Regs. § 15371), only if there is not even a "fair argument" that the project will have a significant environmental effect. (PRC, §§ 21100, 21064.) Since "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process," by allowing the agency "to dispense with the duty [to prepare an EIR]," negative declarations are allowed only in cases where "the proposed project will not affect the environment at all." (*Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440.) A mitigated negative declaration is proper only if the project revisions would avoid or mitigate the potentially significant effects identified in the initial study "to a point where clearly no significant effect on the environment would occur, and…there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment." (PRC §§ 21064.5 and 21080(c)(2); *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 331.) In that context, "may" means a reasonable possibility of a significant effect on the environment. (PRC §§ 21082.2(a), 21100, 21151(a); *Pocket Protectors, supra*, 124 Cal.App.4th at 927; *League for Protection of Oakland's etc. Historic Res. v. City of Oakland* (1997) 52 Cal.App.4th 896, 904–905.)

Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency's decision. (14 CCR § 15064(f)(1); *Pocket Protectors*, *supra*, 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-51; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602.) The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. (*Pocket Protectors*, *supra*, 124 Cal.App.4th at 928.)

The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

> This 'fair argument' standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument standard, by contrast, prevents the lead agency from weighing competing

> evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency's decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

(Kostka & Zishcke*, Practice Under CEQA*, §6.29, pp. 273-74.) The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with a preference for resolving doubts in favor of environmental review." (*Pocket Protectors*, *supra*, 124 Cal.App.4th at 928.)

III. DISCUSSION

A. Substantial Expert Evidence Establishes a Fair Argument that the Project's Indoor Air Quality Will Have a Significant Impact on Human Health Due to Formaldehyde Emissions.

The MND fails to address the significant health risks posed by the Project from formaldehyde, a toxic air contaminant ("TAC"). Certified Industrial Hygienist, Francis Offermann, PE, CIH, has conducted a review of the Project, the MND, and relevant documents regarding the Project's indoor air emissions. Mr. Offermann is one of the world's leading experts on indoor air quality, in particular emissions of formaldehyde, and has published extensively on the topic. As discussed below and set forth in Mr. Offermann's comments, the Project's emissions of formaldehyde to air will result in very significant cancer risks to future residents at the Project's apartments. Mr. Offermann's expert opinion and calculation present a "fair argument" that the Project may have significant health risk impacts as a result of these indoor air pollution emissions, which were not discussed, disclosed, or analyzed in the MND. These impacts must be addressed in n EIR. Mr. Offermann's comment and curriculum vitae are attached as Exhibit A.

Formaldehyde is a known human carcinogen and listed by the State as a TAC. SCAQMD has established a significance threshold of health risks for carcinogenic TACs of 10 in a million and a cumulative health risk threshold of 100 in a million. The MND fails to acknowledge the significant indoor air emissions that will result from the Project. Specifically, there is no discussion of impacts or health risks, no analysis, and no identification of mitigations for significant emissions of formaldehyde to air from the Project.

Mr. Offermann explains that many composite wood products typically used in home and apartment building construction contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states, "The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particle board. These materials are commonly used in residential, office, and retail building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims." (Ex. A, pp. 2-3.)

Mr. Offermann states that future employees of the hotel will be exposed to a cancer risk from formaldehyde of approximately 17.7 per million, ***even assuming that*** all materials are compliant with the California Air Resources Board's formaldehyde airborne toxics control measure. (Ex. A, p. 4.) This exceeds SCAQMD's CEQA significance thresholds for airborne cancer risk of 10 per million. (*Id*.)

Mr. Offermann concludes that these significant environmental impacts must be analyzed in an EIR and mitigation measures should be imposed to reduce the risk of formaldehyde exposure. (Ex. A, pp. 5, 10-12.) He prescribes a methodology for estimating the Project's formaldehyde emissions in order to do a more project-specific health risk assessment. (*Id*., pp. 5-9.). Mr. Offermann also suggests several feasible mitigation measures, such as requiring the use of no-added-formaldehyde composite wood products, which are readily available. (*Id*., pp. 11-13.) Mr. Offermann also suggests requiring air ventilation systems which would reduce formaldehyde levels. (*Id*.) Since the MND does not analyze this impact at all, none of these or other mitigation measures have been considered.

When a Project exceeds a duly adopted CEQA significance threshold, as here, this alone establishes substantial evidence that the project will have a significant adverse environmental impact. Indeed, in many instances, such air quality thresholds are the only criteria reviewed and treated as dispositive in evaluating the significance of a project's air quality impacts. (*See, e.g. Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 [County applies Air District's "published CEQA quantitative criteria" and "threshold level of cumulative significance"]; *see also Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-111 ["A 'threshold of significance' for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant"].) The California Supreme Court made clear the substantial importance that an air district significance threshold plays in providing substantial evidence of a significant adverse impact. (*Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 327 ["As the [South Coast Air Quality Management] District's established significance threshold for NOx is 55 pounds per day, these estimates [of NOx emissions of 201 to 456 pounds per day] constitute substantial evidence supporting a fair argument for a significant adverse impact."].) Since expert evidence demonstrates that the Project will exceed the SCAQMD's CEQA significance threshold, there is substantial evidence that an "unstudied, ***potentially significant environmental effect[]***" exists. (*See Friends of Coll. of San Mateo Gardens v. San Mateo Cty. Cmty. Coll. Dist.* (2016) 1 Cal.5th 937, 958 [emphasis added].) As a result, the City must prepare an EIR for the Project to address this impact and identify enforceable mitigation measures.

The failure of the MND to address the Project's formaldehyde emissions is contrary to the California Supreme Court's decision in *California Building Industry Ass'n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 386 ("*CBIA*"). In that case, the Supreme Court expressly holds that potential adverse impacts to future users and residents from pollution generated by a proposed project ***must be addressed*** under CEQA. At issue in *CBIA* was whether the Air District could enact CEQA guidelines that advised lead agencies that they must analyze the impacts of adjacent environmental conditions on a project. The Supreme Court held that CEQA does not generally require lead agencies to consider the environment's effects on a project. (*CBIA*, 62 Cal.4th at 800-01.) However, to the extent a project may exacerbate existing environmental conditions at or near a project site, those would still have to be considered pursuant to CEQA. (*Id*. at 801.) In so holding, the Court expressly held that CEQA's statutory language required lead agencies to disclose and analyze "impacts on ***a project's users or residents*** that arise ***from the project's effects*** on the environment." (*Id*. at 800 [emphasis added].)

The carcinogenic formaldehyde emissions identified by Mr. Offermann are not an existing environmental condition. Those emissions to the air will be from the Project. People will be residing in and using the Project once it is built and begins emitting formaldehyde. Once built, the Project will begin to emit formaldehyde at levels that pose significant direct and cumulative health risks. The Supreme Court in *CBIA* expressly finds that this type of air emission and health impact by the project on the environment and a "project's users and residents" must be addressed in the CEQA process. The existing TAC sources near the Project site would have to be considered in evaluating the cumulative effect on future residents of both the Project's TAC emissions as well as those existing off-site emissions.

The Supreme Court's reasoning is well-grounded in CEQA's statutory language. CEQA expressly includes a project's effects on human beings as an effect on the environment that must be addressed in an environmental review. "Section 21083(b)(3)'s express language, for example, requires a finding of a 'significant effect on the environment' (§ 21083(b)) whenever the 'environmental effects of a project will cause substantial adverse effects *on human beings,* either directly or indirectly.'" (*CBIA*, 62 Cal.4th at 800 [emphasis in original].) Likewise, "the Legislature has made clear—in declarations accompanying CEQA's enactment—that public health and safety are of great importance in the statutory scheme." (*Id*., citing e.g., §§ 21000, subds. (b), (c), (d), (g), 21001, subds. (b), (d).) It goes without saying that the thousands of future residents at the Project are human beings and the health and safety of those residents must be subjected to CEQA's safeguards.

The City has a duty to investigate issues relating to a project's potential environmental impacts. (*See County Sanitation Dist. No. 2 v. County of Kern*, (2005) 127 Cal.App.4th 1544, 1597–98. ["[U]nder CEQA, the lead agency bears a burden to investigate potential environmental impacts."].) The proposed office buildings will have significant impacts on air quality and health risks by emitting cancer-causing levels of formaldehyde into the air that will expose future residents to cancer risks potentially in excess of SCAQMD's threshold of significance for cancer health risks of 10 in a million. Likewise, when combined with the risks posed by the nearby TAC sources, the health risks inside the project may exceed SCAQMD's cumulative health risk threshold of 100 cancers in a million. Currently, outside of Mr. Offermann's comments, the City does not have any idea what risks will be posed by formaldehyde emissions from the Project or the residences. As a result, the City must include an analysis and discussion in an EIR which discloses and analyzes the health risks that the Project's formaldehyde emissions may have on future residents and identifies appropriate mitigation measures.

B. The MND Relies on Unsubstantiated Input Parameters to Estimate Project Emissions and Thus Fails to Provide Substantial Evidence of the Project's Air Quality Impacts.

Matt Hagemann, P.G., C.Hg., and Paul E. Rosenfeld, Ph.D., of the Soil/Water/Air Protection Enterprise ("SWAPE") reviewed the air quality analysis in the MND. SWAPE's comment letter and CVs are attached as Exhibit B and their findings are summarized below.

The MND for the Project relies on emissions calculated from the California Emissions Estimator Model Version CalEEMod.2016.3.2 ("CalEEMod"). This model relies on recommended default values based on site specific information related to a number of factors. The model is used to generate a project's construction and operational emissions. SWAPE reviewed the Project's CalEEMod output files and found that the values input into the model were inconsistent with information provided in the MND. This results in an underestimation of the Project's emissions. As a result, the MND's air quality analysis cannot be relied upon to determine the Project's air quality impacts. Instead, the City must prepare an EIR to adequately evaluate the impacts that construction and operation of the Project will have on local and regional air quality.

1. <u>The MND's air quality model improperly reduced the default CO_2 intensity factor.</u>

SWAPE's review of the Project's CalEEMod output files found that the CO2 intensity factor was manually reduced by approximately 28%, from the default value of 702.44 pounds per megawatt hour ("lbs/MWh") to 509.22 lbs/MWh. (Ex. B, p. 3.) The "User Entered Comments & Non-Default Data" section attempted to justify these changes by stating: "CO2e intensity factor was linearly projected for year 2022 anticipated RPS based on SB 100 target of 44% RPS by 12/31/2024 projected and from SCE contract with the CPUC to have 41.4% RPS by 2020" (MND, Appendix A, pp. 489, 539).

SWAPE found that the alteration to the CO2 intensity factor was unjustified for two reasons: "First, the IS/MND cannot simply interpolate its own CO2 intensity factor based on estimates of future increases in renewable energy use. Second, simply because the state has renewable energy goals for 2024 does not ensure that these goals will be achieved locally on the Project site or by the Project's specific utility company. As a result, we cannot verify the revised CO2 intensity factor." (Ex. B, p. 3.) SWAPE concluded that the unsubstantiated reduction to the default CO2 intensity factor may underestimate the Project's GHG emissions and, therefore, cannot be relied upon to determine Project's impacts. (Ex. B, p. 4.)

2. <u>The MND's air quality model underestimated the Project's land use size for parking.</u>

SWAPE's review of the Project's CalEEMod output files found that the air model underestimated the proposed parking space by 22,483 sf. (Ex. B, p. 4.) According to the MND, the Project proposes to provide 56,300 sf of subterranean parking but the air model includes only

33,817 sf of parking space. (*Id.*) SWAPE concluded that the model may therefore underestimate the Project's construction-related and operational emissions and cannot be relied upon to determine Project significance. (*Id.*)

3. The MND's air quality model failed to model all proposed land uses.

SWAPE's review of the Project's CalEEMod output files found that the air model failed to model the Project's 3,313 sf of restaurant space and 700 sf of fitness space. (Ex. B, pp. 4-5.) SWAPE found that the model failed to distinguish between the Project's hotel land use and restaurant/fitness land use (*Id*. at p. 5.) SWAPE explained that "CalEEMod includes 63 different land use types that are each assigned a distinctive set of energy usage emission factors" and that "each land use type includes a specific trip rate that CalEEMod uses to calculate mobile-source emissions." (*Id.*) SWAPE concluded that the model may therefore underestimate the Project's construction-related and operational emissions and cannot not be relied upon to determine Project impacts. (*Id*. at pp. 5-6.)

4. The MND's air quality model made unsubstantiated changes to individual construction phase lengths.

SWAPE's review of the Project's CalEEMod output files found that the air model made unsubstantiated changes to individual construction phase lengths. (Ex. B, p. 6.) The specific changes made were:

- the demolition phase was increased by approximately 430%, from the default of 10 to 53 days;
- the grading phase was increased by approximately 3,650%, from the default of 2 to 75 days;
- the building construction phases were collectively increased by approximately 84%, from the cumulative default value of 300 to 553 days;
- the paving phase was increased by approximately 120%, from the default value of 5 to 11 days; and
- the architectural coating phase was increased by 1,440%, from the default value of 5 to 77 days.

(*Id.*)

According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "see construction assumptions" (MND, Appendix A, pp. 82, 115). However, as noted by SWAPE, the MND and associated documents provide no "construction assumptions," as purported by the "User Entered Comments and Non-Default Data" table. (Ex. B, p. 7.)

Additionally, for the changes to construction-related inputs, the MND's Air Quality Technical Report ("AQ Technical Report") explained that "[t]he input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule" and that "[d]etailed construction equipment lists, construction scheduling, and emissions calculations are provided in Appendix A." (AQ Technical Report, pp. 41-42.)

However, as noted by SWAPE, Appendix A of the AQ Technical Report does not include fail a detailed construction schedule, as purported by the AQ Technical Report. (Ex. B, p. 7.)

Lastly, regarding the construction schedule, the AQ Technical Report states, "This analysis assumes construction of the Project is estimated to require up to 26 months, starting as early as the second quarter of 2020." (AQ Technical Report, p. 42.) However, as noted by SWAPE, the AQ Technical Report only indicates that the total construction period is estimated as 26 months but says nothing about the individual construction phase lengths. (Ex. B, p. 7.)

SWAPE concluded that the MND may underestimate the Project's construction-related emissions because of unsubstantiated changes to the default individual construction phase lengths and, therefore, cannot be relied upon to determine Project impacts. (Ex. B, p. 8.)

5. The MND's air quality model improperly altered the number of construction days per week without justification.

SWAPE's review of the Project's CalEEMod output files found that the Project's number of construction days per week was manually changed from the CalEEMod default. (Ex. B, p. 8.) SWAPE found that the "User Entered Comments & Non-Default Data" table (located in Appendix A of the MND) states "see construction assumptions" (MND, Appendix A, pp. 82, 115). However, the MND and associated documents fail to provide any "construction assumptions" pertaining to the number of days a week for construction (*Id.*) As such, SWAPE concludes that the MND may underestimate the Project's construction-related emissions and should not be relied upon to determine Project's impacts. (Ex. B, p. 9.)

6. The MND's air quality model made unsubstantiated changes to off-road equipment unit amounts and usage hours.

SWAPE's review of the Project's CalEEMod output files found that the Project's off-road equipment unit amounts and usage hours were manually changed from the CalEEMod defaults. (Ex. B, p. 9.)

According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "see construction assumptions" (MND, Appendix A, pp. 82, 115). However, as noted by SWAPE, the MND and associated documents provide no "construction assumptions," as purported by the "User Entered Comments and Non-Default Data" table. (Ex. B, p. 10.)

Furthermore, for the changes to construction-related inputs, the MND's Air Quality Technical Report ("AQ Technical Report") explained that "[t]he input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule" and that "[d]etailed construction equipment lists, construction scheduling, and emissions calculations are provided in Appendix A." (AQ Technical Report, pp. 41-42.)

However, as noted by SWAPE, Appendix A of the AQ Technical Report does not include fail a detailed construction schedule, as purported by the AQ Technical Report. (Ex. B, p. 10.)

SWAPE concluded that the MND may underestimate the Project's emissions because of unsubstantiated changes to the Project's off-road construction equipment unit amounts and usage hours and, therefore, cannot be relied upon to determine Project impacts. (Ex. B, p. 8.)

7. The MND's air quality model failed to model all required material export.

SWAPE's review of the Project's CalEEMod output files found that the MND's air model underestimated the amount of required material export by 12,524 cubic yards (cy). (Ex. B, p. 10. According to the AQ Technical Report, "[t]he Project would export approximately 43,836 cubic yards of soil during grading and excavation activities" (AQ Technical Report, p. 42.) However, as SWAPE notes, the model included only 31,312 cy of material export rather than 43,836 cy. (Ex. B, p. 10.) SWAPE concluded that the MND may underestimate the Project's emissions by failing to model all the required material export and, therefore, cannot be relied upon to determine Project impacts. (Ex. B, p. 10.)

8. The MND's air quality model made unsubstantiated reductions to hauling, worker, and vendor trip numbers.

SWAPE's review of the Project's CalEEMod output files found that the MND's air model made unsubstantiated reductions to hauling, worker, and vendor trip numbers. (Ex. B, p. 10.) Specifically, the hauling, worker, and vendor trip numbers were reduced to zero. (*Id*. at p. 11.)

SWAPE found that the MND and associated documents failed to provide a source or any calculations explaining how the trip numbers were derived. (Ex. B, p. 11-12.) By failing to provide this information, the MND fails to provide substantial evidence to justify the modifications to the CalEEMod defaults. (*Id*. at 12.) SWAPE also found that the MND and associated documents failed to provide the total on-road construction-related emissions for hauling, vendor, and worker trips, or demonstrate how the on-road construction-related emissions were summed with the construction-related emissions estimated in CalEEMod. (*Id.*)

SWAPE concluded that the MND may underestimate the Project's emissions by including unsubstantiated changes to the default hauling, vendor, and worker construction trips, and, therefore, cannot be relied upon to determine Project impacts. (Ex. B, p. 10.)

9. The MND's air quality model made unsubstantiated changes to the Project's operational vehicle fleet mix.

SWAPE's review of the Project's CalEEMod output files found that the MND's air model made several changes to the default operational vehicle fleet mix percentages. (Ex. B, 13.) However, no justification for the modifications was given and the MND and associated documents do not mention any revised operational vehicle fleet mix percentages. (*Id.* at 14.)

SWAPE concluded that the model may underestimate the Project's mobile-source operational emissions and cannot be relied upon to determine Project significance. (*Id*.)

10. The MND's air quality model made unsubstantiated changes to operational vehicle emission factors.

SWAPE's review of the Project's CalEEMod output files found that the MND's air model made several changes to the default operational vehicle emission factors. (Ex. B, 15.) According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated to EMFAC2017 EFs" (MND, Appendix A, pp. 489, 539). As explained by SWAPE, EMFAC refers to an entire database, not a specific set of vehicle emission factors. (Ex. B, p. 15.) The MND did not specify which input parameters were used to obtain the vehicle emission factors nor provide the revised vehicle emission factors themselves. (*Id*.) Because the vehicle emission factors are used to calculate the Project's operational emissions associated with on-road vehicles, the model may underestimate the Project's mobile-source operational emissions by including several unsubstantiated changes to the default operational vehicle emission factors and, therefore, cannot be relied upon to determine Project significance. (*Id*.)

11. The MND's air quality model improperly included construction-related mitigation measures.

SWAPE's review of the Project's CalEEMod output files found that the MND assumed that the Project will implement construction-related mitigation measures, including a 15 miles per hour (mph) vehicle speed. (Ex. B, p. 15.) However, as explained by SWAPE, with the exception of Tier 4 Final engines, the "User Entered Comments & Non-Default Data" fails to justify the inclusion of the other construction- related mitigation measures. (*Id*. at p. 16.)

For the 15 mph speed limit, SWAPE noted that although the MND claimed that the Project would comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403, SCAQMD Rule 403 does not require a 15 mph speed limit. (Ex. B, p. 16.) Pursuant to SCAQMD Rule 403, the Project may either water unpaved roads 3 times per day, water unpaved roads 1 time per day and limit vehicle speeds to 15 mph, ***or*** apply a chemical stabilizer. (*Id.* at p. 17.) Therefore, SCAQMD Rule 403 does not explicitly require any of the measures included in the CalEEMod model. (*Id*.)

SWAPE concluded that the MND may underestimate the Project's emissions by including several construction-related mitigation measures without properly committing to their implementation and enforcement, and, therefore, cannot be relied upon to determine Project impacts. (Ex. B, p. 17.)

C. Substantial Expert Evidence Establishes a Fair Argument That the Project Will Have Significant Emissions of ROG/VOC and NOx.

In an effort to accurately determine the proposed Project's construction and operational emissions, SWAPE prepared an updated CalEEMod model that includes more site-specific information and correct input parameters, as provided by the MND. (Ex. B, p. 17.) SWAPE's model included all proposed land use types and sizes as described by the MND; corrected the amount of material export; omitted the unsubstantiated changes to the individual construction phase lengths, off-road construction equipment unit amounts and usage hours, construction trip numbers, operational vehicle emission factors, and operational vehicle fleet mix percentages; and excluded the unsubstantiated construction-related mitigation measures. (*Id*.)

SWAPE's updated model found that the ROG/VOC and NOx emissions associated with Project construction exceed the 75- and 100-pounds per day ("lbs/day") thresholds set by the SCAQMD, respectively. (Ex. B, p. 17.)

SWAPE's updated model demonstrates that when the Project's construction and operational emissions are estimated based on site-specific information provided in the MND, the Project would result in a potentially significant air quality impact that was not previously identified or addressed in the MND. As such, the City must prepare an EIR to include an updated air pollution model to properly estimate the Project's construction and operational emissions and incorporate mitigation to reduce these emissions to a less than significant level.

D. The MND Fails to Adequately Evaluate Health Risks from Diesel Particulate Matter Emissions

Based on based on a quantified construction health risk assessment ("HRA") and a localized significance ("LST") analysis, the MND concluded that the Project would have a less-than-significant health risk impact. (Ex. B, p. 18.) However, SWAPE's review of the MND found that MND's evaluation of the Project's potential health risk impacts and the less-than-significant impact conclusion were improper. (*Id.*)

First, SWAPE notes that, as discussed above, the MND's HRA relied on a flawed air model and therefore underestimated PM_{10} emissions. (Ex. B, p. 18.) By using an inaccurate PM_{10} value, the HRA underestimated the diesel particulate matter ("DPM") concentration to calculate the cancer risk associated with Project construction. (*Id*. at p. 19.) Therefore, the MND underestimated the Project's construction-related cancer risk and cannot be relied upon to determine Project impacts. (*Id*.)

Second, SWAPE disputes the MND's conclusion that operational health risks would be less-than-significant because the Project would not "generate a substantial number of daily truck trips." (Ex. B, p. 19.) However, the MND stated that Project operation would generate 1,463 new daily vehicle trips, which, according to SWAPE, would result in additional exhaust emissions and continue to expose nearby sensitive receptors to DPM emissions. (*Id*.) The MND makes no effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, and, therefore, should not conclude that the Project's operational health risk impact would be less than significant. (*Id*.)

Third, SWAPE found that the MND's omission of a quantified operational HRA is inconsistent with the most recent guidance published by the Office of Environmental Health Hazard Assessment ("OEHHA"). (Ex. B, p. 19.) OEHHA recommends that exposure from projects lasting more than 6 months be evaluated for the duration of the project and recommends that an exposure duration of 30 years be used to estimate individual cancer risk. (*Id*.) SWAPE concluded that the MND should include an operational HRA to evaluate health risk impacts with a 30-year exposure duration. (*Id*.)

Fourth, SWAPE found that the MND failed to evaluate the cumulative lifetime cancer risk to nearby, existing receptors as a result of Project construction *and* operation together. (Ex. B, p. 19.) SWAPE concluded that, per OEHHA Guidance, the Project's combined construction and operational cancer risks must be quantified and compared to the SCAQMD threshold 10 in one million. (*Id*.)

Lastly, SWAPE found that the MND improperly concluded that the Project's $PM_{2.5}$ and PM_{10} emissions would not exceed LSTs. (Ex. B, p. 20.) SWAPE's review of the CalEEMod output files demonstrates that the PM_{10} and $PM_{2.5}$ emissions associated with Project construction exceed the 1- and 2-lbs/day LSTs set by the SCAQMD, respectively. (*Id*.) Therefore, the MND's claim that emissions associated with Project construction would not exceed the applicable SCAQMD LSTs is incorrect and cannot be relied upon.

E. Substantial Expert Evidence Establishes a Fair Argument that the Project May Have a Significant Impact on Human Health from Diesel Particulate Matter

SWAPE prepared a screening-level HRA to evaluate potential impacts from the construction and operation of the Project. (Ex. B, p. 21.) SWAPE used AERSCREEN, the leading screening-level air quality dispersion model. (*Id.*) SWAPE used a sensitive receptor distance of 25 meters and analyzed impacts to individuals at different stages of life based on OEHHA and SCAQMD guidance. (Ex. B, pp. 22-13.)

SWAPE found that the excess cancer risk for adults, children, and infants, at the closest sensitive receptor located approximately 25 meters away, over the course of Project construction and operation, are approximately 16, 150, and 17 in one million, respectively. (Ex. B, p. 23.) SWAPE found that the excess cancer risk over the course of a residential lifetime is approximately **180 in one million**. (*Id.*)

These values appreciably exceed the SCAQMD's threshold of 10 in one million. SWAPE's HRA constitutes a "fair argument" that the Project will have significant impacts on human health. As such, the City must prepare an EIR to properly evaluate the Project's health risk impact.

E. The MND Fails to Adequately Assess Greenhouse Gas Impacts

SWAPE concluded that the MND failed to adequately analyze the Project's greenhouse gas ("GHG") impacts. (Ex. B, p. 24.) Although the MND calculated the Project's annual GHG emissions as 1,537 metric tons of carbon dioxide equivalents per year ("MT CO2e/yr"), the MND failed to compare the Project's emissions to any objective threshold. (*Id*. at pp. 24, 27.) Furthermore, the MND's calculation for 1,537 MT CO2e/yr was based on an inaccurate air model, as discussed above, and likely underestimated. (*Id*. at p. 26.) However, assuming that the Project's 1,537 MT CO2e/yr is accurate, the Project exceeds the proper threshold of 2.6 MT CO2e/SP/year. (*Id*. at pp. 27-28.) SWAPE concluded that the exceedance of this threshold resuls in a significant GHG impact not previously identified or addressed by the MND. (*Id*. at p. 28.) Therefore, an EIR must be prepared and mitigation must be implemented where necessary. SWAPE provided several mitigation measures that could be implemented to mitigate the Project's significant GHG impact. (*Id*. at pp. 32-39.)

Additionally, the MND relied upon the Project's consistency with the CARB's Scoping Plan, SCAG's RTP/SCS, the City's energy efficiency policies, and the City's Green Building Code in order to conclude that the Project would have a less-than-significant GHG impact. (Ex. B, p. 25.)

However, these regulatory plans do not meet the criteria for an officially adopted GHG reduction program, commonly referred to as a Climate Action Plan ("CAP"), for use as a threshold of significance for GHG emissions. (Ex. B, p. 26.) As CEQA Guideline section 15064.4(b)(3) makes clear, a qualified CAP "must be adopted by the relevant public agency through a public review process," and, as explained by CEQA Guideline section 15183.5(b)(1), the CAP should include:

(1) **Inventory**: Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities (e.g., projects) within a defined geographic area (e.g., lead agency jurisdiction);
(2) **Establish GHG Reduction Goal**: Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;
(3) **Analyze Project Types**: Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;
(4) **Craft Performance Based Mitigation Measures**: Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
(5) **Monitoring**: Establish a mechanism to monitor the CAP progress toward achieving said level and to require amendment if the plan is not achieving specified levels; and

Here, the MND fails to demonstrate that the CARB's Scoping Plan, SCAG's RTP/SCS, the City's energy efficiency policies, and the City's Green Building Code include the above-listed requirements to be considered a qualified CAP for the City. Furthermore, the MND failed to consider performance-based standards under CARB's Scoping Plan (Ex. B, pp. 28-30) and SCAG's RTP/SCS (*id*. at pp. 30-32). As such, the MND leaves an analytical gap and fails to demonstrate that compliance with said plans can be used for project-level significance determination. (Ex. B, p. 27.)

F. The MND's Mitigation for Hazards and Hazardous Materials is Inadequate.

In order to mitigate the Project's significant impacts related to hazardous materials, the MND required MM-HAZ-1. MM-HAZ-1 requires a qualified environmental consultant to prepare a Soil Management and Remediation Plan and "[u]pon completion of the Soil Management and Remediation Plan, the Applicant shall contact the LARWQCB to obtain a closure letter that states no further soils testing or remediation is required on the Project Site." (MND, p. B-50.) However, the MND fails to disclose that MND the recent status of the site in Geotracker, which concludes there are two impediments to closure: (1) free product in groundwater; and (2) threat for vapor intrusion. (Ex. B, p. 2.) Without disclosing and accounting for these impediments to closure, the MND fails to provide substantial evidence that MM-HAZ-1 would reduce the Project's impacts to a less-than-significant level.

SWAPE also noted that MND failed to disclose contamination on the Project site because the extent of contamination is not known. (Ex. B, p. 2.) As a result, the MND failed to identify impacts of remediation because: "(1) an informed estimate of the amount of soil to be excavated has not been made, therefore construction impacts for excavation and truck trips for proper disposal have not been estimated; and (2) magnitude of groundwater plume and vapor intrusion impacts have not been determined – these will result in impacts including construction and operation emissions associated with groundwater investigations, well drilling, and groundwater pumping and treatment system installation and operation." (*Id.*) Without disclosing and accounting for the extent of contamination and the impacts of remediation, the MND fails to provide substantial evidence Project's impacts related to hazards and hazardous materials are less-than-significant.

IV. CONCLUSION

For the foregoing reasons, the MND for the Project should be withdrawn, an EIR should be prepared, and the draft EIR should be circulated for public review and comment in accordance with CEQA. Thank you for considering these comments.

Sincerely,

Brian B. Flynn

Brian Flynn
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EXHIBIT A

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From: Francis J. Offermann PE CIH

Subject: Indoor Air Quality: 11469 Jefferson Boulevard-Culver City, CA
(IEE File Reference: P-4424)

Pages: 19

Indoor Air Quality Impacts

Indoor air quality (IAQ) directly impacts the comfort and health of building occupants, and the achievement of acceptable IAQ in newly constructed and renovated buildings is a well-recognized design objective. For example, IAQ is addressed by major high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014). Indoor air quality in homes is particularly important because occupants, on average, spend approximately ninety percent of their time indoors with the majority of this time spent at home (EPA, 2011). Some segments of the population that are most susceptible to the effects of poor IAQ, such as the very young and the elderly, occupy their homes almost continuously. Additionally, an increasing number of adults are working from home at least some of the time during the workweek. Indoor air quality also is a serious concern for workers in hotels, offices and other business establishments.

The concentrations of many air pollutants often are elevated in homes and other buildings relative to outdoor air because many of the materials and products used indoors contain and release a variety of pollutants to air (Hodgson et al., 2002; Offermann and Hodgson, 2011). With respect to indoor air contaminants for which inhalation is the primary route of exposure, the critical design and construction parameters are the provision of adequate ventilation and the reduction of indoor sources of the contaminants.

Indoor Formaldehyde Concentrations Impact. In the California New Home Study (CNHS) of 108 new homes in California (Offermann, 2009), 25 air contaminants were measured, and formaldehyde was identified as the indoor air contaminant with the highest cancer risk as determined by the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), No Significant Risk Levels (NSRL) for carcinogens. The NSRL is the daily intake level calculated to result in one excess case of cancer in an exposed population of 100,000 (i.e., ten in one million cancer risk) and for formaldehyde is 40 μg/day. The NSRL concentration of formaldehyde that represents a daily dose of 40 μg is 2 μg/m^3, assuming a continuous 24-hour exposure, a total daily inhaled air volume of 20 m^3, and 100% absorption by the respiratory system. All of the CNHS homes exceeded this NSRL concentration of 2 μg/m^3. The median indoor formaldehyde concentration was 36 μg/m^3, and ranged from 4.8 to 136 μg/m^3, which corresponds to a median exceedance of the 2 μg/m^3 NSRL concentration of 18 and a range of 2.3 to 68.

Therefore, the cancer risk of a resident living in a California home with the median indoor formaldehyde concentration of 36 μg/m^3, is 180 per million as a result of formaldehyde alone. The CEQA significance threshold for airborne cancer risk is 10 per million, as established by the South Coast Air Quality Management District (SCAQMD, 2015).

Besides being a human carcinogen, formaldehyde is also a potent eye and respiratory irritant. In the CNHS, many homes exceeded the non-cancer reference exposure levels (RELs) prescribed by California Office of Environmental Health Hazard Assessment (OEHHA, 2017b). The percentage of homes exceeding the RELs ranged from 98% for the Chronic REL of 9 μg/m^3 to 28% for the Acute REL of 55 μg/m^3.

The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims.

In January 2009, the California Air Resources Board (CARB) adopted an airborne toxics control measure (ATCM) to reduce formaldehyde emissions from composite wood products, including hardwood plywood, particleboard, medium density fiberboard, and also furniture and other finished products made with these wood products (California Air Resources Board 2009). While this formaldehyde ATCM has resulted in reduced emissions from composite wood products sold in California, they do not preclude that homes built with composite wood products meeting the CARB ATCM will have indoor formaldehyde concentrations below cancer and non-cancer exposure guidelines.

A follow up study to the California New Home Study (CNHS) was conducted in 2016-2018 (Singer et. al., 2019), and found that the median indoor formaldehyde in new homes built after 2009 with CARB Phase 2 Formaldehyde ATCM materials had lower indoor formaldehyde concentrations, with a median indoor concentrations of 22.4 μg/m^3 (18.2 ppb) as compared to a median of 36 μg/m^3 found in the 2007 CNHS. Unlike in the CNHS study where formaldehyde concentrations were measured with pumped DNPH samplers, the formaldehyde concentrations in the HENGH study were measured with passive samplers, which were estimated to under-measure the true indoor formaldehyde concentrations by approximately 7.5%. Applying this correction to the HENGH indoor formaldehyde concentrations results in a median indoor concentration of 24.1 μg/m^3, which is 33% lower than the 36 μg/m^3 found in the 2007 CNHS.

Thus, while new homes built after the 2009 CARB formaldehyde ATCM have a 33% lower median indoor formaldehyde concentration and cancer risk, the median lifetime cancer risk is still 120 per million for homes built with CARB compliant composite wood products. This median lifetime cancer risk is more than 12 times the OEHHA 10 in a million cancer risk threshold (OEHHA, 2017a).

With respect to the 11469 Jefferson Boulevard Project, Culver City, CA, the building consists of a hotel.

The employees of the hotel are expected to experience significant indoor exposures (e.g., 40 hours per week, 50 weeks per year). These exposures for employees are anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in offices, warehouses, residences and hotels.

Because the hotel spaces will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu g/m^3$ (Singer et. al., 2020)

Assuming that the employees of hotel work 8 hours per day and inhale 20 m^3 of air per day, the formaldehyde dose per work-day at the offices is 161 µg/day.

Assuming that these employees work 5 days per week and 50 weeks per year for 45 years (start at age 20 and retire at age 65) the average 70-year lifetime formaldehyde daily dose is 70.9 µg/day.

This is 1.77 times the NSRL (OEHHA, 2017a) of 40 µg/day and represents a cancer risk of 17.7 per million, which exceeds the CEQA cancer risk of 10 per million. This impact should be analyzed in an environmental impact report ("EIR"), and the agency should impose all feasible mitigation measures to reduce this impact. Several feasible mitigation measures are discussed below and these and other measures should be analyzed in an EIR.

Appendix A, Indoor Formaldehyde Concentrations and the CARB Formaldehyde ATCM, provides analyses that show utilization of CARB Phase 2 Formaldehyde ATCM materials will not ensure acceptable cancer risks with respect to formaldehyde emissions from composite wood products.

Even composite wood products manufactured with CARB certified ultra low emitting formaldehyde (ULEF) resins do not insure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

The following describes a method that should be used, prior to construction in the environmental review under CEQA, for determining whether the indoor concentrations resulting from the formaldehyde emissions of specific building materials/furnishings selected exceed cancer and non-cancer guidelines. Such a design analyses can be used to identify those materials/furnishings prior to the completion of the City's CEQA review and project approval, that have formaldehyde emission rates that contribute to indoor concentrations that exceed cancer and non-cancer guidelines, so that alternative lower emitting materials/furnishings may be selected and/or higher minimum outdoor air ventilation rates can be increased to achieve acceptable indoor concentrations and incorporated as mitigation measures for this project.

<u>Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment</u>

This formaldehyde emissions assessment should be used in the environmental review under CEQA to <u>assess</u> the indoor formaldehyde concentrations from the proposed loading of building materials/furnishings, the area-specific formaldehyde emission rate data for building materials/furnishings, and the design minimum outdoor air ventilation rates. This assessment allows the applicant (and the City) to determine, before the conclusion of the environmental review process and the building materials/furnishings are specified, purchased, and installed, if the total chemical emissions will exceed cancer and non-cancer guidelines, and if so, allow for changes in the selection of specific material/furnishings and/or the design minimum outdoor air ventilations rates such that cancer and non-cancer guidelines are not exceeded.

1.) Define Indoor Air Quality Zones. Divide the building into separate indoor air quality zones, (IAQ Zones). IAQ Zones are defined as areas of well-mixed air. Thus, each ventilation system with recirculating air is considered a single zone, and each room or group of rooms where air is not recirculated (e.g. 100% outdoor air) is considered a separate zone. For IAQ Zones with the same construction material/furnishings and design minimum outdoor air ventilation rates. (e.g. hotel rooms, apartments, condominiums, etc.) the formaldehyde emission rates need only be assessed for a single IAQ Zone of that type.

2.) Calculate Material/Furnishing Loading. For each IAQ Zone, determine the building material and furnishing loadings (e.g., m^2 of material/m^2 floor area, units of furnishings/m^2 floor area) from an inventory of all potential indoor formaldehyde sources, including flooring, ceiling tiles, furnishings, finishes, insulation, sealants, adhesives, and any products constructed with composite wood products containing urea-formaldehyde resins (e.g., plywood, medium density fiberboard, particleboard).

3.) Calculate the Formaldehyde Emission Rate. For each building material, calculate the formaldehyde emission rate (µg/h) from the product of the area-specific formaldehyde emission rate (µg/m^2-h) and the area (m^2) of material in the IAQ Zone, and from each furnishing (e.g. chairs, desks, etc.) from the unit-specific formaldehyde emission rate (µg/unit-h) and the number of units in the IAQ Zone.

NOTE: As a result of the high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014), most manufacturers of building materials furnishings sold in the United States conduct chemical emission rate tests using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), or other equivalent chemical emission rate testing methods. Most manufacturers of building furnishings sold in the United States conduct chemical emission rate tests using ANSI/BIFMA M7.1 Standard Test Method for Determining VOC Emissions (BIFMA, 2018), or other equivalent chemical emission rate testing methods.

CDPH, BIFMA, and other chemical emission rate testing programs, typically certify that a material or furnishing does not create indoor chemical concentrations in excess of the maximum concentrations permitted by their certification. For instance, the CDPH emission rate testing requires that the measured emission rates when input into an office, school, or residential model do not exceed one-half of the OEHHA Chronic Exposure Guidelines (OEHHA, 2017b) for the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017). These certifications themselves do not provide the actual area-specific formaldehyde emission rate (i.e., $\mu g/m^2$-h) of the product, but rather provide data that the formaldehyde emission rates do not exceed the maximum rate allowed for the certification. Thus, for example, the data for a certification of a specific type of flooring may be used to calculate that the area-specific emission rate of formaldehyde is less than 31 $\mu g/m^2$-h, but not the actual measured specific emission rate, which may be 3, 18, or 30 $\mu g/m^2$-h. These area-specific emission rates determined from the product certifications of CDPH, BIFA, and other certification programs can be used as an initial estimate of the formaldehyde emission rate.

If the actual area-specific emission rates of a building material or furnishing is needed (i.e. the initial emission rates estimates from the product certifications are higher than desired), then that data can be acquired by requesting from the manufacturer the complete chemical emission rate test report. For instance if the complete CDPH emission test report is requested for a CDHP certified product, that report will provide the actual area-specific emission rates for not only the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017), but also all of the cancer and reproductive/developmental chemicals listed in the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), all of the toxic air contaminants (TACs) in the California Air Resources Board Toxic Air Contamination List (CARB, 2011), and the 10 chemicals with the greatest emission rates.

Alternatively, a sample of the building material or furnishing can be submitted to a chemical emission rate testing laboratory, such as Berkeley Analytical Laboratory (https://berkeleyanalytical.com), to measure the formaldehyde emission rate.

4.) Calculate the Total Formaldehyde Emission Rate. For each IAQ Zone, calculate the total formaldehyde emission rate (i.e. µg/h) from the individual formaldehyde emission rates from each of the building material/furnishings as determined in Step 3.

5.) Calculate the Indoor Formaldehyde Concentration. For each IAQ Zone, calculate the indoor formaldehyde concentration (µg/m^3) from Equation 1 by dividing the total formaldehyde emission rates (i.e. µg/h) as determined in Step 4, by the design minimum outdoor air ventilation rate (m^3/h) for the IAQ Zone.

$$C_{in} = \frac{E_{total}}{Q_{oa}} \quad \text{(Equation 1)}$$

where:

C_{in} = indoor formaldehyde concentration (µg/m^3)

E_{total} = total formaldehyde emission rate (µg/h) into the IAQ Zone.

Q_{oa} = design minimum outdoor air ventilation rate to the IAQ Zone (m^3/h)

The above Equation 1 is based upon mass balance theory, and is referenced in Section 3.10.2 “Calculation of Estimated Building Concentrations” of the California Department of Health “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers”, (CDPH, 2017).

6.) Calculate the Indoor Exposure Cancer and Non-Cancer Health Risks. For each IAQ Zone, calculate the cancer and non-cancer health risks from the indoor formaldehyde concentrations determined in Step 5 and as described in the OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines; Guidance Manual for Preparation of Health Risk Assessments (OEHHA, 2015).

7.) Mitigate Indoor Formaldehyde Exposures of exceeding the CEQA Cancer and/or Non-Cancer Health Risks. In each IAQ Zone, provide mitigation for any formaldehyde exposure risk as determined in Step 6, that exceeds the CEQA cancer risk of 10 per million or the CEQA non-cancer Hazard Quotient of 1.0.

Provide the source and/or ventilation mitigation required in all IAQ Zones to reduce the health risks of the chemical exposures below the CEQA cancer and non-cancer health risks.

Source mitigation for formaldehyde may include:

1.) reducing the amount materials and/or furnishings that emit formaldehyde
2.) substituting a different material with a lower area-specific emission rate of formaldehyde

Ventilation mitigation for formaldehyde emitted from building materials and/or furnishings may include:

1.) increasing the design minimum outdoor air ventilation rate to the IAQ Zone.

NOTE: Mitigating the formaldehyde emissions through use of less material/furnishings, or use of lower emitting materials/furnishings, is the preferred mitigation option, as mitigation with increased outdoor air ventilation increases initial and operating costs associated with the heating/cooling systems.

Further, we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), and use the procedure described earlier above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Outdoor Air Ventilation Impact. Another important finding of the CNHS, was that the outdoor air ventilation rates in the homes were very low. Outdoor air ventilation is a very important factor influencing the indoor concentrations of air contaminants, as it is the primary removal mechanism of all indoor air generated contaminants. Lower outdoor air exchange rates cause indoor generated air contaminants to accumulate to higher indoor air concentrations. Many homeowners rarely open their windows or doors for ventilation as a result of their concerns for security/safety, noise, dust, and odor concerns (Price, 2007). In the CNHS field study, 32% of the homes did not use their windows during the 24-hour Test Day, and 15% of the homes did not use their windows during the entire preceding week. Most of the homes with no window usage were homes in the winter field session. Thus, a substantial percentage of homeowners never open their windows, especially in the winter season. The median 24-hour measurement was 0.26 air changes per hour (ach), with a range of 0.09 ach to 5.3 ach. A total of 67% of the homes had outdoor air exchange rates below the minimum California Building Code (2001) requirement of 0.35 ach. Thus, the relatively tight envelope construction, combined with the fact that many people never open their windows for ventilation, results in homes with low outdoor air exchange rates and higher indoor air contaminant concentrations.

The 11469 Jefferson Boulevard Project, Culver City, CA is close to roads with moderate to high traffic (e.g., Jefferson Boulevard, S. Lausen Avenue, San Diego Freeway, Sepulevada Boulevard, I-90 etc.. As a result of the outdoor vehicle traffic noise, the Project site is likely to be a sound impacted site.

According to the Proposed Mitigated Negative Declaration - 11469 Jefferson Boulevard Project, Culver City, CA. (City of Culver City, 2021) the future traffic noise levels with Project range from from 63.6 to 670.2 dBA CNEL.

As a result of the high outdoor noise levels, the current project will require a mechanical supply of outdoor air ventilation to allow for a habitable interior environment with closed windows and doors. Such a ventilation system would allow windows and doors to be kept closed at the occupant's discretion to control exterior noise within building interiors.

$PM_{2.5}$ Outdoor Concentrations Impact. An additional impact of the nearby motor vehicle traffic associated with this project, are the outdoor concentrations of $PM_{2.5}$. According to the Proposed Mitigated Negative Declaration - 11469 Jefferson Boulevard Project, Culver City, CA. (City of Culver City, 2021), the Project is located in South Coast Air Basin, which is a State and Federal non-attainment area for $PM_{2.5}$.

An air quality analyses should to be conducted to determine the concentrations of $PM_{2.5}$ in the outdoor and indoor air that people inhale each day. This air quality analyses needs to consider the cumulative impacts of the project related emissions, existing and projected future emissions from local $PM_{2.5}$ sources (e.g. stationary sources, motor vehicles, and airport traffic) upon the outdoor air concentrations at the Project site. If the outdoor concentrations are determined to exceed the California and National annual average $PM_{2.5}$ exceedence concentration of 12 $\mu g/m^3$, or the National 24-hour average exceedence concentration of 35 $\mu g/m^3$, then the buildings need to have a mechanical supply of outdoor air that has air filtration with sufficient removal efficiency, such that the indoor concentrations of outdoor $PM_{2.5}$ particles is less than the California and National $PM_{2.5}$ annual and 24-hour standards.

It is my experience that based on the projected high traffic noise levels, the annual average concentration of $PM_{2.5}$ will exceed the California and National $PM_{2.5}$ annual and 24-hour standards and warrant installation of high efficiency air filters (i.e. MERV 13 or higher) in all mechanically supplied outdoor air ventilation systems.

Indoor Air Quality Impact Mitigation Measures

The following are recommended mitigation measures to minimize the impacts upon indoor quality:

Indoor Formaldehyde Concentrations Mitigation. Use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins (CARB, 2009). CARB Phase 2 certified composite wood products, or ultra-low emitting formaldehyde (ULEF) resins, do not insure indoor formaldehyde concentrations that are below the CEQA cancer risk of 10 per million. Only composite wood products manufactured with CARB approved no-added formaldehyde (NAF) resins, such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

Alternatively, conduct the previously described Pre-Construction Building Material/Furnishing Chemical Emissions Assessment, to determine that the combination of formaldehyde emissions from building materials and furnishings do not create indoor formaldehyde concentrations that exceed the CEQA cancer and non-cancer health risks.

It is important to note that we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers", (CDPH, 2017), and use the procedure described above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Outdoor Air Ventilation Mitigation. Provide each habitable room with a continuous mechanical supply of outdoor air that meets or exceeds the California 2016 Building Energy Efficiency Standards (California Energy Commission, 2015) requirements of the greater of 15 cfm/occupant or 0.15 cfm/ft^2 of floor area. Following installation of the system conduct testing and balancing to insure that required amount of outdoor air is entering each habitable room and provide a written report documenting the outdoor airflow rates. Do not use exhaust only mechanical outdoor air systems, use only balanced outdoor air supply and exhaust systems or outdoor air supply only systems. Provide a manual for the occupants or maintenance personnel, that describes the purpose of the mechanical outdoor air system and the operation and maintenance requirements of the system.

$PM_{2.5}$ Outdoor Air Concentration Mitigation. Install air filtration with sufficient $PM_{2.5}$ removal efficiency (e.g. MERV 13 or higher) to filter the outdoor air entering the mechanical outdoor air supply systems, such that the indoor concentrations of outdoor $PM_{2.5}$ particles are less than the California and National $PM_{2.5}$ annual and 24-hour standards. Install the air filters in the system such that they are accessible for replacement by the occupants or maintenance personnel. Include in the mechanical outdoor air ventilation system manual instructions on how to replace the air filters and the estimated frequency of replacement.

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APPENDIX A

INDOOR FORMALDEHYDE CONCENTRATIONS
AND THE
CARB FORMALDEHYDE ATCM

With respect to formaldehyde emissions from composite wood products, the CARB ATCM regulations of formaldehyde emissions from composite wood products, do not assure healthful indoor air quality. The following is the stated purpose of the CARB ATCM regulation - *The purpose of this airborne toxic control measure is to "reduce formaldehyde emissions from composite wood products, and finished goods that contain composite wood products, that are sold, offered for sale, supplied, used, or manufactured for sale in California"*. In other words, the CARB ATCM regulations do not "assure healthful indoor air quality", but rather "reduce formaldehyde emissions from composite wood products".

Just how much protection do the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products? Definitely some, but certainly the regulations do not "*assure healthful indoor air quality"* when CARB Phase 2 products are utilized. As shown in the Chan 2019 study of new California homes, the median indoor formaldehyde concentration was of 22.4 $\mu g/m^3$ (18.2 ppb), which corresponds to a cancer risk of 112 per million for occupants with continuous exposure, which is more than 11 times the CEQA cancer risk of 10 per million.

Another way of looking at how much protection the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products is to calculate the maximum number of square feet of composite wood product that can be in a residence without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy.

For this calculation I utilized the floor area (2,272 ft^2), the ceiling height (8.5 ft), and the number of bedrooms (4) as defined in Appendix B (New Single-Family Residence Scenario) of the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers, Version 1.1, 2017, California

Department of Public Health, Richmond, CA. https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

For the outdoor air ventilation rate I used the 2019 Title 24 code required mechanical ventilation rate (ASHRAE 62.2) of 106 cfm (180 m^3/h) calculated for this model residence. For the composite wood formaldehyde emission rates I used the CARB ATCM Phase 2 rates.

The calculated maximum number of square feet of composite wood product that can be in a residence, without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 15 ft^2 (0.7% of the floor area), or
Particle Board – 30 ft^2 (1.3% of the floor area), or
Hardwood Plywood – 54 ft^2 (2.4% of the floor area), or
Thin MDF – 46 ft^2 (2.0 % of the floor area).

For offices and hotels the calculated maximum amount of composite wood product (% of floor area) that can be used without exceeding the CEQA cancer risk of 10 per million for occupants, assuming 8 hours/day occupancy, and the California Mechanical Code minimum outdoor air ventilation rates are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 3.6 % (offices) and 4.6% (hotel rooms), or
Particle Board – 7.2 % (offices) and 9.4% (hotel rooms), or
Hardwood Plywood – 13 % (offices) and 17% (hotel rooms), or
Thin MDF – 11 % (offices) and 14 % (hotel rooms)

Clearly the CARB ATCM does not regulate the formaldehyde emissions from composite wood products such that the potentially large areas of these products, such as for flooring, baseboards, interior doors, window and door trims, and kitchen and bathroom cabinetry, could be used without causing indoor formaldehyde concentrations that result in CEQA cancer risks that substantially exceed 10 per million for occupants with continuous occupancy.

Even composite wood products manufactured with CARB certified ultra low emitting formaldehyde (ULEF) resins do not insure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

If CARB Phase 2 compliant or ULEF composite wood products are utilized in construction, then the resulting indoor formaldehyde concentrations should be determined in the design phase using the specific amounts of each type of composite wood product, the specific formaldehyde emission rates, and the volume and outdoor air ventilation rates of the indoor spaces, and all feasible mitigation measures employed to reduce this impact (e.g. use less formaldehyde containing composite wood products and/or incorporate mechanical systems capable of higher outdoor air ventilation rates). See the procedure described earlier (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Alternatively, and perhaps a simpler approach, is to use only composite wood products (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins.

Expert Witness Services

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Education

- M.S. Mechanical Engineering Stanford University, Stanford, CA.
- Graduate Studies in Air Pollution Monitoring and Control University of California, Berkeley, CA.
- B.S. in Mechanical Engineering Rensselaer Polytechnic Institute, Troy, N.Y.

Professional Affiliations

ACGIH, AIHA, ASHRAE, CSI, ASTM, ISIAQ, PARMA, and USGBC

Work Experience

Mr. Offermann PE, CIH, has 36 years experience as an IAQ researcher, technical author, and workshop instructor. He is president of Indoor Environmental Engineering, a San Francisco based IAQ R&D consulting firm. As president of Indoor Environmental Engineering, Mr. Offermann directs an interdisciplinary team of environmental scientists, chemists, and mechanical engineers in indoor air quality building investigations. Under Mr. Offermann's supervision, IEE has developed both pro-active and reactive IAQ measurement methods and diagnostic protocols. He has supervised over 2,000 IAQ investigations in commercial, residential, and institutional buildings and conducted numerous forensic investigations related to IAQ.

Litigation Experience

Mr. Offermann has been qualified numerous times in court as an expert in the field of indoor air quality and ventilation for both plaintiffs and defendants. He has been deposed over 150 times in cases involving indoor air quality/ventilation issues in commercial, residential, and institutional buildings involving construction defects, and/or operation and maintenance problems. Examples of indoor air quality cases he has worked on are alleged personal injury and/or property damages from mold and bacterial contamination/moisture intrusion, building renovation activities, insufficient outdoor air ventilation, off gassing of volatile organic compounds from building materials and coatings, malfunctioning gas heaters and carbon monoxide poisoning, and applications of pesticides. Mr. Offermann has testified with respect to the scientific admissability of expert testimony regarding indoor air quality issues via Daubert and Kelly-Frye motions.

EXHIBIT B

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February 17, 2021

Brian Flynn
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Subject: Comments on 11469 Jefferson Boulevard Project (SCH No. 2021010247)

Dear Mr. Flynn,

We have reviewed the January 2021 Initial Study/Mitigated Negative Declaration ("IS/MND") for the 11469 Jefferson Boulevard Project ("Project") located in the City of Culver City ("City"). The Project proposes to demolish the existing 13,000-SF shopping center and construct a 111,000-SF hotel, including 175-rooms, food and drink amenities, a rooftop bar, and pool, as well as 138 parking spaces in a 56,300-SF subterranean garage, on the 0.78-acre site.

Our review concludes that the IS/MND fails to adequately evaluate the Project's hazards and hazardous materials, air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An EIR should be prepared to adequately assess and mitigate the potential hazards and hazardous materials, air quality, health risk, and greenhouse gas impacts that the project may have on the surrounding environment.

Hazards and Hazardous Materials

In MM HAZ-1, the IS/MND presumes closure will be granted, stating:

> "MM-HAZ-1: The Applicant shall retain a qualified environmental consultant to prepare a Soil Management and Remediation Plan for review and approval by the Culver City Building Safety Division and LARWQCB, as necessary, prior to the commencement of excavation and grading activities. The plan would include measures to remove and/or treat/remediate the impacted soils and groundwater to a level determined acceptable per applicable regulatory standards,

> under supervision of a certified environmental consultant licensed to oversee such remediation. Upon completion of the Soil Management and Remediation Plan, the Applicant shall contact the LARWQCB to obtain a closure letter that states no further soils testing or remediation is required on the Project Site."

The IS/MND does not disclose the recent status of the site in Geotracker, pasted below, which concludes there are two impediments to closure: (1) free product in groundwater; and (2) threat for vapor intrusion.

This IS/MND cites plans to remediate by development, stating:

> "[T]he Project would include subterranean parking, which by its nature would involve excavation of soils for the proposed 2-level parking structure. Therefore, with the Project, direct excavation and removal of contaminated soils and groundwater can occur in a manner that was not previously contemplated in the RAP."

The IS/MND fails to disclose contamination because the extent of contamination is not known.

Additionally, not knowing the extent of contamination, the IS/MND fails to identify impacts of remediation because: (1) an informed estimate of the amount of soil to be excavated has not been made, therefore construction impacts for excavation and truck trips for proper disposal have not been estimated; and (2) magnitude of groundwater plume and vapor intrusion impacts have not been determined – these will result in impacts including construction and operation emissions associated with groundwater investigations, well drilling, and groundwater pumping and treatment system installation and operation.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The IS/MND's air quality analysis relies on emissions calculated with CalEEMod.2016.3.2 (p. B-36).[1] CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence. Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters are utilized in calculating the Project's air pollutant emissions and make known which default values are changed as well as provide justification for the values selected.

[1] CAPCOA (November 2017) CalEEMod User's Guide, http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4.

When reviewing the Project's CalEEMod output files, provided in The Jeff Hotel Project Air Quality Emissions Worksheets ("AQ Emissions Worksheets") as Appendix A to the IS/MND, we found that several model inputs were not consistent with information disclosed in the IS/MND. As a result, the Project's construction and operational emissions are underestimated. As a result, a Project-specific EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

Unsubstantiated Reduction to the Default CO_2 Intensity Factor

Review of the CalEEMod output files demonstrates that the "11469 Jefferson – Operations" includes a manual reduction to the default CO_2 intensity factor (see excerpt below) (Appendix A, pp. 491, 541).

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	CO2IntensityFactor	702.44	509.22

As you can see in the excerpt below, the CO_2 intensity factor was manually reduced by approximately 28%, from the default value of 702.44 pounds per megawatt hour ("lbs/MWh") to 509.22 lbs/MWh. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[2] According to the "User Entered Comments and Non-Default Data" table, the justification provided for this change is:

> "CO2e intensity factor was linearly projected for year 2022 anticipated RPS based on SB 100 target of 44% RPS by 12/31/2024 projected and from SCE contract with the CPUC to have 41.4% RPS by 2020" (Appendix A, pp. 489, 539).

Furthermore, regarding the revised CO_2 intensity factor, the IS/MND states:

> "Since the Project's first operational year was conservatively modeled for Year 2022 (would be less energy used for future years), the default CO_2 intensity factor in CalEEMod for SCE was linearly adjusted from 2020 to account for 42.4 percent renewable energy for 2022 based on the required renewables from year 2024 under SB 100. For 2012, SCE had 20.6 percent renewables and this was used to back calculate a CO_2 intensity factor where SCE had zero percent renewable. This value was then adjusted to reflect a CO_2 intensity factor with 42.4 percent renewables" (p. B-37).

However, these justifications are insufficient for two reasons. First, the IS/MND cannot simply interpolate its own CO_2 intensity factor based on *estimates* of future increases in renewable energy use. Second, simply because the *state* has renewable energy *goals* for 2024 does not ensure that these goals will be achieved locally on the Project site or by the Project's specific utility company. As a result, we cannot verify the revised CO_2 intensity factor.

[2] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

This unsubstantiated reduction presents an issue, as CalEEMod uses the CO_2 intensity factor to calculate the Project's greenhouse gas ("GHG") emissions associated with electricity use.[3] Thus, by including an unsubstantiated reduction to the default CO_2 intensity factor, the model may underestimate the Project's GHG emissions and should not be relied upon to determine Project significance.

Use of an Underestimated Parking Land Use Size

According to the IS/MND, the Project proposes to provide "56,300 SF of subterranean parking" (p. A-4). However, review of the CalEEMod output files demonstrates that the "11469 Jefferson – Construction" and "11469 Jefferson – Operations" models include only 33,817-SF of parking space (See excerpts below) (Appendix A, pp. 81, 114, 489, 539).

"11469 Jefferson – Construction"

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Enclosed Parking with Elevator	199.00	Space	0.28	33,817.00
Hotel	175.00	Room	0.50	122,000.00

"11469 Jefferson – Operation"

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Enclosed Parking with Elevator	199.00	Space	0.28	33,817.00
Hotel	175.00	Room	0.50	122,000.00

As you can see in the excerpt above, the proposed parking space is underestimated by 22,483-SF.[4] This underestimation presents an issue, as the land use size feature is used throughout CalEEMod to determine default variable and emission factors that go into the model's calculations. The square footage of a land use is used for certain calculations such as determining the wall space to be painted (i.e., VOC emissions from architectural coatings) and volume that is heated or cooled (i.e., energy impacts).[5] Thus, by underestimating the size of the proposed parking land use, the models underestimate the Project's construction-related and operational emissions and should not be relied upon to determine Project significance.

Failure to Model All Proposed Land Uses

According to the IS/MND, the Project proposes to construct 3,313-SF[6] of restaurant space and 700-SF of fitness space (see excerpt below) (p. A-9).

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[3] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.caleemod.com/, p. 17.

[4] Calculated: 56,300-SF – 33,817-SF = 22,483-SF.

[5] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 28.

[6] Calculated: 2,900-SF "Restaurant" + 413-SF "Rooftop Bar" = 3,313-SF total restaurant space.

Table A-1
Proposed Project Land Use Summary

Hotel (175 rooms)	67,030 SF
Back-Of-House	8,536 SF
Hotel Amenities	
Restaurant	2,900 SF
Rooftop Bar	413 SF
Meeting Rooms	4,570 SF
Lounge (ground floor)	5,000 SF
Lobby	1,200 SF
Fitness Room	700 SF
Hotel Amenities subtotal	*14,783 SF*
Bicycle Parking	630 SF
Circulation (Stairs/Elevators)	18,842 SF
Loading Area	1,119 SF
Total Project SF	**111,000 SF**
Open Space Area	**15,450 SF**
Passenger Vehicle Parking SF	**56,300[a]**
Site Area	**33,800 SF**

SF = square feet

[a] *56,300 SF of parking assumes 2 subterranean parking levels for 138 spaces.*

Source: Nakada, 2020.

As such, the models should have included 3,313- and 700-SF of restaurant and fitness space, respectively. However, review of the CalEEMod output files demonstrates that the "11469 Jefferson – Construction" and "11469 Jefferson – Operations" models fail to include the proposed restaurant and fitness land uses (see excerpt below) (Appendix A, pp. 81, 114, 489, 539).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Enclosed Parking with Elevator	199.00	Space	0.28	33,817.00
Hotel	175.00	Room	0.50	122,000.00

As you can see in the excerpt above, the models fail to distinguish between the hotel land use and the restaurant and fitness land uses. This inconsistency presents an issue, as CalEEMod includes 63 different land use types that are each assigned a distinctive set of energy usage emission factors.[7] Furthermore, each land use type includes a specific trip rate that CalEEMod uses to calculate mobile-source emissions.[8] Thus, by failing to include all proposed land use types, the models may underestimate the

[7] "CalEEMod User's Guide, Appendix D." CAPCOA, September 2016, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/05_appendix-d2016-3-1.pdf?sfvrsn=2.
[8] CalEEMod User's Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 14.

Project's construction-related and operational emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Individual Construction Phase Lengths

Review of the CalEEMod output files demonstrates that the "11469 Jefferson – Construction" model includes several changes to the default individual construction phase lengths (see excerpt below) (Appendix A, pp. 83, 116).

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	77.00
tblConstructionPhase	NumDays	100.00	79.00
tblConstructionPhase	NumDays	100.00	6.00
tblConstructionPhase	NumDays	100.00	468.00
tblConstructionPhase	NumDays	10.00	53.00
tblConstructionPhase	NumDays	2.00	75.00
tblConstructionPhase	NumDays	5.00	11.00

As a result of these changes, the model includes a construction schedule as follows (see excerpt below) (Appendix A, pp. 89, 122):

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
1	Demolition	Demolition	5/4/2020	7/3/2020	6	53
2	Excavation	Grading	7/6/2020	9/30/2020	6	75
3	Foundations	Building Construction	10/1/2020	12/31/2020	6	79
4	Continuous Concrete Pour	Building Construction	11/2/2020	11/7/2020	6	6
5	Building Construction	Building Construction	1/2/2021	7/1/2022	6	468
6	Paving	Paving	11/1/2021	11/12/2021	6	11
7	Architectural Coating	Architectural Coating	2/1/2022	4/30/2022	6	77

As you can see in the excerpts above, the demolition phase was increased by approximately 430%, from the default of 10 to 53 days; the grading phase was increased by approximately 3,650%, from the default of 2 to 75 days; the building construction phases were collectively increased by approximately 84%, from the cumulative default value of 300 to 553 days; the paving phase was increased by approximately 120%, from the default value of 5 to 11 days; and the architectural coating phase was increased by 1,440%, from the default value of 5 to 77 days.

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[9] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "see construction assumptions" (Appendix A, pp. 82, 115). Furthermore,

[9] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

regarding the Project's construction-related CalEEMod input values, the Air Quality Technical Report ("AQ Technical Report") states:

> "The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. *Detailed construction equipment lists, construction scheduling, and emissions calculations are provided in Appendix A*" (see emphasis) (p. 41-42).

Furthermore, regarding the construction schedule, the AQ Technical Report states:

> "This analysis assumes construction of the Project is estimated to require up to 26 months, starting as early as the second quarter of 2020" (p. 42).

However, these justifications are insufficient for two reasons.

First, review of the IS/MND and associated documents demonstrates that no construction assumptions are provided, as purported by the "User Entered Comments and Non-Default Data" table. Furthermore, review of Appendix A demonstrates that the AQ Emissions Worksheets fail to include a detailed construction schedule, as purported by the AQ Technical Report. As such, the revised individual construction phase lengths are unsubstantiated.

Second, while the AQ Technical Report indicates that the *total* construction period is estimated to require 26 months, the AQ Technical Report fails to provide the *individual construction phase lengths* (p. 42). As such, we cannot verify the revised individual construction phase lengths.

These unsubstantiated changes present an issue, as they improperly spread out construction emissions over a longer period of time than is anticipated for the Project. According to the CalEEMod User's Guide, each construction phase is associated with different emissions activities (see excerpt below).[10]

[10] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 31.

Demolition involves removing buildings or structures.

Site Preparation involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.

Grading involves the cut and fill of land to ensure that the proper base and slope is created for the foundation.

Building Construction involves the construction of the foundation, structures and buildings.

Architectural Coating involves the application of coatings to both the interior and exterior of buildings or structures, the painting of parking lot or parking garage striping, associated signage and curbs, and the painting of the walls or other components such as stair railings inside parking structures.

Paving involves the laying of concrete or asphalt such as in parking lots, roads, driveways, or sidewalks.

As such, by disproportionately altering individual construction phase lengths without proper justification, the model's calculations are altered and underestimate emissions. Thus, by including unsubstantiated changes to the default individual construction phase lengths, the model may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Change to Number of Construction Days per Week

Review of the CalEEMod output files demonstrates that the "11469 Jefferson – Construction" model includes several changes to the default number of construction days per week (see excerpt below) (Appendix A, pp. 83, 116).

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00

As you can see in the excerpt above, the model assumes that construction activities would occur 6 days per week, rather than the default of 5 days per week. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[11] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "see construction assumptions" (Appendix A, pp. 82, 115). However, as discussed above, the IS/MND and associated documents fail to include any construction assumptions. Furthermore, the IS/MND and associated documents fail to mention or justify the revised number of construction days per week whatsoever.

This presents an issue, as increasing the number of construction days per week spreads out construction emissions over a longer period of time than is anticipated for the Project. Thus, by including an

[11] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

unsubstantiated increase to the default number of construction days per week, the model may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Off-Road Equipment Unit Amounts and Usage Hours

Review of the CalEEMod output files demonstrates that the "11469 Jefferson – Construction" model includes several changes to the default off-road equipment unit amounts and usage hours (see excerpt below) (Appendix A, pp. 84, 117).

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00

As you can see in the excerpt above, the default off-road construction equipment unit amounts and usage hours were manually altered in the model. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[12] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "see construction assumptions" (Appendix A, pp. 82, 115). Furthermore, regarding the Project's construction-related CalEEMod input values, the AQ Technical Report states:

> "The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. *Detailed construction equipment lists, construction scheduling, and emissions calculations are provided in Appendix A*" (see emphasis) (p. 41-42).

[12] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

However, as previously discussed, review of the IS/MND and associated documents demonstrates that no construction assumptions are provided, as purported by the "User Entered Comments and Non-Default Data" table. Furthermore, review of Appendix A demonstrates that the AQ Emissions Worksheets fail to include detailed construction equipment lists, as purported by the AQ Technical Report. As such, we cannot verify the revised off-road construction equipment unit amounts and usage hours. Thus, by including unsubstantiated changes to the Project's off-road construction equipment unit amounts and usage hours, the model may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Failure to Model All Required Material Export

According to the AQ Technical Report, "[t]he Project would export approximately 43,836 cubic yards of soil during grading and excavation activities" (p. 42). As such, the model should have included 43,836 cubic yards ("cy") of material export. However, review of the CalEEMod output files demonstrates that the "11469 Jefferson – Construction" model includes only 31,312 cy of material export (see excerpt below) (Appendix A, pp. 83, 116).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialExported	0.00	31,312.00

As you can see in the excerpt above, the amount of required material export is underestimated by 12,524 cy.[13] Thus, the amount of material export included in the model is underestimated and inconsistent with the information provided in the AQ Technical Report. This underestimation presents an issue, as CalEEMod uses the total amount of material export to calculate emissions produced from material movement, including truck loading, unloading, and additional hauling truck trips.[14] Thus, by failing to model all the required material export, the model underestimates the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Reductions to Hauling, Worker, and Vendor Trip Numbers

Review of the CalEEMod output files demonstrates that the "11469 Jefferson – Construction" model includes several manual reductions to the default number of hauling, vendor, and worker trips required for construction (see excerpt below) (Appendix A, pp. 84-85, 117-118).

[13] Calculated: 43,836 cy – 31,312 cy = 12,524 cy.

[14] CalEEMod User's Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 3, 26.

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	155.00	0.00
tblTripsAndVMT	HaulingTripNumber	3,914.00	0.00
tblTripsAndVMT	VendorTripNumber	26.00	0.00
tblTripsAndVMT	VendorTripNumber	26.00	0.00
tblTripsAndVMT	VendorTripNumber	26.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	65.00	0.00
tblTripsAndVMT	WorkerTripNumber	65.00	0.00
tblTripsAndVMT	WorkerTripNumber	65.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00

As you can see in the excerpt above, the hauling, vendor, and worker trip numbers were manually reduced to zero. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[15] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "construction mobile emissions calculated outside CalEEMod" (Appendix A, pp. 82, 115). Furthermore, the AQ Emissions Worksheets provide the input values utilized for the Project's on-road construction-related emissions calculations (see excerpt below) (Appendix A, pp. 147).

Total On-Road Emissions

							Regional Emissions (pounds/day)									
Construction Phase	Source	Year	Daily One-Way Truck Trips	Haul Days per Phase (Days)	Work Hours per day (Hours per day)	One-Way Trip Distance per day (miles)	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exh	Total PM10	PM2.5 Dust	PM2.5 Exh	Total PM2.5
Demolition							0.07	1.94	0.62	0.01	0.29	0.03	0.31	0.08	0.03	0.10
Worker	LDA,LDT1,LDT2	2020	10	53	8	14.7	0.01	0.03	0.37	0.00	0.11	0.00	0.11	0.03	0.00	0.03
Hauling	HHDT	2020	10	53	8	20	0.06	1.91	0.24	0.01	0.17	0.03	0.20	0.05	0.03	0.07
Excavation							0.71	22.56	3.39	0.07	2.22	0.33	2.54	0.61	0.31	0.92
Worker	LDA,LDT1,LDT2	2020	14	75	8	14.7	0.01	0.04	0.52	0.00	0.16	0.00	0.16	0.04	0.00	0.04
Hauling	HHDT	2020	118	75	8	20	0.70	22.51	2.87	0.07	2.06	0.33	2.39	0.56	0.31	0.88
Foundations							0.07	1.51	0.74	0.01	0.32	0.03	0.35	0.09	0.03	0.12
Worker	LDA,LDT1,LDT2	2020	14	79	8	14.7	0.01	0.04	0.52	0.00	0.16	0.00	0.16	0.04	0.00	0.04
Vendor	MHDT,HHDT	2020	26	79	8	6.9	0.06	1.47	0.22	0.00	0.17	0.03	0.20	0.05	0.03	0.08
Concrete Pour							1.38	44.29	5.93	0.14	4.14	0.64	4.78	1.13	0.61	1.75
Worker	LDA,LDT1,LDT2	2020	8	6	8	14.7	0.01	0.02	0.30	0.00	0.09	0.00	0.09	0.02	0.00	0.02
Hauling	HHDT	2020	232	6	8	20	1.37	44.27	5.63	0.14	4.05	0.64	4.69	1.11	0.61	1.72
Building Construction							0.09	1.45	2.42	0.01	0.90	0.03	0.93	0.24	0.03	0.27
Worker	LDA,LDT1,LDT2	2021	66	468	8	14.7	0.04	0.17	2.23	0.01	0.74	0.00	0.74	0.20	0.00	0.20
Vendor	MHDT,HHDT	2021	26	468	8	6.9	0.05	1.29	0.19	0.00	0.17	0.02	0.19	0.05	0.02	0.07
Paving							0.01	0.05	0.67	0.00	0.22	0.00	0.22	0.06	0.00	0.06
Worker	LDA,LDT1,LDT2	2021	20	11	8	14.7	0.01	0.05	0.67	0.00	0.22	0.00	0.22	0.06	0.00	0.06
Architectural Coating							0.01	0.03	0.43	0.00	0.16	0.00	0.16	0.04	0.00	0.04
Worker	LDA,LDT1,LDT2	2022	14	77	8	14.7	0.01	0.03	0.43	0.00	0.16	0.00	0.16	0.04	0.00	0.04

However, the IS/MND's analysis of the Project's on-road construction-related emissions is incorrect for two reasons.

First, the AQ Emissions Worksheets fails to provide a source or calculations explaining *how* the worker and hauling trip numbers were derived. Specifically, while the IS/MND provides the *total* number of hauling and worker trips required for Project construction, the document fails to provide the *daily*

[15] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

hauling and vendor trip numbers (p. B-24). Furthermore, the IS/MND fails to provide the *total or daily* number of worker trips. This is incorrect, because the hauling, vendor, and worker trip numbers relied upon by the Project's on-road construction-related emissions calculations are different than the CalEEMod default values. According to the CalEEMod User's Guide:

> "CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, *provided that the information is supported by substantial evidence as required by CEQA*" (emphasis added).[16]

As you can see in the excerpt, the any changes to default values should be supported by substantial evidence. As the Project fails to provide substantial evidence to support the hauling, vendor, and worker trip numbers relied upon by the Project's on-road construction-related emissions calculations, we cannot verify the revised values. Thus, despite the fact that the AQ Emissions Worksheets include an analysis of the Project's on-road construction-related emissions outside of CalEEMod, the IS/MND should still justify the hauling, vendor, and worker trip numbers utilized.

Second, while the AQ Emissions Worksheets provides the analysis of the Project's on-road construction-related emissions, the IS/MND and associated documents fail to provide the *total* on-road construction-related emissions associated with hauling, vendor, and worker trips, or demonstrate how the on-road construction-related emissions were summed with the construction-related emissions estimated in CalEEMod (see excerpt below) (p. B-9, Table B-1).

Table B-1
Maximum Unmitigated Regional Construction Emissions (pounds per day)[a]

Regional Emissions	VOC	NO_x	CO	SO_2	PM_{10} [b]	$PM_{2.5}$ [b]
Demolition - 2020	<1	3	13	<1	1	<1
Excavation - 2020	1	24	20	<1	5	2
Foundations - 2020	<1	2	10	<1	<1	<1
Continuous Concrete Pour - 2020	2	45	18	<1	5	2
Building Construction - 2021	1	4	11	<1	1	<1
Building Construction - 2022	1	4	11	<1	1	<1
Paving - 2021	<1	2	13	<1	<1	<1
Architectural Coating - 2022	15	<1	3	<1	<1	<1
Overlapping Phases[c]						
2020						
Foundations + Continuous Concrete Pour	2	47	28	<1	5	2
2021						
Building Construction + Paving	1	6	24	<1	1	1
2022						
Building Construction + Architectural Coatings	15	4	14	<1	1	<1
Maximum Daily Construction Emissions	**15**	**47**	**28**	**<1**	**5**	**2**
SCAQMD Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in the Air Quality Technical Report.
[b] Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.
[c] Analysis accounted for emissions from overlapping phases.

Source: ESA, 2020.

[16] CalEEMod Model 2013.2.2 User's Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/usersguideSept2016.pdf?sfvrsn=6, p. 12.

As you can see in the excerpt above, the IS/MND fails to indicate how the on-road construction-related emissions estimated outside of CalEEMod were included in the maximum daily construction emissions. Absent an explanation of how the on-road construction-related emissions were summed with the construction-related emissions estimated by CalEEMod, we cannot verify the analysis included in the AQ Emissions Worksheet.

These unsubstantiated changes present an issue, as CalEEMod uses hauling, vendor, and worker trips to calculate the Project's construction-related emissions associated with on-road vehicles.[17] Thus, by including unsubstantiated changes to the default hauling, vendor, and worker construction trips, the model may underestimate the Project's mobile-source construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Operational Vehicle Fleet Mix

Review of the CalEEMod output files demonstrates that the "11469 Jefferson – Operations" model includes several changes to the default operational vehicle fleet mix percentages (see excerpt below) (Appendix A, pp. 490, 540).

[17] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 34.

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.03	9.1619e-003
tblFleetMix	HHD	0.03	9.1619e-003
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDA	0.55	0.54
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT2	0.20	0.18
tblFleetMix	LDT2	0.20	0.18
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.8460e-003	6.2455e-003
tblFleetMix	LHD2	5.8460e-003	6.2455e-003
tblFleetMix	MCY	4.8550e-003	0.02
tblFleetMix	MCY	4.8550e-003	0.02
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	8.9600e-004	3.8643e-003
tblFleetMix	MH	8.9600e-004	3.8643e-003
tblFleetMix	MHD	0.02	0.01
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	2.0990e-003	8.2637e-004
tblFleetMix	OBUS	2.0990e-003	8.2637e-004
tblFleetMix	SBUS	7.0900e-004	7.4790e-004
tblFleetMix	SBUS	7.0900e-004	7.4790e-004
tblFleetMix	UBUS	1.8280e-003	5.1497e-004
tblFleetMix	UBUS	1.8280e-003	5.1497e-004

As you can see in the excerpt above, the operational vehicle fleet mix percentages were altered in the model. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[18] However, no justification was provided in the "User Entered Comments and Non-Default Data" table. Furthermore, the IS/MND and associated documents fail to mention or justify the revised operational vehicle fleet mix percentages whatsoever. As a result, we cannot verify the revised percentages included in the model.

These unsubstantiated changes present an issue, as operational vehicle fleet mix percentages are used by CalEEMod to calculate the Project's operational emissions associated with on-road vehicles.[19] Thus, by including unsubstantiated changes to the default operational vehicle fleet mix percentages, the model may underestimate the Project's mobile-source operational emissions and should not be relied upon to determine Project significance.

[18] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[19] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

Unsubstantiated Changes to Operational Vehicle Emission Factors

Review of the CalEEMod output files demonstrates that the "11469 Jefferson – Operations" model includes several changes to the default operational vehicle emission factors (Appendix A, pp. 491-534, 541-584). As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[20] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated to EMFAC2017 EFs" (Appendix A, pp. 489, 539). Furthermore, the IS/MND states:

> "CalEEMod was used to estimate mobile source emissions where emissions factors from CARB's updated version of the on-road vehicle emissions factor (EMFAC) model were input into CalEEMod to calculate mobile GHG emissions. The most recent version is EMFAC2017, which 'represents CARB's current understanding of motor vehicle travel activities and their associated emission levels'" (p. B-37).

However, this justification is insufficient, as EMFAC refers to an *entire database*, not a specific set of vehicle emission factors.[21] Thus, the IS/MND and associated documents should have specified which input parameters were used to obtain the vehicle emission factors inputted in the model, or provided the revised vehicle emission factors themselves. Absent the specific input parameters, we cannot verify the altered vehicle emission factors, and the changes may be incorrect. These unsubstantiated changes present an issue, as CalEEMod uses vehicle emission factors to calculate the Project's operational emissions associated with on-road vehicles.[22] Thus, by including several unsubstantiated changes to the default operational vehicle emission factors, the model may underestimate the Project's mobile-source operational emissions and should not be relied upon to determine Project significance.

Incorrect Application of Construction-Related Mitigation Measures

Review of the CalEEMod output files demonstrates that the "11469 Jefferson – Construction" model includes the following construction-related mitigation measures (see excerpt below) (Appendix A, pp. 89, 124):

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment
Use Soil Stabilizer
Water Exposed Area
Reduce Vehicle Speed on Unpaved Roads

Furthermore, the model includes a 15 miles per hour ("MPH") vehicle speed (see excerpt below) (Appendix A, pp. 82, 115).

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[20] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[21] "EMFAC2017 Web Database." CARB, *available at:* https://arb.ca.gov/emfac/2017/.
[22] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 35.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[23] According to the "User Entered Comments and Non-Default Data" table, the justification provided for the inclusion of construction-related mitigation measures is: "All Diesel equipment>50 HP would meet Tier 4 Final engine standards" (Appendix A, pp. 82, 115). Furthermore, the IS/MND states:

> "The Project would also comply with SCAQMD regulations for controlling fugitive dust pursuant to SCAQMD Rule 403" (p. B-6).

However, these justifications are insufficient for four reasons.

First, the justification provided in the "User Entered Comments & Non-Default Data" table only applies to the inclusion of Tier 4 Final mitigation, thus failing to address the above-mentioned construction-related mitigation measures.

Second, this measure is not included in the Project's Mitigation Monitoring Program, provided as Attachment C to the IS/MND. As a result, we cannot verify that the measure would be implemented, monitored, and enforced on the Project site.

Third, simply because the IS/MND states that the Project would comply with SCAQMD Rule 403 does not justify the inclusion of the above-mentioned construction-related mitigation measures in the model. According to the Association of Environmental Professionals ("AEP") *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[24]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based on the Project's compliance with SCAQMD Rule 403, is unsubstantiated.

Fourth, according to SCAQMD Rule 403, Projects can *either* water unpaved roads 3 times per day, water unpaved roads 1 time per day and limit vehicle speeds to 15 mph *or* apply a chemical stabilizer (see excerpt below).[25]

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[23] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

[24] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.

[25] "RULE 403. FUGITIVE DUST." SCAQMD, June 2005, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf, p. 403-21, Table 2.

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Unpaved Roads	(4a)	Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR
	(4b)	Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR
	(4c)	Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.

As you can see in the above excerpt, to simply comply with SCAQMD Rule 403, the Project may *either* water unpaved roads 3 times per day, water unpaved roads 1 time per day and limit vehicle speeds to 15 mph, *or* apply a chemical stabilizer. Thus, none of the measures included in the CalEEMod model are explicitly required by SCAQMD Rule 403, and we cannot verify their inclusion in the model. By including several construction-related mitigation measures without properly committing to their implementation, the model may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Updated Analysis Indicates a Potentially Significant Air Quality Impact

In an effort to more accurately estimate the Project's construction-related and operational emissions, we prepared updated CalEEMod models, using the Project-specific information provided by the IS/MND. In our updated models, we included all proposed land use types and sizes as described by the IS/MND; corrected the amount of material export; omitted the unsubstantiated changes to the individual construction phase lengths, off-road construction equipment unit amounts and usage hours, construction trip numbers, operational vehicle emission factors, and operational vehicle fleet mix percentages; and excluded the unsubstantiated construction-related mitigation measures. Our updated analysis estimates that the ROG/VOC and NO_X emissions associated with Project construction exceed the 75- and 100-pounds per day ("lbs/day") thresholds set by the SCAQMD, respectively (see table below).[26]

Construction Model	ROG/VOC	NO_X
SWAPE	229.42	755.85
IS/MND	15.00	47.00
% Increase	1429%	1508%
SCAQMD Regional Threshold (lbs/day)	**75**	**100**
Threshold Exceeded?	***Yes***	***Yes***

As demonstrated above, when modeled correctly, the Project's construction-related ROG/VOC and NO_x emissions increase by approximately 1,429% and 1,508%, respectively, and exceed the applicable

[26] "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, April 2019, *available at*: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.

SCAQMD significance thresholds. Thus, our model demonstrates that the Project would result in a potentially significant air quality impact that was not previously identified or addressed in the IS/MND. As a result, an EIR should be prepared to adequately assess and mitigate the potential air quality impacts that the Project may have on the surrounding environment.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The IS/MND concludes that the proposed Project would have a less-than-significant health risk impact based on a quantified construction health risk assessment ("HRA"), as well as a localized significance ("LST") analysis (p. B-14 – B-15). Specifically, the IS/MND estimates that the Project's construction-related cancer risk would be 9.2 in one million, which would not exceed the SCAQMD threshold of 10 in one million (see excerpt below) (p. B -14, Table B-5).

Table B-5
Maximum Unmitigated Health Impacts for Off-Site Sensitive Receptors

Sensitive Receptor	Maximum Cancer Risk (# in one million)	Hazard Index
Residential Land Use	9.2	0.01
Maximum Health Impact Thresholds	10	1.0
Exceeds Thresholds?	**No**	**No**

Source: ESA, 2019.

Regarding the potential health risk impacts associated with Project operation, the IS/MND states:

> "The Project is not anticipated to generate a substantial number of daily truck trips. Under existing conditions, trucks currently make deliveries from the service alley to the northwest of the Project Site. With implementation of the Project, delivery truck loading and unloading would be moved to the interior of the Project Site in dedicated loading areas, creating greater separation between trucks and off-site sensitive receptors. Furthermore, typical sources of hazardous TACs include industrial manufacturing processes and automotive repair facilities. The Project would not include any of these potential sources, although minimal emissions may result from the use of consumer products (e.g., aerosol sprays). Based on this, the Project is not expected to release substantial amounts of TACs. Therefore, based on the limited activity of TAC sources and TAC concentrations at off-site sensitive receptors relative to existing conditions, the Project would not warrant the need for a health risk assessment associated with on-site activities, and potential TAC impacts would be less than significant" (p. B-15).

However, the IS/MND's evaluation of the Project's potential health risk impacts, as well as the subsequent less-than-significant impact conclusion, is incorrect for five reasons.

First, the IS/MND's construction HRA is incorrect, as it relies upon an exhaust PM_{10} estimate from a flawed air model (Appendix A, p. 44). As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the AQ Emissions Worksheets as Appendix A to the IS/MND, we found that several of the values inputted into the model are not consistent with information disclosed in the IS/MND and associated documents. As a result, the construction HRA utilizes an underestimated diesel particulate matter ("DPM") concentration to calculate the cancer risk associated with Project construction. As such, the IS/MND underestimates the Project's construction-related cancer risk and should not be relied upon to determine Project significance.

Second, the IS/MND's claims that the Project's operational toxic air contaminant ("TAC") emissions would be less than significant impact, because the Project would result in "greater separation between trucks and off-site sensitive receptors and would not "generate a substantial number of daily truck trips" or include common sources of TACs any of these potential sources are unsupported. Rather, according to the IS/MND, Project operation would generate 1,463 new daily vehicle trips, which would result in additional exhaust emissions and continue to expose nearby sensitive receptors to DPM emissions (p. B-92). Without making a reasonable effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the IS/MND should not conclude that the Project's operational health risk impact would be less than significant.

Third, the omission of a quantified operational HRA is inconsistent with the most recent guidance published by the Office of Environmental Health Hazard Assessment ("OEHHA"). The OEHHA document recommends that exposure from projects lasting more than 6 months be evaluated for the duration of the project and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR").[27] Even though we were not provided with the expected lifetime of the Project, we can reasonably assume that the Project will operate for at least 30 years, if not more. Therefore, we recommend that health risk impacts from Project operation also be evaluated, as a 30-year exposure duration vastly exceeds the 6-month requirement set forth by OEHHA. These recommendations reflect the most recent state health risk policies, and as such, we recommend that an updated assessment of health risk impacts posed to nearby sensitive receptors from Project operation be included in an EIR for the Project

Fourth, while the IS/MND includes a construction HRA, the IS/MND fails to evaluate the cumulative lifetime cancer risk to nearby, existing receptors as a result of Project construction ***and*** operation together. According to OEHHA guidance, as referenced by the AQ Technical Report, "the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk at the receptor location" (p. 16).[28] Here, however, the IS/MND fails to conduct a construction-related ***and*** operational HRA, as well as sum each age bin to evaluate the total cancer risk over the course of Project construction and operation. This is incorrect and, thus, an EIR should be prepared, quantifying the Project's construction and operational cancer risks and summing them to compare to the SCAQMD threshold 10 in one million.[29]

[27] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-6, 8-15
[28] "Guidance Manual for preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf p. 8-4
[29] "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, April 2019, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.

Fifth, the IS/MND concludes that the Project's construction-related criteria air pollutant emissions would not exceed the applicable SCAQMD Localized Significance Thresholds ("LSTs") (see excerpt below) (p. B-12).

Table B-3
Maximum Localized Construction Emissions (pounds per day)[a]

Regional Emissions	**NO_x**	**CO**	**PM_{10} [b]**	**$PM_{2.5}$ [b]**
Demolition - 2020	1	12	0.3	0.1
Excavation - 2020	1	16	2.4	1.3
Foundations - 2020	1	10	<0.1	<0.1
Continuous Concrete Pour - 2020	1	12	<0.1	<0.1
Building Construction - 2021	2	9	0.1	0.1
Building Construction - 2022	2	9	0.1	0.1
Paving - 2021	2	12	0.1	0.1
Architectural Coating - 2022	<1	2	0.0	<0.1
Overlapping Phases[c]				
2020				
Foundations + Continuous Concrete Pour	2	22	0.1	0.1
2021				
Building Construction + Paving	4	21	0.2	0.2
2022				
Building Construction + Architectural Coatings	2	11	0.1	0.1
Maximum Daily Construction Emissions	**4**	**22**	**2**	**1**
SCAQMD Localized Significance Thresholds [c]	**103**	**562**	**2**	**1**
Exceed Threshold?	No	No	No	No

[a] Totals may not add up exactly due to rounding in the modeling. Detailed emissions calculations are provided in the Air Quality Technical Report.

[b] Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

[c] Analysis accounted for emissions *from overlapping phases.*

Source: ESA, 2020.

However, this is incorrect. Review of the CalEEMod output files demonstrates that the PM_{10} and $PM_{2.5}$ emissions associated with Project construction exceed the 1- and 2-lbs/day LSTs set by the SCAQMD, respectively (see excerpt below) (Appendix A, pp. 86, 119).

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Year	lb/day									
2020	0.3819	1.6547	21.7757	0.0348	2.3713	0.0509	2.4122	1.2942	0.0509	1.3351
2021	0.8588	4.3731	20.9816	0.0328	0.0000	0.1742	0.1742	0.0000	0.1742	0.1742
2022	15.2726	2.2696	11.4036	0.0185	0.0000	0.0887	0.0887	0.0000	0.0887	0.0887
Maximum	**15.2726**	**4.3731**	**21.7757**	**0.0348**	**2.3713**	**0.1742**	**2.4122**	**1.2942**	**0.1742**	**1.3351**

As you can see in the excerpt above, the Project's estimated construction-related PM_{10} and $PM_{2.5}$ emissions are 2.4122- and 1.3351-lbs/day, respectively. Thus, the Project's estimated construction-related PM_{10} and $PM_{2.5}$ emissions exceed the applicable LST thresholds set by the SCAQMD. As such, the IS/MND's claim that emissions associated with Project construction would not exceed the applicable SCAQMD LSTs is incorrect, and the subsequent less-than-significant health risk impact conclusion should not be relied upon.

Screening-Level Assessment Indicates a Potentially Significant Health Risk Impact

In an effort to demonstrate the potential health risk posed by the construction and operation of the Project to nearby, existing sensitive receptors, we prepared a simple screening-level operational HRA. The results of our assessment, as described below, demonstrate that the proposed Project would have a potentially significant impact.

In order to conduct our screening-level risk assessment we relied upon AERSCREEN, which is a screening level air quality dispersion model.[30] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA[31] and the California Air Pollution Control Officers Associated (CAPCOA)[32] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary HRA of the Project's health-related impact to sensitive receptors using the annual PM_{10} exhaust estimates from the IS/MND's annual CalEEMod output files. Consistent with recommendations set forth by OEHHA, we used a residential exposure duration of 30 years, starting from the 3rd trimester stage of life. Subtracting the 726-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 28 years, approximately.

The IS/MND's annual CalEEMod output file indicates that operational activities will generate approximately 45 pounds of DPM per year over approximately 28 years of operation. The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project operation, we calculated an average DPM emission rate by the following equation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{45.2\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00065}\ \boldsymbol{g/s}$$

[30] U.S. EPA (April 2011) AERSCREEN Released as the EPA Recommended Screening Model, http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[31] Supra, fn 20.
[32] CAPCOA (July 2009) Health Risk Assessments for Proposed Land Use Projects, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.

Using this equation, we estimated an operational emission rate of 0.00065 g/s. Operation was simulated as a 0.78-acre rectangular area source in AERSCREEN, with dimensions of 77 meters by 41 meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant to be estimated by multiplying the single-hour concentration by 10%.[33] According to the IS/MND, the closest residential receptors are located 25 meters north and west of the Project site (p. B-12). As such, we utilized the single-hour concentrations at 25 meters from the Project site. Thus, for Project operation, the single-hour concentration at the MEIR estimated by AERSCREEN is approximately 4.006 $\mu g/m^3$ DPM at approximately 25 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.4006 $\mu g/m^3$ for Project operation at the MEIR.

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA. Consistent with the construction period of 726 days inputted into the IS/MND's CalEEMod model, the annualized average concentration for Project operation was used for the remaining 0.26 years of the infantile stage of life (0 – 2 years), the entire the child stage of life (2 - 16 years), and adult stage of life (16 – 30 years).

Consistent with OEHHA, as recommended by SCAQMD, BAAQMD, and SJVAPCD guidance, and referenced by the AQ Technical Report, we used Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution (p. 16).[34, 35, 36, 37] According to this guidance, the quantified cancer risk should be multiplied by a factor of ten during the third trimester of pregnancy and during the first two years of life (infant) as well as multiplied by a factor of three during the child stage of life (2 – 16 years). Furthermore, in accordance with the guidance set

[33] U.S. EPA (October 1992) Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised, http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf.
[34] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.
[35] "Draft Environmental Impact Report (DEIR) for the Proposed The Exchange (SCH No. 2018071058)." SCAQMD, March 2019, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/march/RVC190115-03.pdf?sfvrsn=8, p. 4.
[36] "California Environmental Quality Act Air Quality Guidelines." BAAQMD, May 2017, *available at:* http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, p. 56; see also "Recommended Methods for Screening and Modeling Local Risks and Hazards." BAAQMD, May 2011, *available at:* http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20Modeling%20Approach.ashx, p. 65, 86.
[37] "Update to District's Risk Management Policy to Address OEHHA's Revised Risk Assessment Guidance Document." SJVAPCD, May 2015, *available at:* https://www.valleyair.org/busind/pto/staff-report-5-28-15.pdf, p. 8, 20, 24.

forth by OEHHA, we used the 95th percentile breathing rates for infants.[38] Finally, according to SCAQMD guidance, we used a Fraction of Time At Home ("FAH") Value of 1 for the 3rd trimester and infant receptors.[39] We used a cancer potency factor of 1.1 $(mg/kg\text{-}day)^{-1}$ and an averaging time of 25,550 days. The results of our calculations are shown below.

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Construction	0.25	N/A	361	10	N/A
3rd Trimester Duration	***0.25***			***3rd Trimester Exposure***	***N/A***
Construction	1.74	N/A	1090	10	N/A
Operation	0.26	0.4006	1090	10	1.7E-05
Infant Exposure Duration	***2.00***			***Infant Exposure***	***1.7E-05***
Operation	14.00	0.4006	572	3	1.5E-04
Child Exposure Duration	***14.00***			***Child Exposure***	***1.5E-04***
Operation	14.00	0.4006	261	1	1.6E-05
Adult Exposure Duration	***14.00***			***Adult Exposure***	***1.6E-05***
Lifetime Exposure Duration	**30.00**			**Lifetime Exposure**	**1.8E-04**

As demonstrated in the table above, the excess cancer risk to adults, children, and infants at the MEIR located approximately 25 meters away, over the course of Project operation, are approximately 16, 150 and 17 in one million, respectively. The estimated excess cancer risk over the course of a residential lifetime (30 years), as a result of Project operation alone, is approximately 180 in one million. When summing the Project's estimated operational cancer risk, with the IS/MND's estimated construction-related cancer risk of 9.2 in one million, we calculated a lifetime construction and operational cancer risk of 189.2 in one million.[40] The infant, child, adult, and lifetime cancer risks exceed the SCAQMD threshold

[38] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," July 2018, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588supplementalguidelines.pdf, p. 16.
"Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf
[39] "Risk Assessment Procedures for Rules 1401, 1401.1, and 212." SCAQMD, August 2017, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.
[40] Calculated: 180 in one million + 9.2 in one million = 189.2 in one million.

of 10 in one million, thus resulting in a potentially significant impact not previously addressed or identified by the IS/MND.

An agency must include an analysis of health risks that connects the Project's air emissions with the health risk posed by those emissions. Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection. The purpose of the screening-level construction and operational HRA shown above is to demonstrate the link between the proposed Project's emissions and the potential health risk. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. Therefore, since our screening-level construction HRA indicates a potentially significant impact, an EIR should include a reasonable effort to connect the Project's air quality emissions and the potential health risks posed to nearby receptors. Thus, an EIR should include a quantified air pollution model as well as an updated, quantified refined health risk assessment which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

The IS/MND estimates that the Project would generate net annual greenhouse gas ("GHG") emissions of 1,537 metric tons of carbon dioxide equivalents per year ("MT CO_2e/year") (p. B-39, Table B-9).

Table B-9
Annual Greenhouse Gas Emissions

Emissions Sources	CO_2e (Metric Tons per Year) [a] Project
Existing Operational	
Area (Landscaping Equipment)	<1
Electricity and Natural Gas	50
Mobile Sources	253
Waste	6
Water	3
Existing Subtotal	**314**
Proposed Project Operational – Without GHG Reduction Characteristics	
Electricity[b]	359
Natural Gas	157
Mobile Sources	1,223
Solid Waste	48
Water	26
Area	<1
Proposed Subtotal	**1,813**
Net Operational	**1,499**
Construction (Amortized)	37
Total Annual Emissions	**1,537**

[a] Totals may not add up exactly due to rounding in the modeling calculations.
[b] For the purposes of estimating GHG emissions in the GHG Technical Report, the emissions analysis conservatively assumes Project would not switch electricity providers from SCE to the Clean Power Alliance (i.e., does not take any credit for 36%, 50%, or 100% renewable electricity, depending on the selected Clean Power Alliance plan). Should the Project switch electricity providers from SCE to the Clean Power Alliance, the Project's electricity-related emissions would be lower than disclosed in the GHG Technical Report.

Source: ESA, 2020.

However, the IS/MND fails to compare the Project's estimated GHG emissions to any quantitative threshold, stating:

> "In the absence of any adopted, quantitative threshold, the Project would not have a significant effect on the environment if the Project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions, including the emissions reduction measures discussed within CARB's Climate Change Scoping Plan, SCAG's 2020-2045 RTP/SCS, and City of Culver City polices established for the purpose of increasing energy efficiency and reducing GHG emissions for new developments and the City's Green Building Code" (p. B-35).

As demonstrated above, the IS/MND relies upon the Project's consistency with the CARB's *Scoping Plan*, SCAG's *RTP/SCS*, the City's energy efficiency policies, and the City's Green Building Code in order to conclude that the Project would have a less-than-significant GHG impact. However, the IS/MND's GHG analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for six reasons.

(1) The IS/MND's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
(2) CARB's 2017 *Scoping Plan*, SCAG's 2020-2045 *RTP/SCS*, and the City's energy efficiency policies should not be relied upon to determine Project significance;
(3) The IS/MND fails to consider a quantitative GHG threshold;
(4) The IS/MND fails to identify a potentially significant GHG impact;
(5) The IS/MND fails to consider the performance-based standards under CARB's *Scoping Plan*; and
(6) The IS/MND fails to consider the performance-based standards under SCAG's *RTP/SCS.*

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As previously stated, the IS/MND estimates that the Project would generate net annual GHG emissions of 1,537 MT CO_2e/year (p. B-39, Table B-9). However, the IS/MND's quantitative GHG analysis is unsubstantiated, as it relies upon a flawed air model. As previously discussed, when we reviewed the Project's CalEEMod output files, provided in AQ Emissions Worksheets as Appendix A to the IS/MND, we found that several of the values inputted into the model are not consistent with information disclosed in the IS/MND. As a result, the model underestimates the Project's emissions, and the IS/MND's quantitative GHG analysis should not be relied upon to determine Project significance. A Project-specific EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the surrounding environment.

2) Incorrect Reliance on CARB's 2017 Scoping Plan, SCAG's 2020-2045 RTP/SCS, and the Sustainable City pLAn/L.A.'s Green New Deal

As previously discussed, the IS/MND relies upon the Project's consistency with CARB's 2017 *Scoping Plan*, SCAG's 2020-2045 *RTP/SCS*, and the City's energy efficiency policies in order to conclude that the Project's GHG impact would be less than significant. However, these plans and policies do not qualify as adequate GHG reduction plans or CAPs under CEQA. CEQA Guidelines § 15064.4(b)(3) and § 15183(b) allow a lead agency to consider a project's consistency with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. When read in conjunction, CEQA Guidelines § 15064.4(b)(3) and § 15183.5(b)(1) make clear that qualified GHG reduction plans or CAPs should include the following features:

(1) **Inventory**: Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities (e.g., projects) within a defined geographic area (e.g., lead agency jurisdiction);
(2) **Establish GHG Reduction Goal**: Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;
(3) **Analyze Project Types**: Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;
(4) **Craft Performance Based Mitigation Measures**: Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
(5) **Monitoring**: Establish a mechanism to monitor the CAP progress toward achieving said level and to require amendment if the plan is not achieving specified levels.

Collectively, the above-listed features tie qualitative measures to quantitative results, which in turn become binding via proper monitoring and enforcement by the jurisdiction—all resulting in real GHG reductions for the jurisdiction as a whole, and substantial evidence demonstrating that a project's incremental contribution is not cumulatively considerable. Here, however, the IS/MND fails to demonstrate that these plans and policies include the above-listed requirements to be considered qualified GHG Reduction Plans or CAPs for the City. As such, the IS/MND leaves an analytical gap showing that compliance with said plans and policies can be used for a project-level significance determination. Thus, the IS/MND's GHG significance determination regarding CARB's 2017 *Scoping Plan*, SCAG's 2020-2045 *RTP/SCS*, and the City's energy efficiency policies should not be relied upon.

3) Failure to Apply a Quantitative GHG Threshold

As previously stated, the IS/MND estimates that the Project would generate net annual GHG emissions of 1,537 MT CO_2e/year (p. B-39, Table B-9). However, the IS/MND fails to apply a quantitative GHG threshold to evaluate the Project's emissions, instead incorrectly relying upon the Project's consistency with CARB's 2017 *Scoping Plan*, SCAG's 2020-2045 *RTP/SCS*, and the City's energy efficiency policies, as described above. Since the IS/MND should not rely upon the Project's consistency with these plans and policies to determine Project significance, we recommend that the Project apply the AEP's "2030 Land Use Efficiency Threshold" of 2.6 metric tons of CO_2 equivalents per service population per year ("MT CO_2e/SP/year").[41] In support of this threshold for projects with a horizon year beyond 2020, AEP's guidance *states*:

> "Once the state has a full plan for 2030 (which is expected in 2017), and then *__a project with a horizon between 2021 and 2030 should be evaluated based on a threshold using the 2030 target__*. A more conservative approach would be to apply a 2030 threshold *__based on SB 32__* for any project with a horizon between 2021 and 2030 regardless of the status of the Scoping Plan Update" (emphasis added).[42]

As the California Air Resources Board ("CARB") adopted *California's 2017 Climate Change Scoping Plan* in November of 2017, the proposed Project "should be evaluated based on a threshold using the 2030 target," according to the relevant guidance referenced above. We recommend that an updated EIR be prepared, including an updated air model and comparing the Project's estimated GHG emissions to the AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year.

4) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

The IS/MND's incorrect and unsubstantiated air model indicates a potentially significant GHG impact, when applying the "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year. As previously stated, the IS/MND estimates that the Project would generate net annual GHG emissions of 1,537 MT

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[41] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[42] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

CO_2e/year (p. B-39, Table B-9). Furthermore, according to CAPCOA's *CEQA & Climate Change* report, service population is defined as "the sum of the number of residents and the number of jobs supported by the project."[43] The IS/MND estimates that the Project would employ approximately 130 people upon buildout (p. B-76). As the Project does not include any residential land uses, we estimate a service population of 130 people.[44] Dividing the Project's GHG emissions, as estimated by the IS/MND, by a service population value of 130 people, we find that the Project would emit approximately 11.8 MT CO_2e/SP/year (see table below).[45]

IS/MND Service Population Efficiency	
Project Phase	**Proposed Project (MT CO_2e/year)**
Total	**1,537**
Service Population	130
Service Population Efficiency	**11.8**
Threshold ***Exceed?***	2.6 ***Yes***

As demonstrated above, when we compare the Project's per service population GHG emissions to the AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year, we find that the Project would result in a significant GHG impact not previously identified or addressed by the IS/MND. Therefore, an EIR should be prepared and recirculated for the Project, and mitigation should be implemented where necessary.

5) Failure to Consider Performance-based Standards Under CARB's 2017 Scoping Plan

As previously discussed, the IS/MND relies upon the Project's consistency with CARB's 2017 *Scoping Plan* to determine Project GHG significance. However, this is incorrect, as the IS/MND fails to consider performance-based measures proposed by CARB.

i. Passenger & Light Duty VMT Per Capita Benchmarks per SB 375

In reaching the State's long-term GHG emission reduction goals, CARB's 2017 *Scoping Plan* explicitly cites to SB 375 and the VMT reductions anticipated under the implementation of Sustainable Community Strategies.[46] CARB has identified the population and daily VMT from passenger autos and light-duty vehicles at the state and county level for each year between 2010 to 2050 under a "baseline scenario" that includes "current projections of VMT included in the existing Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCSs) adopted by the State's 18 Metropolitan Planning

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[43] CAPCOA (Jan. 2008) CEQA & Climate Change, p. 71-72, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf.
[44] Calculated: 130 employees + 0 residents = 130 service population.
[45] Calculated: (1,537 MT CO_2e/year) / (130 service population) = (11.8 MT CO_2e/SP/year).
[46] "California's 2017 Climate Change Scoping Plan." CARB, November 2017, *available at*: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, p. 25, 98, 101-103.

Organizations (MPOs) pursuant to SB 375 as of 2015."[47] By dividing the projected daily VMT by the population, we calculated the daily VMT per capita for each year at the state and county level for 2010 (baseline year), 2022 (Project operational year), and 2030 (target years under SB 32) (see table below and Attachment B).

2017 Scoping Plan Daily VMT Per Capita						
	Los Angeles County			State		
Year	**Population**	**LDV VMT Baseline**	**VMT Per Capita**	**Population**	**LDV VMT Baseline**	**VMT Per Capita**
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2022	10,534,881	220,487,425.77	20.93	41,321,565	916,010,145.57	22.17
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

The below table compares the 2017 *Scoping Plan* daily VMT per capita values against the daily VMT per capita values for the Project based on the IS/MND's modeling (see table below and Attachment B).

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	**Project**
	IS/MND Modeling
Annual VMT from Auto & Light-Duty Vehicles	3,207,802
Daily VMT from Auto & Light-Duty Vehicles	8,788
Service Population	130
Daily VMT Per Capita	67.60
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	**Yes**
22.17 VMT (2022 Projected) Exceed?	**Yes**
21.78 VMT (2030 Projected) Exceed?	**Yes**
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	**Yes**
20.93 VMT (2022 Projected) Exceed?	**Yes**
19.83 VMT (2030 Projected) Exceed?	**Yes**

As shown above, the IS/MND's modeling shows that the Project exceeds the CARB 2017 *Scoping Plan* projections for 2010, 2022, and 2030. Because the exceeds the CARB 2017 *Scoping Plan* performance-based daily VMT per capita projections, the Project conflicts with the CARB 2017 *Scoping Plan* and SB 375. As such, the IS/MND's claim that the proposed Project would not conflict with the CARB 2017

[47] "Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions," Excel Sheet "Readme." CARB, January 2019, *available at*: https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

Scoping Plan is incorrect and unsubstantiated. A Project-specific EIR should be prepared for the proposed Project to provide additional information and analysis to conclude less than significant GHG impacts.

6) *Failure to Consider Performance-based Standards under SCAG's RTP/SCS*

Here, as discussed above, the IS/MND concludes that the Project would be consistent with SCAG's *RTP/SCS*. However, the IS/MND fails to consider whether or not the Project meets any of the specific performance-based goals underlying SCAG's *RTP/SCS* and SB 375, such as: i) per capita GHG emission targets, or ii) daily vehicles miles traveled ("VMT") per capita benchmarks.

i. SB 375 Per Capita GHG Emission Goals

SB 375 was signed into law in September 2008 to enhance the state's ability to reach AB 32 goals by directing CARB to develop regional 2020 and 2035 GHG emission reduction targets for passenger vehicles (autos and light-duty trucks). In March 2018, CARB adopted updated regional targets requiring a 19 percent decrease in VMT for the SCAG region by 2035. This goal is reflected in SCAG's 2020 RTP/SCS Program Environmental Impact Report ("PEIR"),[48] in which the 2020 RTP/SCS PEIR updates the per capita emissions to 21.3 lbs/day in 2020 and 18.8 lbs/day in 2035 (*see* excerpt below). [49]

Table 3.8-10
SB 375 Analysis

	2005 (Baseline)	2020 (Plan)	2035 (Plan)
Resident population (per 1,000)	17,161	19,194	21,110
CO2 emissions (per 1,000 tons)	204.0/a/	204.5/b/	198.6/b/
Per capita emissions (pounds/day)	23.8	21.3	18.8
% difference from Plan (2020) to Baseline (2005)			–8%
% difference from Plan (2035) to Baseline (2005)			–19%/c/

Note:
/a/ Based on EMFAC2007
/b/Based on EMFAC2014 and SCAG modeling, 2019.
/c/ Includes off-model adjustments for 2035 and 2045
Source: SCAG modeling, 2019.
http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf

In order to evaluate consistency with this SB 375 objective and SCAG's *RTP/SCS* performance-based goals, SWAPE calculated the Project's per-capita CO_2 emissions from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, total annual GHG mobile emissions were multiplied by the percentage of auto and light-duty truck fleet mix, then converted into total pounds per

[48] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618.
[49] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618, p. 3.8-74.

day, then divided by the estimated service population of 130. The below table shows the per capita emissions for the Project based on the IS/MND's modeling (see table below and Attachment B).

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks,	
Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	IS/MND Modeling
Annual Mobile Emissions (MT CO_2e/year)	1,222.85
Passenger & Light-Duty Fleet Mix (%)	91.89%
Daily CO_2e Emissions (lbs/day)	6,787.00
Service Population	130
Per Capita Emissions (lbs/day)	**52.21**
21.3 lbs/day/SP (2020 Goal) Exceeded?	**Yes**
18.8 lbs/day/SP (2035 Goal) Exceeded?	**Yes**

As shown in the above table, when utilizing the IS/MND's modeling, the Project would result in 52.21 pounds per day per service population ("lbs/day/SP") emissions. This exceeds both SCAG's 2020 and 2035 targets of 21.3- and 18.8-lbs/day/SP, respectively, indicating that the Project is inconsistent with SB 375 and SCAG's *RTP/SCS*.

i. SB 375 RTP/SCS Daily VMT Per Capita Target

Under the SCAG's 2020 *RTP/SCS*, daily VMT per capita in the SCAG region should decrease from 23.2 VMT in 2016 to 20.7 VMT by 2045.[50] Daily VMT per capita in Los Angeles County should decrease from 22.2 to 19.2 VMT during that same period.[51]

Here, however, the IS/MND fails to consider any of the abovementioned performance-based VMT targets. In order to evaluate consistency with the *RTP/SCS*'s performance-based VMT reduction targets, SWAPE calculated the Project's VMT from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, annual VMTs from passenger automobile and light-duty vehicle were calculated based on the CalEEMod default fleet mix, converted into daily VMT, and divided by the estimated service population of 130. The below table shows the daily VMT per capita for the Project based on the IS/MND's modeling (see table below and Attachment B).

[50] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.
[51] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	**Project IS/MND Modeling**
Annual VMT from Auto & Light-Duty Vehicles	3,207,802
Daily VMT from Auto & Light-Duty Vehicles	8,788
Service Population	130
Daily VMT Per Capita	67.60
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	**Yes**
20.7 VMT (2045 Target) Exceed?	**Yes**
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	**Yes**
19.2 VMT (2045 Target) Exceed?	**Yes**

As shown in the above table, based on a service population of 130, the Project would result in 67.6 daily VMT per capita from passenger auto and light-duty truck vehicles. This exceeds all SCAG-wide and Los Angeles County specific benchmarks and targets under SCAG's 2020 *RTP/SCS*. Thus, based on the IS/MND's modeling, the Project would exceed the 2016 baseline and 2045 target VMT per capita values for both Los Angeles County and the SCAG region as a whole, indicating that the Project conflicts with the SCAG's *RTP/SCS* and SB 375.

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project's air quality, health risk, and GHG emissions may result in significant impacts and should be mitigated further. In an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Feasible mitigation measures can be found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*.[52] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*[53]
Measures – Energy
Building Energy Use
Install Programmable Thermostat Timers
Install Energy Efficient Appliances

[52] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

[53] "Quantifying Greenhouse Gas Mitigation Measures." California Air Pollution Control Officers Association (CAPCOA), August 2010, *available at:* http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf, p.

Install Energy Efficient Boilers
Lighting
Install Higher Efficacy Public Street and Area Lighting
Limit Outdoor Lighting Requirements
Replace Traffic Lights with LED Traffic Lights
Alternative Energy Generation
Establish Onsite Renewable or Carbon-Neutral Energy Systems
Utilize a Combined Heat and Power System
Measures – Transportation
Land Use/Location
Increase Density
Increase Location Efficiency
Increase Diversity of Urban and Suburban Developments (Mixed Use)
Orient Project Toward Non-Auto Corridor
Neighborhood/Site Enhancements
Provide Traffic Calming Measures, such as: • Marked crosswalks • Count-down signal timers • Curb extensions • Speed tables • Raised crosswalks • Raised intersections • Median islands • Tight corner radii • Roundabouts or mini-circles • On-street parking • Planter strips with trees • Chicanes/chokers
Implement a Neighborhood Electric Vehicle (NEV) Network.
Create Urban Non-Motorized Zones
Provide Electric Vehicle Parking
Dedicate Land for Bike Trails
Parking Policy/Pricing
Limit Parking Supply through: • Elimination (or reduction) of minimum parking requirements • Creation of maximum parking requirements • Provision of shared parking
Unbundle Parking Costs from Property Cost
Implement Market Price Public Parking (On-Street)

Require Residential Area Parking Permits
Commute Trip Reduction Programs
Implement Commute Trip Reduction (CTR) Program – Voluntary • Carpooling encouragement • Ride-matching assistance • Preferential carpool parking • Flexible work schedules for carpools • Half time transportation coordinator • Vanpool assistance • Bicycle end-trip facilities (parking, showers and lockers) • New employee orientation of trip reduction and alternative mode options • Event promotions and publications • Flexible work schedule for employees • Transit subsidies • Parking cash-out or priced parking • Shuttles • Emergency ride home
Implement Commute Trip Reduction (CTR) Program – Required Implementation/Monitoring • Established performance standards (e.g. trip reduction requirements) • Required implementation • Regular monitoring and reporting
Provide Ride-Sharing Programs • Designate a certain percentage of parking spaces for ride sharing vehicles • Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles • Providing a web site or messaging board for coordinating rides • Permanent transportation management association membership and funding requirement.
Implement Subsidized or Discounted Transit Program
Provide Ent of Trip Facilities, including: • Showers • Secure bicycle lockers • Changing spaces
Encourage Telecommuting and Alternative Work Schedules, such as: • Staggered starting times • Flexible schedules • Compressed work weeks
Implement Commute Trip Reduction Marketing, such as: • New employee orientation of trip reduction and alternative mode options • Event promotions • Publications
Implement Preferential Parking Permit Program
Implement Car-Sharing Program
Implement School Pool Program

Provide Employer-Sponsored Vanpool/Shuttle
Implement Bike-Sharing Programs
Implement School Bus Program
Price Workplace Parking, such as: • Explicitly charging for parking for its employees; • Implementing above market rate pricing; • Validating parking only for invited guests; • Not providing employee parking and transportation allowances; and • Educating employees about available alternatives.
Implement Employee Parking “Cash-Out”
Transit System Improvements
Transit System Improvements, including: • Grade-separated right-of-way, including bus only lanes (for buses, emergency vehicles, and sometimes taxis), and other Transit Priority measures. Some systems use guideways which automatically steer the bus on portions of the route. • Frequent, high-capacity service • High-quality vehicles that are easy to board, quiet, clean, and comfortable to ride. • Pre-paid fare collection to minimize boarding delays. • Integrated fare systems, allowing free or discounted transfers between routes and modes. • Convenient user information and marketing programs. • High quality bus stations with Transit Oriented Development in nearby areas. • Modal integration, with BRT service coordinated with walking and cycling facilities, taxi services, intercity bus, rail transit, and other transportation services.
Implement Transit Access Improvements, such as: • Sidewalk/crosswalk safety enhancements • Bus shelter improvements
Increase Transit Service Frequency/Speed
Provide Bike Parking Near Transit
Provide Local Shuttles
Road Pricing/Management
Implement Area or Cordon Pricing
Improve Traffic Flow, such as: • Signalization improvements to reduce delay; • Incident management to increase response time to breakdowns and collisions; • Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions; and • Speed management to reduce high free-flow speeds.
Required Project Contributions to Transportation Infrastructure Improvement Projects
Install Park-and-Ride Lots
Vehicles
Utilize Alternative Fueled Vehicles, such as:

• Biodiesel (B20) • Liquefied Natural Gas (LNG) • Compressed Natural Gas (CNG)
Utilize Electric or Hybrid Vehicles
Measures – Water
Water Supply
Use Reclaimed Water
Use Gray Water
Use Locally Sourced Water Supply
Water Use
Adopt a Water Conservation strategy
Design Water-Efficient Landscapes (see California Department of Water Resources Model Water Efficient Landscape Ordinance), such as: • Reducing lawn sizes; • Planting vegetation with minimal water needs, such as native species; • Choosing vegetation appropriate for the climate of the project site; • Choosing complimentary plants with similar water needs or which can provide each other with shade and/or water.
Use Water-Efficient Landscape Irrigation Systems (“Smart” irrigation control systems)
Reduce Turf in Landscapes and Lawns
Plant Native or Drought-Resistant Trees and Vegetation
Measures – Area Landscaping
Landscaping Equipment
Prohibit Gas Powered Landscape Equipment
Implement Lawnmower Exchange Program
Electric Yard Equipment Compatibility
Measures – Vegetation
Vegetation
Urban Tree Planting
Create New Vegetated Open Space
Measures – Construction
Construction
Use Alternative Fuels for Construction Equipment
Urban Tree Planting
Use Electric and Hybrid Construction Equipment
Limit Construction Equipment Idling Beyond Regulation Requirements
Institute a Heavy-Duty Off-Road Vehicle Plan, including: • Construction vehicle inventory tracking system;

• Requiring hour meters on equipment; • Document the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment; and • Daily logging of the operating hours of the equipment.
Implement a Construction Vehicle Inventory Tracking System
Measures – Miscellaneous
Miscellaneous
Establish a Carbon Sequestration Project, such as: • Geologic sequestration or carbon capture and storage techniques, in which CO_2 from point sources is captured and injected underground; • Terrestrial sequestration in which ecosystems are established or preserved to serve as CO_2 sinks; • Novel techniques involving advanced chemical or biological pathways; or • Technologies yet to be discovered.
Establish Off-Site Mitigation
Use Local and Sustainable Building Materials
Require best Management Practices in Agriculture and Animal Operations
Require Environmentally Responsible Purchasing, such as: • Purchasing products with sustainable packaging; • Purchasing post-consumer recycled copier paper, paper towels, and stationary; • Purchasing and stocking communal kitchens with reusable dishes and utensils; • Choosing sustainable cleaning supplies; • Leasing equipment from manufacturers who will recycle the components at their end of life; • Choosing ENERGY STAR appliances and Water Sense-certified water fixtures; • Choosing electronic appliances with built in sleep-mode timers; • Purchasing 'green power' (e.g. electricity generated from renewable or hydropower) from the utility; and • Choosing locally-made and distributed products.

Furthermore, in an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project from NEDC's *Diesel Emission Controls in Construction Projects.*[54] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

NEDC's *Diesel Emission Controls in Construction Projects*[55]
Measures – Diesel Emission Control Technology

[54] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

[55] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

a. Diesel Onroad Vehicles All diesel nonroad vehicles on site for more than 10 total days must have either (1) engines that meet EPA onroad emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
b. Diesel Generators All diesel generators on site for more than 10 total days must be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
c. Upon confirming that the diesel vehicle, construction equipment, or generator has either an engine meeting Tier 4 non road emission standards or emission control technology, as specified above, installed and functioning, the developer will issue a compliance sticker. All diesel vehicles, construction equipment, and generators on site shall display the compliance sticker in a visible, external location as designated by the developer.
d. Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.
Measures – Additional Diesel Requirements
a. Construction shall not proceed until the contractor submits a certified list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following: i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment. ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
b. If the contractor subsequently needs to bring on site equipment not on the list, the contractor shall submit written notification within 24 hours that attests the equipment complies with all contract conditions and provide information.
c. All diesel equipment shall comply with all pertinent local, state, and federal regulations relative to exhaust emission controls and safety.
d. The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
Reporting
a. For each onroad diesel vehicle, nonroad construction equipment, or generator, the contractor shall submit to the developer's representative a report prior to bringing said equipment on site that includes: i. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number. ii. The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level. iii. The Certification Statement signed and printed on the contractor's letterhead.
b. The contractor shall submit to the developer's representative a monthly report that, for each onroad diesel vehicle, nonroad construction equipment, or generator onsite, includes: i. Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date. ii. Any problems with the equipment or emission controls. iii. Certified copies of fuel deliveries for the time period that identify:

1. Source of supply
2. Quantity of fuel
3. Quality of fuel, including sulfur content (percent by weight)

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation. An EIR should be prepared to include all feasible mitigation measures, as well as include an updated health risk and GHG analysis to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Attachment A:	SWAPE HRA Calculations
Attachment B:	SWAPE GHG and VMT Calculations
Attachment C:	SWAPE Project CalEEMod Modeling
Attachment D:	SWAPE Project AERSCREEN Modeling
Attachment E:	Paul Rosenfeld CV
Attachment F:	Matt Hagemann CV

Attachment A

Operation		
Emission Rate		
Annual Emissions (tons/year)		0.0226
Daily Emissions (lbs/day)		0.123835616
Emission Rate (g/s)		0.000650137
Release Height (meters)		3
Initial Vertical Dimension (meters)		1.5
Max Horizontal (meters)		77.0
Min Horizontal (meters)		41.0
Total Acreage		0.780111
Setting	Urban	
Population		39,169
Total Pounds of DPM		
Total DPM (lbs)		45.2

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Construction	0.25	N/A	361	10	N/A
3rd Trimester Duration	***0.25***			***3rd Trimester Exposure***	***N/A***
Construction	1.74	N/A	1090	10	N/A
Operation	0.26	0.4006	1090	10	1.7E-05
Infant Exposure Duration	***2.00***			***Infant Exposure***	***1.7E-05***
Operation	14.00	0.4006	572	3	1.5E-04
Child Exposure Duration	***14.00***			***Child Exposure***	***1.5E-04***
Operation	14.00	0.4006	261	1	1.6E-05
Adult Exposure Duration	***14.00***			***Adult Exposure***	***1.6E-05***
Lifetime Exposure Duration	**30.00**			**Lifetime Exposure**	**1.8E-04**

Attachment B

GHG CALCULATIONS: IS/MND Modeling

Line (L)	Value	Unit
Project Total VMT		
1	3,490,968	Project Total VMT
Total Emissions From Passenger and Light Duty Vehicles		
2	1,222.85	Mobile Emissions (MT CO2e/year) (CalEEMod Output, Tbl. 2.2, Mitigated Operational).
3	3,490,968	Project Total VMT (see L1)
4	91.89%	Passenger and Light-Duty VMT Fleet Mix
5	3,207,802	VMT from Passenger & Light-Duty Vehicles**** [Calc: (L3*L4)]
6	1,123.66	Passenger and Light Duty Vehicle Emissions (MT CO2e/year) [Calc: (L2*L4)]
7	6,787.00	Passenger and Light-Duty Vehicle Emissions (Total lbs CO2e/day) [Calc: (L6 converted into lbs) / (365 days)]
8	130	Service Population [0 residents + 130 long-term jobs]
9	52.21	Per Service Population Emissions (lbs CO2e/day/SP) [Calc: (L7/L8)]
Daily VMT Per Capita From Passenger and Light Duty Vehicles		
10	3,207,802	VMT from Passenger & Light-Duty Vehicles**** (see L5)
11	8,788	Daily VMT from Passenger & Light-Duty Vehicles [Calc: (L10/365)]
12	130	Service Population [0 residents + 130 long-term jobs]
13	67.60	Daily VMT Per Capita [(Calc: L11/L12)]

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks,	
Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	IS/MND Modeling
Annual Mobile Emissions (MT CO_2e/year)	1,222.85
Passenger & Light-Duty Fleet Mix (%)	91.89%
Daily CO_2e Emissions (lbs/day)	6,787.00
Service Population	130
Per Capita Emissions (lbs/day)	**52.21**
21.3 lbs/day/SP (2020 Goal) Exceeded?	**Yes**
18.8 lbs/day/SP (2035 Goal) Exceeded?	**Yes**

Daily VMT Per Capita from Passenger & Light-Duty Trucks,	
Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	**Project**
	IS/MND Modeling
Annual VMT from Auto & Light-Duty Vehicles	3,207,802
Daily VMT from Auto & Light-Duty Vehicles	8,788
Service Population	130
Daily VMT Per Capita	67.60
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	**Yes**
20.7 VMT (2045 Target) Exceed?	**Yes**
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	**Yes**
19.2 VMT (2045 Target) Exceed?	**Yes**

2017 Scoping Plan Daily VMT Per Capita						
	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2022	10,534,881	220,487,425.77	20.93	41,321,565	916,010,145.57	22.17
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	**Project**
	IS/MND Modeling
Annual VMT from Auto & Light-Duty Vehicles	3,207,802
Daily VMT from Auto & Light-Duty Vehicles	8,788
Service Population	130
Daily VMT Per Capita	67.60
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	**Yes**
22.17 VMT (2022 Projected) Exceed?	**Yes**
21.78 VMT (2030 Projected) Exceed?	**Yes**
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	**Yes**
20.93 VMT (2022 Projected) Exceed?	**Yes**
19.83 VMT (2030 Projected) Exceed?	**Yes**

11469 Jefferson - Operations

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	138.00	Space	0.28	56,300.00	0
Health Club	0.70	1000sqft	0.02	700.00	0
Hotel	175.00	Room	0.50	117,987.00	0
Quality Restaurant	3.31	1000sqft	0.08	3,313.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See SWAPE comment regarding CO2 intensity factor.

Land Use - See SWAPE comment regarding parking and failure to model all proposed land uses.

Vehicle Trips - Consistent with the IS/MND's model.

Vehicle Emission Factors - See SWAPE comment regarding operational vehicle emission factors.

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Mitigation - Consistent with the IS/MND's model.

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	55,200.00	56,300.00
tblLandUse	LandUseSquareFeet	254,100.00	117,987.00
tblLandUse	LandUseSquareFeet	3,310.00	3,313.00
tblLandUse	LotAcreage	1.24	0.28
tblLandUse	LotAcreage	5.83	0.50
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	8.19	8.36
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	5.95	8.36
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	8.17	8.36
tblVehicleTrips	WD_TR	89.95	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.6399	0.6196	0.6034	1.4600e-003	0.0529	0.0267	0.0796	0.0144	0.0247	0.0391	0.0000	132.3248	132.3248	0.0215	0.0000	132.8611
Maximum	**0.6399**	**0.6196**	**0.6034**	**1.4600e-003**	**0.0529**	**0.0267**	**0.0796**	**0.0144**	**0.0247**	**0.0391**	**0.0000**	**132.3248**	**132.3248**	**0.0215**	**0.0000**	**132.8611**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.6399	0.6196	0.6034	1.4600e-003	0.0529	0.0267	0.0796	0.0144	0.0247	0.0391	0.0000	132.3247	132.3247	0.0215	0.0000	132.8610
Maximum	**0.6399**	**0.6196**	**0.6034**	**1.4600e-003**	**0.0529**	**0.0267**	**0.0796**	**0.0144**	**0.0247**	**0.0391**	**0.0000**	**132.3247**	**132.3247**	**0.0215**	**0.0000**	**132.8610**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-9-2021	5-8-2021	0.3619	0.3619
2	5-9-2021	8-8-2021	0.8914	0.8914
		Highest	0.8914	0.8914

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5022	4.0000e-005	4.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8700e-003	7.8700e-003	2.0000e-005	0.0000	8.3900e-003
Energy	0.0195	0.1768	0.1485	1.0600e-003		0.0134	0.0134		0.0134	0.0134	0.0000	631.6018	631.6018	0.0218	7.2800e-003	634.3165
Mobile	0.3735	2.0366	4.4176	0.0162	1.3265	0.0130	1.3395	0.3555	0.0121	0.3676	0.0000	1,498.5302	1,498.5302	0.0753	0.0000	1,500.4131
Waste						0.0000	0.0000		0.0000	0.0000	20.8715	0.0000	20.8715	1.2335	0.0000	51.7083
Water						0.0000	0.0000		0.0000	0.0000	1.7402	24.8200	26.5603	0.1798	4.4300e-003	32.3752
Total	**0.8951**	**2.2134**	**4.5701**	**0.0173**	**1.3265**	**0.0264**	**1.3529**	**0.3555**	**0.0256**	**0.3810**	**22.6118**	**2,154.9598**	**2,177.5716**	**1.5104**	**0.0117**	**2,218.8214**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5022	4.0000e-005	4.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8700e-003	7.8700e-003	2.0000e-005	0.0000	8.3900e-003
Energy	0.0195	0.1768	0.1485	1.0600e-003		0.0134	0.0134		0.0134	0.0134	0.0000	631.6018	631.6018	0.0218	7.2800e-003	634.3165
Mobile	0.3735	2.0366	4.4176	0.0162	1.3265	0.0130	1.3395	0.3555	0.0121	0.3676	0.0000	1,498.530 2	1,498.530 2	0.0753	0.0000	1,500.413 1
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	1.7402	24.8200	26.5603	0.1798	4.4300e-003	32.3752
Total	**0.8951**	**2.2134**	**4.5701**	**0.0173**	**1.3265**	**0.0264**	**1.3529**	**0.3555**	**0.0256**	**0.3810**	**1.7402**	**2,154.959 8**	**2,156.700 0**	**0.2769**	**0.0117**	**2,167.113 1**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**92.30**	**0.00**	**0.96**	**81.67**	**0.00**	**2.33**

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	2/9/2021	2/22/2021	5	10	
2	Site Preparation	Site Preparation	2/23/2021	2/23/2021	5	1	
3	Grading	Grading	2/24/2021	2/25/2021	5	2	
4	Building Construction	Building Construction	2/26/2021	7/15/2021	5	100	
5	Paving	Paving	7/16/2021	7/22/2021	5	5	
6	Architectural Coating	Architectural Coating	7/23/2021	7/29/2021	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.28

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 183,000; Non-Residential Outdoor: 61,000; Striped Parking Area: 3,378 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
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
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	75.00	29.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9800e-003	0.0363	0.0379	6.0000e-005		2.0400e-003	2.0400e-003		1.9400e-003	1.9400e-003	0.0000	5.2047	5.2047	9.7000e-004	0.0000	5.2289
Total	**3.9800e-003**	**0.0363**	**0.0379**	**6.0000e-005**		**2.0400e-003**	**2.0400e-003**		**1.9400e-003**	**1.9400e-003**	**0.0000**	**5.2047**	**5.2047**	**9.7000e-004**	**0.0000**	**5.2289**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4778	0.4778	1.0000e-005	0.0000	0.4782
Total	**2.1000e-004**	**1.5000e-004**	**1.7400e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4778**	**0.4778**	**1.0000e-005**	**0.0000**	**0.4782**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9800e-003	0.0363	0.0379	6.0000e-005		2.0400e-003	2.0400e-003		1.9400e-003	1.9400e-003	0.0000	5.2047	5.2047	9.7000e-004	0.0000	5.2289
Total	**3.9800e-003**	**0.0363**	**0.0379**	**6.0000e-005**		**2.0400e-003**	**2.0400e-003**		**1.9400e-003**	**1.9400e-003**	**0.0000**	**5.2047**	**5.2047**	**9.7000e-004**	**0.0000**	**5.2289**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4778	0.4778	1.0000e-005	0.0000	0.4782
Total	**2.1000e-004**	**1.5000e-004**	**1.7400e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4778**	**0.4778**	**1.0000e-005**	**0.0000**	**0.4782**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-004	3.9100e-003	2.0100e-003	0.0000		1.5000e-004	1.5000e-004		1.4000e-004	1.4000e-004	0.0000	0.4276	0.4276	1.4000e-004	0.0000	0.4310
Total	**3.2000e-004**	**3.9100e-003**	**2.0100e-003**	**0.0000**	**2.7000e-004**	**1.5000e-004**	**4.2000e-004**	**3.0000e-005**	**1.4000e-004**	**1.7000e-004**	**0.0000**	**0.4276**	**0.4276**	**1.4000e-004**	**0.0000**	**0.4310**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0239	0.0239	0.0000	0.0000	0.0239
Total	**1.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0239**	**0.0239**	**0.0000**	**0.0000**	**0.0239**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-004	3.9100e-003	2.0100e-003	0.0000		1.5000e-004	1.5000e-004		1.4000e-004	1.4000e-004	0.0000	0.4276	0.4276	1.4000e-004	0.0000	0.4310
Total	**3.2000e-004**	**3.9100e-003**	**2.0100e-003**	**0.0000**	**2.7000e-004**	**1.5000e-004**	**4.2000e-004**	**3.0000e-005**	**1.4000e-004**	**1.7000e-004**	**0.0000**	**0.4276**	**0.4276**	**1.4000e-004**	**0.0000**	**0.4310**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0239	0.0239	0.0000	0.0000	0.0239
Total	**1.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0239**	**0.0239**	**0.0000**	**0.0000**	**0.0239**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	7.2500e-003	7.5700e-003	1.0000e-005		4.1000e-004	4.1000e-004		3.9000e-004	3.9000e-004	0.0000	1.0409	1.0409	1.9000e-004	0.0000	1.0458
Total	**8.0000e-004**	**7.2500e-003**	**7.5700e-003**	**1.0000e-005**	**7.5000e-004**	**4.1000e-004**	**1.1600e-003**	**4.1000e-004**	**3.9000e-004**	**8.0000e-004**	**0.0000**	**1.0409**	**1.0409**	**1.9000e-004**	**0.0000**	**1.0458**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0956	0.0956	0.0000	0.0000	0.0956
Total	**4.0000e-005**	**3.0000e-005**	**3.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0956**	**0.0956**	**0.0000**	**0.0000**	**0.0956**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	7.2500e-003	7.5700e-003	1.0000e-005		4.1000e-004	4.1000e-004		3.9000e-004	3.9000e-004	0.0000	1.0409	1.0409	1.9000e-004	0.0000	1.0458
Total	**8.0000e-004**	**7.2500e-003**	**7.5700e-003**	**1.0000e-005**	**7.5000e-004**	**4.1000e-004**	**1.1600e-003**	**4.1000e-004**	**3.9000e-004**	**8.0000e-004**	**0.0000**	**1.0409**	**1.0409**	**1.9000e-004**	**0.0000**	**1.0458**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0956	0.0956	0.0000	0.0000	0.0956
Total	**4.0000e-005**	**3.0000e-005**	**3.5000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0956**	**0.0956**	**0.0000**	**0.0000**	**0.0956**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0388	0.3993	0.3632	5.7000e-004		0.0224	0.0224		0.0206	0.0206	0.0000	50.0410	50.0410	0.0162	0.0000	50.4456
Total	**0.0388**	**0.3993**	**0.3632**	**5.7000e-004**		**0.0224**	**0.0224**		**0.0206**	**0.0206**	**0.0000**	**50.0410**	**50.0410**	**0.0162**	**0.0000**	**50.4456**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1200e-003	0.1403	0.0348	3.7000e-004	9.1400e-003	2.8000e-004	9.4200e-003	2.6400e-003	2.7000e-004	2.9100e-003	0.0000	35.4012	35.4012	2.2400e-003	0.0000	35.4572
Worker	0.0156	0.0116	0.1307	4.0000e-004	0.0411	3.1000e-004	0.0415	0.0109	2.8000e-004	0.0112	0.0000	35.8373	35.8373	9.6000e-004	0.0000	35.8613
Total	**0.0198**	**0.1519**	**0.1655**	**7.7000e-004**	**0.0503**	**5.9000e-004**	**0.0509**	**0.0136**	**5.5000e-004**	**0.0141**	**0.0000**	**71.2385**	**71.2385**	**3.2000e-003**	**0.0000**	**71.3185**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0388	0.3993	0.3632	5.7000e-004		0.0224	0.0224		0.0206	0.0206	0.0000	50.0410	50.0410	0.0162	0.0000	50.4456
Total	**0.0388**	**0.3993**	**0.3632**	**5.7000e-004**		**0.0224**	**0.0224**		**0.0206**	**0.0206**	**0.0000**	**50.0410**	**50.0410**	**0.0162**	**0.0000**	**50.4456**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1200e-003	0.1403	0.0348	3.7000e-004	9.1400e-003	2.8000e-004	9.4200e-003	2.6400e-003	2.7000e-004	2.9100e-003	0.0000	35.4012	35.4012	2.2400e-003	0.0000	35.4572
Worker	0.0156	0.0116	0.1307	4.0000e-004	0.0411	3.1000e-004	0.0415	0.0109	2.8000e-004	0.0112	0.0000	35.8373	35.8373	9.6000e-004	0.0000	35.8613
Total	**0.0198**	**0.1519**	**0.1655**	**7.7000e-004**	**0.0503**	**5.9000e-004**	**0.0509**	**0.0136**	**5.5000e-004**	**0.0141**	**0.0000**	**71.2385**	**71.2385**	**3.2000e-003**	**0.0000**	**71.3185**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8000e-003**	**0.0168**	**0.0177**	**3.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.3481**	**2.3481**	**6.8000e-004**	**0.0000**	**2.3652**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.4000e-004	1.5700e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4301	0.4301	1.0000e-005	0.0000	0.4303
Total	**1.9000e-004**	**1.4000e-004**	**1.5700e-003**	**0.0000**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4301**	**0.4301**	**1.0000e-005**	**0.0000**	**0.4303**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8000e-003**	**0.0168**	**0.0177**	**3.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.3481**	**2.3481**	**6.8000e-004**	**0.0000**	**2.3652**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.4000e-004	1.5700e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4301	0.4301	1.0000e-005	0.0000	0.4303
Total	**1.9000e-004**	**1.4000e-004**	**1.5700e-003**	**0.0000**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4301**	**0.4301**	**1.0000e-005**	**0.0000**	**0.4303**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5733					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.5739**	**3.8200e-003**	**4.5400e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.3100e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3584	0.3584	1.0000e-005	0.0000	0.3586
Total	**1.6000e-004**	**1.2000e-004**	**1.3100e-003**	**0.0000**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3584**	**0.3584**	**1.0000e-005**	**0.0000**	**0.3586**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5733					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.5739**	**3.8200e-003**	**4.5400e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.3100e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3584	0.3584	1.0000e-005	0.0000	0.3586
Total	**1.6000e-004**	**1.2000e-004**	**1.3100e-003**	**0.0000**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3584**	**0.3584**	**1.0000e-005**	**0.0000**	**0.3586**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3735	2.0366	4.4176	0.0162	1.3265	0.0130	1.3395	0.3555	0.0121	0.3676	0.0000	1,498.530 2	1,498.530 2	0.0753	0.0000	1,500.413 1
Unmitigated	0.3735	2.0366	4.4176	0.0162	1.3265	0.0130	1.3395	0.3555	0.0121	0.3676	0.0000	1,498.530 2	1,498.530 2	0.0753	0.0000	1,500.413 1

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
Hotel	1,463.00	1,463.00	1463.00	3,490,968	3,490,968
Quality Restaurant	0.00	0.00	0.00		
Total	1,463.00	1,463.00	1,463.00	3,490,968	3,490,968

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Health Club	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Hotel	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Quality Restaurant	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	439.1449	439.1449	0.0181	3.7500e-003	440.7159
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	439.1449	439.1449	0.0181	3.7500e-003	440.7159
NaturalGas Mitigated	0.0195	0.1768	0.1485	1.0600e-003		0.0134	0.0134		0.0134	0.0134	0.0000	192.4569	192.4569	3.6900e-003	3.5300e-003	193.6006
NaturalGas Unmitigated	0.0195	0.1768	0.1485	1.0600e-003		0.0134	0.0134		0.0134	0.0134	0.0000	192.4569	192.4569	3.6900e-003	3.5300e-003	193.6006

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	12670	7.0000e-005	6.2000e-004	5.2000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6761	0.6761	1.0000e-005	1.0000e-005	0.6801
Hotel	2.82933e+006	0.0153	0.1387	0.1165	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	150.9837	150.9837	2.8900e-003	2.7700e-003	151.8810
Quality Restaurant	764508	4.1200e-003	0.0375	0.0315	2.2000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	40.7971	40.7971	7.8000e-004	7.5000e-004	41.0395
Total		**0.0195**	**0.1768**	**0.1485**	**1.0500e-003**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**192.4569**	**192.4569**	**3.6800e-003**	**3.5300e-003**	**193.6006**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	12670	7.0000e-005	6.2000e-004	5.2000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6761	0.6761	1.0000e-005	1.0000e-005	0.6801
Hotel	2.82933e+006	0.0153	0.1387	0.1165	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	150.9837	150.9837	2.8900e-003	2.7700e-003	151.8810
Quality Restaurant	764508	4.1200e-003	0.0375	0.0315	2.2000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	40.7971	40.7971	7.8000e-004	7.5000e-004	41.0395
Total		**0.0195**	**0.1768**	**0.1485**	**1.0500e-003**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**192.4569**	**192.4569**	**3.6800e-003**	**3.5300e-003**	**193.6006**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	329918	105.1189	4.3400e-003	9.0000e-004	105.4950
Health Club	7770	2.4757	1.0000e-004	2.0000e-005	2.4846
Hotel	894341	284.9564	0.0118	2.4300e-003	285.9758
Quality Restaurant	146236	46.5939	1.9200e-003	4.0000e-004	46.7606
Total		**439.1449**	**0.0181**	**3.7500e-003**	**440.7159**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	329918	105.1189	4.3400e-003	9.0000e-004	105.4950
Health Club	7770	2.4757	1.0000e-004	2.0000e-005	2.4846
Hotel	894341	284.9564	0.0118	2.4300e-003	285.9758
Quality Restaurant	146236	46.5939	1.9200e-003	4.0000e-004	46.7606
Total		**439.1449**	**0.0181**	**3.7500e-003**	**440.7159**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5022	4.0000e-005	4.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8700e-003	7.8700e-003	2.0000e-005	0.0000	8.3900e-003
Unmitigated	0.5022	4.0000e-005	4.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8700e-003	7.8700e-003	2.0000e-005	0.0000	8.3900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0573					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4445					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8700e-003	7.8700e-003	2.0000e-005	0.0000	8.3900e-003
Total	**0.5022**	**4.0000e-005**	**4.0500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.8700e-003**	**7.8700e-003**	**2.0000e-005**	**0.0000**	**8.3900e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0573					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4445					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8700e-003	7.8700e-003	2.0000e-005	0.0000	8.3900e-003
Total	**0.5022**	**4.0000e-005**	**4.0500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.8700e-003**	**7.8700e-003**	**2.0000e-005**	**0.0000**	**8.3900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	26.5603	0.1798	4.4300e-003	32.3752
Unmitigated	26.5603	0.1798	4.4300e-003	32.3752

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Health Club	0.0414002 / 0.0253743	0.2747	1.3600e-003	3.0000e-005	0.3189
Hotel	4.43918 / 0.493243	21.5715	0.1455	3.5900e-003	26.2778
Quality Restaurant	1.0047 / 0.0641296	4.7140	0.0329	8.1000e-004	5.7785
Total		**26.5603**	**0.1798**	**4.4300e-003**	**32.3752**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Health Club	0.0414002 / 0.0253743	0.2747	1.3600e-003	3.0000e-005	0.3189
Hotel	4.43918 / 0.493243	21.5715	0.1455	3.5900e-003	26.2778
Quality Restaurant	1.0047 / 0.0641296	4.7140	0.0329	8.1000e-004	5.7785
Total		**26.5603**	**0.1798**	**4.4300e-003**	**32.3752**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	20.8715	1.2335	0.0000	51.7083

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Health Club	3.99	0.8099	0.0479	0.0000	2.0066
Hotel	95.81	19.4486	1.1494	0.0000	48.1830
Quality Restaurant	3.02	0.6130	0.0362	0.0000	1.5188
Total		**20.8715**	**1.2335**	**0.0000**	**51.7083**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator		0.0000	0.0000	0.0000	0.0000
Health Club		0.0000	0.0000	0.0000	0.0000
Hotel		0.0000	0.0000	0.0000	0.0000
Quality Restaurant		0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

11469 Jefferson - Operations

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	138.00	Space	0.28	56,300.00	0
Health Club	0.70	1000sqft	0.02	700.00	0
Hotel	175.00	Room	0.50	117,987.00	0
Quality Restaurant	3.31	1000sqft	0.08	3,313.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See SWAPE comment regarding CO2 intensity factor.

Land Use - See SWAPE comment regarding parking and failure to model all proposed land uses.

Vehicle Trips - Consistent with the IS/MND's model.

Vehicle Emission Factors - See SWAPE comment regarding operational vehicle emission factors.

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Mitigation - Consistent with the IS/MND's model.

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	55,200.00	56,300.00
tblLandUse	LandUseSquareFeet	254,100.00	117,987.00
tblLandUse	LandUseSquareFeet	3,310.00	3,313.00
tblLandUse	LotAcreage	1.24	0.28
tblLandUse	LotAcreage	5.83	0.50
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	8.19	8.36
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	5.95	8.36
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	8.17	8.36
tblVehicleTrips	WD_TR	89.95	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					
2021	229.6016	10.9562	10.7455	0.0271	1.0239	0.4593	1.4832	0.4434	0.4227	0.8328	0.0000	2,723.8398	2,723.8398	0.4269	0.0000	2,734.5130
Maximum	**229.6016**	**10.9562**	**10.7455**	**0.0271**	**1.0239**	**0.4593**	**1.4832**	**0.4434**	**0.4227**	**0.8328**	**0.0000**	**2,723.8398**	**2,723.8398**	**0.4269**	**0.0000**	**2,734.5130**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	229.6016	10.9562	10.7455	0.0271	1.0239	0.4593	1.4832	0.4434	0.4227	0.8328	0.0000	2,723.8398	2,723.8398	0.4269	0.0000	2,734.5130
Maximum	**229.6016**	**10.9562**	**10.7455**	**0.0271**	**1.0239**	**0.4593**	**1.4832**	**0.4434**	**0.4227**	**0.8328**	**0.0000**	**2,723.8398**	**2,723.8398**	**0.4269**	**0.0000**	**2,734.5130**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Energy	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595
Mobile	2.2214	10.8617	25.2626	0.0927	7.4230	0.0712	7.4942	1.9861	0.0664	2.0525		9,444.5009	9,444.5009	0.4570		9,455.9259
Total	**5.0807**	**11.8307**	**26.1087**	**0.0985**	**7.4230**	**0.1449**	**7.5680**	**1.9861**	**0.1402**	**2.1263**		**10,607.0219**	**10,607.0219**	**0.4795**	**0.0213**	**10,625.3593**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Energy	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595
Mobile	2.2214	10.8617	25.2626	0.0927	7.4230	0.0712	7.4942	1.9861	0.0664	2.0525		9,444.5009	9,444.5009	0.4570		9,455.9259
Total	**5.0807**	**11.8307**	**26.1087**	**0.0985**	**7.4230**	**0.1449**	**7.5680**	**1.9861**	**0.1402**	**2.1263**		**10,607.0219**	**10,607.0219**	**0.4795**	**0.0213**	**10,625.3593**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Demolition	Demolition	2/9/2021	2/22/2021	5	10	
2	Site Preparation	Site Preparation	2/23/2021	2/23/2021	5	1	
3	Grading	Grading	2/24/2021	2/25/2021	5	2	
4	Building Construction	Building Construction	2/26/2021	7/15/2021	5	100	
5	Paving	Paving	7/16/2021	7/22/2021	5	5	
6	Architectural Coating	Architectural Coating	7/23/2021	7/29/2021	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.28

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 183,000; Non-Residential Outdoor: 61,000; Striped Parking Area: 3,378 (Architectural Coating – sqft)

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	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
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
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	75.00	29.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886		1,147.4338	1,147.4338	0.2138		1,152.7797
Total	**0.7965**	**7.2530**	**7.5691**	**0.0120**		**0.4073**	**0.4073**		**0.3886**	**0.3886**		**1,147.4338**	**1,147.4338**	**0.2138**		**1,152.7797**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0422	0.0274	0.3767	1.1100e-003	0.1118	8.2000e-004	0.1126	0.0296	7.6000e-004	0.0304		110.7403	110.7403	2.9800e-003		110.8148
Total	**0.0422**	**0.0274**	**0.3767**	**1.1100e-003**	**0.1118**	**8.2000e-004**	**0.1126**	**0.0296**	**7.6000e-004**	**0.0304**		**110.7403**	**110.7403**	**2.9800e-003**		**110.8148**

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	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797
Total	**0.7965**	**7.2530**	**7.5691**	**0.0120**		**0.4073**	**0.4073**		**0.3886**	**0.3886**	**0.0000**	**1,147.4338**	**1,147.4338**	**0.2138**		**1,152.7797**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0422	0.0274	0.3767	1.1100e-003	0.1118	8.2000e-004	0.1126	0.0296	7.6000e-004	0.0304		110.7403	110.7403	2.9800e-003		110.8148
Total	**0.0422**	**0.0274**	**0.3767**	**1.1100e-003**	**0.1118**	**8.2000e-004**	**0.1126**	**0.0296**	**7.6000e-004**	**0.0304**		**110.7403**	**110.7403**	**2.9800e-003**		**110.8148**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6403	7.8204	4.0274	9.7300e-003		0.2995	0.2995		0.2755	0.2755		942.5842	942.5842	0.3049		950.2055
Total	**0.6403**	**7.8204**	**4.0274**	**9.7300e-003**	**0.5303**	**0.2995**	**0.8297**	**0.0573**	**0.2755**	**0.3328**		**942.5842**	**942.5842**	**0.3049**		**950.2055**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0211	0.0137	0.1884	5.6000e-004	0.0559	4.1000e-004	0.0563	0.0148	3.8000e-004	0.0152		55.3702	55.3702	1.4900e-003		55.4074
Total	**0.0211**	**0.0137**	**0.1884**	**5.6000e-004**	**0.0559**	**4.1000e-004**	**0.0563**	**0.0148**	**3.8000e-004**	**0.0152**		**55.3702**	**55.3702**	**1.4900e-003**		**55.4074**

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6403	7.8204	4.0274	9.7300e-003		0.2995	0.2995		0.2755	0.2755	0.0000	942.5842	942.5842	0.3049		950.2055
Total	**0.6403**	**7.8204**	**4.0274**	**9.7300e-003**	**0.5303**	**0.2995**	**0.8297**	**0.0573**	**0.2755**	**0.3328**	**0.0000**	**942.5842**	**942.5842**	**0.3049**		**950.2055**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0211	0.0137	0.1884	5.6000e-004	0.0559	4.1000e-004	0.0563	0.0148	3.8000e-004	0.0152		55.3702	55.3702	1.4900e-003		55.4074
Total	**0.0211**	**0.0137**	**0.1884**	**5.6000e-004**	**0.0559**	**4.1000e-004**	**0.0563**	**0.0148**	**3.8000e-004**	**0.0152**		**55.3702**	**55.3702**	**1.4900e-003**		**55.4074**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886		1,147.4338	1,147.4338	0.2138		1,152.7797
Total	**0.7965**	**7.2530**	**7.5691**	**0.0120**	**0.7528**	**0.4073**	**1.1601**	**0.4138**	**0.3886**	**0.8024**		**1,147.4338**	**1,147.4338**	**0.2138**		**1,152.7797**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0422	0.0274	0.3767	1.1100e-003	0.1118	8.2000e-004	0.1126	0.0296	7.6000e-004	0.0304		110.7403	110.7403	2.9800e-003		110.8148
Total	**0.0422**	**0.0274**	**0.3767**	**1.1100e-003**	**0.1118**	**8.2000e-004**	**0.1126**	**0.0296**	**7.6000e-004**	**0.0304**		**110.7403**	**110.7403**	**2.9800e-003**		**110.8148**

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					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797
Total	**0.7965**	**7.2530**	**7.5691**	**0.0120**	**0.7528**	**0.4073**	**1.1601**	**0.4138**	**0.3886**	**0.8024**	**0.0000**	**1,147.4338**	**1,147.4338**	**0.2138**		**1,152.7797**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0422	0.0274	0.3767	1.1100e-003	0.1118	8.2000e-004	0.1126	0.0296	7.6000e-004	0.0304		110.7403	110.7403	2.9800e-003		110.8148
Total	**0.0422**	**0.0274**	**0.3767**	**1.1100e-003**	**0.1118**	**8.2000e-004**	**0.1126**	**0.0296**	**7.6000e-004**	**0.0304**		**110.7403**	**110.7403**	**2.9800e-003**		**110.8148**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**		**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0807	2.7659	0.6564	7.4000e-003	0.1856	5.5700e-003	0.1912	0.0534	5.3300e-003	0.0588		790.0716	790.0716	0.0478		791.2664
Worker	0.3166	0.2053	2.8254	8.3400e-003	0.8383	6.1700e-003	0.8445	0.2223	5.6800e-003	0.2280		830.5525	830.5525	0.0223		831.1109
Total	**0.3973**	**2.9712**	**3.4818**	**0.0157**	**1.0239**	**0.0117**	**1.0357**	**0.2758**	**0.0110**	**0.2868**		**1,620.6240**	**1,620.6240**	**0.0701**		**1,622.3772**

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	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**	**0.0000**	**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0807	2.7659	0.6564	7.4000e-003	0.1856	5.5700e-003	0.1912	0.0534	5.3300e-003	0.0588		790.0716	790.0716	0.0478		791.2664
Worker	0.3166	0.2053	2.8254	8.3400e-003	0.8383	6.1700e-003	0.8445	0.2223	5.6800e-003	0.2280		830.5525	830.5525	0.0223		831.1109
Total	**0.3973**	**2.9712**	**3.4818**	**0.0157**	**1.0239**	**0.0117**	**1.0357**	**0.2758**	**0.0110**	**0.2868**		**1,620.6240**	**1,620.6240**	**0.0701**		**1,622.3772**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286		1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**		**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0760	0.0493	0.6781	2.0000e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		199.3326	199.3326	5.3600e-003		199.4666
Total	**0.0760**	**0.0493**	**0.6781**	**2.0000e-003**	**0.2012**	**1.4800e-003**	**0.2027**	**0.0534**	**1.3600e-003**	**0.0547**		**199.3326**	**199.3326**	**5.3600e-003**		**199.4666**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286	0.0000	1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**	**0.0000**	**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0760	0.0493	0.6781	2.0000e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		199.3326	199.3326	5.3600e-003		199.4666
Total	**0.0760**	**0.0493**	**0.6781**	**2.0000e-003**	**0.2012**	**1.4800e-003**	**0.2027**	**0.0534**	**1.3600e-003**	**0.0547**		**199.3326**	**199.3326**	**5.3600e-003**		**199.4666**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	229.3194					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**229.5383**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222
Total	**0.0633**	**0.0411**	**0.5651**	**1.6700e-003**	**0.1677**	**1.2300e-003**	**0.1689**	**0.0445**	**1.1400e-003**	**0.0456**		**166.1105**	**166.1105**	**4.4700e-003**		**166.2222**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	229.3194					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**229.5383**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222
Total	**0.0633**	**0.0411**	**0.5651**	**1.6700e-003**	**0.1677**	**1.2300e-003**	**0.1689**	**0.0445**	**1.1400e-003**	**0.0456**		**166.1105**	**166.1105**	**4.4700e-003**		**166.2222**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2214	10.8617	25.2626	0.0927	7.4230	0.0712	7.4942	1.9861	0.0664	2.0525		9,444.500 9	9,444.500 9	0.4570		9,455.925 9
Unmitigated	2.2214	10.8617	25.2626	0.0927	7.4230	0.0712	7.4942	1.9861	0.0664	2.0525		9,444.500 9	9,444.500 9	0.4570		9,455.925 9

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
Hotel	1,463.00	1,463.00	1463.00	3,490,968	3,490,968
Quality Restaurant	0.00	0.00	0.00		
Total	1,463.00	1,463.00	1,463.00	3,490,968	3,490,968

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Health Club	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Hotel	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Quality Restaurant	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595
NaturalGas Unmitigated	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	34.7123	3.7000e-004	3.4000e-003	2.8600e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		4.0838	4.0838	8.0000e-005	7.0000e-005	4.1081
Hotel	7751.58	0.0836	0.7600	0.6384	4.5600e-003		0.0578	0.0578		0.0578	0.0578		911.9511	911.9511	0.0175	0.0167	917.3704
Quality Restaurant	2094.54	0.0226	0.2054	0.1725	1.2300e-003		0.0156	0.0156		0.0156	0.0156		246.4167	246.4167	4.7200e-003	4.5200e-003	247.8811
Total		**0.1066**	**0.9687**	**0.8137**	**5.8100e-003**		**0.0736**	**0.0736**		**0.0736**	**0.0736**		**1,162.4516**	**1,162.4516**	**0.0223**	**0.0213**	**1,169.3595**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0.0347123	3.7000e-004	3.4000e-003	2.8600e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		4.0838	4.0838	8.0000e-005	7.0000e-005	4.1081
Hotel	7.75158	0.0836	0.7600	0.6384	4.5600e-003		0.0578	0.0578		0.0578	0.0578		911.9511	911.9511	0.0175	0.0167	917.3704
Quality Restaurant	2.09454	0.0226	0.2054	0.1725	1.2300e-003		0.0156	0.0156		0.0156	0.0156		246.4167	246.4167	4.7200e-003	4.5200e-003	247.8811
Total		**0.1066**	**0.9687**	**0.8137**	**5.8100e-003**		**0.0736**	**0.0736**		**0.0736**	**0.0736**		**1,162.4516**	**1,162.4516**	**0.0223**	**0.0213**	**1,169.3595**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Unmitigated	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4355					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0100e-003	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Total	**2.7527**	**3.0000e-004**	**0.0324**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0694**	**0.0694**	**1.8000e-004**		**0.0740**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4355					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0100e-003	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Total	**2.7527**	**3.0000e-004**	**0.0324**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0694**	**0.0694**	**1.8000e-004**		**0.0740**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

11469 Jefferson - Operations
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	138.00	Space	0.28	56,300.00	0
Health Club	0.70	1000sqft	0.02	700.00	0
Hotel	175.00	Room	0.50	117,987.00	0
Quality Restaurant	3.31	1000sqft	0.08	3,313.00	0

1.2 Other Project Characteristics

Urbanization Urban **Wind Speed (m/s)** 2.2 **Precipitation Freq (Days)** 31

Climate Zone 11 **Operational Year** 2022

Utility Company Southern California Edison

CO2 Intensity (lb/MWhr) 702.44 **CH4 Intensity (lb/MWhr)** 0.029 **N2O Intensity (lb/MWhr)** 0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See SWAPE comment regarding CO2 intensity factor.

Land Use - See SWAPE comment regarding parking and failure to model all proposed land uses.

Vehicle Trips - Consistent with the IS/MND's model.

Vehicle Emission Factors - See SWAPE comment regarding operational vehicle emission factors.

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Mitigation - Consistent with the IS/MND's model.

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	55,200.00	56,300.00
tblLandUse	LandUseSquareFeet	254,100.00	117,987.00
tblLandUse	LandUseSquareFeet	3,310.00	3,313.00
tblLandUse	LotAcreage	1.24	0.28
tblLandUse	LotAcreage	5.83	0.50
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	8.19	8.36
tblVehicleTrips	ST_TR	94.36	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	5.95	8.36
tblVehicleTrips	SU_TR	72.16	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	8.17	8.36
tblVehicleTrips	WD_TR	89.95	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					
2021	229.6075	10.9669	10.5372	0.0264	1.0239	0.4595	1.4834	0.4434	0.4229	0.8328	0.0000	2,647.1622	2,647.1622	0.4290	0.0000	2,657.8860
Maximum	**229.6075**	**10.9669**	**10.5372**	**0.0264**	**1.0239**	**0.4595**	**1.4834**	**0.4434**	**0.4229**	**0.8328**	**0.0000**	**2,647.1622**	**2,647.1622**	**0.4290**	**0.0000**	**2,657.8860**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	229.6075	10.9669	10.5372	0.0264	1.0239	0.4595	1.4834	0.4434	0.4229	0.8328	0.0000	2,647.1622	2,647.1622	0.4290	0.0000	2,657.8860
Maximum	**229.6075**	**10.9669**	**10.5372**	**0.0264**	**1.0239**	**0.4595**	**1.4834**	**0.4434**	**0.4229**	**0.8328**	**0.0000**	**2,647.1622**	**2,647.1622**	**0.4290**	**0.0000**	**2,657.8860**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Energy	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595
Mobile	2.1043	10.9950	23.9828	0.0877	7.4230	0.0717	7.4948	1.9861	0.0669	2.0531		8,935.1246	8,935.1246	0.4611		8,946.6527
Total	**4.9635**	**11.9640**	**24.8289**	**0.0935**	**7.4230**	**0.1455**	**7.5685**	**1.9861**	**0.1407**	**2.1268**		**10,097.6456**	**10,097.6456**	**0.4836**	**0.0213**	**10,116.0861**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Energy	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595
Mobile	2.1043	10.9950	23.9828	0.0877	7.4230	0.0717	7.4948	1.9861	0.0669	2.0531		8,935.1246	8,935.1246	0.4611		8,946.6527
Total	**4.9635**	**11.9640**	**24.8289**	**0.0935**	**7.4230**	**0.1455**	**7.5685**	**1.9861**	**0.1407**	**2.1268**		**10,097.6456**	**10,097.6456**	**0.4836**	**0.0213**	**10,116.0861**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Demolition	Demolition	2/9/2021	2/22/2021	5	10	
2	Site Preparation	Site Preparation	2/23/2021	2/23/2021	5	1	
3	Grading	Grading	2/24/2021	2/25/2021	5	2	
4	Building Construction	Building Construction	2/26/2021	7/15/2021	5	100	
5	Paving	Paving	7/16/2021	7/22/2021	5	5	
6	Architectural Coating	Architectural Coating	7/23/2021	7/29/2021	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.28

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 183,000; Non-Residential Outdoor: 61,000; Striped Parking Area: 3,378 (Architectural Coating – sqft)

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	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
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
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	75.00	29.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886		1,147.433 8	1,147.433 8	0.2138		1,152.779 7
Total	**0.7965**	**7.2530**	**7.5691**	**0.0120**		**0.4073**	**0.4073**		**0.3886**	**0.3886**		**1,147.433 8**	**1,147.433 8**	**0.2138**		**1,152.779 7**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0461	0.0300	0.3385	1.0400e-003	0.1118	8.2000e-004	0.1126	0.0296	7.6000e-004	0.0304		103.5668	103.5668	2.7800e-003		103.6362
Total	**0.0461**	**0.0300**	**0.3385**	**1.0400e-003**	**0.1118**	**8.2000e-004**	**0.1126**	**0.0296**	**7.6000e-004**	**0.0304**		**103.5668**	**103.5668**	**2.7800e-003**		**103.6362**

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	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797
Total	**0.7965**	**7.2530**	**7.5691**	**0.0120**		**0.4073**	**0.4073**		**0.3886**	**0.3886**	**0.0000**	**1,147.4338**	**1,147.4338**	**0.2138**		**1,152.7797**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0461	0.0300	0.3385	1.0400e-003	0.1118	8.2000e-004	0.1126	0.0296	7.6000e-004	0.0304		103.5668	103.5668	2.7800e-003		103.6362
Total	**0.0461**	**0.0300**	**0.3385**	**1.0400e-003**	**0.1118**	**8.2000e-004**	**0.1126**	**0.0296**	**7.6000e-004**	**0.0304**		**103.5668**	**103.5668**	**2.7800e-003**		**103.6362**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6403	7.8204	4.0274	9.7300e-003		0.2995	0.2995		0.2755	0.2755		942.5842	942.5842	0.3049		950.2055
Total	**0.6403**	**7.8204**	**4.0274**	**9.7300e-003**	**0.5303**	**0.2995**	**0.8297**	**0.0573**	**0.2755**	**0.3328**		**942.5842**	**942.5842**	**0.3049**		**950.2055**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0150	0.1693	5.2000e-004	0.0559	4.1000e-004	0.0563	0.0148	3.8000e-004	0.0152		51.7834	51.7834	1.3900e-003		51.8181
Total	**0.0231**	**0.0150**	**0.1693**	**5.2000e-004**	**0.0559**	**4.1000e-004**	**0.0563**	**0.0148**	**3.8000e-004**	**0.0152**		**51.7834**	**51.7834**	**1.3900e-003**		**51.8181**

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					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.6403	7.8204	4.0274	9.7300e-003		0.2995	0.2995		0.2755	0.2755	0.0000	942.5842	942.5842	0.3049		950.2055
Total	**0.6403**	**7.8204**	**4.0274**	**9.7300e-003**	**0.5303**	**0.2995**	**0.8297**	**0.0573**	**0.2755**	**0.3328**	**0.0000**	**942.5842**	**942.5842**	**0.3049**		**950.2055**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0150	0.1693	5.2000e-004	0.0559	4.1000e-004	0.0563	0.0148	3.8000e-004	0.0152		51.7834	51.7834	1.3900e-003		51.8181
Total	**0.0231**	**0.0150**	**0.1693**	**5.2000e-004**	**0.0559**	**4.1000e-004**	**0.0563**	**0.0148**	**3.8000e-004**	**0.0152**		**51.7834**	**51.7834**	**1.3900e-003**		**51.8181**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886		1,147.4338	1,147.4338	0.2138		1,152.7797
Total	**0.7965**	**7.2530**	**7.5691**	**0.0120**	**0.7528**	**0.4073**	**1.1601**	**0.4138**	**0.3886**	**0.8024**		**1,147.4338**	**1,147.4338**	**0.2138**		**1,152.7797**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0461	0.0300	0.3385	1.0400e-003	0.1118	8.2000e-004	0.1126	0.0296	7.6000e-004	0.0304		103.5668	103.5668	2.7800e-003		103.6362
Total	**0.0461**	**0.0300**	**0.3385**	**1.0400e-003**	**0.1118**	**8.2000e-004**	**0.1126**	**0.0296**	**7.6000e-004**	**0.0304**		**103.5668**	**103.5668**	**2.7800e-003**		**103.6362**

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					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.7965	7.2530	7.5691	0.0120		0.4073	0.4073		0.3886	0.3886	0.0000	1,147.4338	1,147.4338	0.2138		1,152.7797
Total	**0.7965**	**7.2530**	**7.5691**	**0.0120**	**0.7528**	**0.4073**	**1.1601**	**0.4138**	**0.3886**	**0.8024**	**0.0000**	**1,147.4338**	**1,147.4338**	**0.2138**		**1,152.7797**

3.4 Grading - 2021

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0461	0.0300	0.3385	1.0400e-003	0.1118	8.2000e-004	0.1126	0.0296	7.6000e-004	0.0304		103.5668	103.5668	2.7800e-003		103.6362
Total	**0.0461**	**0.0300**	**0.3385**	**1.0400e-003**	**0.1118**	**8.2000e-004**	**0.1126**	**0.0296**	**7.6000e-004**	**0.0304**		**103.5668**	**103.5668**	**2.7800e-003**		**103.6362**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**		**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0849	2.7571	0.7345	7.1900e-003	0.1856	5.7500e-003	0.1914	0.0534	5.5000e-003	0.0589		767.1956	767.1956	0.0513		768.4788
Worker	0.3459	0.2248	2.5391	7.7900e-003	0.8383	6.1700e-003	0.8445	0.2223	5.6800e-003	0.2280		776.7509	776.7509	0.0208		777.2713
Total	**0.4308**	**2.9819**	**3.2735**	**0.0150**	**1.0239**	**0.0119**	**1.0358**	**0.2758**	**0.0112**	**0.2869**		**1,543.9465**	**1,543.9465**	**0.0722**		**1,545.7502**

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	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**	**0.0000**	**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0849	2.7571	0.7345	7.1900e-003	0.1856	5.7500e-003	0.1914	0.0534	5.5000e-003	0.0589		767.1956	767.1956	0.0513		768.4788
Worker	0.3459	0.2248	2.5391	7.7900e-003	0.8383	6.1700e-003	0.8445	0.2223	5.6800e-003	0.2280		776.7509	776.7509	0.0208		777.2713
Total	**0.4308**	**2.9819**	**3.2735**	**0.0150**	**1.0239**	**0.0119**	**1.0358**	**0.2758**	**0.0112**	**0.2869**		**1,543.9465**	**1,543.9465**	**0.0722**		**1,545.7502**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286		1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**		**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0830	0.0539	0.6094	1.8700e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		186.4202	186.4202	5.0000e-003		186.5451
Total	**0.0830**	**0.0539**	**0.6094**	**1.8700e-003**	**0.2012**	**1.4800e-003**	**0.2027**	**0.0534**	**1.3600e-003**	**0.0547**		**186.4202**	**186.4202**	**5.0000e-003**		**186.5451**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286	0.0000	1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**	**0.0000**	**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0830	0.0539	0.6094	1.8700e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		186.4202	186.4202	5.0000e-003		186.5451
Total	**0.0830**	**0.0539**	**0.6094**	**1.8700e-003**	**0.2012**	**1.4800e-003**	**0.2027**	**0.0534**	**1.3600e-003**	**0.0547**		**186.4202**	**186.4202**	**5.0000e-003**		**186.5451**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	229.3194					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**229.5383**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0692	0.0450	0.5078	1.5600e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		155.3502	155.3502	4.1600e-003		155.4543
Total	**0.0692**	**0.0450**	**0.5078**	**1.5600e-003**	**0.1677**	**1.2300e-003**	**0.1689**	**0.0445**	**1.1400e-003**	**0.0456**		**155.3502**	**155.3502**	**4.1600e-003**		**155.4543**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	229.3194					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**229.5383**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0692	0.0450	0.5078	1.5600e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		155.3502	155.3502	4.1600e-003		155.4543
Total	**0.0692**	**0.0450**	**0.5078**	**1.5600e-003**	**0.1677**	**1.2300e-003**	**0.1689**	**0.0445**	**1.1400e-003**	**0.0456**		**155.3502**	**155.3502**	**4.1600e-003**		**155.4543**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Mitigated	2.1043	10.9950	23.9828	0.0877	7.4230	0.0717	7.4948	1.9861	0.0669	2.0531		8,935.1246	8,935.1246	0.4611		8,946.6527
Unmitigated	2.1043	10.9950	23.9828	0.0877	7.4230	0.0717	7.4948	1.9861	0.0669	2.0531		8,935.1246	8,935.1246	0.4611		8,946.6527

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Health Club	0.00	0.00	0.00		
Hotel	1,463.00	1,463.00	1463.00	3,490,968	3,490,968
Quality Restaurant	0.00	0.00	0.00		
Total	1,463.00	1,463.00	1,463.00	3,490,968	3,490,968

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Health Club	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Hotel	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Quality Restaurant	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595
NaturalGas Unmitigated	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	34.7123	3.7000e-004	3.4000e-003	2.8600e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		4.0838	4.0838	8.0000e-005	7.0000e-005	4.1081
Hotel	7751.58	0.0836	0.7600	0.6384	4.5600e-003		0.0578	0.0578		0.0578	0.0578		911.9511	911.9511	0.0175	0.0167	917.3704
Quality Restaurant	2094.54	0.0226	0.2054	0.1725	1.2300e-003		0.0156	0.0156		0.0156	0.0156		246.4167	246.4167	4.7200e-003	4.5200e-003	247.8811
Total		**0.1066**	**0.9687**	**0.8137**	**5.8100e-003**		**0.0736**	**0.0736**		**0.0736**	**0.0736**		**1,162.4516**	**1,162.4516**	**0.0223**	**0.0213**	**1,169.3595**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0.0347123	3.7000e-004	3.4000e-003	2.8600e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		4.0838	4.0838	8.0000e-005	7.0000e-005	4.1081
Hotel	7.75158	0.0836	0.7600	0.6384	4.5600e-003		0.0578	0.0578		0.0578	0.0578		911.9511	911.9511	0.0175	0.0167	917.3704
Quality Restaurant	2.09454	0.0226	0.2054	0.1725	1.2300e-003		0.0156	0.0156		0.0156	0.0156		246.4167	246.4167	4.7200e-003	4.5200e-003	247.8811
Total		**0.1066**	**0.9687**	**0.8137**	**5.8100e-003**		**0.0736**	**0.0736**		**0.0736**	**0.0736**		**1,162.4516**	**1,162.4516**	**0.0223**	**0.0213**	**1,169.3595**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Unmitigated	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4355					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0100e-003	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Total	**2.7527**	**3.0000e-004**	**0.0324**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0694**	**0.0694**	**1.8000e-004**		**0.0740**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4355					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0100e-003	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Total	**2.7527**	**3.0000e-004**	**0.0324**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0694**	**0.0694**	**1.8000e-004**		**0.0740**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

11469 Jefferson - Construction

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	138.00	Space	0.28	56,300.00	0
Health Club	0.70	1000sqft	0.02	700.00	0
Hotel	175.00	Room	0.50	117,987.00	0
Quality Restaurant	3.31	1000sqft	0.08	3,313.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the IS/MND's model.

Land Use - See SWAPE comment regarding parking and failure to model all proposed land uses.

Construction Phase - See SWAPE comment regarding constructuion schedule and number of days per week,

Off-road Equipment - See SWAPE comment regarding construction equipment unit amounts and usage hours.

Trips and VMT - See SWAPE comment regarding worker, vendor, and hauling trips.

Demolition -

Grading - See SWAPE comment regarding material export.

Construction Off-road Equipment Mitigation - Consistent with the DEIR's model.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
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
tblGrading	MaterialExported	0.00	43,836.00
tblLandUse	LandUseSquareFeet	55,200.00	56,300.00
tblLandUse	LandUseSquareFeet	254,100.00	117,987.00
tblLandUse	LandUseSquareFeet	3,310.00	3,313.00
tblLandUse	LotAcreage	1.24	0.28
tblLandUse	LotAcreage	5.83	0.50
tblTripsAndVMT	HaulingTripNumber	0.00	5,044.00

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					
2020	21.7234	753.5728	156.4009	2.1378	51.2224	2.8718	54.0942	13.9401	2.7462	16.6862	0.0000	230,963.8803	230,963.8803	15.6343	0.0000	231,354.7366
2021	229.6016	10.9562	10.7455	0.0271	1.0239	0.4593	1.4832	0.2758	0.4227	0.6985	0.0000	2,723.8398	2,723.8398	0.4269	0.0000	2,734.5130
Maximum	**229.6016**	**753.5728**	**156.4009**	**2.1378**	**51.2224**	**2.8718**	**54.0942**	**13.9401**	**2.7462**	**16.6862**	**0.0000**	**230,963.8803**	**230,963.8803**	**15.6343**	**0.0000**	**231,354.7366**

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					
2020	20.9887	746.2746	156.6292	2.1378	51.2224	2.4223	53.6447	13.9401	2.3182	16.2582	0.0000	230,963.8803	230,963.8803	15.6343	0.0000	231,354.7366
2021	229.4124	3.5764	11.2079	0.0271	1.0239	0.0304	1.0543	0.2758	0.0296	0.3054	0.0000	2,723.8398	2,723.8398	0.4269	0.0000	2,734.5130
Maximum	**229.4124**	**746.2746**	**156.6292**	**2.1378**	**51.2224**	**2.4223**	**53.6447**	**13.9401**	**2.3182**	**16.2582**	**0.0000**	**230,963.8803**	**230,963.8803**	**15.6343**	**0.0000**	**231,354.7366**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.37	1.92	-0.41	0.00	0.00	26.37	1.58	0.00	25.91	4.72	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Energy	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595
Mobile	2.6194	12.6894	28.7558	0.1046	8.3224	0.0806	8.4030	2.2268	0.0751	2.3019		10,658.9230	10,658.9230	0.5222		10,671.9771
Total	**5.4787**	**13.6584**	**29.6019**	**0.1104**	**8.3224**	**0.1543**	**8.4767**	**2.2268**	**0.1489**	**2.3756**		**11,821.4440**	**11,821.4440**	**0.5446**	**0.0213**	**11,841.4106**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Energy	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595
Mobile	2.6194	12.6894	28.7558	0.1046	8.3224	0.0806	8.4030	2.2268	0.0751	2.3019		10,658.9230	10,658.9230	0.5222		10,671.9771
Total	**5.4787**	**13.6584**	**29.6019**	**0.1104**	**8.3224**	**0.1543**	**8.4767**	**2.2268**	**0.1489**	**2.3756**		**11,821.4440**	**11,821.4440**	**0.5446**	**0.0213**	**11,841.4106**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Demolition	Demolition	5/4/2020	5/15/2020	5	10	
2	Excavation	Grading	5/16/2020	5/19/2020	5	2	
3	Building Construction	Building Construction	5/20/2020	10/6/2020	5	100	
4	Foundation	Building Construction	10/7/2020	2/23/2021	5	100	
5	Continuous Concrete Pour	Building Construction	2/24/2021	7/13/2021	5	100	
6	Paving	Paving	7/14/2021	7/20/2021	5	5	
7	Architectural Coating	Architectural Coating	7/21/2021	7/27/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.28

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 183,000; Non-Residential Outdoor: 61,000; Striped Parking Area: 3,378 (Architectural Coating – sqft)

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	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Excavation	Concrete/Industrial Saws	1	8.00	81	0.73
Excavation	Rubber Tired Dozers	1	1.00	247	0.40
Excavation	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Foundation	Cranes	1	4.00	231	0.29
Foundation	Forklifts	2	6.00	89	0.20
Foundation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Continuous Concrete Pour	Cranes	1	4.00	231	0.29
Continuous Concrete Pour	Forklifts	2	6.00	89	0.20
Continuous Concrete Pour	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
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
Demolition	4	10.00	0.00	155.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	4	10.00	0.00	5,480.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	75.00	29.00	5,044.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundation	5	75.00	29.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Continuous Concrete Pour	5	75.00	29.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	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

3.2 Demolition - 2020

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					3.3468	0.0000	3.3468	0.5067	0.0000	0.5067			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.8674**	**7.8729**	**7.6226**	**0.0120**	**3.3468**	**0.4672**	**3.8140**	**0.5067**	**0.4457**	**0.9524**		**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.2 Demolition - 2020

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	0.1177	4.2182	0.8393	0.0120	0.2709	0.0136	0.2845	0.0742	0.0130	0.0872		1,299.410 3	1,299.410 3	0.0872		1,301.590 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0452	0.0304	0.4088	1.1500e-003	0.1118	8.5000e-004	0.1126	0.0296	7.8000e-004	0.0304		114.4418	114.4418	3.2900e-003		114.5240
Total	**0.1630**	**4.2486**	**1.2481**	**0.0132**	**0.3826**	**0.0145**	**0.3971**	**0.1039**	**0.0138**	**0.1177**		**1,413.852 0**	**1,413.852 0**	**0.0905**		**1,416.114 2**

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					3.3468	0.0000	3.3468	0.5067	0.0000	0.5067			0.0000			0.0000
Off-Road	0.1326	0.5747	7.8509	0.0120		0.0177	0.0177		0.0177	0.0177	0.0000	1,147.235 2	1,147.235 2	0.2169		1,152.657 8
Total	**0.1326**	**0.5747**	**7.8509**	**0.0120**	**3.3468**	**0.0177**	**3.3645**	**0.5067**	**0.0177**	**0.5244**	**0.0000**	**1,147.235 2**	**1,147.235 2**	**0.2169**		**1,152.657 8**

3.2 Demolition - 2020

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	0.1177	4.2182	0.8393	0.0120	0.2709	0.0136	0.2845	0.0742	0.0130	0.0872		1,299.4103	1,299.4103	0.0872		1,301.5902
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0452	0.0304	0.4088	1.1500e-003	0.1118	8.5000e-004	0.1126	0.0296	7.8000e-004	0.0304		114.4418	114.4418	3.2900e-003		114.5240
Total	**0.1630**	**4.2486**	**1.2481**	**0.0132**	**0.3826**	**0.0145**	**0.3971**	**0.1039**	**0.0138**	**0.1177**		**1,413.8520**	**1,413.8520**	**0.0905**		**1,416.1142**

3.3 Excavation - 2020

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					3.2315	0.0000	3.2315	0.7891	0.0000	0.7891			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.8674**	**7.8729**	**7.6226**	**0.0120**	**3.2315**	**0.4672**	**3.6987**	**0.7891**	**0.4457**	**1.2348**		**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.3 Excavation - 2020

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	20.8108	745.6695	148.3695	2.1246	47.8792	2.4037	50.2829	13.1213	2.2997	15.4210		229,702.2033	229,702.2033	15.4141		230,087.5548
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0452	0.0304	0.4088	1.1500e-003	0.1118	8.5000e-004	0.1126	0.0296	7.8000e-004	0.0304		114.4418	114.4418	3.2900e-003		114.5240
Total	**20.8560**	**745.6999**	**148.7783**	**2.1258**	**47.9910**	**2.4046**	**50.3955**	**13.1510**	**2.3005**	**15.4514**		**229,816.6451**	**229,816.6451**	**15.4174**		**230,202.0788**

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					3.2315	0.0000	3.2315	0.7891	0.0000	0.7891			0.0000			0.0000
Off-Road	0.1326	0.5747	7.8509	0.0120		0.0177	0.0177		0.0177	0.0177	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.1326**	**0.5747**	**7.8509**	**0.0120**	**3.2315**	**0.0177**	**3.2491**	**0.7891**	**0.0177**	**0.8068**	**0.0000**	**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.3 Excavation - 2020

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	20.8108	745.6695	148.3695	2.1246	47.8792	2.4037	50.2829	13.1213	2.2997	15.4210		229,702.2033	229,702.2033	15.4141		230,087.5548
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0452	0.0304	0.4088	1.1500e-003	0.1118	8.5000e-004	0.1126	0.0296	7.8000e-004	0.0304		114.4418	114.4418	3.2900e-003		114.5240
Total	**20.8560**	**745.6999**	**148.7783**	**2.1258**	**47.9910**	**2.4046**	**50.3955**	**13.1510**	**2.3005**	**15.4514**		**229,816.6451**	**229,816.6451**	**15.4174**		**230,202.0788**

3.4 Building Construction - 2020

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	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.8617**	**8.8523**	**7.3875**	**0.0114**		**0.5224**	**0.5224**		**0.4806**	**0.4806**		**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

3.4 Building Construction - 2020

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	0.3831	13.7269	2.7313	0.0391	0.8814	0.0443	0.9257	0.2416	0.0423	0.2839		4,228.532 5	4,228.532 5	0.2838		4,235.626 4
Vendor	0.0952	3.0431	0.7246	7.4600e-003	0.1856	0.0151	0.2007	0.0534	0.0144	0.0679		795.9005	795.9005	0.0500		797.1498
Worker	0.3393	0.2281	3.0661	8.6200e-003	0.8383	6.3600e-003	0.8447	0.2223	5.8600e-003	0.2282		858.3131	858.3131	0.0247		858.9300
Total	**0.8177**	**16.9981**	**6.5221**	**0.0552**	**1.9053**	**0.0657**	**1.9710**	**0.5173**	**0.0626**	**0.5799**		**5,882.746 1**	**5,882.746 1**	**0.3584**		**5,891.706 2**

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	0.1397	0.6052	7.7261	0.0114		0.0186	0.0186		0.0186	0.0186	0.0000	1,102.978 1	1,102.978 1	0.3567		1,111.896 2
Total	**0.1397**	**0.6052**	**7.7261**	**0.0114**		**0.0186**	**0.0186**		**0.0186**	**0.0186**	**0.0000**	**1,102.978 1**	**1,102.978 1**	**0.3567**		**1,111.896 2**

3.4 Building Construction - 2020

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	0.3831	13.7269	2.7313	0.0391	0.8814	0.0443	0.9257	0.2416	0.0423	0.2839		4,228.532 5	4,228.532 5	0.2838		4,235.626 4
Vendor	0.0952	3.0431	0.7246	7.4600e-003	0.1856	0.0151	0.2007	0.0534	0.0144	0.0679		795.9005	795.9005	0.0500		797.1498
Worker	0.3393	0.2281	3.0661	8.6200e-003	0.8383	6.3600e-003	0.8447	0.2223	5.8600e-003	0.2282		858.3131	858.3131	0.0247		858.9300
Total	**0.8177**	**16.9981**	**6.5221**	**0.0552**	**1.9053**	**0.0657**	**1.9710**	**0.5173**	**0.0626**	**0.5799**		**5,882.746 1**	**5,882.746 1**	**0.3584**		**5,891.706 2**

3.5 Foundation - 2020

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	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.978 1	1,102.978 1	0.3567		1,111.896 2
Total	**0.8617**	**8.8523**	**7.3875**	**0.0114**		**0.5224**	**0.5224**		**0.4806**	**0.4806**		**1,102.978 1**	**1,102.978 1**	**0.3567**		**1,111.896 2**

3.5 Foundation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0952	3.0431	0.7246	7.4600e-003	0.1856	0.0151	0.2007	0.0534	0.0144	0.0679		795.9005	795.9005	0.0500		797.1498
Worker	0.3393	0.2281	3.0661	8.6200e-003	0.8383	6.3600e-003	0.8447	0.2223	5.8600e-003	0.2282		858.3131	858.3131	0.0247		858.9300
Total	**0.4346**	**3.2712**	**3.7908**	**0.0161**	**1.0239**	**0.0214**	**1.0454**	**0.2758**	**0.0203**	**0.2960**		**1,654.2136**	**1,654.2136**	**0.0747**		**1,656.0798**

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	0.1397	0.6052	7.7261	0.0114		0.0186	0.0186		0.0186	0.0186	0.0000	1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.1397**	**0.6052**	**7.7261**	**0.0114**		**0.0186**	**0.0186**		**0.0186**	**0.0186**	**0.0000**	**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

3.5 Foundation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0952	3.0431	0.7246	7.4600e-003	0.1856	0.0151	0.2007	0.0534	0.0144	0.0679		795.9005	795.9005	0.0500		797.1498
Worker	0.3393	0.2281	3.0661	8.6200e-003	0.8383	6.3600e-003	0.8447	0.2223	5.8600e-003	0.2282		858.3131	858.3131	0.0247		858.9300
Total	**0.4346**	**3.2712**	**3.7908**	**0.0161**	**1.0239**	**0.0214**	**1.0454**	**0.2758**	**0.0203**	**0.2960**		**1,654.2136**	**1,654.2136**	**0.0747**		**1,656.0798**

3.5 Foundation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**		**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.5 Foundation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0807	2.7659	0.6564	7.4000e-003	0.1856	5.5700e-003	0.1912	0.0534	5.3300e-003	0.0588		790.0716	790.0716	0.0478		791.2664
Worker	0.3166	0.2053	2.8254	8.3400e-003	0.8383	6.1700e-003	0.8445	0.2223	5.6800e-003	0.2280		830.5525	830.5525	0.0223		831.1109
Total	**0.3973**	**2.9712**	**3.4818**	**0.0157**	**1.0239**	**0.0117**	**1.0357**	**0.2758**	**0.0110**	**0.2868**		**1,620.6240**	**1,620.6240**	**0.0701**		**1,622.3772**

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	0.1397	0.6052	7.7261	0.0114		0.0186	0.0186		0.0186	0.0186	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.1397**	**0.6052**	**7.7261**	**0.0114**		**0.0186**	**0.0186**		**0.0186**	**0.0186**	**0.0000**	**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.5 Foundation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0807	2.7659	0.6564	7.4000e-003	0.1856	5.5700e-003	0.1912	0.0534	5.3300e-003	0.0588		790.0716	790.0716	0.0478		791.2664
Worker	0.3166	0.2053	2.8254	8.3400e-003	0.8383	6.1700e-003	0.8445	0.2223	5.6800e-003	0.2280		830.5525	830.5525	0.0223		831.1109
Total	**0.3973**	**2.9712**	**3.4818**	**0.0157**	**1.0239**	**0.0117**	**1.0357**	**0.2758**	**0.0110**	**0.2868**		**1,620.6240**	**1,620.6240**	**0.0701**		**1,622.3772**

3.6 Continuous Concrete Pour - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**		**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.6 Continuous Concrete Pour - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0807	2.7659	0.6564	7.4000e-003	0.1856	5.5700e-003	0.1912	0.0534	5.3300e-003	0.0588		790.0716	790.0716	0.0478		791.2664
Worker	0.3166	0.2053	2.8254	8.3400e-003	0.8383	6.1700e-003	0.8445	0.2223	5.6800e-003	0.2280		830.5525	830.5525	0.0223		831.1109
Total	**0.3973**	**2.9712**	**3.4818**	**0.0157**	**1.0239**	**0.0117**	**1.0357**	**0.2758**	**0.0110**	**0.2868**		**1,620.6240**	**1,620.6240**	**0.0701**		**1,622.3772**

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	0.1397	0.6052	7.7261	0.0114		0.0186	0.0186		0.0186	0.0186	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.1397**	**0.6052**	**7.7261**	**0.0114**		**0.0186**	**0.0186**		**0.0186**	**0.0186**	**0.0000**	**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.6 Continuous Concrete Pour - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0807	2.7659	0.6564	7.4000e-003	0.1856	5.5700e-003	0.1912	0.0534	5.3300e-003	0.0588		790.0716	790.0716	0.0478		791.2664
Worker	0.3166	0.2053	2.8254	8.3400e-003	0.8383	6.1700e-003	0.8445	0.2223	5.6800e-003	0.2280		830.5525	830.5525	0.0223		831.1109
Total	**0.3973**	**2.9712**	**3.4818**	**0.0157**	**1.0239**	**0.0117**	**1.0357**	**0.2758**	**0.0110**	**0.2868**		**1,620.6240**	**1,620.6240**	**0.0701**		**1,622.3772**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286		1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**		**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0760	0.0493	0.6781	2.0000e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		199.3326	199.3326	5.3600e-003		199.4666
Total	**0.0760**	**0.0493**	**0.6781**	**2.0000e-003**	**0.2012**	**1.4800e-003**	**0.2027**	**0.0534**	**1.3600e-003**	**0.0547**		**199.3326**	**199.3326**	**5.3600e-003**		**199.4666**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1119	0.4851	6.9028	0.0113		0.0149	0.0149		0.0149	0.0149	0.0000	1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.1119**	**0.4851**	**6.9028**	**0.0113**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0760	0.0493	0.6781	2.0000e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		199.3326	199.3326	5.3600e-003		199.4666
Total	**0.0760**	**0.0493**	**0.6781**	**2.0000e-003**	**0.2012**	**1.4800e-003**	**0.2027**	**0.0534**	**1.3600e-003**	**0.0547**		**199.3326**	**199.3326**	**5.3600e-003**		**199.4666**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	229.3194					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**229.5383**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222
Total	**0.0633**	**0.0411**	**0.5651**	**1.6700e-003**	**0.1677**	**1.2300e-003**	**0.1689**	**0.0445**	**1.1400e-003**	**0.0456**		**166.1105**	**166.1105**	**4.4700e-003**		**166.2222**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	229.3194					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	0.0193		281.9309
Total	**229.3491**	**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**	**0.0193**		**281.9309**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0411	0.5651	1.6700e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		166.1105	166.1105	4.4700e-003		166.2222
Total	**0.0633**	**0.0411**	**0.5651**	**1.6700e-003**	**0.1677**	**1.2300e-003**	**0.1689**	**0.0445**	**1.1400e-003**	**0.0456**		**166.1105**	**166.1105**	**4.4700e-003**		**166.2222**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6194	12.6894	28.7558	0.1046	8.3224	0.0806	8.4030	2.2268	0.0751	2.3019		10,658.92 30	10,658.92 30	0.5222		10,671.97 71
Unmitigated	2.6194	12.6894	28.7558	0.1046	8.3224	0.0806	8.4030	2.2268	0.0751	2.3019		10,658.92 30	10,658.92 30	0.5222		10,671.97 71

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Health Club	23.05	14.61	18.71	45,395	45,395
Hotel	1,429.75	1,433.25	1041.25	3,280,389	3,280,389
Quality Restaurant	297.73	312.33	238.85	414,857	414,857
Total	1,750.54	1,760.19	1,298.81	3,740,641	3,740,641

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Health Club	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Hotel	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Quality Restaurant	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595
NaturalGas Unmitigated	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	34.7123	3.7000e-004	3.4000e-003	2.8600e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		4.0838	4.0838	8.0000e-005	7.0000e-005	4.1081
Hotel	7751.58	0.0836	0.7600	0.6384	4.5600e-003		0.0578	0.0578		0.0578	0.0578		911.9511	911.9511	0.0175	0.0167	917.3704
Quality Restaurant	2094.54	0.0226	0.2054	0.1725	1.2300e-003		0.0156	0.0156		0.0156	0.0156		246.4167	246.4167	4.7200e-003	4.5200e-003	247.8811
Total		**0.1066**	**0.9687**	**0.8137**	**5.8100e-003**		**0.0736**	**0.0736**		**0.0736**	**0.0736**		**1,162.4516**	**1,162.4516**	**0.0223**	**0.0213**	**1,169.3595**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0.0347123	3.7000e-004	3.4000e-003	2.8600e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		4.0838	4.0838	8.0000e-005	7.0000e-005	4.1081
Hotel	7.75158	0.0836	0.7600	0.6384	4.5600e-003		0.0578	0.0578		0.0578	0.0578		911.9511	911.9511	0.0175	0.0167	917.3704
Quality Restaurant	2.09454	0.0226	0.2054	0.1725	1.2300e-003		0.0156	0.0156		0.0156	0.0156		246.4167	246.4167	4.7200e-003	4.5200e-003	247.8811
Total		**0.1066**	**0.9687**	**0.8137**	**5.8100e-003**		**0.0736**	**0.0736**		**0.0736**	**0.0736**		**1,162.4516**	**1,162.4516**	**0.0223**	**0.0213**	**1,169.3595**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Unmitigated	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4355					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0100e-003	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Total	**2.7527**	**3.0000e-004**	**0.0324**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0694**	**0.0694**	**1.8000e-004**		**0.0740**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4355					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0100e-003	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Total	**2.7527**	**3.0000e-004**	**0.0324**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0694**	**0.0694**	**1.8000e-004**		**0.0740**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

11469 Jefferson - Construction

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	138.00	Space	0.28	56,300.00	0
Health Club	0.70	1000sqft	0.02	700.00	0
Hotel	175.00	Room	0.50	117,987.00	0
Quality Restaurant	3.31	1000sqft	0.08	3,313.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the IS/MND's model.

Land Use - See SWAPE comment regarding parking and failure to model all proposed land uses.

Construction Phase - See SWAPE comment regarding constructuion schedule and number of days per week,

Off-road Equipment - See SWAPE comment regarding construction equipment unit amounts and usage hours.

Trips and VMT - See SWAPE comment regarding worker, vendor, and hauling trips.

Demolition -

Grading - See SWAPE comment regarding material export.

Construction Off-road Equipment Mitigation - Consistent with the DEIR's model.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
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
tblGrading	MaterialExported	0.00	43,836.00
tblLandUse	LandUseSquareFeet	55,200.00	56,300.00
tblLandUse	LandUseSquareFeet	254,100.00	117,987.00
tblLandUse	LandUseSquareFeet	3,310.00	3,313.00
tblLandUse	LotAcreage	1.24	0.28
tblLandUse	LotAcreage	5.83	0.50
tblTripsAndVMT	HaulingTripNumber	0.00	5,044.00

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					
2020	22.3252	763.1486	167.7106	2.0985	51.2224	2.9086	54.1310	13.9401	2.7814	16.7215	0.0000	226,728.3347	226,728.3347	16.3033	0.0000	227,135.9182
2021	229.6075	10.9669	10.5372	0.0264	1.0239	0.4595	1.4834	0.2758	0.4229	0.6987	0.0000	2,647.1622	2,647.1622	0.4290	0.0000	2,657.8860
Maximum	**229.6075**	**763.1486**	**167.7106**	**2.0985**	**51.2224**	**2.9086**	**54.1310**	**13.9401**	**2.7814**	**16.7215**	**0.0000**	**226,728.3347**	**226,728.3347**	**16.3033**	**0.0000**	**227,135.9182**

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					
2020	21.5905	755.8504	167.9390	2.0985	51.2224	2.4591	53.6815	13.9401	2.3534	16.2935	0.0000	226,728.3347	226,728.3347	16.3033	0.0000	227,135.9182
2021	229.4183	3.5871	10.9997	0.0264	1.0239	0.0305	1.0545	0.2758	0.0298	0.3056	0.0000	2,647.1622	2,647.1622	0.4290	0.0000	2,657.8860
Maximum	**229.4183**	**755.8504**	**167.9390**	**2.0985**	**51.2224**	**2.4591**	**53.6815**	**13.9401**	**2.3534**	**16.2935**	**0.0000**	**226,728.3347**	**226,728.3347**	**16.3033**	**0.0000**	**227,135.9182**

11469 Jefferson - Construction - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.37	1.90	-0.39	0.00	0.00	26.08	1.58	0.00	25.62	4.71	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Energy	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595
Mobile	2.4798	12.8258	27.4080	0.0989	8.3224	0.0812	8.4036	2.2268	0.0758	2.3025		10,080.9552	10,080.9552	0.5281		10,094.1573
Total	**5.3390**	**13.7948**	**28.2542**	**0.1047**	**8.3224**	**0.1550**	**8.4774**	**2.2268**	**0.1495**	**2.3763**		**11,243.4762**	**11,243.4762**	**0.5506**	**0.0213**	**11,263.5908**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Energy	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595
Mobile	2.4798	12.8258	27.4080	0.0989	8.3224	0.0812	8.4036	2.2268	0.0758	2.3025		10,080.9552	10,080.9552	0.5281		10,094.1573
Total	**5.3390**	**13.7948**	**28.2542**	**0.1047**	**8.3224**	**0.1550**	**8.4774**	**2.2268**	**0.1495**	**2.3763**		**11,243.4762**	**11,243.4762**	**0.5506**	**0.0213**	**11,263.5908**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Demolition	Demolition	5/4/2020	5/15/2020	5	10	
2	Excavation	Grading	5/16/2020	5/19/2020	5	2	
3	Building Construction	Building Construction	5/20/2020	10/6/2020	5	100	
4	Foundation	Building Construction	10/7/2020	2/23/2021	5	100	
5	Continuous Concrete Pour	Building Construction	2/24/2021	7/13/2021	5	100	
6	Paving	Paving	7/14/2021	7/20/2021	5	5	
7	Architectural Coating	Architectural Coating	7/21/2021	7/27/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.28

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 183,000; Non-Residential Outdoor: 61,000; Striped Parking Area: 3,378 (Architectural Coating – sqft)

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	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Excavation	Concrete/Industrial Saws	1	8.00	81	0.73
Excavation	Rubber Tired Dozers	1	1.00	247	0.40
Excavation	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Foundation	Cranes	1	4.00	231	0.29
Foundation	Forklifts	2	6.00	89	0.20
Foundation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Continuous Concrete Pour	Cranes	1	4.00	231	0.29
Continuous Concrete Pour	Forklifts	2	6.00	89	0.20
Continuous Concrete Pour	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
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
Demolition	4	10.00	0.00	155.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	4	10.00	0.00	5,480.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	75.00	29.00	5,044.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundation	5	75.00	29.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Continuous Concrete Pour	5	75.00	29.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	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

3.2 Demolition - 2020

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					3.3468	0.0000	3.3468	0.5067	0.0000	0.5067			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.8674**	**7.8729**	**7.6226**	**0.0120**	**3.3468**	**0.4672**	**3.8140**	**0.5067**	**0.4457**	**0.9524**		**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.2 Demolition - 2020

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	0.1211	4.2724	0.9035	0.0118	0.2709	0.0138	0.2847	0.0742	0.0132	0.0874		1,275.4920	1,275.4920	0.0910		1,277.7665
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0333	0.3681	1.0700e-003	0.1118	8.5000e-004	0.1126	0.0296	7.8000e-004	0.0304		107.0365	107.0365	3.0700e-003		107.1132
Total	**0.1705**	**4.3057**	**1.2716**	**0.0129**	**0.3826**	**0.0147**	**0.3973**	**0.1039**	**0.0140**	**0.1179**		**1,382.5285**	**1,382.5285**	**0.0941**		**1,384.8798**

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					3.3468	0.0000	3.3468	0.5067	0.0000	0.5067			0.0000			0.0000
Off-Road	0.1326	0.5747	7.8509	0.0120		0.0177	0.0177		0.0177	0.0177	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.1326**	**0.5747**	**7.8509**	**0.0120**	**3.3468**	**0.0177**	**3.3645**	**0.5067**	**0.0177**	**0.5244**	**0.0000**	**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.2 Demolition - 2020

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	0.1211	4.2724	0.9035	0.0118	0.2709	0.0138	0.2847	0.0742	0.0132	0.0874		1,275.4920	1,275.4920	0.0910		1,277.7665
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0333	0.3681	1.0700e-003	0.1118	8.5000e-004	0.1126	0.0296	7.8000e-004	0.0304		107.0365	107.0365	3.0700e-003		107.1132
Total	**0.1705**	**4.3057**	**1.2716**	**0.0129**	**0.3826**	**0.0147**	**0.3973**	**0.1039**	**0.0140**	**0.1179**		**1,382.5285**	**1,382.5285**	**0.0941**		**1,384.8798**

3.3 Excavation - 2020

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					3.2315	0.0000	3.2315	0.7891	0.0000	0.7891			0.0000			0.0000
Off-Road	0.8674	7.8729	7.6226	0.0120		0.4672	0.4672		0.4457	0.4457		1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.8674**	**7.8729**	**7.6226**	**0.0120**	**3.2315**	**0.4672**	**3.6987**	**0.7891**	**0.4457**	**1.2348**		**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.3 Excavation - 2020

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	21.4085	755.2424	159.7200	2.0854	47.8792	2.4406	50.3198	13.1213	2.3350	15.4563		225,474.0630	225,474.0630	16.0834		225,876.1472
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0333	0.3681	1.0700e-003	0.1118	8.5000e-004	0.1126	0.0296	7.8000e-004	0.0304		107.0365	107.0365	3.0700e-003		107.1132
Total	**21.4578**	**755.2757**	**160.0881**	**2.0865**	**47.9910**	**2.4414**	**50.4324**	**13.1510**	**2.3357**	**15.4867**		**225,581.0995**	**225,581.0995**	**16.0864**		**225,983.2604**

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					3.2315	0.0000	3.2315	0.7891	0.0000	0.7891			0.0000			0.0000
Off-Road	0.1326	0.5747	7.8509	0.0120		0.0177	0.0177		0.0177	0.0177	0.0000	1,147.2352	1,147.2352	0.2169		1,152.6578
Total	**0.1326**	**0.5747**	**7.8509**	**0.0120**	**3.2315**	**0.0177**	**3.2491**	**0.7891**	**0.0177**	**0.8068**	**0.0000**	**1,147.2352**	**1,147.2352**	**0.2169**		**1,152.6578**

3.3 Excavation - 2020

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	21.4085	755.2424	159.7200	2.0854	47.8792	2.4406	50.3198	13.1213	2.3350	15.4563		225,474.0630	225,474.0630	16.0834		225,876.1472
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0333	0.3681	1.0700e-003	0.1118	8.5000e-004	0.1126	0.0296	7.8000e-004	0.0304		107.0365	107.0365	3.0700e-003		107.1132
Total	**21.4578**	**755.2757**	**160.0881**	**2.0865**	**47.9910**	**2.4414**	**50.4324**	**13.1510**	**2.3357**	**15.4867**		**225,581.0995**	**225,581.0995**	**16.0864**		**225,983.2604**

3.4 Building Construction - 2020

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	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.8617**	**8.8523**	**7.3875**	**0.0114**		**0.5224**	**0.5224**		**0.4806**	**0.4806**		**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

3.4 Building Construction - 2020

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	0.3941	13.9031	2.9403	0.0384	0.8814	0.0449	0.9263	0.2416	0.0430	0.2845		4,150.6977	4,150.6977	0.2961		4,158.0996
Vendor	0.0998	3.0400	0.8079	7.2500e-003	0.1856	0.0153	0.2009	0.0534	0.0146	0.0681		772.8871	772.8871	0.0537		774.2288
Worker	0.3701	0.2498	2.7607	8.0600e-003	0.8383	6.3600e-003	0.8447	0.2223	5.8600e-003	0.2282		802.7737	802.7737	0.0230		803.3493
Total	**0.8640**	**17.1928**	**6.5088**	**0.0537**	**1.9053**	**0.0666**	**1.9719**	**0.5173**	**0.0635**	**0.5808**		**5,726.3586**	**5,726.3586**	**0.3728**		**5,735.6777**

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	0.1397	0.6052	7.7261	0.0114		0.0186	0.0186		0.0186	0.0186	0.0000	1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.1397**	**0.6052**	**7.7261**	**0.0114**		**0.0186**	**0.0186**		**0.0186**	**0.0186**	**0.0000**	**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

3.4 Building Construction - 2020

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	0.3941	13.9031	2.9403	0.0384	0.8814	0.0449	0.9263	0.2416	0.0430	0.2845		4,150.6977	4,150.6977	0.2961		4,158.0996
Vendor	0.0998	3.0400	0.8079	7.2500e-003	0.1856	0.0153	0.2009	0.0534	0.0146	0.0681		772.8871	772.8871	0.0537		774.2288
Worker	0.3701	0.2498	2.7607	8.0600e-003	0.8383	6.3600e-003	0.8447	0.2223	5.8600e-003	0.2282		802.7737	802.7737	0.0230		803.3493
Total	**0.8640**	**17.1928**	**6.5088**	**0.0537**	**1.9053**	**0.0666**	**1.9719**	**0.5173**	**0.0635**	**0.5808**		**5,726.3586**	**5,726.3586**	**0.3728**		**5,735.6777**

3.5 Foundation - 2020

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	0.8617	8.8523	7.3875	0.0114		0.5224	0.5224		0.4806	0.4806		1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.8617**	**8.8523**	**7.3875**	**0.0114**		**0.5224**	**0.5224**		**0.4806**	**0.4806**		**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

3.5 Foundation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0998	3.0400	0.8079	7.2500e-003	0.1856	0.0153	0.2009	0.0534	0.0146	0.0681		772.8871	772.8871	0.0537		774.2288
Worker	0.3701	0.2498	2.7607	8.0600e-003	0.8383	6.3600e-003	0.8447	0.2223	5.8600e-003	0.2282		802.7737	802.7737	0.0230		803.3493
Total	**0.4699**	**3.2897**	**3.5686**	**0.0153**	**1.0239**	**0.0217**	**1.0456**	**0.2758**	**0.0205**	**0.2963**		**1,575.6609**	**1,575.6609**	**0.0767**		**1,577.5781**

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	0.1397	0.6052	7.7261	0.0114		0.0186	0.0186		0.0186	0.0186	0.0000	1,102.9781	1,102.9781	0.3567		1,111.8962
Total	**0.1397**	**0.6052**	**7.7261**	**0.0114**		**0.0186**	**0.0186**		**0.0186**	**0.0186**	**0.0000**	**1,102.9781**	**1,102.9781**	**0.3567**		**1,111.8962**

3.5 Foundation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0998	3.0400	0.8079	7.2500e-003	0.1856	0.0153	0.2009	0.0534	0.0146	0.0681		772.8871	772.8871	0.0537		774.2288
Worker	0.3701	0.2498	2.7607	8.0600e-003	0.8383	6.3600e-003	0.8447	0.2223	5.8600e-003	0.2282		802.7737	802.7737	0.0230		803.3493
Total	**0.4699**	**3.2897**	**3.5686**	**0.0153**	**1.0239**	**0.0217**	**1.0456**	**0.2758**	**0.0205**	**0.2963**		**1,575.6609**	**1,575.6609**	**0.0767**		**1,577.5781**

3.5 Foundation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**		**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.5 Foundation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0849	2.7571	0.7345	7.1900e-003	0.1856	5.7500e-003	0.1914	0.0534	5.5000e-003	0.0589		767.1956	767.1956	0.0513		768.4788
Worker	0.3459	0.2248	2.5391	7.7900e-003	0.8383	6.1700e-003	0.8445	0.2223	5.6800e-003	0.2280		776.7509	776.7509	0.0208		777.2713
Total	**0.4308**	**2.9819**	**3.2735**	**0.0150**	**1.0239**	**0.0119**	**1.0358**	**0.2758**	**0.0112**	**0.2869**		**1,543.9465**	**1,543.9465**	**0.0722**		**1,545.7502**

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	0.1397	0.6052	7.7261	0.0114		0.0186	0.0186		0.0186	0.0186	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.1397**	**0.6052**	**7.7261**	**0.0114**		**0.0186**	**0.0186**		**0.0186**	**0.0186**	**0.0000**	**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.5 Foundation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0849	2.7571	0.7345	7.1900e-003	0.1856	5.7500e-003	0.1914	0.0534	5.5000e-003	0.0589		767.1956	767.1956	0.0513		768.4788
Worker	0.3459	0.2248	2.5391	7.7900e-003	0.8383	6.1700e-003	0.8445	0.2223	5.6800e-003	0.2280		776.7509	776.7509	0.0208		777.2713
Total	**0.4308**	**2.9819**	**3.2735**	**0.0150**	**1.0239**	**0.0119**	**1.0358**	**0.2758**	**0.0112**	**0.2869**		**1,543.9465**	**1,543.9465**	**0.0722**		**1,545.7502**

3.6 Continuous Concrete Pour - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7750	7.9850	7.2637	0.0114		0.4475	0.4475		0.4117	0.4117		1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.7750**	**7.9850**	**7.2637**	**0.0114**		**0.4475**	**0.4475**		**0.4117**	**0.4117**		**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.6 Continuous Concrete Pour - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0849	2.7571	0.7345	7.1900e-003	0.1856	5.7500e-003	0.1914	0.0534	5.5000e-003	0.0589		767.1956	767.1956	0.0513		768.4788
Worker	0.3459	0.2248	2.5391	7.7900e-003	0.8383	6.1700e-003	0.8445	0.2223	5.6800e-003	0.2280		776.7509	776.7509	0.0208		777.2713
Total	**0.4308**	**2.9819**	**3.2735**	**0.0150**	**1.0239**	**0.0119**	**1.0358**	**0.2758**	**0.0112**	**0.2869**		**1,543.9465**	**1,543.9465**	**0.0722**		**1,545.7502**

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	0.1397	0.6052	7.7261	0.0114		0.0186	0.0186		0.0186	0.0186	0.0000	1,103.2158	1,103.2158	0.3568		1,112.1358
Total	**0.1397**	**0.6052**	**7.7261**	**0.0114**		**0.0186**	**0.0186**		**0.0186**	**0.0186**	**0.0000**	**1,103.2158**	**1,103.2158**	**0.3568**		**1,112.1358**

3.6 Continuous Concrete Pour - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0849	2.7571	0.7345	7.1900e-003	0.1856	5.7500e-003	0.1914	0.0534	5.5000e-003	0.0589		767.1956	767.1956	0.0513		768.4788
Worker	0.3459	0.2248	2.5391	7.7900e-003	0.8383	6.1700e-003	0.8445	0.2223	5.6800e-003	0.2280		776.7509	776.7509	0.0208		777.2713
Total	**0.4308**	**2.9819**	**3.2735**	**0.0150**	**1.0239**	**0.0119**	**1.0358**	**0.2758**	**0.0112**	**0.2869**		**1,543.9465**	**1,543.9465**	**0.0722**		**1,545.7502**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7214	6.7178	7.0899	0.0113		0.3534	0.3534		0.3286	0.3286		1,035.3425	1,035.3425	0.3016		1,042.8818
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7214**	**6.7178**	**7.0899**	**0.0113**		**0.3534**	**0.3534**		**0.3286**	**0.3286**		**1,035.3425**	**1,035.3425**	**0.3016**		**1,042.8818**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0830	0.0539	0.6094	1.8700e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		186.4202	186.4202	5.0000e-003		186.5451
Total	**0.0830**	**0.0539**	**0.6094**	**1.8700e-003**	**0.2012**	**1.4800e-003**	**0.2027**	**0.0534**	**1.3600e-003**	**0.0547**		**186.4202**	**186.4202**	**5.0000e-003**		**186.5451**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1119	0.4851	6.9028	0.0113		0.0149	0.0149		0.0149	0.0149	0.0000	1,035.342 5	1,035.342 5	0.3016		1,042.881 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.1119**	**0.4851**	**6.9028**	**0.0113**		**0.0149**	**0.0149**		**0.0149**	**0.0149**	**0.0000**	**1,035.342 5**	**1,035.342 5**	**0.3016**		**1,042.881 8**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0830	0.0539	0.6094	1.8700e-003	0.2012	1.4800e-003	0.2027	0.0534	1.3600e-003	0.0547		186.4202	186.4202	5.0000e-003		186.5451
Total	**0.0830**	**0.0539**	**0.6094**	**1.8700e-003**	**0.2012**	**1.4800e-003**	**0.2027**	**0.0534**	**1.3600e-003**	**0.0547**		**186.4202**	**186.4202**	**5.0000e-003**		**186.5451**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	229.3194					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**229.5383**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0692	0.0450	0.5078	1.5600e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		155.3502	155.3502	4.1600e-003		155.4543
Total	**0.0692**	**0.0450**	**0.5078**	**1.5600e-003**	**0.1677**	**1.2300e-003**	**0.1689**	**0.0445**	**1.1400e-003**	**0.0456**		**155.3502**	**155.3502**	**4.1600e-003**		**155.4543**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	229.3194					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	0.0193		281.9309
Total	**229.3491**	**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**	**0.0193**		**281.9309**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0692	0.0450	0.5078	1.5600e-003	0.1677	1.2300e-003	0.1689	0.0445	1.1400e-003	0.0456		155.3502	155.3502	4.1600e-003		155.4543
Total	**0.0692**	**0.0450**	**0.5078**	**1.5600e-003**	**0.1677**	**1.2300e-003**	**0.1689**	**0.0445**	**1.1400e-003**	**0.0456**		**155.3502**	**155.3502**	**4.1600e-003**		**155.4543**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4798	12.8258	27.4080	0.0989	8.3224	0.0812	8.4036	2.2268	0.0758	2.3025		10,080.9552	10,080.9552	0.5281		10,094.1573
Unmitigated	2.4798	12.8258	27.4080	0.0989	8.3224	0.0812	8.4036	2.2268	0.0758	2.3025		10,080.9552	10,080.9552	0.5281		10,094.1573

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Health Club	23.05	14.61	18.71	45,395	45,395
Hotel	1,429.75	1,433.25	1041.25	3,280,389	3,280,389
Quality Restaurant	297.73	312.33	238.85	414,857	414,857
Total	1,750.54	1,760.19	1,298.81	3,740,641	3,740,641

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Health Club	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Hotel	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Quality Restaurant	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595
NaturalGas Unmitigated	0.1066	0.9687	0.8137	5.8100e-003		0.0736	0.0736		0.0736	0.0736		1,162.4516	1,162.4516	0.0223	0.0213	1,169.3595

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	34.7123	3.7000e-004	3.4000e-003	2.8600e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		4.0838	4.0838	8.0000e-005	7.0000e-005	4.1081
Hotel	7751.58	0.0836	0.7600	0.6384	4.5600e-003		0.0578	0.0578		0.0578	0.0578		911.9511	911.9511	0.0175	0.0167	917.3704
Quality Restaurant	2094.54	0.0226	0.2054	0.1725	1.2300e-003		0.0156	0.0156		0.0156	0.0156		246.4167	246.4167	4.7200e-003	4.5200e-003	247.8811
Total		**0.1066**	**0.9687**	**0.8137**	**5.8100e-003**		**0.0736**	**0.0736**		**0.0736**	**0.0736**		**1,162.4516**	**1,162.4516**	**0.0223**	**0.0213**	**1,169.3595**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0.0347123	3.7000e-004	3.4000e-003	2.8600e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		4.0838	4.0838	8.0000e-005	7.0000e-005	4.1081
Hotel	7.75158	0.0836	0.7600	0.6384	4.5600e-003		0.0578	0.0578		0.0578	0.0578		911.9511	911.9511	0.0175	0.0167	917.3704
Quality Restaurant	2.09454	0.0226	0.2054	0.1725	1.2300e-003		0.0156	0.0156		0.0156	0.0156		246.4167	246.4167	4.7200e-003	4.5200e-003	247.8811
Total		**0.1066**	**0.9687**	**0.8137**	**5.8100e-003**		**0.0736**	**0.0736**		**0.0736**	**0.0736**		**1,162.4516**	**1,162.4516**	**0.0223**	**0.0213**	**1,169.3595**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Unmitigated	2.7527	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4355					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0100e-003	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Total	**2.7527**	**3.0000e-004**	**0.0324**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0694**	**0.0694**	**1.8000e-004**		**0.0740**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4355					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0100e-003	3.0000e-004	0.0324	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0694	0.0694	1.8000e-004		0.0740
Total	**2.7527**	**3.0000e-004**	**0.0324**	**0.0000**		**1.2000e-004**	**1.2000e-004**		**1.2000e-004**	**1.2000e-004**		**0.0694**	**0.0694**	**1.8000e-004**		**0.0740**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

11469 Jefferson - Construction

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	138.00	Space	0.28	56,300.00	0
Health Club	0.70	1000sqft	0.02	700.00	0
Hotel	175.00	Room	0.50	117,987.00	0
Quality Restaurant	3.31	1000sqft	0.08	3,313.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	11			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the IS/MND's model.

Land Use - See SWAPE comment regarding parking and failure to model all proposed land uses.

Construction Phase - See SWAPE comment regarding constructuion schedule and number of days per week,

Off-road Equipment - See SWAPE comment regarding construction equipment unit amounts and usage hours.

Trips and VMT - See SWAPE comment regarding worker, vendor, and hauling trips.

Demolition -

Grading - See SWAPE comment regarding material export.

Construction Off-road Equipment Mitigation - Consistent with the DEIR's model.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
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
tblGrading	MaterialExported	0.00	43,836.00
tblLandUse	LandUseSquareFeet	55,200.00	56,300.00
tblLandUse	LandUseSquareFeet	254,100.00	117,987.00
tblLandUse	LandUseSquareFeet	3,310.00	3,313.00
tblLandUse	LotAcreage	1.24	0.28
tblLandUse	LotAcreage	5.83	0.50
tblTripsAndVMT	HaulingTripNumber	0.00	5,044.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1513	2.5343	1.2374	6.3700e-003	0.1939	0.0516	0.2455	0.0507	0.0478	0.0984	0.0000	608.6009	608.6009	0.0607	0.0000	610.1182
2021	0.6567	0.7814	0.7547	1.8800e-003	0.0703	0.0328	0.1031	0.0190	0.0302	0.0492	0.0000	171.1406	171.1406	0.0275	0.0000	171.8281
Maximum	**0.6567**	**2.5343**	**1.2374**	**6.3700e-003**	**0.1939**	**0.0516**	**0.2455**	**0.0507**	**0.0478**	**0.0984**	**0.0000**	**608.6009**	**608.6009**	**0.0607**	**0.0000**	**610.1182**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0884	1.8225	1.2662	6.3700e-003	0.1939	8.0800e-003	0.2020	0.0507	7.7800e-003	0.0585	0.0000	608.6008	608.6008	0.0607	0.0000	610.1181
2021	0.6109	0.2531	0.7862	1.8800e-003	0.0703	2.1500e-003	0.0725	0.0190	2.1000e-003	0.0211	0.0000	171.1405	171.1405	0.0275	0.0000	171.8280
Maximum	**0.6109**	**1.8225**	**1.2662**	**6.3700e-003**	**0.1939**	**8.0800e-003**	**0.2020**	**0.0507**	**7.7800e-003**	**0.0585**	**0.0000**	**608.6008**	**608.6008**	**0.0607**	**0.0000**	**610.1181**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**13.45**	**37.40**	**-3.03**	**0.00**	**0.00**	**87.88**	**21.28**	**0.00**	**87.33**	**46.15**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-4-2020**	**8-3-2020**	1.9112	1.6218
2	**8-4-2020**	**11-3-2020**	0.7645	0.4698
3	**11-4-2020**	**2-3-2021**	0.4269	0.1438
4	**2-4-2021**	**5-3-2021**	0.3864	0.1316
5	**5-4-2021**	**8-3-2021**	0.9044	0.6801
		Highest	1.9112	1.6218

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5022	4.0000e-005	4.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8700e-003	7.8700e-003	2.0000e-005	0.0000	8.3900e-003
Energy	0.0195	0.1768	0.1485	1.0600e-003		0.0134	0.0134		0.0134	0.0134	0.0000	631.6018	631.6018	0.0218	7.2800e-003	634.3165
Mobile	0.4198	2.2683	4.8179	0.0175	1.4214	0.0140	1.4354	0.3809	0.0131	0.3940	0.0000	1,616.0510	1,616.0510	0.0823	0.0000	1,618.1089
Waste						0.0000	0.0000		0.0000	0.0000	20.8715	0.0000	20.8715	1.2335	0.0000	51.7083
Water						0.0000	0.0000		0.0000	0.0000	1.7402	24.8200	26.5603	0.1798	4.4300e-003	32.3752
Total	**0.9414**	**2.4451**	**4.9705**	**0.0185**	**1.4214**	**0.0275**	**1.4489**	**0.3809**	**0.0266**	**0.4074**	**22.6118**	**2,272.4807**	**2,295.0924**	**1.5174**	**0.0117**	**2,336.5173**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5022	4.0000e-005	4.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8700e-003	7.8700e-003	2.0000e-005	0.0000	8.3900e-003
Energy	0.0195	0.1768	0.1485	1.0600e-003		0.0134	0.0134		0.0134	0.0134	0.0000	631.6018	631.6018	0.0218	7.2800e-003	634.3165
Mobile	0.4198	2.2683	4.8179	0.0175	1.4214	0.0140	1.4354	0.3809	0.0131	0.3940	0.0000	1,616.0510	1,616.0510	0.0823	0.0000	1,618.1089
Waste						0.0000	0.0000		0.0000	0.0000	20.8715	0.0000	20.8715	1.2335	0.0000	51.7083
Water						0.0000	0.0000		0.0000	0.0000	1.7402	24.8200	26.5603	0.1798	4.4300e-003	32.3752
Total	**0.9414**	**2.4451**	**4.9705**	**0.0185**	**1.4214**	**0.0275**	**1.4489**	**0.3809**	**0.0266**	**0.4074**	**22.6118**	**2,272.4807**	**2,295.0924**	**1.5174**	**0.0117**	**2,336.5173**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Demolition	Demolition	5/4/2020	5/15/2020	5	10	
2	Excavation	Grading	5/16/2020	5/19/2020	5	2	
3	Building Construction	Building Construction	5/20/2020	10/6/2020	5	100	
4	Foundation	Building Construction	10/7/2020	2/23/2021	5	100	
5	Continuous Concrete Pour	Building Construction	2/24/2021	7/13/2021	5	100	
6	Paving	Paving	7/14/2021	7/20/2021	5	5	
7	Architectural Coating	Architectural Coating	7/21/2021	7/27/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.28

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 183,000; Non-Residential Outdoor: 61,000; Striped Parking Area: 3,378 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Excavation	Concrete/Industrial Saws	1	8.00	81	0.73
Excavation	Rubber Tired Dozers	1	1.00	247	0.40
Excavation	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Foundation	Cranes	1	4.00	231	0.29
Foundation	Forklifts	2	6.00	89	0.20
Foundation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Continuous Concrete Pour	Cranes	1	4.00	231	0.29
Continuous Concrete Pour	Forklifts	2	6.00	89	0.20
Continuous Concrete Pour	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
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
Demolition	4	10.00	0.00	155.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Excavation	4	10.00	0.00	5,480.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	75.00	29.00	5,044.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Foundation	5	75.00	29.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Continuous Concrete Pour	5	75.00	29.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	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

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0167	0.0000	0.0167	2.5300e-003	0.0000	2.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3400e-003	0.0394	0.0381	6.0000e-005		2.3400e-003	2.3400e-003		2.2300e-003	2.2300e-003	0.0000	5.2038	5.2038	9.8000e-004	0.0000	5.2284
Total	**4.3400e-003**	**0.0394**	**0.0381**	**6.0000e-005**	**0.0167**	**2.3400e-003**	**0.0191**	**2.5300e-003**	**2.2300e-003**	**4.7600e-003**	**0.0000**	**5.2038**	**5.2038**	**9.8000e-004**	**0.0000**	**5.2284**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-004	0.0218	4.3400e-003	6.0000e-005	1.3300e-003	7.0000e-005	1.4000e-003	3.7000e-004	7.0000e-005	4.3000e-004	0.0000	5.8485	5.8485	4.0000e-004	0.0000	5.8585
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.7000e-004	1.8900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4938	0.4938	1.0000e-005	0.0000	0.4942
Total	**8.2000e-004**	**0.0219**	**6.2300e-003**	**7.0000e-005**	**1.8800e-003**	**7.0000e-005**	**1.9500e-003**	**5.2000e-004**	**7.0000e-005**	**5.8000e-004**	**0.0000**	**6.3423**	**6.3423**	**4.1000e-004**	**0.0000**	**6.3527**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0167	0.0000	0.0167	2.5300e-003	0.0000	2.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	2.8700e-003	0.0393	6.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	5.2038	5.2038	9.8000e-004	0.0000	5.2284
Total	**6.6000e-004**	**2.8700e-003**	**0.0393**	**6.0000e-005**	**0.0167**	**9.0000e-005**	**0.0168**	**2.5300e-003**	**9.0000e-005**	**2.6200e-003**	**0.0000**	**5.2038**	**5.2038**	**9.8000e-004**	**0.0000**	**5.2284**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-004	0.0218	4.3400e-003	6.0000e-005	1.3300e-003	7.0000e-005	1.4000e-003	3.7000e-004	7.0000e-005	4.3000e-004	0.0000	5.8485	5.8485	4.0000e-004	0.0000	5.8585
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.7000e-004	1.8900e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4938	0.4938	1.0000e-005	0.0000	0.4942
Total	**8.2000e-004**	**0.0219**	**6.2300e-003**	**7.0000e-005**	**1.8800e-003**	**7.0000e-005**	**1.9500e-003**	**5.2000e-004**	**7.0000e-005**	**5.8000e-004**	**0.0000**	**6.3423**	**6.3423**	**4.1000e-004**	**0.0000**	**6.3527**

3.3 Excavation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2300e-003	0.0000	3.2300e-003	7.9000e-004	0.0000	7.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.7000e-004	7.8700e-003	7.6200e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.5000e-004	4.5000e-004	0.0000	1.0408	1.0408	2.0000e-004	0.0000	1.0457
Total	**8.7000e-004**	**7.8700e-003**	**7.6200e-003**	**1.0000e-005**	**3.2300e-003**	**4.7000e-004**	**3.7000e-003**	**7.9000e-004**	**4.5000e-004**	**1.2400e-003**	**0.0000**	**1.0408**	**1.0408**	**2.0000e-004**	**0.0000**	**1.0457**

3.3 Excavation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0211	0.7689	0.1533	2.1100e-003	0.0471	2.4200e-003	0.0495	0.0129	2.3100e-003	0.0153	0.0000	206.7713	206.7713	0.0143	0.0000	207.1275
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.8000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	0.0000	0.0000	0.0988
Total	**0.0211**	**0.7689**	**0.1537**	**2.1100e-003**	**0.0472**	**2.4200e-003**	**0.0496**	**0.0130**	**2.3100e-003**	**0.0153**	**0.0000**	**206.8701**	**206.8701**	**0.0143**	**0.0000**	**207.2264**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.2300e-003	0.0000	3.2300e-003	7.9000e-004	0.0000	7.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3000e-004	5.7000e-004	7.8500e-003	1.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	1.0408	1.0408	2.0000e-004	0.0000	1.0457
Total	**1.3000e-004**	**5.7000e-004**	**7.8500e-003**	**1.0000e-005**	**3.2300e-003**	**2.0000e-005**	**3.2500e-003**	**7.9000e-004**	**2.0000e-005**	**8.1000e-004**	**0.0000**	**1.0408**	**1.0408**	**2.0000e-004**	**0.0000**	**1.0457**

3.3 Excavation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0211	0.7689	0.1533	2.1100e-003	0.0471	2.4200e-003	0.0495	0.0129	2.3100e-003	0.0153	0.0000	206.7713	206.7713	0.0143	0.0000	207.1275
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.8000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0988	0.0988	0.0000	0.0000	0.0988
Total	**0.0211**	**0.7689**	**0.1537**	**2.1100e-003**	**0.0472**	**2.4200e-003**	**0.0496**	**0.0130**	**2.3100e-003**	**0.0153**	**0.0000**	**206.8701**	**206.8701**	**0.0143**	**0.0000**	**207.2264**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0431	0.4426	0.3694	5.7000e-004		0.0261	0.0261		0.0240	0.0240	0.0000	50.0302	50.0302	0.0162	0.0000	50.4348
Total	**0.0431**	**0.4426**	**0.3694**	**5.7000e-004**		**0.0261**	**0.0261**		**0.0240**	**0.0240**	**0.0000**	**50.0302**	**50.0302**	**0.0162**	**0.0000**	**50.4348**

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0194	0.7077	0.1411	1.9400e-003	0.0434	2.2300e-003	0.0456	0.0119	2.1300e-003	0.0140	0.0000	190.3202	190.3202	0.0131	0.0000	190.6481
Vendor	4.8600e-003	0.1547	0.0383	3.7000e-004	9.1400e-003	7.6000e-004	9.9000e-003	2.6400e-003	7.3000e-004	3.3600e-003	0.0000	35.6630	35.6630	2.3400e-003	0.0000	35.7216
Worker	0.0167	0.0128	0.1420	4.1000e-004	0.0411	3.2000e-004	0.0415	0.0109	2.9000e-004	0.0112	0.0000	37.0375	37.0375	1.0600e-003	0.0000	37.0641
Total	**0.0410**	**0.8753**	**0.3215**	**2.7200e-003**	**0.0936**	**3.3100e-003**	**0.0970**	**0.0255**	**3.1500e-003**	**0.0286**	**0.0000**	**263.0207**	**263.0207**	**0.0165**	**0.0000**	**263.4337**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9800e-003	0.0303	0.3863	5.7000e-004		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	50.0302	50.0302	0.0162	0.0000	50.4347
Total	**6.9800e-003**	**0.0303**	**0.3863**	**5.7000e-004**		**9.3000e-004**	**9.3000e-004**		**9.3000e-004**	**9.3000e-004**	**0.0000**	**50.0302**	**50.0302**	**0.0162**	**0.0000**	**50.4347**

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0194	0.7077	0.1411	1.9400e-003	0.0434	2.2300e-003	0.0456	0.0119	2.1300e-003	0.0140	0.0000	190.3202	190.3202	0.0131	0.0000	190.6481
Vendor	4.8600e-003	0.1547	0.0383	3.7000e-004	9.1400e-003	7.6000e-004	9.9000e-003	2.6400e-003	7.3000e-004	3.3600e-003	0.0000	35.6630	35.6630	2.3400e-003	0.0000	35.7216
Worker	0.0167	0.0128	0.1420	4.1000e-004	0.0411	3.2000e-004	0.0415	0.0109	2.9000e-004	0.0112	0.0000	37.0375	37.0375	1.0600e-003	0.0000	37.0641
Total	**0.0410**	**0.8753**	**0.3215**	**2.7200e-003**	**0.0936**	**3.3100e-003**	**0.0970**	**0.0255**	**3.1500e-003**	**0.0286**	**0.0000**	**263.0207**	**263.0207**	**0.0165**	**0.0000**	**263.4337**

3.5 Foundation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0267	0.2744	0.2290	3.5000e-004		0.0162	0.0162		0.0149	0.0149	0.0000	31.0188	31.0188	0.0100	0.0000	31.2696
Total	**0.0267**	**0.2744**	**0.2290**	**3.5000e-004**		**0.0162**	**0.0162**		**0.0149**	**0.0149**	**0.0000**	**31.0188**	**31.0188**	**0.0100**	**0.0000**	**31.2696**

3.5 Foundation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0100e-003	0.0959	0.0238	2.3000e-004	5.6700e-003	4.7000e-004	6.1400e-003	1.6400e-003	4.5000e-004	2.0800e-003	0.0000	22.1111	22.1111	1.4500e-003	0.0000	22.1474
Worker	0.0104	7.9600e-003	0.0881	2.5000e-004	0.0255	2.0000e-004	0.0257	6.7700e-003	1.8000e-004	6.9600e-003	0.0000	22.9632	22.9632	6.6000e-004	0.0000	22.9797
Total	**0.0134**	**0.1039**	**0.1118**	**4.8000e-004**	**0.0312**	**6.7000e-004**	**0.0319**	**8.4100e-003**	**6.3000e-004**	**9.0400e-003**	**0.0000**	**45.0743**	**45.0743**	**2.1100e-003**	**0.0000**	**45.1271**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.3300e-003	0.0188	0.2395	3.5000e-004		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004	0.0000	31.0187	31.0187	0.0100	0.0000	31.2695
Total	**4.3300e-003**	**0.0188**	**0.2395**	**3.5000e-004**		**5.8000e-004**	**5.8000e-004**		**5.8000e-004**	**5.8000e-004**	**0.0000**	**31.0187**	**31.0187**	**0.0100**	**0.0000**	**31.2695**

3.5 Foundation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0100e-003	0.0959	0.0238	2.3000e-004	5.6700e-003	4.7000e-004	6.1400e-003	1.6400e-003	4.5000e-004	2.0800e-003	0.0000	22.1111	22.1111	1.4500e-003	0.0000	22.1474
Worker	0.0104	7.9600e-003	0.0881	2.5000e-004	0.0255	2.0000e-004	0.0257	6.7700e-003	1.8000e-004	6.9600e-003	0.0000	22.9632	22.9632	6.6000e-004	0.0000	22.9797
Total	**0.0134**	**0.1039**	**0.1118**	**4.8000e-004**	**0.0312**	**6.7000e-004**	**0.0319**	**8.4100e-003**	**6.3000e-004**	**9.0400e-003**	**0.0000**	**45.0743**	**45.0743**	**2.1100e-003**	**0.0000**	**45.1271**

3.5 Foundation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0147	0.1517	0.1380	2.2000e-004		8.5000e-003	8.5000e-003		7.8200e-003	7.8200e-003	0.0000	19.0156	19.0156	6.1500e-003	0.0000	19.1693
Total	**0.0147**	**0.1517**	**0.1380**	**2.2000e-004**		**8.5000e-003**	**8.5000e-003**		**7.8200e-003**	**7.8200e-003**	**0.0000**	**19.0156**	**19.0156**	**6.1500e-003**	**0.0000**	**19.1693**

3.5 Foundation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5700e-003	0.0533	0.0132	1.4000e-004	3.4700e-003	1.1000e-004	3.5800e-003	1.0000e-003	1.0000e-004	1.1000e-003	0.0000	13.4525	13.4525	8.5000e-004	0.0000	13.4737
Worker	5.9400e-003	4.3900e-003	0.0497	1.5000e-004	0.0156	1.2000e-004	0.0158	4.1500e-003	1.1000e-004	4.2600e-003	0.0000	13.6182	13.6182	3.7000e-004	0.0000	13.6273
Total	**7.5100e-003**	**0.0577**	**0.0629**	**2.9000e-004**	**0.0191**	**2.3000e-004**	**0.0193**	**5.1500e-003**	**2.1000e-004**	**5.3600e-003**	**0.0000**	**27.0706**	**27.0706**	**1.2200e-003**	**0.0000**	**27.1010**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.6500e-003	0.0115	0.1468	2.2000e-004		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	19.0156	19.0156	6.1500e-003	0.0000	19.1693
Total	**2.6500e-003**	**0.0115**	**0.1468**	**2.2000e-004**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**19.0156**	**19.0156**	**6.1500e-003**	**0.0000**	**19.1693**

3.5 Foundation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5700e-003	0.0533	0.0132	1.4000e-004	3.4700e-003	1.1000e-004	3.5800e-003	1.0000e-003	1.0000e-004	1.1000e-003	0.0000	13.4525	13.4525	8.5000e-004	0.0000	13.4737
Worker	5.9400e-003	4.3900e-003	0.0497	1.5000e-004	0.0156	1.2000e-004	0.0158	4.1500e-003	1.1000e-004	4.2600e-003	0.0000	13.6182	13.6182	3.7000e-004	0.0000	13.6273
Total	**7.5100e-003**	**0.0577**	**0.0629**	**2.9000e-004**	**0.0191**	**2.3000e-004**	**0.0193**	**5.1500e-003**	**2.1000e-004**	**5.3600e-003**	**0.0000**	**27.0706**	**27.0706**	**1.2200e-003**	**0.0000**	**27.1010**

3.6 Continuous Concrete Pour - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0388	0.3993	0.3632	5.7000e-004		0.0224	0.0224		0.0206	0.0206	0.0000	50.0410	50.0410	0.0162	0.0000	50.4456
Total	**0.0388**	**0.3993**	**0.3632**	**5.7000e-004**		**0.0224**	**0.0224**		**0.0206**	**0.0206**	**0.0000**	**50.0410**	**50.0410**	**0.0162**	**0.0000**	**50.4456**

3.6 Continuous Concrete Pour - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1200e-003	0.1403	0.0348	3.7000e-004	9.1400e-003	2.8000e-004	9.4200e-003	2.6400e-003	2.7000e-004	2.9100e-003	0.0000	35.4012	35.4012	2.2400e-003	0.0000	35.4572
Worker	0.0156	0.0116	0.1307	4.0000e-004	0.0411	3.1000e-004	0.0415	0.0109	2.8000e-004	0.0112	0.0000	35.8373	35.8373	9.6000e-004	0.0000	35.8613
Total	**0.0198**	**0.1519**	**0.1655**	**7.7000e-004**	**0.0503**	**5.9000e-004**	**0.0509**	**0.0136**	**5.5000e-004**	**0.0141**	**0.0000**	**71.2385**	**71.2385**	**3.2000e-003**	**0.0000**	**71.3185**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9800e-003	0.0303	0.3863	5.7000e-004		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	50.0410	50.0410	0.0162	0.0000	50.4456
Total	**6.9800e-003**	**0.0303**	**0.3863**	**5.7000e-004**		**9.3000e-004**	**9.3000e-004**		**9.3000e-004**	**9.3000e-004**	**0.0000**	**50.0410**	**50.0410**	**0.0162**	**0.0000**	**50.4456**

3.6 Continuous Concrete Pour - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1200e-003	0.1403	0.0348	3.7000e-004	9.1400e-003	2.8000e-004	9.4200e-003	2.6400e-003	2.7000e-004	2.9100e-003	0.0000	35.4012	35.4012	2.2400e-003	0.0000	35.4572
Worker	0.0156	0.0116	0.1307	4.0000e-004	0.0411	3.1000e-004	0.0415	0.0109	2.8000e-004	0.0112	0.0000	35.8373	35.8373	9.6000e-004	0.0000	35.8613
Total	**0.0198**	**0.1519**	**0.1655**	**7.7000e-004**	**0.0503**	**5.9000e-004**	**0.0509**	**0.0136**	**5.5000e-004**	**0.0141**	**0.0000**	**71.2385**	**71.2385**	**3.2000e-003**	**0.0000**	**71.3185**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8000e-003	0.0168	0.0177	3.0000e-005		8.8000e-004	8.8000e-004		8.2000e-004	8.2000e-004	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.8000e-003**	**0.0168**	**0.0177**	**3.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.3481**	**2.3481**	**6.8000e-004**	**0.0000**	**2.3652**

3.7 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.4000e-004	1.5700e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4301	0.4301	1.0000e-005	0.0000	0.4303
Total	**1.9000e-004**	**1.4000e-004**	**1.5700e-003**	**0.0000**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4301**	**0.4301**	**1.0000e-005**	**0.0000**	**0.4303**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8000e-004	1.2100e-003	0.0173	3.0000e-005		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	2.3481	2.3481	6.8000e-004	0.0000	2.3652
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.8000e-004**	**1.2100e-003**	**0.0173**	**3.0000e-005**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**2.3481**	**2.3481**	**6.8000e-004**	**0.0000**	**2.3652**

3.7 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.4000e-004	1.5700e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4301	0.4301	1.0000e-005	0.0000	0.4303
Total	**1.9000e-004**	**1.4000e-004**	**1.5700e-003**	**0.0000**	**4.9000e-004**	**0.0000**	**5.0000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4301**	**0.4301**	**1.0000e-005**	**0.0000**	**0.4303**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5733					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.5739**	**3.8200e-003**	**4.5400e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

3.8 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.3100e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3584	0.3584	1.0000e-005	0.0000	0.3586
Total	**1.6000e-004**	**1.2000e-004**	**1.3100e-003**	**0.0000**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3584**	**0.3584**	**1.0000e-005**	**0.0000**	**0.3586**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5733					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0000e-005	3.2000e-004	4.5800e-003	1.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.5734**	**3.2000e-004**	**4.5800e-003**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

3.8 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.3100e-003	0.0000	4.1000e-004	0.0000	4.1000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3584	0.3584	1.0000e-005	0.0000	0.3586
Total	**1.6000e-004**	**1.2000e-004**	**1.3100e-003**	**0.0000**	**4.1000e-004**	**0.0000**	**4.1000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3584**	**0.3584**	**1.0000e-005**	**0.0000**	**0.3586**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4198	2.2683	4.8179	0.0175	1.4214	0.0140	1.4354	0.3809	0.0131	0.3940	0.0000	1,616.051 0	1,616.051 0	0.0823	0.0000	1,618.108 9
Unmitigated	0.4198	2.2683	4.8179	0.0175	1.4214	0.0140	1.4354	0.3809	0.0131	0.3940	0.0000	1,616.051 0	1,616.051 0	0.0823	0.0000	1,618.108 9

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Health Club	23.05	14.61	18.71	45,395	45,395
Hotel	1,429.75	1,433.25	1041.25	3,280,389	3,280,389
Quality Restaurant	297.73	312.33	238.85	414,857	414,857
Total	1,750.54	1,760.19	1,298.81	3,740,641	3,740,641

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Health Club	16.60	8.40	6.90	16.90	64.10	19.00	52	39	9
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Health Club	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Hotel	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Quality Restaurant	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	439.1449	439.1449	0.0181	3.7500e-003	440.7159
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	439.1449	439.1449	0.0181	3.7500e-003	440.7159
NaturalGas Mitigated	0.0195	0.1768	0.1485	1.0600e-003		0.0134	0.0134		0.0134	0.0134	0.0000	192.4569	192.4569	3.6900e-003	3.5300e-003	193.6006
NaturalGas Unmitigated	0.0195	0.1768	0.1485	1.0600e-003		0.0134	0.0134		0.0134	0.0134	0.0000	192.4569	192.4569	3.6900e-003	3.5300e-003	193.6006

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	12670	7.0000e-005	6.2000e-004	5.2000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6761	0.6761	1.0000e-005	1.0000e-005	0.6801
Hotel	2.82933e+006	0.0153	0.1387	0.1165	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	150.9837	150.9837	2.8900e-003	2.7700e-003	151.8810
Quality Restaurant	764508	4.1200e-003	0.0375	0.0315	2.2000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	40.7971	40.7971	7.8000e-004	7.5000e-004	41.0395
Total		**0.0195**	**0.1768**	**0.1485**	**1.0500e-003**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**192.4569**	**192.4569**	**3.6800e-003**	**3.5300e-003**	**193.6006**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	12670	7.0000e-005	6.2000e-004	5.2000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6761	0.6761	1.0000e-005	1.0000e-005	0.6801
Hotel	2.82933e+006	0.0153	0.1387	0.1165	8.3000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	150.9837	150.9837	2.8900e-003	2.7700e-003	151.8810
Quality Restaurant	764508	4.1200e-003	0.0375	0.0315	2.2000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	40.7971	40.7971	7.8000e-004	7.5000e-004	41.0395
Total		**0.0195**	**0.1768**	**0.1485**	**1.0500e-003**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**192.4569**	**192.4569**	**3.6800e-003**	**3.5300e-003**	**193.6006**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	329918	105.1189	4.3400e-003	9.0000e-004	105.4950
Health Club	7770	2.4757	1.0000e-004	2.0000e-005	2.4846
Hotel	894341	284.9564	0.0118	2.4300e-003	285.9758
Quality Restaurant	146236	46.5939	1.9200e-003	4.0000e-004	46.7606
Total		**439.1449**	**0.0181**	**3.7500e-003**	**440.7159**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	329918	105.1189	4.3400e-003	9.0000e-004	105.4950
Health Club	7770	2.4757	1.0000e-004	2.0000e-005	2.4846
Hotel	894341	284.9564	0.0118	2.4300e-003	285.9758
Quality Restaurant	146236	46.5939	1.9200e-003	4.0000e-004	46.7606
Total		**439.1449**	**0.0181**	**3.7500e-003**	**440.7159**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5022	4.0000e-005	4.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8700e-003	7.8700e-003	2.0000e-005	0.0000	8.3900e-003
Unmitigated	0.5022	4.0000e-005	4.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8700e-003	7.8700e-003	2.0000e-005	0.0000	8.3900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0573					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4445					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8700e-003	7.8700e-003	2.0000e-005	0.0000	8.3900e-003
Total	**0.5022**	**4.0000e-005**	**4.0500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.8700e-003**	**7.8700e-003**	**2.0000e-005**	**0.0000**	**8.3900e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0573					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4445					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.8700e-003	7.8700e-003	2.0000e-005	0.0000	8.3900e-003
Total	**0.5022**	**4.0000e-005**	**4.0500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.8700e-003**	**7.8700e-003**	**2.0000e-005**	**0.0000**	**8.3900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	26.5603	0.1798	4.4300e-003	32.3752
Unmitigated	26.5603	0.1798	4.4300e-003	32.3752

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Health Club	0.0414002 / 0.0253743	0.2747	1.3600e-003	3.0000e-005	0.3189
Hotel	4.43918 / 0.493243	21.5715	0.1455	3.5900e-003	26.2778
Quality Restaurant	1.0047 / 0.0641296	4.7140	0.0329	8.1000e-004	5.7785
Total		**26.5603**	**0.1798**	**4.4300e-003**	**32.3752**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Health Club	0.0414002 / 0.0253743	0.2747	1.3600e-003	3.0000e-005	0.3189
Hotel	4.43918 / 0.493243	21.5715	0.1455	3.5900e-003	26.2778
Quality Restaurant	1.0047 / 0.0641296	4.7140	0.0329	8.1000e-004	5.7785
Total		**26.5603**	**0.1798**	**4.4300e-003**	**32.3752**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	20.8715	1.2335	0.0000	51.7083
Unmitigated	20.8715	1.2335	0.0000	51.7083

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Health Club	3.99	0.8099	0.0479	0.0000	2.0066
Hotel	95.81	19.4486	1.1494	0.0000	48.1830
Quality Restaurant	3.02	0.6130	0.0362	0.0000	1.5188
Total		**20.8715**	**1.2335**	**0.0000**	**51.7083**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Health Club	3.99	0.8099	0.0479	0.0000	2.0066
Hotel	95.81	19.4486	1.1494	0.0000	48.1830
Quality Restaurant	3.02	0.6130	0.0362	0.0000	1.5188
Total		**20.8715**	**1.2335**	**0.0000**	**51.7083**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment D

```
Start date and time  02/08/21 10:49:51

                             AERSCREEN 16216

Jefferson Hotel Operation

            Jefferson Hotel Operation

         -----------------  DATA ENTRY VALIDATION  -----------------
                        METRIC              ENGLISH
 ** AREADATA **  ---------------     ----------------

 Emission Rate:    0.650E-03 g/s         0.516E-02 lb/hr

 Area Height:           3.00 meters           9.84 feet

 Area Source Length:   77.00 meters         252.62 feet

 Area Source Width:    41.00 meters         134.51 feet

 Vertical Dimension:    1.50 meters           4.92 feet

 Model Mode:           URBAN

 Population:         1410000

 Dist to Ambient Air:           1.0 meters             3. feet


 ** BUILDING DATA **
```

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters   0.0 feet

Probe distance: 5000. meters   16404. feet

No flagpole receptors

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K   -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

Anemometer Height: 10.000 meters

Dominant Surface Profile: Urban

Dominant Climate Type: Average Moisture

Surface friction velocity (u*): not adjusted

DEBUG OPTION ON

AERSCREEN output file:

2020.02.08_JeffersonHotel_Operational.out

*** AERSCREEN Run is Ready to Begin

No terrain used, AERMAP will not be run

****

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...

```
Using AERMET seasonal surface characteristics for Urban with Average Moisture

Season            Albedo     Bo       zo

Winter             0.35     1.50     1.000

Spring             0.14     1.00     1.000

Summer             0.16     2.00     1.000

Autumn             0.18     2.00     1.000


Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl


Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl


Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl


Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl


Buildings and/or terrain present or rectangular area source, skipping probe


FLOWSECTOR   started 02/08/21 10:53:14
 ********************************************


  Running AERMOD
 Processing Winter


Processing surface roughness sector  1
```

```
*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


*****************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


*****************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10


    ********   WARNING MESSAGES   ********

               ***  NONE  ***
```

```
**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25


    ********   WARNING MESSAGES   ********

               ***  NONE  ***


**************************************************
```

```
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  30

    ********   WARNING MESSAGES   ********
               ***  NONE  ***
 ********************************************

  Running AERMOD
 Processing Spring

Processing surface roughness sector  1

*****************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

*****************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5
```

```
    ********   WARNING MESSAGES   ********
               ***  NONE  ***

****************************************************
Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

****************************************************
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

****************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  20
```

```
    ********   WARNING MESSAGES   ********
               ***  NONE  ***

************************************************
Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  25

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  30

    ********   WARNING MESSAGES   ********
               ***  NONE  ***
 ****************************************

  Running AERMOD
 Processing Summer

Processing surface roughness sector  1
```

```
***************************************************

Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

***************************************************

Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

***************************************************

Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

***************************************************
```

```
Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

****************************************************
Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

****************************************************
Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

****************************************************
Processing wind flow sector   7
```

```
 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  30

    ********   WARNING MESSAGES   ********
               ***  NONE  ***
 ********************************************

  Running AERMOD
 Processing Autumn

Processing surface roughness sector  1

*****************************************************
Processing wind flow sector   1

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

*****************************************************
Processing wind flow sector   2

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5
```

```
    ********   WARNING MESSAGES   ********

               ***  NONE  ***

************************************************

Processing wind flow sector   3

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

************************************************

Processing wind flow sector   4

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15

    ********   WARNING MESSAGES   ********

               ***  NONE  ***

************************************************

Processing wind flow sector   5

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20

    ********   WARNING MESSAGES   ********
```

```
               ***  NONE  ***

*****************************************************
Processing wind flow sector   6

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

*****************************************************
Processing wind flow sector   7

 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  30

    ********   WARNING MESSAGES   ********
               ***  NONE  ***

FLOWSECTOR   ended 02/08/21 10:53:26

REFINE       started 02/08/21 10:53:26

 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0

    ********   WARNING MESSAGES   ********
```

*** NONE ***

REFINE ended 02/08/21 10:53:28

****

AERSCREEN Finished Successfully

With no errors or warnings

Check log file for details

****

Ending date and time 02/08/21 10:53:30

```
 Concentration     Distance Elevation  Diag  Season/Month   Zo sector       Date
 H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS     HT
REF TA     HT
   0.28376E+01         1.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34662E+01        25.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
*  0.37102E+01        39.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28110E+01        50.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14233E+01        75.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.92189E+00       100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66553E+00       125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51213E+00       150.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.41126E+00       175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34081E+00       200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28881E+00       225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24929E+00       250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21829E+00       275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19345E+00       300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17305E+00       325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15616E+00       350.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

```
310.0    2.0
   0.14195E+00       375.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12985E+00       400.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11945E+00       425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11043E+00       450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10252E+00       475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.95531E-01       500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.89309E-01       525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.83746E-01       550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.78758E-01       575.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.74264E-01       600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.70198E-01       625.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66504E-01       649.99      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.63133E-01       675.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.60051E-01       700.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.57220E-01       725.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.54613E-01       749.99      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.52377E-01       775.00      0.00   0.0        Winter       0-360   10011001
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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.50138E-01       800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48060E-01       825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.46127E-01       850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.44325E-01       875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42641E-01       900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.41065E-01       925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39587E-01       950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.38199E-01       975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36893E-01      1000.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.35662E-01      1025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34501E-01      1050.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33404E-01      1075.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32366E-01      1100.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31382E-01      1125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30450E-01      1149.99      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29564E-01      1175.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
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   0.28722E-01      1200.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27920E-01      1225.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27157E-01      1250.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26428E-01      1275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25734E-01      1300.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25070E-01      1325.00      0.00  30.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24435E-01      1350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23828E-01      1375.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23246E-01      1400.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22688E-01      1425.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22154E-01      1450.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21640E-01      1475.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21147E-01      1500.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20673E-01      1525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20218E-01      1550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19779E-01      1574.99      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19357E-01      1600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
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310.0    2.0
   0.18950E-01      1625.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18558E-01      1650.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18179E-01      1675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17814E-01      1700.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17462E-01      1725.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17121E-01      1750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16791E-01      1775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16472E-01      1800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16164E-01      1824.99      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15865E-01      1850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15576E-01      1875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15296E-01      1900.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15024E-01      1924.99      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14761E-01      1950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14505E-01      1975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14258E-01      2000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14017E-01      2025.00      0.00   0.0        Winter       0-360   10011001
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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13783E-01      2050.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13556E-01      2075.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13336E-01      2100.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13121E-01      2125.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12913E-01      2150.00      0.00  30.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12710E-01      2175.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12512E-01      2200.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12320E-01      2224.99      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12133E-01      2250.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11951E-01      2275.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11773E-01      2300.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11600E-01      2325.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11431E-01      2350.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11267E-01      2375.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11107E-01      2400.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10950E-01      2425.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
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   0.10797E-01      2449.99      0.00  25.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10648E-01      2475.00      0.00   0.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10503E-01      2500.00      0.00   0.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10360E-01      2525.00      0.00   0.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10222E-01      2550.00      0.00   0.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10086E-01      2575.00      0.00   0.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99534E-02      2600.00      0.00  20.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.98238E-02      2625.00      0.00  20.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.96972E-02      2650.00      0.00  15.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.95733E-02      2675.00      0.00  25.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.94521E-02      2700.00      0.00  10.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.93336E-02      2725.00      0.00  20.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.92176E-02      2750.00      0.00  10.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.91041E-02      2775.00      0.00  15.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.89930E-02      2800.00      0.00  10.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.88842E-02      2825.00      0.00   0.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.87777E-02      2850.00      0.00  20.0         Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
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310.0    2.0
   0.86733E-02      2875.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.85711E-02      2900.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.84710E-02      2925.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.83729E-02      2950.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.82767E-02      2975.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.81824E-02      3000.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.80900E-02      3025.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.79994E-02      3050.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.79105E-02      3074.99      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.78233E-02      3100.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.77377E-02      3125.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.76538E-02      3150.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75714E-02      3174.99      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.74906E-02      3199.99      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.74112E-02      3225.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.73333E-02      3250.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.72568E-02      3275.00      0.00  30.0        Winter       0-360   10011001
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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.71816E-02      3300.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.71078E-02      3325.00      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.70353E-02      3350.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.69641E-02      3375.00      0.00  20.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.68941E-02      3400.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.68253E-02      3425.00      0.00  25.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.67577E-02      3450.00      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66913E-02      3475.00      0.00  20.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66259E-02      3500.00      0.00  20.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.65617E-02      3525.00      0.00  25.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.64985E-02      3550.00      0.00  25.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.64364E-02      3575.00      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.63753E-02      3600.00      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.63152E-02      3625.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.62561E-02      3650.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.61979E-02      3675.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

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   0.61407E-02      3700.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.60844E-02      3725.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.60289E-02      3750.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59744E-02      3775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59206E-02      3800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.58678E-02      3825.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.58157E-02      3849.99      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.57644E-02      3875.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.57139E-02      3900.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.56642E-02      3925.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.56151E-02      3950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.55669E-02      3975.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.55193E-02      4000.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.54725E-02      4025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.54263E-02      4050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53808E-02      4075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53360E-02      4100.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
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310.0    2.0
   0.52918E-02      4125.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.52482E-02      4150.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.52052E-02      4175.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51629E-02      4200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51211E-02      4225.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.50800E-02      4250.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.50394E-02      4275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.49993E-02      4300.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.49598E-02      4325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.49209E-02      4350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48824E-02      4375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48445E-02      4400.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48071E-02      4425.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.47702E-02      4449.99      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.47338E-02      4475.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.46978E-02      4500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.46624E-02      4525.00      0.00   0.0        Winter       0-360   10011001
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-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.46273E-02      4550.00      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.45928E-02      4575.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.45587E-02      4600.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.45250E-02      4625.00      0.00  25.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.44918E-02      4650.00      0.00  25.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.44589E-02      4675.00      0.00  15.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.44265E-02      4700.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.43945E-02      4725.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.43629E-02      4750.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.43317E-02      4775.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.43008E-02      4800.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42704E-02      4825.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42403E-02      4850.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42106E-02      4875.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.41812E-02      4900.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.41522E-02      4925.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.       6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
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   0.41235E-02      4950.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40952E-02      4975.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40672E-02      5000.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the United States District Court For The Southern District of Illinois
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 3:19-cv-00302-SMY-GCS
Rosenfeld Deposition. 2-19-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, *Plaintiff,* vs. Marathon Petroleum, LP, *Defendant.*
Case No.: 1716-CV10006
Rosenfeld Deposition. 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs,* vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs,* vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" *Defendant.*
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case: No 1:19-cv-00315-RHW
Rosenfeld Deposition, 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs,* vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al.,, et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No,: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action N0. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 150 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.

- Established national protocol for the peer review of scientific documents.

<u>Geology:</u>

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

<u>Teaching:</u>

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

<u>Invited Testimony, Reports, Papers and Presentations:</u>

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

Appendix B

SUPPLEMENTAL AIR QUALITY AND OPERATIONAL HEALTH RISK INFORMATION

Supplemental Parking Lot Emissions Information

The Jeff Hotel Project, Culver City, CA

Emissions Updates -- Parking Lot (PL) Surface Area

CONSTRUCTION EMISSIONS			Notes:
Construction VOC Emissions, Mitigated, Draft MND			Reference Appendix A-1 of the AQTR to the Draft MND
Max Year 2022	15.2726	lb/day VOC	

Parking Lot Construction Painting VOC Emission Calculations			Notes:
PL Total Area, Draft MND	33,817	sq ft	Original PL area assumed
PL Total Area, Final MND	56,300	sq ft	Revised PL area assumed
Default % Parking Lot Painted, P	6%	%	CalEEMod Users Guide, Appendix A, Section 4.7
PL Painted Area, Draft MND	2,029.02	sq ft	Calculated
PL Painted Area, Final MND	3,378.00	sq ft	Calculated
VOC Emission Factor, EF_AC	0.00463	lbs/sq ft	Calculated from CalEEMod Users Guide, Appendix A, Section 4.7
VOC Content, C	100	g/L	Default assumed in CalEEMod
Arch Coating Phase Duration	77	days	Based on project information
PL Arch Coating Emission, Draft MND	0.12	lb/day VOC	Total emissions by phase calculated w/equation in CalEEMod Users Guide, Appendix A, Section 4.7, then divided by phase duration
PL Arch Coating Emission, Final MND	0.20	lb/day VOC	
PL Arch Coating Emissions, Delta	0.08	<-- Add Delta to get new ops emissions	

Note: Offgassing VOC emissions were not necessary as there is no asphalt paving assumed for subterranean enclosed parking, which assumes concrete that does not result in offgassing.

OPERATIONS EMISSIONS			Notes:	
Operations VOC Emissions, Mitigated, Draft MND			Reference the GHGTR to the Draft MND; values for "Project Without GHG Reduction Characteristics, Features, and Measures"	
Total Project	7.76	lb/day VOC	1851	MT/year CO2e
Existing	1.76	lb/day VOC	314	MT/year CO2e
Net Project Emissions	6.00	lb/day VOC	1537.00	MT/year CO2e

Consumer Products			Notes:
EF	2.04E-05	lbs/sq.ft/day	Conservatively assumes parking lot degreaser VOC emissions (CalEEMod Users Guide Appendix A, consumer products) and 6% daily application.
CP Application Area, Draft MND	0.04	lb VOC/day	
CP Application Area, Final MND	0.07	lb VOC/day	
Delta	0.03	<-- Add CP + AC Delta to get new ops emissions	

Architectural Coatings			Notes:
Reapplication Rate	10%	% per year of Area	CalEEMod Users Guide, Appendix A, Section 6.3
PL Arch Coating Emission, Draft MND	0.01	lb/day VOC	
PL Arch Coating Emission, Final MND	0.02	lb/day VOC	
Delta	0.01	<-- Add CP + AC Delta to get new ops emissions	

Energy Use			Notes:	
Annual Energy Use Factor	5.86	kWh/sq ft	CalEEMod Users Guide, Appendix A, Section 7.3	
Energy Use PL Total Area, Draft MND	198,167.62	KWh/year		
Energy Use PL Total Area, Final MND	329,918.00	KWh/year		
Carbon Intensity of Local Utility	578.93	lbs CO2/MWh	1	GWP
	0.029	lbs CH4/MWh	21	GWP
	0.006	lbs N2O/MWh	310	GWP
	581.399	lbs CO2e/MWh		
Annual CO2e Emissions, Draft MND	115,214.5	lbs CO2e/year		
Annual CO2e Emissions, Final MND	191,814.0	lbs CO2e/year		
Annual CO2e Emissions, Draft MND	52.3	MT/year		
Annual CO2e Emissions, Final MND	87.0	MT/year		
Delta	34.74	<-- Add Delta to get new ops GHG emissions		

Project Phase	Maximum VOC Emissions (pounds per day)			Maximum GHG Emissions ($MTCO_2e$ per year)		
	Draft MND	Final MND	Percent Change	Draft MND	Final MND	Percent Change
Construction	15.3	15.4	0.5%	No Changes		
Operations	6.00	6.04	0.6%	1,537	1,572	2.26%

Source: ESA, 2021

The Jeff Hotel Project, Culver City, CA

Energy Use Updates with Updates to Parking Lot Square Footage

<u>OPERATIONAL ENERGY USE - Updates to Electricity Usage</u>			<u>Notes:</u>
Annual Energy Use Factor	5.86	kWh/sq ft	CalEEMod Users Guide, Appendix A, Section 7.3
Parking Lot Total Area, Draft MND	33817	sq ft	
Parking Lot Total Area, Final MND	56300	sq ft	
Existing Energy Usage, Draft MND	0.96	million kWh per year	
Parking Lot Energy Usage, Draft MND	0.20	million kWh per year	
Parking Lot Energy Usage, Final MND	0.33	million kWh per year	
Change in Energy Usage	0.13	million kWh per year	
Updated Energy Usage, Final MND	1.09	million kWh per year	

Supplemental Operational Health Risk Information

The Jeff Hotel Project, Culver City, CA
Fleet Mix Calculations Emission Factors

	Vehicle Type												
Land Use Total Fleet Mixes	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking With Elevator	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864
Hotel	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864

Note:

Reference CalEEMod Output files, Appendix A-1 of the AQTR to the Draft MND

DPM Fleet Mix Calculations	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
DPM / Total Population Ratio	0.008758	0.000521	0.006235	0.020527	0.404291	0.612002	0.828945	0.955038	0.417679	0.002217	0	0.715959	0.266605
Adjusted DPM Fleet Mix	0.004759	3.13E-05	0.001149	0.002693	0.00964	0.003822	0.009957	0.00875	0.000345	1.14E-06	0	0.000536	0.00103

Note:

EMFAC2017, Year 2022; DPM / Total Population Ratio is calculated by taking the population of diesel vehicles divided by the population of all vehicles for each vehicle type.
The Adjusted DPM Fleet Mix portrays the percentage of diesel vehicles, by vehicle type, of the total Project trips.

DPM Emission Factor	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
2022 Diesel PM10 EF	0.008486	0.147108	0.005997	0.00512	0.014912	0.015833	0.038704	0.029646	0.029314	0.006355	0	0.04482	0.093344

Note:

EMFAC2017, Year 2022

The Jeff Hotel Project, Culver City, CA
DPM Emissions Calculations

Daily One Way Trips:	1463	*Reference CalEEMod Output files, Appendix A-1 of the AQTR to the Draft MND*
Annual One Way Trips:	533,995	*Assuming 365 days per year*

	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Adjusted DPM Fleet Mix:	0.00475907	3.13E-05	0.001149	0.002693	0.00964	0.003822	0.009957	0.00875	0.000345	1.14E-06	0	0.000536	0.00103
Annual Diesel Trips by Vehicle Type:	2541.3	16.7	613.8	1438.0	5147.5	2040.9	5317.1	4672.5	184.2	0.6	0	286.0	550.1
Modeled 1-Way Trip Distance (mile):	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Annual Diesel VMT by Vehicle Type:	1067.4	7.0	257.8	603.9	2161.9	857.2	2233.2	1962.4	77.4	0.3	0	120.1	231.0

Note: Vehicle Miles Traveled (VMT) calculated based on modeled vehicle travel distance (miles) and annual diesel trips by vehicle type.

	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
2022 DPM EF (g/mile):	0.00848648	0.147108	0.005997	0.00512	0.014912	0.015833	0.038704	0.029646	0.029314	0.006355	0	0.04482	0.093344
2022 DPM Emissions (g/yr):	9.1	1.0	1.5	3.1	32.2	13.6	86.4	58.2	2.3	0.0	0	5.4	21.6

Note: DPM emissions are calculated based on the EMFAC2017 emission factors (g/mi) and the annual VMT (miles/year).

Total DPM Emissions (g/yr):	234.37
Total DPM Emissions (g/s):	0.00001

The Jeff Hotel Project, Culver City, CA
Maximum Individual Cancer Risk Calculations

Parameter		Age Bins			
		3rd Trimester	**0 < 2**	**2 < 16**	**16 < 30**
DBR	Daily Breathing Rate (L/kg (body weight) per day)	361	1090	631	261
A	Inhalation absorption factor (default = 1).	1	1	1	1
EF	Exposure Frequency unitless (days/days)	0.96	0.96	0.96	0.96
ED	Exposure Duration (years)	0.25	2	14	14
FAH	Fraction of Time at Home	1	1	1	0.73
AT	Averaged Exposure Time Period (years)	70	70	70	70
ASF	Age Sensitvity Factor	10	10	3	1
CF	Conversion Factor	1.00E-06	1.00E-06	1.00E-06	1.00E-06
DOSE	**[= CONC × DBR × A × EF × CF] (mg/kg-day)**				
CPF	DPM Cancer Potency Factor (mg/kg-day)-1	1.1	1.1	1.1	1.1
Cancer Conversion Factor	1,000,000				
RISK	**Cancer Risk (in one million) =[[DOSE × CPF × ASF x FAH x ED]/ AT]*1,000,000**				
	Max Project AERMOD Modeled Concentration (ug/m3):	0.0005324	0.000532	0.000532	0.000532
	Dose By Age Bin:	1.84E-07	5.56E-07	3.22E-07	1.33E-07
	Risk By Age Bin:	0.0072	0.1749	0.2126	0.0214
	Total Maximum Lifetime Risk (in one million):	**0.416**			

Note: Parameters and methodologies from the SCAQMD's Risk Assessment Procedsures for Rules 1401, 1401.1 and 212, Version 8.1, dated September 1, 2017.

The Jeff Hotel Project, Culver City, CA
Maximum Non-Cancer Risk Calculations

Maximum Non-cancer Chronic Hazards / Toxicological Endpoints -Without Mitigation *

	Pollutant	CREL[1]	CONC	WFrac	$CONC_{WF}$	HI	ALIM	BN	CVS	DEV	ENDC	EYE	HEM	IMMUN	KIDN	NS	REPRO	RESP	SK	Threshold	Over?
Project:																					
Max Residential Receptor	DPM	5.00E+00	5.32E-04	1.00E+00	5.32E-04	**1.06E-04**	--	-	-	-	-	-	-	-	-	-	-	0.0001	-	1.0	NO

Sources:

1. California Air Resources Board, "Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values" and "OEHHA/ARB Approved Chronic Reference Exposure Levels and Target Organs," http://www.arb.ca.gov/toxics/healthval/healthval.htm.
Tables last updated: September 9, 2016 and March 30, 2016. Downloaded 02/10/2017.

Where:

$CONC_{WF}$	Pollutant Concentration ($\mu g/m^3$) multiplied by the weight fraction
CREL	Chronic Reference Exposure Level
HI	Hazard Index
MEI	Maximally Exposed Individual
WFrac	Weight fraction of speciated component

* Key to Toxicological Endpoints

ALIM	Alimentary Tract	EYE	Eye	NS	Nervous System
BN	Bone	HEM	Hematologic System	REPRO	Reproductive System
CVS	Cardiovascular System	IMMUN	Immune System	RESP	Respiratory System
DEV	Developmental System	KIDN	Kidney	SK	Skin
ENDC	Endocrine System				

The Jeff Hotel Project, Culver City, CA
EMFAC2017 Data Outputs

EMFAC2017 (v1.0.2) Emission Rates
Region Type: Air District
Region: SOUTH COAST AQMD
Calendar Year: 2020, 2021, 2022, 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTSOAK	ROG_RUNLOSS	ROG_RESTLOSS	ROG_DIURN	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTSOAK	TOG_RUNLOSS	TOG_RESTLOSS	TOG_DIURN	CO_RUNEX	CO_IDLEX
SOUTH CO	2020	HHDT	Aggregatec	Aggregatec	GAS	87.83189	7670.468393	1757.340415	0.746021824	0	0.00137939	0.194997842	0.98856652	0.066658615	0.099073631	1.077925784	0	0.001510259	0.194997842	0.98856652	0.066658615	0.099073631	39.24470639	0
SOUTH CO	2020	HHDT	Aggregatec	Aggregatec	DSL	103820.4	12807959.19	1065500.159	0.131688113	5.025090373	0	0	0	0	0	0.149916892	5.720682874	0	0	0	0	0	0.519052787	60.92842872
SOUTH CO	2020	HHDT	Aggregatec	Aggregatec	NG	4398.413	179076.229	17153.81106	0.427422365	0.081689909	0	0	0	0	0	5.897148394	1.42555439	0	0	0	0	0	13.01071423	19.69512577
SOUTH CO	2020	LDA	Aggregatec	Aggregatec	GAS	6343244	250946804.6	29952289.22	0.014835706	0	0.271765089	0.11513896	0.231795913	0.270480535	0.303023428	0.021630849	0	0.297545551	0.11513896	0.231795913	0.270480535	0.303023428	0.830943159	0
SOUTH CO	2020	LDA	Aggregatec	Aggregatec	DSL	51115.55	2093562.117	242023.4737	0.023873875	0	0	0	0	0	0	0.027178819	0	0	0	0	0	0	0.293360091	0
SOUTH CO	2020	LDA	Aggregatec	Aggregatec	ELEC	90985.72	3568728.994	456458.1804	0	0	0	0.004888026	0	0.008180261	0.023872524	0	0	0	0.004888026	0	0.008180261	0.023872524	0	0
SOUTH CO	2020	LDT1	Aggregatec	Aggregatec	GAS	692884.6	26159714.71	3181017.639	0.042779726	0	0.447774397	0.244899955	0.83281128	0.598282558	0.761774273	0.06235415	0	0.490252133	0.244899955	0.83281128	0.598282558	0.761774273	1.766833932	0
SOUTH CO	2020	LDT1	Aggregatec	Aggregatec	DSL	447.0053	10577.7496	1564.205034	0.215369448	0	0	0	0	0	0	0.245183798	0	0	0	0	0	0	1.251890987	0
SOUTH CO	2020	LDT1	Aggregatec	Aggregatec	ELEC	2466.328	92670.64319	12156.12935	0	0	0	0.004888026	0	0.008037586	0.023575573	0	0	0	0.004888026	0	0.008037586	0.023575573	0	0
SOUTH CO	2020	LDT2	Aggregatec	Aggregatec	GAS	2169628	83699648.08	10158608.89	0.02415523	0	0.375689099	0.141243083	0.445478252	0.384821294	0.402603078	0.035218611	0	0.411330451	0.141243083	0.445478252	0.384821294	0.402603078	1.176733253	0
SOUTH CO	2020	LDT2	Aggregatec	Aggregatec	DSL	11367.52	511152.7811	56413.22504	0.02188392	0	0	0	0	0	0	0.024913388	0	0	0	0	0	0	0.169041863	0
SOUTH CO	2020	LDT2	Aggregatec	Aggregatec	ELEC	12535.43	424456.7871	63666.289	0	0	0	0.004888026	0	0.008236503	0.023985921	0	0	0	0.004888026	0	0.008236503	0.023985921	0	0
SOUTH CO	2020	LHDT1	Aggregatec	Aggregatec	GAS	178175.5	6494353.996	2654549.228	0.042660899	0.460779784	0.139352822	0.133332138	0.889141906	0.037639364	0.065610006	0.061662632	0.672129535	0.152549333	0.133332138	0.889141906	0.037639364	0.065610006	1.035480871	3.744564982
SOUTH CO	2020	LHDT1	Aggregatec	Aggregatec	DSL	106680.2	4404637.682	1341902.266	0.081647705	0.109759705	0	0	0	0	0	0.092950484	0.124954127	0	0	0	0	0	0.466938727	0.909745076
SOUTH CO	2020	LHDT2	Aggregatec	Aggregatec	GAS	29750.07	1051653.666	443231.7796	0.029693666	0.463017638	0.137792562	0.126922354	0.834770696	0.034081429	0.058835742	0.043321476	0.675631126	0.150865189	0.126922354	0.834770696	0.034081429	0.058835742	0.749629088	3.751909941
SOUTH CO	2020	LHDT2	Aggregatec	Aggregatec	DSL	41895.25	1694144.207	526989.5855	0.075882922	0.109759705	0	0	0	0	0	0.086387662	0.124954127	0	0	0	0	0	0.425186524	0.909745076
SOUTH CO	2020	MCY	Aggregatec	Aggregatec	GAS	276047.6	1990434.04	552095.1922	2.515405584	0	1.837402501	0.727104108	2.121485231	1.449854921	2.405655781	3.099734094	0	1.999296164	0.727104108	2.121485231	1.449854921	2.405655781	19.67941412	0
SOUTH CO	2020	MDV	Aggregatec	Aggregatec	GAS	1557729	56408480.36	7193015.573	0.03903059	0	0.495944644	0.162666871	0.481724879	0.46106636	0.46614825	0.054222959	0	0.542924367	0.162666871	0.481724879	0.46106636	0.46614825	1.520561489	0
SOUTH CO	2020	MDV	Aggregatec	Aggregatec	DSL	27451.54	1159329.066	135395.1637	0.016924462	0	0	0	0	0	0	0.019267374	0	0	0	0	0	0	0.265027598	0
SOUTH CO	2020	MDV	Aggregatec	Aggregatec	ELEC	3954.471	138125.1853	20276.62835	0	0	0	0.004888026	0	0.008280716	0.024086142	0	0	0	0.004888026	0	0.008280716	0.024086142	0	0
SOUTH CO	2020	MH	Aggregatec	Aggregatec	GAS	36100.69	340582.2237	3611.512816	0.075811034	0	0.142330762	0.093204627	2.21046236	0.056820357	0.145516626	0.109007327	0	0.155782241	0.093204627	2.21046236	0.056820357	0.145516626	2.25115835	0
SOUTH CO	2020	MH	Aggregatec	Aggregatec	DSL	12007.37	118161.7969	1200.737369	0.074292074	0	0	0	0	0	0	0.084576587	0	0	0	0	0	0	0.323810162	0
SOUTH CO	2020	MHDT	Aggregatec	Aggregatec	GAS	25210.15	1381572.63	504404.7546	0.081073931	1.000760895	0.220050077	0.08639845	0.459958648	0.028337615	0.047195421	0.11830289	1.460307948	0.240927136	0.08639845	0.459958648	0.028337615	0.047195421	2.098131322	14.33513855
SOUTH CO	2020	MHDT	Aggregatec	Aggregatec	DSL	120277.1	7555230.165	1196267.58	0.146882294	0.126731896	0	0	0	0	0	0.16721431	0.144274617	0	0	0	0	0	0.509585607	2.375961793
SOUTH CO	2020	OBUS	Aggregatec	Aggregatec	GAS	5971.384	262419.3817	119475.4563	0.072761465	0.743495942	0.166313031	0.029893342	0.34282291	0.025979727	0.053220124	0.105933435	1.084690713	0.18207085	0.029893342	0.34282291	0.025979727	0.053220124	1.864404674	5.757023195
SOUTH CO	2020	OBUS	Aggregatec	Aggregatec	DSL	4179.048	309243.7025	40903.23601	0.191704961	1.462787269	0	0	0	0	0	0.218241506	1.665271957	0	0	0	0	0	0.671802412	14.12136826
SOUTH CO	2020	SBUS	Aggregatec	Aggregatec	GAS	2327.941	97616.62301	9311.762921	0.072716778	10.59822229	0.337077331	0.080220084	0.584905396	0.019196983	0.039485462	0.106108152	15.46490109	0.369057248	0.080220084	0.584905396	0.019196983	0.039485462	1.616478979	81.97929696
SOUTH CO	2020	SBUS	Aggregatec	Aggregatec	DSL	6542.861	206832.8804	75503.7145	0.13298115	0.308477087	0	0	0	0	0	0.151388917	0.351177682	0	0	0	0	0	0.365996832	5.709030052
SOUTH CO	2020	UBUS	Aggregatec	Aggregatec	GAS	938.2571	88202.7311	3753.028589	0.016361451	0	0.421345543	0.071814969	0.435703173	0.017272276	0.022336862	0.02387459	0	0.461320334	0.071814969	0.435703173	0.017272276	0.022336862	0.302133635	0
SOUTH CO	2020	UBUS	Aggregatec	Aggregatec	DSL	18.19692	1877.446227	72.78767323	0.002907758	0	0	0	0	0	0	0.090072406	0	0	0	0	0	0	0.211612621	0
SOUTH CO	2020	UBUS	Aggregatec	Aggregatec	ELEC	17.11694	1343.18541	68.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH CO	2020	UBUS	Aggregatec	Aggregatec	NG	5325.955	586393.9078	21303.81879	0.151851891	0	0	0	0	0	0	7.143671741	0	0	0	0	0	0	44.26742964	0
SOUTH CO	2021	HHDT	Aggregatec	Aggregatec	GAS	82.02365	7779.478841	1641.129268	0.621421209	0	0.001515284	0.162872089	0.863292402	0.059399165	0.087856899	0.906776369	0	0.001659045	0.162872089	0.863292402	0.059399165	0.087856899	35.73455952	0
SOUTH CO	2021	HHDT	Aggregatec	Aggregatec	DSL	106416.5	13098099.52	1096767.394	0.107097094	5.006426889	0	0	0	0	0	0.121921889	5.699435917	0	0	0	0	0	0.443215059	63.9754825
SOUTH CO	2021	HHDT	Aggregatec	Aggregatec	NG	4728.678	192520.0593	18441.84402	0.379688412	0.073062963	0	0	0	0	0	5.654517946	1.390763479	0	0	0	0	0	13.221117	19.9272636
SOUTH CO	2021	LDA	Aggregatec	Aggregatec	GAS	6444755	251960829.1	30445138.88	0.012620648	0	0.246691495	0.107236191	0.221834092	0.252471197	0.278838129	0.018405179	0	0.270094187	0.107236191	0.221834092	0.252471197	0.278838129	0.759761649	0
SOUTH CO	2021	LDA	Aggregatec	Aggregatec	DSL	55086.24	2235697.578	261421.0655	0.020821254	0	0	0	0	0	0	0.023703614	0	0	0	0	0	0	0.276436322	0
SOUTH CO	2021	LDA	Aggregatec	Aggregatec	ELEC	107407.1	4288811.557	537483.7872	0	0	0	0.004888026	0	0.008216835	0.023956569	0	0	0	0.004888026	0	0.008216835	0.023956569	0	0
SOUTH CO	2021	LDT1	Aggregatec	Aggregatec	GAS	715053.2	26787165.5	3291669.777	0.037019286	0	0.401929221	0.225049396	0.764455909	0.55612794	0.697326245	0.053969613	0	0.440058774	0.225049396	0.764455909	0.55612794	0.697326245	1.57153653	0
SOUTH CO	2021	LDT1	Aggregatec	Aggregatec	DSL	416.2374	9768.779686	1451.630325	0.205969267	0	0	0	0	0	0	0.234482316	0	0	0	0	0	0	1.197051607	0
SOUTH CO	2021	LDT1	Aggregatec	Aggregatec	ELEC	3765.999	150723.395	18801.15656	0	0	0	0.004888026	0	0.008130072	0.023769116	0	0	0	0.004888026	0	0.008130072	0.023769116	0	0
SOUTH CO	2021	LDT2	Aggregatec	Aggregatec	GAS	2207489	84313978.67	10346294.88	0.021253604	0	0.344147164	0.133570802	0.427765686	0.372887078	0.385202421	0.030994975	0	0.376796658	0.133570802	0.427765686	0.372887078	0.385202421	1.071322135	0
SOUTH CO	2021	LDT2	Aggregatec	Aggregatec	DSL	12809.41	562270.3473	63393.99266	0.02112619	0	0	0	0	0	0	0.024050763	0	0	0	0	0	0	0.170546608	0
SOUTH CO	2021	LDT2	Aggregatec	Aggregatec	ELEC	17082.5	567118.9552	86612.02796	0	0	0	0.004888026	0	0.00826092	0.024039827	0	0	0	0.004888026	0	0.00826092	0.024039827	0	0
SOUTH CO	2021	LHDT1	Aggregatec	Aggregatec	GAS	176982.4	6390713.726	2636774.003	0.03773471	0.451124388	0.129049622	0.127182795	0.850175842	0.036586255	0.062824437	0.055062401	0.658279647	0.141293092	0.127182795	0.850175842	0.036586255	0.062824437	0.908803604	3.748286277
SOUTH CO	2021	LHDT1	Aggregatec	Aggregatec	DSL	113082.1	4621741.237	1422430.214	0.075839273	0.109759705	0	0	0	0	0	0.08633797	0.124954127	0	0	0	0	0	0.425306365	0.909745076
SOUTH CO	2021	LHDT2	Aggregatec	Aggregatec	GAS	29883.23	1046372.376	445215.6738	0.025709992	0.453522365	0.129828843	0.122662675	0.789960106	0.033300462	0.056316382	0.03751596	0.66177877	0.142146241	0.122662675	0.789960106	0.033300462	0.056316382	0.648827712	3.755675324
SOUTH CO	2021	LHDT2	Aggregatec	Aggregatec	DSL	44616.37	1781625.741	561217.7994	0.070897589	0.109759705	0	0	0	0	0	0.080712191	0.124954127	0	0	0	0	0	0.38984293	0.909745076
SOUTH CO	2021	MCY	Aggregatec	Aggregatec	GAS	286160.6	2034867.698	572321.1261	2.502786896	0	1.825527937	0.711198577	2.035068113	1.434742105	2.392171159	3.095194812	0	1.986656375	0.711198577	2.035068113	1.434742105	2.392171159	19.33312731	0
SOUTH CO	2021	MDV	Aggregatec	Aggregatec	GAS	1569538	56209459.55	7250478.016	0.033127553	0	0.452450025	0.15616374	0.465668344	0.452664389	0.451797167	0.04654167	0	0.495327247	0.15616374	0.465668344	0.452664389	0.451797167	1.359430192	0
SOUTH CO	2021	MDV	Aggregatec	Aggregatec	DSL	30443.6	1257907.778	149745.6331	0.015548559	0	0	0	0	0	0	0.017701001	0	0	0	0	0	0	0.258741865	0
SOUTH CO	2021	MDV	Aggregatec	Aggregatec	ELEC	7447.233	256086.1071	38184.47758	0	0	0	0.004888026	0	0.008295275	0.024117361	0	0	0	0.004888026	0	0.008295275	0.024117361	0	0
SOUTH CO	2021	MH	Aggregatec	Aggregatec	GAS	35586.6	336910.0236	3560.08352	0.061637745	0	0.132409351	0.086374098	2.036573802	0.052960078	0.133442519	0.089941653	0	0.144971572	0.086374098	2.036573802	0.052960078	0.133442519	1.791625333	0
SOUTH CO	2021	MH	Aggregatec	Aggregatec	DSL	12385.97	120326.0615	1238.596705	0.072001466	0	0	0	0	0	0	0.081968882	0	0	0	0	0	0	0.308667129	0
SOUTH CO	2021	MHDT	Aggregatec	Aggregatec	GAS	25312.95	1374104.99	506461.4329	0.067676908	1.003125889	0.210836384	0.08275905	0.435823244	0.026868744	0.043720599	0.098753985	1.463758943	0.230839302	0.08275905	0.435823244	0.026868744	0.043720599	1.742507929	14.36143542
SOUTH CO	2021	MHDT	Aggregatec	Aggregatec	DSL	122608.9	7755175.552	1223035.655	0.117825541	0.114149781	0	0	0	0	0	0.134135409	0.129950836	0	0	0	0	0	0.420894314	2.384456103
SOUTH CO	2021	OBUS	Aggregatec	Aggregatec	GAS	5971.381	256430.9176	119475.3831	0.065241439	0.743818718	0.16027719	0.029880055	0.346484106	0.026225772	0.053127248	0.095200154	1.085378527	0.175483348	0.029880055	0.346484106	0.026225772	0.053127248	1.648091306	5.759841301
SOUTH CO	2021	OBUS	Aggregatec	Aggregatec	DSL	4250.338	317904.7019	41510.49338	0.141374471	1.292462823	0	0	0	0	0	0.160944074	1.47137054	0	0	0	0	0	0.515599164	13.93917165
SOUTH CO	2021	SBUS	Aggregatec	Aggregatec	GAS	2478.675	102530.0329	9914.699156	0.065736739	10.60770901	0.333985621	0.077469183	0.524270317	0.018981903	0.037897476	0.095922895	15.47874409	0.365672215	0.077469183	0.524270317	0.018981903	0.037897476	1.460936505	82.03627178
SOUTH CO	2021	SBUS	Aggregatec	Aggregatec	DSL	6588.549	208177.801	76030.94486	0.127099151	0.297243237	0	0	0	0	0	0.144692709	0.338388799	0	0	0	0	0	0.354759557	5.933685029
SOUTH CO	2021	UBUS	Aggregatec	Aggregatec	GAS	943.9678	88729.36464	3775.87135	0.016304879	0	0.43556774	0.083060896	0.512511075	0.019765992	0.025251607	0.023792041	0	0.476891849	0.083060896	0.512511075	0.019765992	0.025251607	0.314114162	0
SOUTH CO	2021	UBUS	Aggregatec	Aggregatec	DSL	14.14142	1478.085683	56.56567323	0.00138296	0	0	0	0	0	0	0.098782884	0	0	0	0	0	0	0.157474251	0
SOUTH CO	2021	UBUS	Aggregatec	Aggregatec	ELEC	17.11694	1343.18541	68.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH CO	2021	UBUS	Aggregatec	Aggregatec	NG	5362.039	590313.6899	21448.15649	0.09721595	0	0	0	0	0	0	6.914550877	0	0	0	0	0	0	45.48450222	0
SOUTH CO	2022	HHDT	Aggregatec	Aggregatec	GAS	77.82251	7970.98117	1557.072798	0.534539611	0	0.001625762	0.145944615	0.764377261	0.05284316	0.077569423	0.779998945	0	0.001780004	0.145944615	0.764377261	0.05284316	0.077569423	33.20956955	0
SOUTH CO	2022	HHDT	Aggregatec	Aggregatec	DSL	108362	13373431.11	1118616.808	0.066311067	4.953559592	0	0	0	0	0	0.075490102	5.639250525	0	0	0	0	0	0.307101864	67.54376867
SOUTH CO	2022	HHDT	Aggregatec	Aggregatec	NG	5023.711	204625.173	19592.47418	0.339192067	0.065718619	0	0	0	0	0	5.450486273	1.361527852	0	0	0	0	0	13.40108382	20.13296542
SOUTH CO	2022	LDA	Aggregatec	Aggregatec	GAS	6542832	252244145.8	30915700.59	0.010807584	0	0.225004301	0.100808652	0.213622344	0.236739793	0.258119784	0.015763996	0	0.246350211	0.100808652	0.213622344	0.236739793	0.258119784	0.701626991	0
SOUTH CO	2022	LDA	Aggregatec	Aggregatec	DSL	58937.5	2358229.535	279973.4391	0.018297169	0	0	0	0	0	0	0.02083011	0	0	0	0	0	0	0.26131431	0
SOUTH CO	2022	LDA	Aggregatec	Aggregatec	ELEC	127532.6	5177709.154	637025.3739	0	0	0	0.004888026	0	0.008247438	0.024026526	0	0	0	0.004888026	0	0.008247438	0.024026526	0	0
SOUTH CO	2022	LDT1	Aggregatec	Aggregatec	GAS	736905.6	27300895.56	3399511.906	0.031959652	0	0.361389035	0.207144146	0.70681942	0.516804396	0.638701209	0.046606278	0	0.395673614	0.207144146	0.70681942	0.516804396	0.638701209	1.403423642	0
SOUTH CO	2022	LDT1	Aggregatec	Aggregatec	DSL	387.1571	9037.122412	1348.407804	0.194856526	0	0	0	0	0	0	0.2218312	0	0	0	0	0	0	1.137842369	0
SOUTH CO	2022	LDT1	Aggregatec	Aggregatec	ELEC	5339.042	221507.355	26794.46811	0	0	0	0.004888026	0	0.008187019	0.023888919	0	0	0	0.004888026	0	0.008187019	0.023888919	0	0

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SOUTH CO/	2022	LDT2	Aggregatec	Aggregatec	GAS	2246303	84740129.27	10535909.69	0.018748117	0	0.31555438	0.126512271	0.413337261	0.361826801	0.369693456	0.027345509	0	0.345491568	0.126512271	0.413337261	0.361826801	0.369693456	0.983936842	0
SOUTH CO/	2022	LDT2	Aggregatec	Aggregatec	DSL	14234.59	607996.5113	70193.21532	0.020716871	0	0	0	0	0	0	0.02358478	0	0	0	0	0	0	0.172240796	0
SOUTH CO/	2022	LDT2	Aggregatec	Aggregatec	ELEC	22589.96	734756.0744	114302.6498	0	0	0	0.004888026	0	0.008282318	0.024087012	0	0	0	0.004888026	0	0.008282318	0.024087012	0	0
SOUTH CO/	2022	LHDT1	Aggregatec	Aggregatec	GAS	175903.1	6298251.455	2620693.985	0.033352878	0.439576809	0.121077931	0.122149849	0.813995078	0.035361742	0.059906428	0.048668442	0.641429447	0.132565095	0.122149849	0.813995078	0.035361742	0.059906428	0.808390803	3.751801981
SOUTH CO/	2022	LHDT1	Aggregatec	Aggregatec	DSL	119380.7	4817006.913	1501659.07	0.070684026	0.109759705	0	0	0	0	0	0.080469064	0.124954127	0	0	0	0	0	0.389981061	0.909745076
SOUTH CO/	2022	LHDT2	Aggregatec	Aggregatec	GAS	30009.92	1040649.06	447103.1237	0.022119932	0.442151492	0.122035778	0.118048535	0.742889405	0.032420485	0.053737357	0.032277352	0.64518642	0.133613816	0.118048535	0.742889405	0.032420485	0.053737357	0.561921039	3.759210533
SOUTH CO/	2022	LHDT2	Aggregatec	Aggregatec	DSL	47335.63	1861640.337	595422.6751	0.066532795	0.109759705	0	0	0	0	0	0.075743164	0.124954127	0	0	0	0	0	0.360377228	0.909745076
SOUTH CO/	2022	MCY	Aggregatec	Aggregatec	GAS	295960.1	2072370.126	591920.16	2.484622471	0	1.81517329	0.697336661	1.961252461	1.420600236	2.381222297	3.081786824	0	1.976635847	0.697336661	1.961252461	1.420600236	2.381222297	19.02538024	0
SOUTH CO/	2022	MDV	Aggregatec	Aggregatec	GAS	1579640	55888916.43	7302407.352	0.025510081	0	0.410373139	0.149292732	0.450727833	0.440692731	0.434477209	0.037119485	0	0.449300867	0.149292732	0.450727833	0.440692731	0.434477209	1.167815956	0
SOUTH CO/	2022	MDV	Aggregatec	Aggregatec	DSL	33348.92	1344806.362	163526.2835	0.014262978	0	0	0	0	0	0	0.016237452	0	0	0	0	0	0	0.251390452	0
SOUTH CO/	2022	MDV	Aggregatec	Aggregatec	ELEC	11658.48	391944.2778	59625.29995	0	0	0	0.004888026	0	0.008312586	0.024155143	0	0	0	0.004888026	0	0.008312586	0.024155143	0	0
SOUTH CO/	2022	MH	Aggregatec	Aggregatec	GAS	35097.75	333282.4015	3511.17938	0.051959293	0	0.127702008	0.079936325	1.873205374	0.049350114	0.122260412	0.075818878	0	0.139817625	0.079936325	1.873205374	0.049350114	0.122260412	1.472656911	0
SOUTH CO/	2022	MH	Aggregatec	Aggregatec	DSL	12758.81	122359.1731	1275.881024	0.069582109	0	0	0	0	0	0	0.079214605	0	0	0	0	0	0	0.293984972	0
SOUTH CO/	2022	MHDT	Aggregatec	Aggregatec	GAS	25445.41	1367743.276	509111.7939	0.056133967	1.005198629	0.201893597	0.079459578	0.414432874	0.02568769	0.040796047	0.081910553	1.46678348	0.221048076	0.079459578	0.414432874	0.02568769	0.040796047	1.436670867	14.38449122
SOUTH CO/	2022	MHDT	Aggregatec	Aggregatec	DSL	123310	7939339.808	1231987.666	0.058435145	0.091276741	0	0	0	0	0	0.066523964	0.103911622	0	0	0	0	0	0.234510134	2.354049319
SOUTH CO/	2022	OBUS	Aggregatec	Aggregatec	GAS	5959.443	250653.5146	119236.5275	0.058122687	0.744264192	0.15636909	0.030026221	0.349398959	0.026292559	0.052717482	0.084812488	1.086028562	0.171204471	0.030026221	0.349398959	0.026292559	0.052717482	1.458399252	5.762524869
SOUTH CO/	2022	OBUS	Aggregatec	Aggregatec	DSL	4274.499	325950.0826	41607.39015	0.060180925	1.007917754	0	0	0	0	0	0.068511402	1.147437639	0	0	0	0	0	0.253523192	13.49357136
SOUTH CO/	2022	SBUS	Aggregatec	Aggregatec	GAS	2630.829	107369.7838	10523.31785	0.059784668	10.615424	0.331378363	0.075810478	0.481182259	0.018961712	0.036827835	0.087237648	15.49000179	0.362817596	0.075810478	0.481182259	0.018961712	0.036827835	1.324882936	82.08267195
SOUTH CO/	2022	SBUS	Aggregatec	Aggregatec	DSL	6631.313	209546.1335	76524.43389	0.121177966	0.287981698	0	0	0	0	0	0.13795189	0.327845242	0	0	0	0	0	0.343402749	6.171457013
SOUTH CO/	2022	UBUS	Aggregatec	Aggregatec	GAS	952.146	89255.99818	3808.584112	0.016134244	0	0.439672142	0.086559594	0.543364486	0.020492544	0.026184252	0.023543051	0	0.481385653	0.086559594	0.543364486	0.020492544	0.026184252	0.319702051	0
SOUTH CO/	2022	UBUS	Aggregatec	Aggregatec	DSL	14.14142	1478.085683	56.56567323	0.00138296	0	0	0	0	0	0	0.098782884	0	0	0	0	0	0	0.157474251	0
SOUTH CO/	2022	UBUS	Aggregatec	Aggregatec	ELEC	17.11694	1343.18541	68.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH CO/	2022	UBUS	Aggregatec	Aggregatec	NG	5394.05	593834.1114	21576.1994	0.090073705	0	0	0	0	0	0	6.404610254	0	0	0	0	0	0	48.7683305	0
SOUTH CO/	2023	HHDT	Aggregatec	Aggregatec	GAS	75.10443	8265.097091	1502.689423	0.465983015	0	0.001705211	0.128690685	0.650128357	0.046373192	0.067838721	0.679961322	0	0.001866991	0.128690685	0.650128357	0.046373192	0.067838721	31.30938147	0
SOUTH CO/	2023	HHDT	Aggregatec	Aggregatec	DSL	109818.7	13648007.93	1133618.402	0.01908827	4.947315841	0	0	0	0	0	0.021730542	5.632142488	0	0	0	0	0	0.194616837	72.40695471
SOUTH CO/	2023	HHDT	Aggregatec	Aggregatec	NG	5312.035	216378.9448	20716.93508	0.302598787	0.059273564	0	0	0	0	0	5.268292151	1.337107219	0	0	0	0	0	13.56548042	20.34391496
SOUTH CO/	2023	LDA	Aggregatec	Aggregatec	GAS	6635002	252710542.7	31352477.48	0.009319438	0	0.205789214	0.095182824	0.206333274	0.222654125	0.240109445	0.013595145	0	0.22531258	0.095182824	0.206333274	0.222654125	0.240109445	0.65413422	0
SOUTH CO/	2023	LDA	Aggregatec	Aggregatec	DSL	62492.98	2469815.67	297086.5583	0.016161785	0	0	0	0	0	0	0.018399118	0	0	0	0	0	0	0.249280852	0
SOUTH CO/	2023	LDA	Aggregatec	Aggregatec	ELEC	150700.4	6237105.777	751566.0196	0	0	0	0.004888026	0	0.008273627	0.024086487	0	0	0	0.004888026	0	0.008273627	0.024086487	0	0
SOUTH CO/	2023	LDT1	Aggregatec	Aggregatec	GAS	758467.6	27812996.47	3504562.533	0.027556162	0	0.325307877	0.190953223	0.656914263	0.480547917	0.58566716	0.040200251	0	0.356170516	0.190953223	0.656914263	0.480547917	0.58566716	1.257693874	0
SOUTH CO/	2023	LDT1	Aggregatec	Aggregatec	DSL	360.7799	8408.618214	1256.879517	0.183439792	0	0	0	0	0	0	0.208834007	0	0	0	0	0	0	1.077998824	0
SOUTH CO/	2023	LDT1	Aggregatec	Aggregatec	ELEC	7122.934	303507.5334	35798.18926	0	0	0	0.004888026	0	0.008224074	0.023967145	0	0	0	0.004888026	0	0.008224074	0.023967145	0	0
SOUTH CO/	2023	LDT2	Aggregatec	Aggregatec	GAS	2285150	85272415.53	10723314.74	0.016560315	0	0.289694628	0.120020286	0.400441023	0.351079878	0.355225998	0.024160712	0	0.317178873	0.120020286	0.400441023	0.351079878	0.355225998	0.908940719	0
SOUTH CO/	2023	LDT2	Aggregatec	Aggregatec	DSL	15594.68	650362.8069	76635.8271	0.020166819	0	0	0	0	0	0	0.022958583	0	0	0	0	0	0	0.173719012	0
SOUTH CO/	2023	LDT2	Aggregatec	Aggregatec	ELEC	28809.64	917592.8423	145405.4455	0	0	0	0.004888026	0	0.008299808	0.024125531	0	0	0	0.004888026	0	0.008299808	0.024125531	0	0
SOUTH CO/	2023	LHDT1	Aggregatec	Aggregatec	GAS	174910.4	6216642.74	2605904.115	0.029060867	0.427518002	0.11344829	0.116988997	0.780755001	0.033997763	0.056883683	0.042405549	0.623833265	0.124211598	0.116988997	0.780755001	0.033997763	0.056883683	0.711782937	3.755128977
SOUTH CO/	2023	LHDT1	Aggregatec	Aggregatec	DSL	125545.1	4994753.051	1579199.198	0.066253048	0.109759705	0	0	0	0	0	0.07542469	0.124954127	0	0	0	0	0	0.359850714	0.909745076
SOUTH CO/	2023	LHDT2	Aggregatec	Aggregatec	GAS	30102.75	1034569.096	448486.1701	0.019015722	0.430359743	0.114402487	0.112960535	0.693444496	0.031465973	0.051093372	0.027747697	0.627979927	0.125256323	0.112960535	0.693444496	0.031465973	0.051093372	0.48679127	3.762424085
SOUTH CO/	2023	LHDT2	Aggregatec	Aggregatec	DSL	50003.13	1935029.912	628976.486	0.062797896	0.109759705	0	0	0	0	0	0.071491229	0.124954127	0	0	0	0	0	0.335431521	0.909745076
SOUTH CO/	2023	MCY	Aggregatec	Aggregatec	GAS	305044.5	2104623.657	610089.0281	2.469292922	0	1.804878753	0.681809345	1.872284573	1.404162569	2.368165791	3.070339636	0	1.964666276	0.681809345	1.872284573	1.404162569	2.368165791	18.76744995	0
SOUTH CO/	2023	MDV	Aggregatec	Aggregatec	GAS	1589863	55684188.36	7354859.885	0.022055654	0	0.372673741	0.142659168	0.437149831	0.429106118	0.418656013	0.032121874	0	0.408027264	0.142659168	0.437149831	0.429106118	0.418656013	1.055952259	0
SOUTH CO/	2023	MDV	Aggregatec	Aggregatec	DSL	36128.1	1425691.372	176566.9105	0.013207637	0	0	0	0	0	0	0.015036016	0	0	0	0	0	0	0.245752918	0
SOUTH CO/	2023	MDV	Aggregatec	Aggregatec	ELEC	16376.68	537591.7438	83475.9529	0	0	0	0.004888026	0	0.008327132	0.024186925	0	0	0	0.004888026	0	0.008327132	0.024186925	0	0
SOUTH CO/	2023	MH	Aggregatec	Aggregatec	GAS	34679.51	330042.9197	3469.337722	0.044150661	0	0.123321313	0.073923353	1.716022363	0.046045218	0.111997771	0.064424541	0	0.135021315	0.073923353	1.716022363	0.046045218	0.111997771	1.220003548	0
SOUTH CO/	2023	MH	Aggregatec	Aggregatec	DSL	13122.69	124302.0239	1312.269387	0.067364537	0	0	0	0	0	0	0.076690047	0	0	0	0	0	0	0.280543068	0
SOUTH CO/	2023	MHDT	Aggregatec	Aggregatec	GAS	25624.32	1363694.415	512691.2965	0.04675969	1.006961958	0.193792061	0.076585512	0.396058475	0.02474531	0.038411224	0.06823163	1.469356525	0.212177914	0.076585512	0.396058475	0.02474531	0.038411224	1.189354809	14.40411455
SOUTH CO/	2023	MHDT	Aggregatec	Aggregatec	DSL	122124.5	8120623.353	1221858.451	0.007626521	0.067142904	0	0	0	0	0	0.008682213	0.076437085	0	0	0	0	0	0.070457074	2.427476101
SOUTH CO/	2023	OBUS	Aggregatec	Aggregatec	GAS	5955.292	245774.0168	119153.4751	0.05220773	0.744688398	0.152864966	0.030119863	0.352016079	0.026349072	0.052371659	0.076181397	1.086647563	0.167367896	0.030119863	0.352016079	0.026349072	0.052371659	1.290782966	5.765079839
SOUTH CO/	2023	OBUS	Aggregatec	Aggregatec	DSL	4286.94	333969.8185	41558.28926	0.010921901	0.87291544	0	0	0	0	0	0.012433753	0.993747781	0	0	0	0	0	0.114318139	13.97418754
SOUTH CO/	2023	SBUS	Aggregatec	Aggregatec	GAS	2783.643	112189.6089	11134.57227	0.054926332	10.62174526	0.32820917	0.074971567	0.455347874	0.019113187	0.036239596	0.080148375	15.49922576	0.359347728	0.074971567	0.455347874	0.019113187	0.036239596	1.203483583	82.12081191
SOUTH CO/	2023	SBUS	Aggregatec	Aggregatec	DSL	6671.826	210853.9115	76991.94375	0.115452453	0.280682913	0	0	0	0	0	0.131433829	0.319536131	0	0	0	0	0	0.3324687	6.42072076
SOUTH CO/	2023	UBUS	Aggregatec	Aggregatec	GAS	957.7686	89782.63172	3831.074474	0.016014921	0	0.372351579	0.055877055	0.334314802	0.01382645	0.01863009	0.023368936	0	0.40767811	0.055877055	0.334314802	0.01382645	0.01863009	0.271689149	0
SOUTH CO/	2023	UBUS	Aggregatec	Aggregatec	DSL	13.00046	1416.621572	52.00184381	0.001396342	0	0	0	0	0	0	0.099738726	0	0	0	0	0	0	0.159434452	0
SOUTH CO/	2023	UBUS	Aggregatec	Aggregatec	ELEC	16.11694	1320.163255	64.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH CO/	2023	UBUS	Aggregatec	Aggregatec	NG	5428.202	597439.0192	21712.80613	0.090057511	0	0	0	0	0	0	6.40424428	0	0	0	0	0	0	48.7652004	0
SOUTH CO/	2024	HHDT	Aggregatec	Aggregatec	GAS	74.26701	8620.013986	1485.934371	0.427962646	0	0.001604337	0.114976447	0.572052428	0.041382009	0.060201297	0.624482088	0	0.001756547	0.114976447	0.572052428	0.041382009	0.060201297	30.51989714	0
SOUTH CO/	2024	HHDT	Aggregatec	Aggregatec	DSL	112561	13933380.76	1167770.445	0.019258186	4.961259019	0	0	0	0	0	0.021923979	5.648015735	0	0	0	0	0	0.199062667	72.67893025
SOUTH CO/	2024	HHDT	Aggregatec	Aggregatec	NG	5589.308	227691.5934	21798.30289	0.269944714	0.053561557	0	0	0	0	0	5.107008862	1.315969394	0	0	0	0	0	13.71324468	20.55411434
SOUTH CO/	2024	LDA	Aggregatec	Aggregatec	GAS	6721891	253006673.7	31758651.73	0.008191101	0	0.188472056	0.090285639	0.199928384	0.210053678	0.224368258	0.011952435	0	0.206353178	0.090285639	0.199928384	0.210053678	0.224368258	0.617004881	0
SOUTH CO/	2024	LDA	Aggregatec	Aggregatec	DSL	65701.81	2569094.642	312770.0626	0.014478992	0	0	0	0	0	0	0.01648337	0	0	0	0	0	0	0.246057089	0
SOUTH CO/	2024	LDA	Aggregatec	Aggregatec	ELEC	176700.2	7452589.244	879861.9304	0	0	0	0.004888026	0	0.008296289	0.024138369	0	0	0	0.004888026	0	0.008296289	0.024138369	0	0
SOUTH CO/	2024	LDT1	Aggregatec	Aggregatec	GAS	779748.6	28286817.37	3606828.302	0.024176011	0	0.293242088	0.176432784	0.612767769	0.447369436	0.538021042	0.035273748	0	0.321062917	0.176432784	0.612767769	0.447369436	0.538021042	1.14346608	0
SOUTH CO/	2024	LDT1	Aggregatec	Aggregatec	DSL	336.6362	7857.181353	1175.366913	0.172143655	0	0	0	0	0	0	0.195974106	0	0	0	0	0	0	1.02010552	0
SOUTH CO/	2024	LDT1	Aggregatec	Aggregatec	ELEC	9097.581	395805.8648	45700.55861	0	0	0	0.004888026	0	0.008250118	0.024022271	0	0	0	0.004888026	0	0.008250118	0.024022271	0	0
SOUTH CO/	2024	LDT2	Aggregatec	Aggregatec	GAS	2324382	85796127.87	10909752.6	0.014898486	0	0.266450305	0.114168326	0.389079182	0.340780127	0.341828264	0.02173842	0	0.291729448	0.114168326	0.389079182	0.340780127	0.341828264	0.852096973	0
SOUTH CO/	2024	LDT2	Aggregatec	Aggregatec	DSL	16866.7	688058.7876	82641.57951	0.019958147	0	0	0	0	0	0	0.022721023	0	0	0	0	0	0	0.179901499	0
SOUTH CO/	2024	LDT2	Aggregatec	Aggregatec	ELEC	35655.35	1112020.476	179446.8993	0	0	0	0.004888026	0	0.008314276	0.024157351	0	0	0	0.004888026	0	0.008314276	0.024157351	0	0
SOUTH CO/	2024	LHDT1	Aggregatec	Aggregatec	GAS	174005.1	6143072.551	2592417.176	0.025414358	0.415575217	0.1063068	0.112008463	0.752398783	0.032625622	0.0539775	0.037084571	0.606406381	0.116392565	0.112008463	0.752398783	0.032625622	0.0539775	0.627358522	3.758097326
SOUTH CO/	2024	LHDT1	Aggregatec	Aggregatec	DSL	131545.2	5156710.286	1654673.617	0.063279436	0.109759705	0	0	0	0	0	0.072039431	0.124954127	0	0	0	0	0	0.336518988	0.909745076
SOUTH CO/	2024	LHDT2	Aggregatec	Aggregatec	GAS	30198.86	1028982.266	449917.9665	0.016606167	0.418882386	0.107322653	0.108128685	0.649439853	0.030543145	0.048652531	0.02423168	0.611232194	0.117504796	0.108128685	0.649439853	0.030543145	0.048652531	0.425628473	3.765237759
SOUTH CO/	2024	LHDT2	Aggregatec	Aggregatec	DSL	52580.79	2001241.348	661400.1538	0.060456048	0.109759705	0	0	0	0	0	0.068825191	0.124954127	0	0	0	0	0	0.31669233	0.909745076
SOUTH CO/	2024	MCY	Aggregatec	Aggregatec	GAS	313845.7	2132419.376	627691.4524	2.481691169	0	1.79584909	0.669693215	1.795839829	1.390860433	2.359057653	3.092186757	0	1.955045209	0.669693215	1.795839829	1.390860433	2.359057653	18.61241022	0
SOUTH CO/	2024	MDV	Aggregatec	Aggregatec	GAS	1599677	55496538.13	7405446.286	0.019209866	0	0.337534167	0.136253094	0.42423211	0.417353245	0.403628507	0.028009872	0	0.369556185	0.136253094	0.42423211	0.417353245	0.403628507	0.960268048	0
SOUTH CO/	2024	MDV	Aggregatec	Aggregatec	DSL	38789.91	1499058.187	188910.1338	0.012754194	0	0	0	0	0	0	0.014519802	0	0	0	0	0	0	0.249077654	0
SOUTH CO/	2024	MDV	Aggregatec	Aggregatec	ELEC	21546.74	690718.3728	109429.4116	0	0	0	0.004888026	0	0.008339578	0.024214105	0	0	0	0.004888026	0	0.008339578	0.024214105	0	0
SOUTH CO/	2024	MH	Aggregatec	Aggregatec	GAS	34296.13	327056.6532	3430.984949	0.038540635	0	0.119411163	0.068578189	1.571107836	0.043155384	0.103002086	0.056238405	0	0.130740193	0.068578189	1.571107836	0.043155384	0.103002086	1.031904602	0
SOUTH CO/	2024	MH	Aggregatec	Aggregatec	DSL	13472.14	126106.7887	1347.214217	0.066687068	0	0	0	0	0	0	0.075918793	0	0	0	0	0	0	0.271810858	0
SOUTH CO/	2024	MHDT	Aggregatec	Aggregatec	GAS	25804.01	1359447.346	516286.6944	0.039637168	1.008458029	0.186599647	0.074127332	0.380621231	0.024121627	0.036645821	0.057838462	1.471539589	0.204303126	0.074127332	0.380621231	0.024121627	0.036645821	0.995532441	14.42077256
SOUTH CO/	2024	MHDT	Aggregatec	Aggregatec	DSL	127715.1	8302936.698	1282757.095	0.007669227	0.065522439	0	0	0	0	0	0.008730831	0.074592309	0	0	0	0	0	0.071999387	2.431108027
SOUTH CO/	2024	OBUS	Aggregatec	Aggregatec	GAS	5954.495	241431.3981	119137.5421	0.047455134	0.744964755	0.149536799	0.030338288	0.356256538	0.026622935	0.052525272	0.06924642	1.087050821	0.163723972	0.030338288	0.356256538	0.026622935	0.052525272	1.160770057	5.766747201
SOUTH CO/	2024	OBUS	Aggregatec	Aggregatec	DSL	4446.353	342309.6953	43067.16004	0.011111355	0.86769089	0	0	0	0	0	0.012649432	0.987800028	0	0	0	0	0	0.117082216	13.89879142
SOUTH CO/	2024	SBUS	Aggregatec	Aggregatec	GAS	2938.098	117037.9587	11752.39082	0.050170317	10.62617624	0.323941161	0.07541733	0.455811909	0.019512592	0.036408392	0.073208409	15.50569143	0.354674796	0.07541733	0.455811909	0.019512592	0.036408392	1.105148386	82.14771787

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SOUTH CO/	2024	SBUS	Aggregatec	Aggregatec	DSL	6709.768	212099.0577	77429.79185	0.109995611	0.275005716	0	0	0	0	0	0.12522163	0.313073074	0	0	0	0	0	0.322139515	6.682096388
SOUTH CO/	2024	UBUS	Aggregatec	Aggregatec	GAS	963.3912	90309.26527	3853.564835	0.015848018	0	0.355821045	0.042970418	0.252495674	0.010930144	0.015140977	0.023125391	0	0.389579256	0.042970418	0.252495674	0.010930144	0.015140977	0.26325801	0
SOUTH CO/	2024	UBUS	Aggregatec	Aggregatec	DSL	10.42282	1204.585498	41.69128879	0.00114803	0	0	0	0	0	0	0.082002151	0	0	0	0	0	0	0.13659608	0
SOUTH CO/	2024	UBUS	Aggregatec	Aggregatec	ELEC	16.11694	1320.163255	64.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH CO/	2024	UBUS	Aggregatec	Aggregatec	NG	5462.79	601171.4768	21851.15959	0.090085707	0	0	0	0	0	0	6.405697801	0	0	0	0	0	0	48.76650273	0
SOUTH CO/	2025	HHDT	Aggregatec	Aggregatec	GAS	73.98518	9005.52904	1480.295497	0.389036098	0	0.001629658	0.10077084	0.499421292	0.036394878	0.052506079	0.56768056	0	0.001784271	0.10077084	0.499421292	0.036394878	0.052506079	29.57064055	0
SOUTH CO/	2025	HHDT	Aggregatec	Aggregatec	DSL	114510.1	14172365.37	1194128.743	0.019256612	4.973913864	0	0	0	0	0	0.021922187	5.662422314	0	0	0	0	0	0.200028864	72.92399746
SOUTH CO/	2025	HHDT	Aggregatec	Aggregatec	NG	5856.035	238581.2969	22838.53694	0.242181142	0.048662429	0	0	0	0	0	4.969654973	1.297662281	0	0	0	0	0	13.83870288	20.74708914
SOUTH CO/	2025	LDA	Aggregatec	Aggregatec	GAS	6805727	253145342.8	32143253.37	0.00718125	0	0.172700999	0.085997198	0.195201037	0.199659965	0.211832822	0.010478863	0	0.189085856	0.085997198	0.195201037	0.199659965	0.211832822	0.582839439	0
SOUTH CO/	2025	LDA	Aggregatec	Aggregatec	DSL	68721.91	2656428.369	327385.003	0.013084498	0	0	0	0	0	0	0.014895831	0	0	0	0	0	0	0.238173114	0
SOUTH CO/	2025	LDA	Aggregatec	Aggregatec	ELEC	205237.2	8815934.14	1020366.918	0	0	0	0.004888026	0	0.008315909	0.02418344	0	0	0	0.004888026	0	0.008315909	0.02418344	0	0
SOUTH CO/	2025	LDT1	Aggregatec	Aggregatec	GAS	800497.3	28711777.34	3705072.539	0.021014544	0	0.26442008	0.163497937	0.573708456	0.417940945	0.495938369	0.030664374	0	0.289506705	0.163497937	0.573708456	0.417940945	0.495938369	1.040104807	0
SOUTH CO/	2025	LDT1	Aggregatec	Aggregatec	DSL	314.0764	7370.62386	1101.554527	0.160226393	0	0	0	0	0	0	0.182407095	0	0	0	0	0	0	0.95792904	0
SOUTH CO/	2025	LDT1	Aggregatec	Aggregatec	ELEC	11260.19	498412.9596	56475.75047	0	0	0	0.004888026	0	0.008269049	0.024062381	0	0	0	0.004888026	0	0.008269049	0.024062381	0	0
SOUTH CO/	2025	LDT2	Aggregatec	Aggregatec	GAS	2364309	86303467.33	11096373.45	0.013325358	0	0.245668055	0.108870651	0.377919004	0.331220465	0.329712383	0.019444331	0	0.268975597	0.108870651	0.377919004	0.331220465	0.329712383	0.800438292	0
SOUTH CO/	2025	LDT2	Aggregatec	Aggregatec	DSL	18091.4	722150.5811	88340.72944	0.019720607	0	0	0	0	0	0	0.0224506	0	0	0	0	0	0	0.181891132	0
SOUTH CO/	2025	LDT2	Aggregatec	Aggregatec	ELEC	43109.08	1316602.996	216309.8691	0	0	0	0.004888026	0	0.008326138	0.024183378	0	0	0	0.004888026	0	0.008326138	0.024183378	0	0
SOUTH CO/	2025	LHDT1	Aggregatec	Aggregatec	GAS	173430.4	6082106.238	2583853.887	0.022074888	0.403834067	0.099669458	0.107366243	0.727784285	0.031509383	0.051424437	0.032211625	0.589273722	0.109125511	0.107366243	0.727784285	0.031509383	0.051424437	0.554765753	3.760656486
SOUTH CO/	2025	LHDT1	Aggregatec	Aggregatec	DSL	137399.6	5304568.502	1728313.877	0.059936414	0.109759705	0	0	0	0	0	0.068233623	0.124954127	0	0	0	0	0	0.31428149	0.909745076
SOUTH CO/	2025	LHDT2	Aggregatec	Aggregatec	GAS	30280.26	1023279.202	451130.7451	0.01466825	0.407653731	0.100558513	0.103411242	0.61056889	0.029722711	0.046501545	0.021403876	0.594847367	0.110098914	0.103411242	0.61056889	0.029722711	0.046501545	0.378619205	3.767532211
SOUTH CO/	2025	LHDT2	Aggregatec	Aggregatec	DSL	55100.27	2061805.728	693092.1078	0.05769554	0.109759705	0	0	0	0	0	0.065682536	0.124954127	0	0	0	0	0	0.29849821	0.909745076
SOUTH CO/	2025	MCY	Aggregatec	Aggregatec	GAS	322405.1	2156492.828	644810.2364	2.470899345	0	1.788394381	0.66030527	1.726859622	1.380318836	2.353113199	3.08397993	0	1.947113397	0.66030527	1.726859622	1.380318836	2.353113199	18.42767579	0
SOUTH CO/	2025	MDV	Aggregatec	Aggregatec	GAS	1610759	55349775.96	7459996.66	0.016796233	0	0.305954302	0.130361804	0.411600197	0.409022538	0.393089073	0.024502589	0	0.334981046	0.130361804	0.411600197	0.409022538	0.393089073	0.885426098	0
SOUTH CO/	2025	MDV	Aggregatec	Aggregatec	DSL	41295.15	1564637.726	200455.1443	0.011982644	0	0	0	0	0	0	0.013641444	0	0	0	0	0	0	0.24547191	0
SOUTH CO/	2025	MDV	Aggregatec	Aggregatec	ELEC	27149.64	850200.5411	137370.5198	0	0	0	0.004888026	0	0.00835026	0.024237415	0	0	0	0.004888026	0	0.00835026	0.024237415	0	0
SOUTH CO/	2025	MH	Aggregatec	Aggregatec	GAS	33995.46	324472.9039	3400.905358	0.033776118	0	0.115815405	0.063677763	1.428719881	0.040611304	0.094966897	0.049286031	0	0.12680329	0.063677763	1.428719881	0.040611304	0.094966897	0.883584438	0
SOUTH CO/	2025	MH	Aggregatec	Aggregatec	DSL	13797.48	127691.6269	1379.747947	0.064861839	0	0	0	0	0	0	0.073840892	0	0	0	0	0	0	0.260712816	0
SOUTH CO/	2025	MHDT	Aggregatec	Aggregatec	GAS	25990.85	1355596.744	520024.9763	0.03345566	1.009750141	0.18043063	0.071944217	0.366950477	0.023571847	0.035092549	0.04881842	1.473425036	0.197548829	0.071944217	0.366950477	0.023571847	0.035092549	0.833035561	14.43515884
SOUTH CO/	2025	MHDT	Aggregatec	Aggregatec	DSL	132892.8	8444865.816	1340366.128	0.007643831	0.06415984	0	0	0	0	0	0.008701919	0.073041094	0	0	0	0	0	0.072350697	2.434988977
SOUTH CO/	2025	OBUS	Aggregatec	Aggregatec	GAS	5953.626	237698.4826	119120.1566	0.04280932	0.745259624	0.146538529	0.030430844	0.360279311	0.02676734	0.052418952	0.062467259	1.087481094	0.160441244	0.030430844	0.360279311	0.02676734	0.052418952	1.036817518	5.768520274
SOUTH CO/	2025	OBUS	Aggregatec	Aggregatec	DSL	4685.134	349833.854	45454.12243	0.011034258	0.877760973	0	0	0	0	0	0.012561663	0.999264052	0	0	0	0	0	0.11623889	14.04411401
SOUTH CO/	2025	SBUS	Aggregatec	Aggregatec	GAS	3092.715	121823.4096	12370.85878	0.046430732	10.62996688	0.319817273	0.076112461	0.458707291	0.019975342	0.036743107	0.067751615	15.51122271	0.350159657	0.076112461	0.458707291	0.019975342	0.036743107	1.018905878	82.1707355
SOUTH CO/	2025	SBUS	Aggregatec	Aggregatec	DSL	6746.346	213318.799	77851.89673	0.104682923	0.270720797	0	0	0	0	0	0.119173539	0.308195019	0	0	0	0	0	0.312119944	6.956066933
SOUTH CO/	2025	UBUS	Aggregatec	Aggregatec	GAS	969.366	90835.89881	3877.463997	0.015817649	0	0.327068704	0.025874338	0.130833088	0.007319182	0.011129133	0.023081077	0	0.358099062	0.025874338	0.130833088	0.007319182	0.011129133	0.249114114	0
SOUTH CO/	2025	UBUS	Aggregatec	Aggregatec	DSL	6.367322	775.5948993	25.46928879	0.001141375	0	0	0	0	0	0	0.081526789	0	0	0	0	0	0	0.13573339	0
SOUTH CO/	2025	UBUS	Aggregatec	Aggregatec	ELEC	16.11694	1320.163255	64.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH CO/	2025	UBUS	Aggregatec	Aggregatec	NG	5498.856	605120.889	21995.42449	0.090100285	0	0	0	0	0	0	6.405998224	0	0	0	0	0	0	48.76903294	0
SOUTH CO/	2026	HHDT	Aggregatec	Aggregatec	GAS	73.68174	9403.551925	1474.224171	0.358029401	0	0.001657486	0.083710336	0.411586288	0.030461364	0.04353477	0.522435661	0	0.001814739	0.083710336	0.411586288	0.030461364	0.04353477	28.95561164	0
SOUTH CO/	2026	HHDT	Aggregatec	Aggregatec	DSL	116233.6	14433400.88	1216929.778	0.019193315	4.979564812	0	0	0	0	0	0.021850128	5.668855488	0	0	0	0	0	0.200335741	73.07364439
SOUTH CO/	2026	HHDT	Aggregatec	Aggregatec	NG	6117.855	249228.9578	23859.63526	0.217568622	0.044386552	0	0	0	0	0	4.848266866	1.282012155	0	0	0	0	0	13.95021326	20.9204719
SOUTH CO/	2026	LDA	Aggregatec	Aggregatec	GAS	6890013	252855713.3	32528383.83	0.006364588	0	0.15903309	0.08209554	0.190910424	0.190081484	0.200466203	0.009287192	0	0.174121216	0.08209554	0.190910424	0.190081484	0.200466203	0.555208392	0
SOUTH CO/	2026	LDA	Aggregatec	Aggregatec	DSL	71373.84	2727510.268	340604.7037	0.011770604	0	0	0	0	0	0	0.01340005	0	0	0	0	0	0	0.231142186	0
SOUTH CO/	2026	LDA	Aggregatec	Aggregatec	ELEC	232749.5	9798207.015	1154485.794	0	0	0	0.004888026	0	0.008333943	0.02422524	0	0	0	0.004888026	0	0.008333943	0.02422524	0	0
SOUTH CO/	2026	LDT1	Aggregatec	Aggregatec	GAS	820893.1	29048632.42	3800772.095	0.018333623	0	0.239155334	0.151794701	0.5385816	0.390531593	0.457500021	0.02675238	0	0.261844988	0.151794701	0.5385816	0.390531593	0.457500021	0.952046266	0
SOUTH CO/	2026	LDT1	Aggregatec	Aggregatec	DSL	277.3894	6696.411601	994.2354937	0.140369882	0	0	0	0	0	0	0.159801778	0	0	0	0	0	0	0.876882772	0
SOUTH CO/	2026	LDT1	Aggregatec	Aggregatec	ELEC	13403.15	580090.8687	67042.39244	0	0	0	0.004888026	0	0.008283875	0.024093918	0	0	0	0.004888026	0	0.008283875	0.024093918	0	0
SOUTH CO/	2026	LDT2	Aggregatec	Aggregatec	GAS	2406087	86677830.02	11289338.2	0.01200069	0	0.227395753	0.103960806	0.366802895	0.321629906	0.31801862	0.017511378	0	0.248969727	0.103960806	0.366802895	0.321629906	0.31801862	0.757605943	0
SOUTH CO/	2026	LDT2	Aggregatec	Aggregatec	DSL	19278.53	751522.0083	93783.45798	0.019648222	0	0	0	0	0	0	0.022368194	0	0	0	0	0	0	0.184349146	0
SOUTH CO/	2026	LDT2	Aggregatec	Aggregatec	ELEC	50413.02	1506666.739	252060.2663	0	0	0	0.004888026	0	0.008337568	0.024208418	0	0	0	0.004888026	0	0.008337568	0.024208418	0	0
SOUTH CO/	2026	LHDT1	Aggregatec	Aggregatec	GAS	173056.7	6033376.008	2578287.329	0.018897296	0.392360993	0.093570622	0.103035307	0.708669016	0.030392205	0.048940621	0.02757489	0.57253224	0.102448053	0.103035307	0.708669016	0.030392205	0.048940621	0.486409048	3.763026656
SOUTH CO/	2026	LHDT1	Aggregatec	Aggregatec	DSL	143072.3	5442892.527	1799669.293	0.056985599	0.109759705	0	0	0	0	0	0.064874316	0.124954127	0	0	0	0	0	0.294834977	0.909745076
SOUTH CO/	2026	LHDT2	Aggregatec	Aggregatec	GAS	30380.69	1019189.783	452626.987	0.012539401	0.396811269	0.094234088	0.098649609	0.573449184	0.028804012	0.044212598	0.018297465	0.579026072	0.103174465	0.098649609	0.573449184	0.028804012	0.044212598	0.327924943	3.769867141
SOUTH CO/	2026	LHDT2	Aggregatec	Aggregatec	DSL	57537.52	2118258.655	723749.6143	0.055286135	0.109759705	0	0	0	0	0	0.062939588	0.124954127	0	0	0	0	0	0.282633002	0.909745076
SOUTH CO/	2026	MCY	Aggregatec	Aggregatec	GAS	330653.4	2179057.101	661306.7133	2.461696007	0	1.781360568	0.652226553	1.656809015	1.371348204	2.348447781	3.076846361	0	1.939624878	0.652226553	1.656809015	1.371348204	2.348447781	18.2691115	0
SOUTH CO/	2026	MDV	Aggregatec	Aggregatec	GAS	1623219	55156956.72	7520376.329	0.014840968	0	0.278121855	0.124747551	0.398929095	0.400932675	0.38362696	0.021653749	0	0.304508287	0.124747551	0.398929095	0.400932675	0.38362696	0.827238541	0
SOUTH CO/	2026	MDV	Aggregatec	Aggregatec	DSL	43701.21	1620690.625	211432.3811	0.011319706	0	0	0	0	0	0	0.012886733	0	0	0	0	0	0	0.24253218	0
SOUTH CO/	2026	MDV	Aggregatec	Aggregatec	ELEC	32680.43	999389.314	164663.1779	0	0	0	0.004888026	0	0.008360921	0.024260705	0	0	0	0.004888026	0	0.008360921	0.024260705	0	0
SOUTH CO/	2026	MH	Aggregatec	Aggregatec	GAS	33697.08	322202.0105	3371.0557	0.028849211	0	0.112737849	0.058435866	1.265158108	0.038012285	0.086955953	0.042096701	0	0.123433754	0.058435866	1.265158108	0.038012285	0.086955953	0.731748778	0
SOUTH CO/	2026	MH	Aggregatec	Aggregatec	DSL	14107.02	129198.2863	1410.702167	0.063126425	0	0	0	0	0	0	0.071865238	0	0	0	0	0	0	0.250145901	0
SOUTH CO/	2026	MHDT	Aggregatec	Aggregatec	GAS	26200.98	1353545.058	524229.2582	0.028657912	1.010823963	0.175075505	0.069956883	0.354207667	0.023205716	0.033912939	0.041817558	1.474991954	0.191685641	0.069956883	0.354207667	0.023205716	0.033912939	0.705485471	14.44712918
SOUTH CO/	2026	MHDT	Aggregatec	Aggregatec	DSL	137838	8588906.396	1395108.057	0.007610824	0.062988617	0	0	0	0	0	0.008664344	0.071707746	0	0	0	0	0	0.072568334	2.438819114
SOUTH CO/	2026	OBUS	Aggregatec	Aggregatec	GAS	5959.016	234710.4848	119227.9884	0.038224807	0.745560293	0.144157549	0.030489532	0.363803472	0.026823158	0.052083107	0.055777549	1.08791983	0.15783437	0.030489532	0.363803472	0.026823158	0.052083107	0.922415458	5.77032665
SOUTH CO/	2026	OBUS	Aggregatec	Aggregatec	DSL	4901.128	357325.1281	47575.00875	0.010970046	0.881054322	0	0	0	0	0	0.012488562	1.003013278	0	0	0	0	0	0.115533788	14.09164073
SOUTH CO/	2026	SBUS	Aggregatec	Aggregatec	GAS	3247.263	126614.0466	12989.05137	0.042922257	10.63326198	0.318030706	0.077036527	0.463348547	0.020488769	0.03723084	0.062632057	15.51603093	0.348203592	0.077036527	0.463348547	0.020488769	0.03723084	0.940874972	82.19074418
SOUTH CO/	2026	SBUS	Aggregatec	Aggregatec	DSL	6784.275	214549.8334	78289.58863	0.099198978	0.26754073	0	0	0	0	0	0.112930486	0.304574755	0	0	0	0	0	0.301683971	7.245687336
SOUTH CO/	2026	UBUS	Aggregatec	Aggregatec	GAS	974.9886	91362.53235	3899.954358	0.015775208	0	0.337811129	0.027754829	0.135373696	0.007879855	0.011712006	0.023019147	0	0.369860665	0.027754829	0.135373696	0.007879855	0.011712006	0.253302718	0
SOUTH CO/	2026	UBUS	Aggregatec	Aggregatec	DSL	6.367322	775.5948993	25.46928879	0.001141375	0	0	0	0	0	0	0.081526789	0	0	0	0	0	0	0.13573339	0
SOUTH CO/	2026	UBUS	Aggregatec	Aggregatec	ELEC	16.11694	1320.163255	64.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH CO/	2026	UBUS	Aggregatec	Aggregatec	NG	5530.867	608641.3105	22123.46739	0.09011014	0	0	0	0	0	0	6.405980898	0	0	0	0	0	0	48.76895849	0

The Jeff Hotel Project, Culver City, CA
EMFAC2017 Data Outputs

EMFAC2017 (v1.0.2) Emission Rates
Region Type: Air District
Region: SOUTH COAST AQMD
Calendar Year: 2020, 2021, 2022, 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and R

Region	Calendar Y	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	CO_STREX	NOx_RUNEX	NOx_IDLEX	NOx_STREX	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_PMTW	PM10_PMBW	PM2_5_RUNEX
SOUTH CO	2020	HHDT	Aggregatec	Aggregatec	GAS	87.83189	7670.468393	1757.340415	5.248822678	5.346409568	0	0.875159685	2178.237368	0	50.25532572	0.137159133	0	0.000262599	0.001551631	0	0.001200603	0.020000006	0.061740018	0.001429588
SOUTH CO	2020	HHDT	Aggregatec	Aggregatec	DSL	103820.4	12807959.19	1065500.159	0	4.292150071	67.49360078	1.82614471	1480.801786	12197.02832	0	0.006116572	0.233402433	0	0.06248521	0.137872295	0	0.035494772	0.060873534	0.059782127
SOUTH CO	2020	HHDT	Aggregatec	Aggregatec	NG	4398.413	179076.229	17153.81106	0	3.961367699	25.48424823	0	3521.165728	4230.359394	0	5.387020588	1.326781493	0	0.007335758	0.057151305	0	0.03600001	0.061740018	0.007018417
SOUTH CO	2020	LDA	Aggregatec	Aggregatec	GAS	6343244	250946804.6	29952289.22	2.267597862	0.050767361	0	0.211483351	286.2783069	0	57.66847753	0.003700284	0	0.058951646	0.001839387	0	0.002098984	0.008000002	0.036750011	0.0016913
SOUTH CO	2020	LDA	Aggregatec	Aggregatec	DSL	51115.55	2093562.117	242023.4737	0	0.104174528	0	0	219.8015453	0	0	0.001108896	0	0	0.011898393	0	0	0.008000002	0.036750011	0.011383673
SOUTH CO	2020	LDA	Aggregatec	Aggregatec	ELEC	90985.72	3568728.994	456458.1804	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2020	LDT1	Aggregatec	Aggregatec	GAS	692884.6	26159714.71	3181017.639	2.466003004	0.15304714	0	0.308660204	332.8110335	0	67.59926888	0.009530355	0	0.086858459	0.00293049	0	0.003075735	0.008000002	0.036750011	0.002694741
SOUTH CO	2020	LDT1	Aggregatec	Aggregatec	DSL	447.0053	10577.7496	1564.205034	0	1.173901507	0	0	460.2041256	0	0	0.010003499	0	0	0.163782081	0	0	0.008000002	0.036750011	0.156696941
SOUTH CO	2020	LDT1	Aggregatec	Aggregatec	ELEC	2466.328	92670.64319	12156.12935	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2020	LDT2	Aggregatec	Aggregatec	GAS	2169628	83699648.08	10158608.89	2.880502564	0.107735579	0	0.343957027	364.1016687	0	74.73836157	0.005783537	0	0.078965229	0.00193807	0	0.002077004	0.008000002	0.036750011	0.001782081
SOUTH CO	2020	LDT2	Aggregatec	Aggregatec	DSL	11367.52	511152.7811	56413.22504	0	0.053377641	0	0	301.8313974	0	0	0.001016466	0	0	0.007002933	0	0	0.008000002	0.036750011	0.006699989
SOUTH CO	2020	LDT2	Aggregatec	Aggregatec	ELEC	12535.43	424456.7871	63666.289	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2020	LHDT1	Aggregatec	Aggregatec	GAS	178175.5	6494353.996	2654549.228	1.796593882	0.248650357	0.04023078	0.547369915	819.7398229	122.6768922	19.24085921	0.008706354	0.128642213	0.02797192	0.00134302	0	0.000462392	0.008000002	0.076440022	0.001235417
SOUTH CO	2020	LHDT1	Aggregatec	Aggregatec	DSL	106680.2	4404637.682	1341902.266	0	2.121475999	2.234890029	0	482.3013802	135.7928707	0	0.00379238	0.005098128	0	0.017707716	0.02775697	0	0.012000003	0.076440022	0.016941688
SOUTH CO	2020	LHDT2	Aggregatec	Aggregatec	GAS	29750.07	1051653.666	443231.7796	1.785001149	0.248244134	0.040410892	0.557453088	940.8393895	141.7002708	21.8557461	0.006574778	0.129500104	0.027876823	0.001183809	0	0.000373971	0.008000002	0.089180026	0.001088476
SOUTH CO	2020	LHDT2	Aggregatec	Aggregatec	DSL	41895.25	1694144.207	526989.5855	0	1.857147353	2.241187165	0	531.5954854	217.8870253	0	0.003524617	0.005098128	0	0.017726964	0.028213795	0	0.012000003	0.089180026	0.016960104
SOUTH CO	2020	MCY	Aggregatec	Aggregatec	GAS	276047.6	1990434.04	552095.1922	8.471813362	1.131082716	0	0.262699623	218.6252009	0	60.52412808	0.365651498	0	0.238745953	0.002144399	0	0.003328126	0.004000001	0.011760003	0.002007094
SOUTH CO	2020	MDV	Aggregatec	Aggregatec	GAS	1557729	56408480.36	7193015.573	3.51511054	0.148405061	0	0.429119168	445.059243	0	92.09048151	0.008261844	0	0.098113557	0.002045935	0	0.002305261	0.008000002	0.036750011	0.001883229
SOUTH CO	2020	MDV	Aggregatec	Aggregatec	DSL	27451.54	1159329.066	135395.1637	0	0.064840505	0	0	393.2469534	0	0	0.000786109	0	0	0.006433357	0	0	0.008000002	0.036750011	0.006155053
SOUTH CO	2020	MDV	Aggregatec	Aggregatec	ELEC	3954.471	138125.1853	20276.62835	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2020	MH	Aggregatec	Aggregatec	GAS	36100.69	340582.2237	3611.512816	3.040106079	0.452526564	0	0.321863697	1713.700368	0	26.57023846	0.016431677	0	0.033231338	0.001538335	0	0.000421394	0.012000003	0.130340037	0.001415588
SOUTH CO	2020	MH	Aggregatec	Aggregatec	DSL	12007.37	118161.7969	1200.737369	0	4.094022166	0	0	982.2671845	0	0	0.003450725	0	0	0.108506123	0	0	0.016000005	0.130340037	0.103812196
SOUTH CO	2020	MHDT	Aggregatec	Aggregatec	GAS	25210.15	1381572.63	504404.7546	4.800021665	0.56430463	0.089123692	0.369690882	1710.236045	554.4144929	39.91047853	0.016570283	0.261565872	0.040982356	0.001038588	0	0.000451492	0.012000003	0.130340037	0.000954943
SOUTH CO	2020	MHDT	Aggregatec	Aggregatec	DSL	120277.1	7555230.165	1196267.58	0	3.020982787	8.510544834	1.299129303	989.4544505	842.5888829	0	0.006822302	0.005886368	0	0.089019631	0.031339142	0	0.012000003	0.130340037	0.085168681
SOUTH CO	2020	OBUS	Aggregatec	Aggregatec	GAS	5971.384	262419.3817	119475.4563	3.41971866	0.566893694	0.064865176	0.328629298	1726.158292	384.716315	27.12818331	0.015108374	0.196374563	0.031481736	0.000863068	0	0.000271138	0.012000003	0.130340037	0.00079371
SOUTH CO	2020	OBUS	Aggregatec	Aggregatec	DSL	4179.048	309243.7025	40903.23601	0	3.958194543	25.338097	1.404273903	1222.760263	3017.472893	0	0.008904199	0.06794268	0	0.093503968	0.120732178	0	0.012000003	0.130340037	0.089459028
SOUTH CO	2020	SBUS	Aggregatec	Aggregatec	GAS	2327.941	97616.62301	9311.762921	8.167172457	0.494575405	0.923609387	0.573019626	890.755231	2651.399348	48.93481718	0.014629479	2.401018748	0.058143222	0.001109641	0	0.000432649	0.008000002	0.744800204	0.001020274
SOUTH CO	2020	SBUS	Aggregatec	Aggregatec	DSL	6542.861	206832.8804	75503.7145	0	7.950751063	45.60581831	0.718901469	1250.451969	3672.493909	0	0.00617663	0.014327962	0	0.051760849	0.068528275	0	0.012000003	0.744800213	0.049521697
SOUTH CO	2020	UBUS	Aggregatec	Aggregatec	GAS	938.2571	88202.7311	3753.028589	6.37670198	0.238011741	0	0.78394374	1786.091193	0	78.67467619	0.005056784	0	0.098760027	0.000891343	0	0.00034274	0.010555704	0.115478201	0.000819557
SOUTH CO	2020	UBUS	Aggregatec	Aggregatec	DSL	18.19692	1877.446227	72.78767323	0	2.463648387	0	0	1609.150747	0	0	0.086388116	0	0	0.006443589	0	0	0.027100062	0.087179091	0.006164843
SOUTH CO	2020	UBUS	Aggregatec	Aggregatec	ELEC	17.11694	1343.18541	68.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016829342	0.116536229	0
SOUTH CO	2020	UBUS	Aggregatec	Aggregatec	NG	5325.955	586393.9078	21303.81879	0	1.707934574	0	0	1970.39491	0	0	6.940861348	0	0	0.004248308	0	0	0.033378451	0.068730395	0.004064528
SOUTH CO	2021	HHDT	Aggregatec	Aggregatec	GAS	82.02365	7779.478841	1641.129268	5.436092007	4.784675398	0	0.816889192	2114.284552	0	48.41809556	0.118550357	0	0.000288557	0.001390151	0	0.000941407	0.020000006	0.061740018	0.001278192
SOUTH CO	2021	HHDT	Aggregatec	Aggregatec	DSL	106416.5	13098099.52	1096767.394	0	3.846775489	67.12856953	1.9557001	1450.210238	12350.40341	0	0.004974383	0.232535562	0	0.052203787	0.09626202	0	0.035493526	0.060871398	0.049945475
SOUTH CO	2021	HHDT	Aggregatec	Aggregatec	NG	4728.678	192520.0593	18441.84402	0	3.497665234	24.50110563	0	3471.532565	4159.130651	0	5.199582115	1.301926681	0	0.006686396	0.049858254	0	0.03600001	0.061740018	0.006397145
SOUTH CO	2021	LDA	Aggregatec	Aggregatec	GAS	6444755	251960829.1	30445138.88	2.206401675	0.044024016	0	0.197537835	279.3081476	0	56.20808863	0.003215674	0	0.054461587	0.001741313	0	0.001988077	0.008000002	0.036750011	0.001601106
SOUTH CO	2021	LDA	Aggregatec	Aggregatec	DSL	55086.24	2235697.578	261421.0655	0	0.085226593	0	0	214.5018817	0	0	0.000967107	0	0	0.009992415	0	0	0.008000002	0.036750011	0.009560147
SOUTH CO	2021	LDA	Aggregatec	Aggregatec	ELEC	107407.1	4288811.557	537483.7872	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2021	LDT1	Aggregatec	Aggregatec	GAS	715053.2	26787165.5	3291669.777	2.378676441	0.132697667	0	0.283606438	324.9244479	0	65.83928824	0.008311445	0	0.079126852	0.002693598	0	0.002846111	0.008000002	0.036750011	0.002476858
SOUTH CO	2021	LDT1	Aggregatec	Aggregatec	DSL	416.2374	9768.779686	1451.630325	0	1.113904072	0	0	456.1543573	0	0	0.009566879	0	0	0.15598139	0	0	0.008000002	0.036750011	0.149233704
SOUTH CO	2021	LDT1	Aggregatec	Aggregatec	ELEC	3765.999	150723.395	18801.15656	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2021	LDT2	Aggregatec	Aggregatec	GAS	2207489	84313978.67	10346294.88	2.777754158	0.093291449	0	0.31175458	351.9595074	0	72.22593742	0.005150357	0	0.073336318	0.001838833	0	0.001977196	0.008000002	0.036750011	0.001690806
SOUTH CO	2021	LDT2	Aggregatec	Aggregatec	DSL	12809.41	562270.3473	63393.99266	0	0.048845818	0	0	293.5876656	0	0	0.000981271	0	0	0.006313994	0	0	0.008000002	0.036750011	0.006040854
SOUTH CO	2021	LDT2	Aggregatec	Aggregatec	ELEC	17082.5	567118.9552	86612.02796	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2021	LHDT1	Aggregatec	Aggregatec	GAS	176982.4	6390713.726	2636774.003	1.746656033	0.224826068	0.039391379	0.532197316	813.3266186	121.9234004	19.04432453	0.007821893	0.126767019	0.026140659	0.001310917	0	0.000432849	0.008000002	0.076440022	0.00120534
SOUTH CO	2021	LHDT1	Aggregatec	Aggregatec	DSL	113082.1	4621741.237	1422430.214	0	1.823868334	2.120674939	0	475.8290758	134.1631875	0	0.003522589	0.005098128	0	0.016240993	0.027664468	0	0.012000003	0.076440022	0.015538415
SOUTH CO	2021	LHDT2	Aggregatec	Aggregatec	GAS	29883.23	1046372.376	445215.6738	1.728497919	0.222646818	0.039571733	0.544709497	933.6334202	140.8373685	21.69919021	0.00576374	0.127540246	0.02636582	0.001166126	0	0.000359933	0.008000002	0.089180026	0.00107221
SOUTH CO	2021	LHDT2	Aggregatec	Aggregatec	DSL	44616.37	1781625.741	561217.7994	0	1.599848912	2.126656003	0	524.5961027	215.4318088	0	0.003293057	0.005098128	0	0.016666038	0.028123672	0	0.012000003	0.089180026	0.015945072
SOUTH CO	2021	MCY	Aggregatec	Aggregatec	GAS	286160.6	2034867.698	572321.1261	8.495355925	1.129415434	0	0.262962041	218.9624778	0	60.14038341	0.365107663	0	0.23731239	0.002216667	0	0.00325429	0.004000001	0.011760003	0.002073062
SOUTH CO	2021	MDV	Aggregatec	Aggregatec	GAS	1569538	56209459.55	7250478.016	3.350661505	0.128397973	0	0.391291027	432.0477775	0	89.31008554	0.007229956	0	0.090657063	0.001943948	0	0.002189132	0.008000002	0.036750011	0.001788823
SOUTH CO	2021	MDV	Aggregatec	Aggregatec	DSL	30443.6	1257907.778	149745.6331	0	0.055615403	0	0	382.6698135	0	0	0.000722201	0	0	0.005721351	0	0	0.008000002	0.036750011	0.005473848
SOUTH CO	2021	MDV	Aggregatec	Aggregatec	ELEC	7447.233	256086.1071	38184.47758	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2021	MH	Aggregatec	Aggregatec	GAS	35586.6	336910.0236	3560.08352	2.926967541	0.397447983	0	0.324658669	1691.464415	0	25.99092253	0.013949115	0	0.031988168	0.00144111	0	0.000375783	0.012000003	0.130340037	0.001325048
SOUTH CO	2021	MH	Aggregatec	Aggregatec	DSL	12385.97	120326.0615	1238.596705	0	3.905522936	0	0	972.9946125	0	0	0.00334433	0	0	0.100370923	0	0	0.016000005	0.130340037	0.096028921
SOUTH CO	2021	MHDT	Aggregatec	Aggregatec	GAS	25312.95	1374104.99	506461.4329	4.56259905	0.479696693	0.089284638	0.362180585	1689.602364	549.8502556	39.22694475	0.013941095	0.264235133	0.039683608	0.001030162	0	0.000430976	0.012000003	0.130340037	0.000947196
SOUTH CO	2021	MHDT	Aggregatec	Aggregatec	DSL	122608.9	7755175.552	1223035.655	0	2.541827261	7.710579886	1.445340168	968.6099243	825.4858732	0	0.005472691	0.005301962	0	0.072767455	0.025647597	0	0.012000003	0.130340037	0.069619567
SOUTH CO	2021	OBUS	Aggregatec	Aggregatec	GAS	5971.381	256430.9176	119475.3831	3.331209776	0.510732	0.064896577	0.324929875	1705.667786	381.7728399	26.7339888	0.013598498	0.196924767	0.03056397	0.000893175	0	0.000265383	0.012000003	0.130340037	0.000821242
SOUTH CO	2021	OBUS	Aggregatec	Aggregatec	DSL	4250.338	317904.7019	41510.49338	0	3.206030175	21.85463923	1.591928819	1198.372775	2938.226892	0	0.006566478	0.060031551	0	0.071679267	0.085636054	0	0.012000003	0.130340037	0.068578454
SOUTH CO	2021	SBUS	Aggregatec	Aggregatec	GAS	2478.675	102530.0329	9914.699156	7.987781857	0.467406133	0.924238665	0.574990961	881.2704513	2626.030889	48.28106455	0.013247264	2.402867243	0.057638561	0.001091972	0	0.000436765	0.008000002	0.744800204	0.001004028
SOUTH CO	2021	SBUS	Aggregatec	Aggregatec	DSL	6588.549	208177.801	76030.94486	0	7.614733008	44.50196232	0.784484843	1237.499269	3658.749219	0	0.005903426	0.013806179	0	0.048245879	0.06222948	0	0.012000003	0.744800213	0.046158783
SOUTH CO	2021	UBUS	Aggregatec	Aggregatec	GAS	943.9678	88729.36464	3775.87135	6.365676937	0.251149417	0	0.803220648	1784.367569	0	78.54485894	0.005026265	0	0.102002075	0.000911224	0	0.000353003	0.010555704	0.115478201	0.000837837
SOUTH CO	2021	UBUS	Aggregatec	Aggregatec	DSL	14.14142	1478.085683	56.56567323	0	1.304068789	0	0	1699.592362	0	0	0.096791558	0	0	0.006355216	0	0	0.03117991	0.075517523	0.006080293
SOUTH CO	2021	UBUS	Aggregatec	Aggregatec	ELEC	17.11694	1343.18541	68.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016829342	0.116536229	0
SOUTH CO	2021	UBUS	Aggregatec	Aggregatec	NG	5362.039	590313.6899	21448.15649	0	1.366369292	0	0	1974.407407	0	0	6.774715258	0	0	0.004007125	0	0	0.033363644	0.068773075	0.003833778
SOUTH CO	2022	HHDT	Aggregatec	Aggregatec	GAS	77.82251	7970.98117	1557.072798	5.253797049	4.256515209	0	0.612327367	2055.186477	0	47.48765277	0.104729778	0	0.000309787	0.001317308	0	0.000849671	0.020000006	0.061740018	0.001211216
SOUTH CO	2022	HHDT	Aggregatec	Aggregatec	DSL	108362	13373431.11	1118616.808	0	3.285140382	66.75346503	2.151408659	1407.335867	12547.21771	0	0.003079977	0.230080013	0	0.029646183	0.037331856	0	0.035492432	0.060869521	0.028363702
SOUTH CO	2022	HHDT	Aggregatec	Aggregatec	NG	5023.711	204625.173	19592.47418	0	3.105546263	23.64504698	0	3421.848687	4090.128254	0	5.042366254	1.281148276	0	0.006163741	0.043716688	0	0.03600001	0.061740018	0.005897101
SOUTH CO	2022	LDA	Aggregatec	Aggregatec	GAS	6542832	252244145.8	30915700.59	2.147026188	0.03867161	0	0.185257907	271.9398747	0	54.7436816	0.002812828	0	0.05048983	0.001649979	0	0.001891865	0.008000002	0.036750011	0.001517114
SOUTH CO	2022	LDA	Aggregatec	Aggregatec	DSL	58937.5	2358229.535	279973.4391	0	0.070553067	0	0	209.0169003	0	0	0.000849869	0	0	0.008486478	0	0	0.008000002	0.036750011	0.008119357
SOUTH CO	2022	LDA	Aggregatec	Aggregatec	ELEC	127532.6	5177709.154	637025.3739	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2022	LDT1	Aggregatec	Aggregatec	GAS	736905.6	27300895.56	3399511.906	2.296184577	0.115457882	0	0.261427756	316.7268879	0	64.10486059	0.00724046	0	0.072234245	0.002476444	0	0.00264091	0.008000002	0.036750011	0.002277129
SOUTH CO	2022	LDT1	Aggregatec	Aggregatec	DSL	387.1571	9037.122412	1348.407804	0	1.051194494	0	0	450.4063221	0	0	0.009050713	0	0	0.147108482	0	0	0.008000002	0.036750011	0.140744635
SOUTH CO	2022	LDT1	Aggregatec	Aggregatec	ELEC	5339.042	221507.355	26794.46811	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0

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SOUTH CO	2022	LDT2	Aggregatec	Aggregatec	GAS	2246303	84740129.27	10535909.69	2.686339669	0.081381107	0	0.283196524	339.8277789	0	69.78509531	0.004595676	0	0.068107859	0.001746336	0	0.001892763	0.008000002	0.036750011	0.001605737
SOUTH CO	2022	LDT2	Aggregatec	Aggregatec	DSL	14234.59	607996.5113	70193.21532	0	0.045978296	0	0	285.4839537	0	0	0.000962259	0	0	0.005996942	0	0	0.008000002	0.036750011	0.005737517
SOUTH CO	2022	LDT2	Aggregatec	Aggregatec	ELEC	22589.96	734756.0744	114302.6498	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2022	LHDT1	Aggregatec	Aggregatec	GAS	175903.1	6298251.455	2620693.985	1.700216538	0.201142464	0.038374024	0.51526363	804.8825647	121.01741	18.89017013	0.006951485	0.124302455	0.024593498	0.001287898	0	0.000418348	0.008000002	0.076440022	0.001184175
SOUTH CO	2022	LHDT1	Aggregatec	Aggregatec	DSL	119380.7	4817006.913	1501659.07	0	1.573434289	1.99969513	0	468.8881985	132.4565781	0	0.003283138	0.005098128	0	0.014911662	0.027585037	0	0.012000003	0.076440022	0.01426659
SOUTH CO	2022	LHDT2	Aggregatec	Aggregatec	GAS	30009.92	1040649.06	447103.1237	1.676711817	0.198760186	0.038569855	0.52922198	924.225105	139.8162546	21.52525194	0.005021629	0.125034233	0.024870664	0.001147395	0	0.000347276	0.008000002	0.089180026	0.001054987
SOUTH CO	2022	LHDT2	Aggregatec	Aggregatec	DSL	47335.63	1861640.337	595422.6751	0	1.386134477	2.006002541	0	517.0443772	212.836845	0	0.003090321	0.005098128	0	0.015833419	0.028057457	0	0.012000003	0.089180026	0.015148473
SOUTH CO	2022	MCY	Aggregatec	Aggregatec	GAS	295960.1	2072370.126	591920.16	8.517012991	1.127843422	0	0.263203905	218.988869	0	59.79811033	0.363623493	0	0.236116735	0.002271226	0	0.003195935	0.004000001	0.011760003	0.002122758
SOUTH CO	2022	MDV	Aggregatec	Aggregatec	GAS	1579640	55888916.43	7302407.352	3.175998674	0.1080538	0	0.355488734	418.337462	0	86.42281908	0.006037295	0	0.083466507	0.001825958	0	0.002065929	0.008000002	0.036750011	0.001679195
SOUTH CO	2022	MDV	Aggregatec	Aggregatec	DSL	33348.92	1344806.362	163526.2835	0	0.048102126	0	0	371.9832052	0	0	0.000662488	0	0	0.005119944	0	0	0.008000002	0.036750011	0.004898457
SOUTH CO	2022	MDV	Aggregatec	Aggregatec	ELEC	11658.48	391944.2778	59625.29995	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2022	MH	Aggregatec	Aggregatec	GAS	35097.75	333282.4015	3511.17938	2.815709758	0.348941897	0	0.327840884	1668.298142	0	25.60805651	0.012039929	0	0.031387518	0.00137551	0	0.000357489	0.012000003	0.130340037	0.001264731
SOUTH CO	2022	MH	Aggregatec	Aggregatec	DSL	12758.81	122359.1731	1275.881024	0	3.730581524	0	0	962.1948198	0	0	0.003231956	0	0	0.093343796	0	0	0.016000005	0.130340037	0.089305785
SOUTH CO	2022	MHDT	Aggregatec	Aggregatec	GAS	25445.41	1367743.276	509111.7939	4.337340156	0.406849173	0.089425844	0.355284788	1667.631581	544.9879106	38.54614187	0.011680586	0.266596384	0.038414753	0.001026455	0	0.00041505	0.012000003	0.130340037	0.000943788
SOUTH CO	2022	MHDT	Aggregatec	Aggregatec	DSL	123310	7939339.808	1231987.666	0	1.769634249	6.441753291	1.708179911	936.6178281	804.8028346	0	0.002714161	0.004239568	0	0.038704027	0.0151735	0	0.012000003	0.130340037	0.037029708
SOUTH CO	2022	OBUS	Aggregatec	Aggregatec	GAS	5959.443	250653.5146	119236.5275	3.246737087	0.45754851	0.064926384	0.320827091	1681.765032	378.4450799	26.39822289	0.012150289	0.19744536	0.029895138	0.000923914	0	0.000268372	0.012000003	0.130340037	0.000849505
SOUTH CO	2022	OBUS	Aggregatec	Aggregatec	DSL	4274.499	325950.0826	41607.39015	0	2.284746503	15.91277616	1.897000722	1164.186126	2816.780263	0	0.002795248	0.046815169	0	0.029313567	0.027824886	0	0.012000003	0.130340037	0.028045475
SOUTH CO	2022	SBUS	Aggregatec	Aggregatec	GAS	2630.829	107369.7838	10523.31785	7.820635352	0.445196546	0.924752498	0.577467191	872.9188316	2603.652805	47.69079291	0.012064863	2.403830595	0.057195831	0.00108409	0	0.000443496	0.008000002	0.744800204	0.000996781
SOUTH CO	2022	SBUS	Aggregatec	Aggregatec	DSL	6631.313	209546.1335	76524.43389	0	7.269736056	43.32696569	0.851744823	1223.902586	3641.464664	0	0.005628403	0.013376004	0	0.044820413	0.056448043	0	0.012000003	0.744800213	0.042881502
SOUTH CO	2022	UBUS	Aggregatec	Aggregatec	GAS	952.146	89255.99818	3808.584112	6.33086036	0.256693758	0	0.801826776	1768.52795	0	77.67361921	0.004973128	0	0.102830791	0.000996512	0	0.000399148	0.010555704	0.115478201	0.000916256
SOUTH CO	2022	UBUS	Aggregatec	Aggregatec	DSL	14.14142	1478.085683	56.56567323	0	1.304068789	0	0	1699.592362	0	0	0.096791558	0	0	0.006355216	0	0	0.03117991	0.075517523	0.006080293
SOUTH CO	2022	UBUS	Aggregatec	Aggregatec	ELEC	17.11694	1343.18541	68.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016829342	0.116536229	0
SOUTH CO	2022	UBUS	Aggregatec	Aggregatec	NG	5394.05	593834.1114	21576.1994	0	0.480545739	0	0	1985.230709	0	0	6.275057674	0	0	0.003385341	0	0	0.033363389	0.068773816	0.003238892
SOUTH CO	2023	HHDT	Aggregatec	Aggregatec	GAS	75.10443	8265.097091	1502.689423	5.502873792	3.851075541	0	0.55305515	2004.897326	0	47.17340149	0.093891133	0	0.000325143	0.001267087	0	0.000762067	0.020000006	0.061740018	0.001165039
SOUTH CO	2023	HHDT	Aggregatec	Aggregatec	DSL	109818.7	13648007.93	1133618.402	0	2.447133573	60.96427464	2.432161481	1328.724736	12047.64061	0	0.000886601	0.229790007	0	0.020709531	0.029866803	0	0.035491216	0.060867436	0.019813646
SOUTH CO	2023	HHDT	Aggregatec	Aggregatec	NG	5312.035	216378.9448	20716.93508	0	2.752383011	22.88713973	0	3374.206419	4023.151606	0	4.902466514	1.264144027	0	0.005725358	0.038633522	0	0.03600001	0.061740018	0.005477681
SOUTH CO	2023	LDA	Aggregatec	Aggregatec	GAS	6635002	252710542.7	31352477.48	2.086916874	0.0343324	0	0.174216318	264.4894889	0	53.27102803	0.002478104	0	0.046881758	0.001576628	0	0.001812449	0.008000002	0.036750011	0.001449663
SOUTH CO	2023	LDA	Aggregatec	Aggregatec	DSL	62492.98	2469815.67	297086.5583	0	0.05877775	0	0	203.5612321	0	0	0.000750684	0	0	0.007182172	0	0	0.008000002	0.036750011	0.006871474
SOUTH CO	2023	LDA	Aggregatec	Aggregatec	ELEC	150700.4	6237105.777	751566.0196	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2023	LDT1	Aggregatec	Aggregatec	GAS	758467.6	27812996.47	3504562.533	2.215972612	0.100619867	0	0.241629438	308.5406546	0	62.39232297	0.006307315	0	0.066019999	0.002288845	0	0.002461172	0.008000002	0.036750011	0.002104575
SOUTH CO	2023	LDT1	Aggregatec	Aggregatec	DSL	360.7799	8408.618214	1256.879517	0	0.985869562	0	0	443.6160378	0	0	0.008520428	0	0	0.137760016	0	0	0.008000002	0.036750011	0.131800579
SOUTH CO	2023	LDT1	Aggregatec	Aggregatec	ELEC	7122.934	303507.5334	35798.18926	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2023	LDT2	Aggregatec	Aggregatec	GAS	2285150	85272415.53	10723314.74	2.598328064	0.071382738	0	0.258360203	328.0390937	0	67.41098853	0.00410963	0	0.063283527	0.001670427	0	0.001824459	0.008000002	0.036750011	0.001535919
SOUTH CO	2023	LDT2	Aggregatec	Aggregatec	DSL	15594.68	650362.8069	76635.8271	0	0.043170885	0	0	277.624607	0	0	0.00093671	0	0	0.00557773	0	0	0.008000002	0.036750011	0.00533644
SOUTH CO	2023	LDT2	Aggregatec	Aggregatec	ELEC	28809.64	917592.8423	145405.4455	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2023	LHDT1	Aggregatec	Aggregatec	GAS	174910.4	6216642.74	2605904.115	1.659159437	0.17908533	0.037312743	0.497801652	795.3128199	119.972273	18.72211155	0.006111093	0.121695052	0.023114901	0.001267634	0	0.000404679	0.008000002	0.076440022	0.001165543
SOUTH CO	2023	LHDT1	Aggregatec	Aggregatec	DSL	125545.1	4994753.051	1579199.198	0	1.360533854	1.886535793	0	461.7286646	130.684227	0	0.003077327	0.005098128	0	0.013754971	0.027532868	0	0.012000003	0.076440022	0.013159937
SOUTH CO	2023	LHDT2	Aggregatec	Aggregatec	GAS	30102.75	1034569.096	448486.1701	1.628666266	0.177120756	0.037532455	0.512269981	913.6198656	138.6448227	21.33097063	0.004376471	0.122408497	0.023408821	0.001133331	0	0.000336718	0.008000002	0.089180026	0.001042056
SOUTH CO	2023	LHDT2	Aggregatec	Aggregatec	DSL	50003.13	1935029.912	628976.486	0	1.204836503	1.893637376	0	509.2895804	210.1316359	0	0.002916842	0.005098128	0	0.015175471	0.028007378	0	0.012000003	0.089180026	0.014518987
SOUTH CO	2023	MCY	Aggregatec	Aggregatec	GAS	305044.5	2104623.657	610089.0281	8.540693379	1.126518824	0	0.263246728	219.0018052	0	59.45261735	0.36234533	0	0.23496472	0.002309895	0	0.003073107	0.004000001	0.011760003	0.00215767
SOUTH CO	2023	MDV	Aggregatec	Aggregatec	GAS	1589863	55684188.36	7354859.885	3.015498301	0.093419644	0	0.323413401	404.7441794	0	83.60934475	0.005299363	0	0.076789559	0.001725111	0	0.001957142	0.008000002	0.036750011	0.001586347
SOUTH CO	2023	MDV	Aggregatec	Aggregatec	DSL	36128.1	1425691.372	176566.9105	0	0.042067627	0	0	361.6462609	0	0	0.000613469	0	0	0.004612779	0	0	0.008000002	0.036750011	0.004413232
SOUTH CO	2023	MDV	Aggregatec	Aggregatec	ELEC	16376.68	537591.7438	83475.9529	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2023	MH	Aggregatec	Aggregatec	GAS	34679.51	330042.9197	3469.337722	2.714616905	0.308416783	0	0.33031801	1647.151379	0	25.24372659	0.010482252	0	0.0308023	0.001322009	0	0.0003421	0.012000003	0.130340037	0.001215539
SOUTH CO	2023	MH	Aggregatec	Aggregatec	DSL	13122.69	124302.0239	1312.269387	0	3.573290777	0	0	952.3998464	0	0	0.003128954	0	0	0.08707151	0	0	0.016000005	0.130340037	0.083304835
SOUTH CO	2023	MHDT	Aggregatec	Aggregatec	GAS	25624.32	1363694.415	512691.2965	4.135387043	0.346416053	0.089546132	0.349049638	1647.036987	540.2007644	37.91001029	0.009842638	0.268572575	0.037249867	0.001029563	0	0.00040373	0.012000003	0.130340037	0.000946645
SOUTH CO	2023	MHDT	Aggregatec	Aggregatec	DSL	122124.5	8120623.353	1221858.451	0	1.136879227	4.698567679	2.142380225	896.8996296	770.1907694	0	0.000354232	0.003118614	0	0.007417883	0.004327591	0	0.012000003	0.130340037	0.007096989
SOUTH CO	2023	OBUS	Aggregatec	Aggregatec	GAS	5955.292	245774.0168	119153.4751	3.174164274	0.414441638	0.064954752	0.317434613	1659.50159	375.2455648	26.08995254	0.010941526	0.197885431	0.029277192	0.000953247	0	0.000271343	0.012000003	0.130340037	0.000876475
SOUTH CO	2023	OBUS	Aggregatec	Aggregatec	DSL	4286.94	333969.8185	41558.28926	0	1.58896943	12.11337002	2.208699948	1129.695274	2667.664674	0	0.000507294	0.040544661	0	0.01141886	0.004112826	0	0.012000003	0.130340037	0.010924886
SOUTH CO	2023	SBUS	Aggregatec	Aggregatec	GAS	2783.643	112189.6089	11134.57227	7.667394326	0.427585553	0.925177355	0.584203939	865.4275992	2583.544407	47.15290178	0.011090877	2.404314142	0.056647753	0.001085876	0	0.000453265	0.008000002	0.744800204	0.000998423
SOUTH CO	2023	SBUS	Aggregatec	Aggregatec	DSL	6671.826	210853.9115	76991.94375	0	6.920880742	42.08060158	0.920158827	1210.300211	3620.838291	0	0.005362467	0.013036994	0	0.041629099	0.051214215	0	0.012000003	0.744800213	0.039828243
SOUTH CO	2023	UBUS	Aggregatec	Aggregatec	GAS	957.7686	89782.63172	3831.074474	6.304063914	0.197554703	0	0.69255354	1683.934595	0	74.16390053	0.004988257	0	0.088056226	0.001424479	0	0.000584711	0.010555704	0.115478201	0.001309756
SOUTH CO	2023	UBUS	Aggregatec	Aggregatec	DSL	13.00046	1416.621572	52.00184381	0	1.303513468	0	0	1720.911377	0	0	0.097728131	0	0	0.006405078	0	0	0.032012084	0.073138892	0.006127998
SOUTH CO	2023	UBUS	Aggregatec	Aggregatec	ELEC	16.11694	1320.163255	64.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016495027	0.117491813	0
SOUTH CO	2023	UBUS	Aggregatec	Aggregatec	NG	5428.202	597439.0192	21712.80613	0	0.480214097	0	0	1984.772929	0	0	6.274711104	0	0	0.003365926	0	0	0.033361042	0.068780611	0.003220318
SOUTH CO	2024	HHDT	Aggregatec	Aggregatec	GAS	74.26701	8620.013986	1485.934371	5.284200826	3.578481492	0	0.455791424	1957.248734	0	46.00988236	0.087965912	0	0.000305257	0.001260501	0	0.000701499	0.020000006	0.061740018	0.001158985
SOUTH CO	2024	HHDT	Aggregatec	Aggregatec	DSL	112561	13933380.76	1167770.445	0	2.468044923	60.88429323	2.43261383	1309.570869	11931.8044	0	0.000894493	0.230437632	0	0.020749449	0.02904266	0	0.035489893	0.060865166	0.019851837
SOUTH CO	2024	HHDT	Aggregatec	Aggregatec	NG	5589.308	227691.5934	21798.30289	0	2.437831228	22.22145174	0	3319.91352	3949.788227	0	4.778919137	1.249576902	0	0.00535441	0.034240488	0	0.03600001	0.061740018	0.005122781
SOUTH CO	2024	LDA	Aggregatec	Aggregatec	GAS	6721891	253006673.7	31758651.73	2.01807668	0.030920638	0	0.164147432	258.0280953	0	51.77890702	0.002223257	0	0.043509403	0.001534772	0	0.001745768	0.008000002	0.036750011	0.001411166
SOUTH CO	2024	LDA	Aggregatec	Aggregatec	DSL	65701.81	2569094.642	312770.0626	0	0.048962812	0	0	199.003023	0	0	0.000672522	0	0	0.005932635	0	0	0.008000002	0.036750011	0.005675992
SOUTH CO	2024	LDA	Aggregatec	Aggregatec	ELEC	176700.2	7452589.244	879861.9304	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2024	LDT1	Aggregatec	Aggregatec	GAS	779748.6	28286817.37	3606828.302	2.138203331	0.08846207	0	0.223901758	301.628134	0	60.70308262	0.005582338	0	0.060351021	0.002154311	0	0.002305007	0.008000002	0.036750011	0.001980836
SOUTH CO	2024	LDT1	Aggregatec	Aggregatec	DSL	336.6362	7857.181353	1175.366913	0	0.915746618	0	0	438.2269283	0	0	0.007995744	0	0	0.128462949	0	0	0.008000002	0.036750011	0.122905698
SOUTH CO	2024	LDT1	Aggregatec	Aggregatec	ELEC	9097.581	395805.8648	45700.55861	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2024	LDT2	Aggregatec	Aggregatec	GAS	2324382	85796127.87	10909752.6	2.514780604	0.063376454	0	0.237036593	317.8931034	0	65.10577342	0.003737712	0	0.058815016	0.001627581	0	0.001769471	0.008000002	0.036750011	0.001496509
SOUTH CO	2024	LDT2	Aggregatec	Aggregatec	DSL	16866.7	688058.7876	82641.57951	0	0.040390505	0	0	271.1082718	0	0	0.000927018	0	0	0.0050084	0	0	0.008000002	0.036750011	0.004791739
SOUTH CO	2024	LDT2	Aggregatec	Aggregatec	ELEC	35655.35	1112020.476	179446.8993	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2024	LHDT1	Aggregatec	Aggregatec	GAS	174005.1	6143072.551	2592417.176	1.624257048	0.159586294	0.036262758	0.480260942	787.8090403	118.7995568	18.54227457	0.005405379	0.119063222	0.021725791	0.00126592	0	0.000392741	0.008000002	0.076440022	0.001163967
SOUTH CO	2024	LHDT1	Aggregatec	Aggregatec	DSL	131545.2	5156710.286	1654673.617	0	1.17613395	1.78421239	0	455.3880116	128.8618194	0	0.002939209	0.005098128	0	0.01279033	0.027491535	0	0.012000003	0.076440022	0.012237026
SOUTH CO	2024	LHDT2	Aggregatec	Aggregatec	GAS	30198.86	1028982.266	449917.9665	1.586606304	0.158585308	0.0365238	0.494800292	905.5466177	137.3413084	21.12060624	0.003878105	0.119797563	0.022047189	0.001138491	0	0.000328902	0.008000002	0.089180026	0.001046801
SOUTH CO	2024	LHDT2	Aggregatec	Aggregatec	DSL	52580.79	2001241.348	661400.1538	0	1.047737831	1.791988504	0	502.5417912	207.3268954	0	0.002808068	0.005098128	0	0.014710773	0.027988133	0	0.012000003	0.089180026	0.014074392
SOUTH CO	2024	MCY	Aggregatec	Aggregatec	GAS	313845.7	2132419.376	627691.4524	8.562311072	1.126675988	0	0.263302852	219.9190609	0	59.14548167	0.364534853	0	0.233687396	0.002368281	0	0.002969641	0.004000001	0.011760003	0.002211184
SOUTH CO	2024	MDV	Aggregatec	Aggregatec	GAS	1599677	55496538.13	7405446.286	2.858589584	0.080872805	0	0.293818624	392.7804663	0	80.79484094	0.004693826	0	0.070444236	0.001655514	0	0.001859843	0.008000002	0.036750011	0.001522239
SOUTH CO	2024	MDV	Aggregatec	Aggregatec	DSL	38789.91	1499058.187	188910.1338	0	0.03759521	0	0	353.1212142	0	0	0.000592408	0	0	0.0042497	0	0	0.008000002	0.036750011	0.00406586
SOUTH CO	2024	MDV	Aggregatec	Aggregatec	ELEC	21546.74	690718.3728	109429.4116	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO	2024	MH	Aggregatec	Aggregatec	GAS	34296.13	327056.6532	3430.984949	2.627421924	0.276151239	0	0.33266085	1623.325543	0	24.83743155	0.009354685	0	0.030216845	0.001297235	0	0.000331279	0.012000003	0.130340037	0.00119276
SOUTH CO	2024	MH	Aggregatec	Aggregatec	DSL	13472.14	126106.7887	1347.214217	0	3.452992031	0	0	941.807774	0	0	0.003097487	0	0	0.081406521	0	0	0.016000005	0.130340037	0.077884911
SOUTH CO	2024	MHDT	Aggregatec	Aggregatec	GAS	25804.01	1359447.346	516286.6944	3.953922267	0.296945041	0.089648342	0.343218307	1625.604106	534.0225222	37.22649905	0.008445481	0.270104836	0.03619423	0.001048567	0	0.000396273	0.012000003	0.130340037	0.000964119
SOUTH CO	2024	MHDT	Aggregatec	Aggregatec	DSL	127715.1	8302936.698	1282757.095	0	1.15610439	4.514410137	2.145766573	885.4946598	754.2826862	0	0.000356216	0.003043348	0	0.007461463	0.003711093	0	0.012000003	0.130340037	0.007138683
SOUTH CO	2024	OBUS	Aggregatec	Aggregatec	GAS	5954.495	241431.3981	119137.5421	3.101582526	0.375730174	0.064973324	0.31420816	1636.175146	371.1466596	25.73145493	0.009969522	0.198115252	0.02868547	0.000995236	0	0.000276372	0.012000003	0.130340037	0.000915082
SOUTH CO	2024	OBUS	Aggregatec	Aggregatec	DSL	4446.353	342309.6953	43067.16004	0	1.627988241	12.05464103	2.209857299	1118.945542	2638.051877	0	0.000516094	0.040301994	0	0.011663103	0.004091257	0	0.012000003	0.130340037	0.011158562
SOUTH CO	2024	SBUS	Aggregatec	Aggregatec	GAS	2938.098	117037.9587	11752.39082	7.496610295	0.400944681	0.925480564	0.583472505	855.3956034	2556.25432	46.48276504	0.010160916	2.404301986	0.055953282	0.001102225	0	0.000467587	0.008000002	0.744800204	0.001013456

SOUTH CO/	2024	SBUS	Aggregatec	Aggregatec	DSL	6709.768	212099.0577	77429.79185	0	6.566879229	40.75417124	0.990076266	1194.840531	3593.432743	0	0.005109011	0.012773303	0	0.038700284	0.046413857	0	0.012000003	0.744800213	0.037026127
SOUTH CO/	2024	UBUS	Aggregatec	Aggregatec	GAS	963.3912	90309.26527	3853.564835	6.308060312	0.183011138	0	0.659660351	1627.980614	0	72.01789609	0.004945362	0	0.084424386	0.001639228	0	0.000675831	0.010555704	0.115478201	0.00150721
SOUTH CO/	2024	UBUS	Aggregatec	Aggregatec	DSL	10.42282	1204.585498	41.69128879	0	0.82632059	0	0	1784.180934	0	0	0.080349101	0	0	0.006085254	0	0	0.035534692	0.063070105	0.005822009
SOUTH CO/	2024	UBUS	Aggregatec	Aggregatec	ELEC	16.11694	1320.163255	64.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016495027	0.117491813	0
SOUTH CO/	2024	UBUS	Aggregatec	Aggregatec	NG	5462.79	601171.4768	21851.15959	0	0.479996551	0	0	1984.688022	0	0	6.276126801	0	0	0.003345915	0	0	0.033353272	0.068803011	0.003201172
SOUTH CO/	2025	HHDT	Aggregatec	Aggregatec	GAS	73.98518	9005.52904	1480.295497	5.345821485	3.391393112	0	0.346188258	1909.818976	0	45.24484274	0.081942057	0	0.000310299	0.001240854	0	0.000641683	0.020000006	0.061740018	0.00114092
SOUTH CO/	2025	HHDT	Aggregatec	Aggregatec	DSL	114510.1	14172365.37	1194128.743	0	2.452985576	60.82592843	2.431685316	1284.726689	11785.89829	0	0.00089442	0.231025416	0	0.02079027	0.028320005	0	0.035488069	0.060862038	0.019890892
SOUTH CO/	2025	HHDT	Aggregatec	Aggregatec	NG	5856.035	238581.2969	22838.53694	0	2.170064531	21.63100043	0	3265.330372	3876.969778	0	4.673650532	1.236906167	0	0.005035495	0.030421425	0	0.03600001	0.061740018	0.004817661
SOUTH CO/	2025	LDA	Aggregatec	Aggregatec	GAS	6805727	253145342.8	32143253.37	1.939604551	0.028153498	0	0.154777476	250.4731482	0	50.27132086	0.001983743	0	0.040323927	0.001483172	0	0.001692954	0.008000002	0.036750011	0.001363722
SOUTH CO/	2025	LDA	Aggregatec	Aggregatec	DSL	68721.91	2656428.369	327385.003	0	0.041182696	0	0	193.4949916	0	0	0.00060775	0	0	0.00506016	0	0	0.008000002	0.036750011	0.004841259
SOUTH CO/	2025	LDA	Aggregatec	Aggregatec	ELEC	205237.2	8815934.14	1020366.918	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO/	2025	LDT1	Aggregatec	Aggregatec	GAS	800497.3	28711777.34	3705072.539	2.053082029	0.078037148	0	0.207932635	293.4856913	0	59.01606008	0.004898226	0	0.055170316	0.002015703	0	0.002171535	0.008000002	0.036750011	0.001853364
SOUTH CO/	2025	LDT1	Aggregatec	Aggregatec	DSL	314.0764	7370.62386	1101.554527	0	0.847336721	0	0	429.5151297	0	0	0.00744221	0	0	0.118747647	0	0	0.008000002	0.036750011	0.113610676
SOUTH CO/	2025	LDT1	Aggregatec	Aggregatec	ELEC	11260.19	498412.9596	56475.75047	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO/	2025	LDT2	Aggregatec	Aggregatec	GAS	2364309	86303467.33	11096373.45	2.430011081	0.056721868	0	0.218828983	306.7506205	0	62.85681936	0.003379599	0	0.054772018	0.001574096	0	0.001724554	0.008000002	0.036750011	0.001447323
SOUTH CO/	2025	LDT2	Aggregatec	Aggregatec	DSL	18091.4	722150.5811	88340.72944	0	0.038414137	0	0	263.3704751	0	0	0.000915984	0	0	0.004798226	0	0	0.008000002	0.036750011	0.004590657
SOUTH CO/	2025	LDT2	Aggregatec	Aggregatec	ELEC	43109.08	1316602.996	216309.8691	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO/	2025	LHDT1	Aggregatec	Aggregatec	GAS	173430.4	6082106.238	2583853.887	1.595024457	0.142304997	0.035231738	0.462328431	776.4554872	117.5095548	18.35019554	0.004756865	0.1164713	0.020440714	0.00125465	0	0.000383191	0.008000002	0.076440022	0.001153604
SOUTH CO/	2025	LHDT1	Aggregatec	Aggregatec	DSL	137399.6	5304568.502	1728313.877	0	1.018393447	1.691040066	0	447.9433916	126.9939509	0	0.002783932	0.005098128	0	0.01190768	0.027472034	0	0.012000003	0.076440022	0.011392559
SOUTH CO/	2025	LHDT2	Aggregatec	Aggregatec	GAS	30280.26	1023279.202	451130.7451	1.550140557	0.142360142	0.035538635	0.477190172	893.0086598	135.9054624	20.89638933	0.003465661	0.117249941	0.020754936	0.001136308	0	0.00032392	0.008000002	0.089180026	0.001044794
SOUTH CO/	2025	LHDT2	Aggregatec	Aggregatec	DSL	55100.27	2061805.728	693092.1078	0	0.914382883	1.699793661	0	494.5003732	204.4383456	0	0.002679848	0.005098128	0	0.014325	0.027997819	0	0.012000003	0.089180026	0.013705307
SOUTH CO/	2025	MCY	Aggregatec	Aggregatec	GAS	322405.1	2156492.828	644810.2364	8.584150329	1.125800619	0	0.263190262	219.9293675	0	58.875015	0.363583388	0	0.232808848	0.002406268	0	0.002966384	0.004000001	0.011760003	0.002245994
SOUTH CO/	2025	MDV	Aggregatec	Aggregatec	GAS	1610759	55349775.96	7459996.66	2.721100744	0.070791614	0	0.267127493	379.3921752	0	78.03360588	0.004159479	0	0.064672379	0.001587918	0	0.001789002	0.008000002	0.036750011	0.001460045
SOUTH CO/	2025	MDV	Aggregatec	Aggregatec	DSL	41295.15	1564637.726	200455.1443	0	0.033393229	0	0	343.0136427	0	0	0.000556571	0	0	0.003847727	0	0	0.008000002	0.036750011	0.003681277
SOUTH CO/	2025	MDV	Aggregatec	Aggregatec	ELEC	27149.64	850200.5411	137370.5198	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO/	2025	MH	Aggregatec	Aggregatec	GAS	33995.46	324472.9039	3400.905358	2.549358072	0.248433076	0	0.33487546	1595.66146	0	24.44387738	0.008376945	0	0.029707395	0.001266825	0	0.000322876	0.012000003	0.130340037	0.001164798
SOUTH CO/	2025	MH	Aggregatec	Aggregatec	DSL	13797.48	127691.6269	1379.747947	0	3.32792747	0	0	928.8715091	0	0	0.003012708	0	0	0.076331167	0	0	0.016000005	0.130340037	0.073031028
SOUTH CO/	2025	MHDT	Aggregatec	Aggregatec	GAS	25990.85	1355596.744	520024.9763	3.79705117	0.256374536	0.089736606	0.337818925	1598.885323	527.7145585	36.57791009	0.007235328	0.271408574	0.035298056	0.001059764	0	0.000391125	0.012000003	0.130340037	0.000974414
SOUTH CO/	2025	MHDT	Aggregatec	Aggregatec	DSL	132892.8	8444865.816	1340366.128	0	1.161079005	4.356358656	2.148402985	870.68719	739.4566874	0	0.000355036	0.002980058	0	0.00753276	0.003188244	0	0.012000003	0.130340037	0.007206896
SOUTH CO/	2025	OBUS	Aggregatec	Aggregatec	GAS	5953.626	237698.4826	119120.1566	3.04148618	0.342414679	0.064992952	0.311036712	1606.747704	366.8482872	25.38254802	0.009032149	0.198395548	0.028156963	0.001024173	0	0.000280344	0.012000003	0.130340037	0.000941689
SOUTH CO/	2025	OBUS	Aggregatec	Aggregatec	DSL	4685.134	349833.854	45454.12243	0	1.605877641	12.16783848	2.211886149	1093.325933	2616.786638	0	0.000512513	0.040769724	0	0.011521401	0.00413283	0	0.012000003	0.130340037	0.01102299
SOUTH CO/	2025	SBUS	Aggregatec	Aggregatec	GAS	3092.715	121823.4096	12370.85878	7.360378474	0.378553539	0.925739954	0.584092619	846.3398158	2531.575341	45.90476919	0.009420493	2.403859694	0.055283304	0.00111822	0	0.000480805	0.008000002	0.744800204	0.001028162
SOUTH CO/	2025	SBUS	Aggregatec	Aggregatec	DSL	6746.346	213318.799	77851.89673	0	6.208495251	39.33822231	1.061734348	1178.946967	3562.146445	0	0.004862251	0.01257428	0	0.036003707	0.041973129	0	0.012000003	0.744800213	0.034446202
SOUTH CO/	2025	UBUS	Aggregatec	Aggregatec	GAS	969.366	90835.89881	3877.463997	6.296528683	0.165010904	0	0.613878541	1575.444154	0	69.45785467	0.004953752	0	0.078486894	0.00182466	0	0.000773677	0.010555704	0.115478201	0.001677708
SOUTH CO/	2025	UBUS	Aggregatec	Aggregatec	DSL	6.367322	775.5948993	25.46928879	0	0.822554811	0	0	1776.671301	0	0	0.079883322	0	0	0.006063639	0	0	0.035277313	0.063805781	0.005801329
SOUTH CO/	2025	UBUS	Aggregatec	Aggregatec	ELEC	16.11694	1320.163255	64.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016495027	0.117491813	0
SOUTH CO/	2025	UBUS	Aggregatec	Aggregatec	NG	5498.856	605120.889	21995.42449	0	0.48004259	0	0	1984.746109	0	0	6.276409899	0	0	0.003359194	0	0	0.033354959	0.068798557	0.003213877
SOUTH CO/	2026	HHDT	Aggregatec	Aggregatec	GAS	73.68174	9403.551925	1474.224171	5.163750428	3.113818747	0	0.186798597	1868.553635	0	44.02543875	0.077228617	0	0.000315794	0.001207688	0	0.000556612	0.020000006	0.061740018	0.001110424
SOUTH CO/	2026	HHDT	Aggregatec	Aggregatec	DSL	116233.6	14433400.88	1216929.778	0	2.427462489	60.70511954	2.432135077	1258.800995	11610.464	0	0.00089148	0.231287888	0	0.0206986	0.027434732	0	0.035487215	0.060860574	0.019803188
SOUTH CO/	2026	HHDT	Aggregatec	Aggregatec	NG	6117.855	249228.9578	23859.63526	0	1.933287594	21.11716066	0	3211.392055	3805.454469	0	4.580704549	1.226173974	0	0.004758663	0.027172461	0	0.03600001	0.061740018	0.004552805
SOUTH CO/	2026	LDA	Aggregatec	Aggregatec	GAS	6890013	252855713.3	32528383.83	1.868723525	0.02599158	0	0.146943986	243.7452733	0	48.89825338	0.001787727	0	0.03752454	0.00142282	0	0.001635622	0.008000002	0.036750011	0.00130823
SOUTH CO/	2026	LDA	Aggregatec	Aggregatec	DSL	71373.84	2727510.268	340604.7037	0	0.034232393	0	0	188.6947868	0	0	0.000546722	0	0	0.004206992	0	0	0.008000002	0.036750011	0.004025
SOUTH CO/	2026	LDA	Aggregatec	Aggregatec	ELEC	232749.5	9798207.015	1154485.794	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO/	2026	LDT1	Aggregatec	Aggregatec	GAS	820893.1	29048632.42	3800772.095	1.97304341	0.069343036	0	0.194305307	286.233041	0	57.47644616	0.004316739	0	0.050597652	0.00188595	0	0.002045526	0.008000002	0.036750011	0.001734061
SOUTH CO/	2026	LDT1	Aggregatec	Aggregatec	DSL	277.3894	6696.411601	994.2354937	0	0.745588008	0	0	418.989514	0	0	0.006519913	0	0	0.101726587	0	0	0.008000002	0.036750011	0.09732594
SOUTH CO/	2026	LDT1	Aggregatec	Aggregatec	ELEC	13403.15	580090.8687	67042.39244	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO/	2026	LDT2	Aggregatec	Aggregatec	GAS	2406087	86677830.02	11289338.2	2.354543286	0.051280587	0	0.203484121	296.8833178	0	60.81732621	0.003076806	0	0.05118813	0.001513398	0	0.001672067	0.008000002	0.036750011	0.001391514
SOUTH CO/	2026	LDT2	Aggregatec	Aggregatec	DSL	19278.53	751522.0083	93783.45798	0	0.037361562	0	0	256.8453707	0	0	0.000912622	0	0	0.004730498	0	0	0.008000002	0.036750011	0.004525859
SOUTH CO/	2026	LDT2	Aggregatec	Aggregatec	ELEC	50413.02	1506666.739	252060.2663	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO/	2026	LHDT1	Aggregatec	Aggregatec	GAS	173056.7	6033376.008	2578287.329	1.570337529	0.12651494	0.034224676	0.444503037	764.4154465	116.1132977	18.14645068	0.004145943	0.113927761	0.019263705	0.001245243	0	0.000374678	0.008000002	0.076440022	0.001144955
SOUTH CO/	2026	LHDT1	Aggregatec	Aggregatec	DSL	143072.3	5442892.527	1799669.293	0	0.880321035	1.605452485	0	440.3923431	125.0834046	0	0.002646872	0.005098128	0	0.011119752	0.027462598	0	0.012000003	0.076440022	0.010638716
SOUTH CO/	2026	LHDT2	Aggregatec	Aggregatec	GAS	30380.69	1019189.783	452626.987	1.516208598	0.126776311	0.034586916	0.460301621	879.7126121	134.3534306	20.65680121	0.003029403	0.114801894	0.01955887	0.001133144	0	0.000318788	0.008000002	0.089180026	0.001041884
SOUTH CO/	2026	LHDT2	Aggregatec	Aggregatec	DSL	57537.52	2118258.655	723749.6143	0	0.798560242	1.615471911	0	486.3395356	201.4775943	0	0.002567935	0.005098128	0	0.014008198	0.028011431	0	0.012000003	0.089180026	0.01340221
SOUTH CO/	2026	MCY	Aggregatec	Aggregatec	GAS	330653.4	2179057.101	661306.7133	8.604685916	1.12505688	0	0.263060696	219.9358373	0	58.62720262	0.362748196	0	0.231986484	0.002438153	0	0.002957032	0.004000001	0.011760003	0.00227519
SOUTH CO/	2026	MDV	Aggregatec	Aggregatec	GAS	1623219	55156956.72	7520376.329	2.603176998	0.062680175	0	0.243994592	367.2274846	0	75.47595958	0.003718895	0	0.059538673	0.00152105	0	0.001720605	0.008000002	0.036750011	0.001398553
SOUTH CO/	2026	MDV	Aggregatec	Aggregatec	DSL	43701.21	1620690.625	211432.3811	0	0.029915995	0	0	334.2696822	0	0	0.000525779	0	0	0.003496274	0	0	0.008000002	0.036750011	0.003345027
SOUTH CO/	2026	MDV	Aggregatec	Aggregatec	ELEC	32680.43	999389.314	164663.1779	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008000002	0.036750011	0
SOUTH CO/	2026	MH	Aggregatec	Aggregatec	GAS	33697.08	322202.0105	3371.0557	2.47813385	0.222265242	0	0.33759583	1570.225946	0	24.06347038	0.007389668	0	0.029283931	0.001236594	0	0.000314311	0.012000003	0.130340037	0.001137003
SOUTH CO/	2026	MH	Aggregatec	Aggregatec	DSL	14107.02	129198.2863	1410.702167	0	3.213125327	0	0	917.0126987	0	0	0.002932102	0	0	0.071522576	0	0	0.016000005	0.130340037	0.068428541
SOUTH CO/	2026	MHDT	Aggregatec	Aggregatec	GAS	26200.98	1353545.058	524229.2582	3.659742253	0.223569242	0.08981021	0.333151437	1573.915706	521.5569174	35.9723429	0.006292887	0.272419663	0.034521882	0.00107356	0	0.000389422	0.012000003	0.130340037	0.000987099
SOUTH CO/	2026	MHDT	Aggregatec	Aggregatec	DSL	137838	8588906.396	1395108.057	0	1.162750012	4.218797262	2.150869187	856.4090274	725.7725535	0	0.000353503	0.002925658	0	0.007574187	0.002737043	0	0.012000003	0.130340037	0.007246531
SOUTH CO/	2026	OBUS	Aggregatec	Aggregatec	GAS	5959.016	234710.4848	119227.9884	2.975611632	0.309394579	0.065012916	0.308780566	1579.504521	362.7133639	25.03580351	0.008123004	0.198614486	0.027754738	0.001049837	0	0.000283474	0.012000003	0.130340037	0.000965286
SOUTH CO/	2026	OBUS	Aggregatec	Aggregatec	DSL	4901.128	357325.1281	47575.00875	0	1.587570694	12.2048589	2.213467309	1070.146988	2587.952545	0	0.00050953	0.040922691	0	0.011406779	0.004146427	0	0.012000003	0.130340037	0.010913327
SOUTH CO/	2026	SBUS	Aggregatec	Aggregatec	GAS	3247.263	126614.0466	12989.05137	7.227638067	0.362606983	0.925965436	0.590537618	838.0343733	2508.910144	45.36860346	0.008726595	2.403352701	0.054991058	0.001133902	0	0.000493029	0.008000002	0.744800204	0.001042581
SOUTH CO/	2026	SBUS	Aggregatec	Aggregatec	DSL	6784.275	214549.8334	78289.58863	0	5.838632739	37.81548374	1.136106141	1162.714511	3527.281626	0	0.004607536	0.012426574	0	0.03342871	0.037766286	0	0.012000003	0.744800213	0.031982598
SOUTH CO/	2026	UBUS	Aggregatec	Aggregatec	GAS	974.9886	91362.53235	3899.954358	6.276597451	0.169989447	0	0.628946161	1558.681699	0	69.0169533	0.004931646	0	0.08091032	0.001878034	0	0.000789029	0.010555704	0.115478201	0.001726783
SOUTH CO/	2026	UBUS	Aggregatec	Aggregatec	DSL	6.367322	775.5948993	25.46928879	0	0.822554811	0	0	1776.671301	0	0	0.079883322	0	0	0.006063639	0	0	0.035277313	0.063805781	0.005801329
SOUTH CO/	2026	UBUS	Aggregatec	Aggregatec	ELEC	16.11694	1320.163255	64.46775545	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016495027	0.117491813	0
SOUTH CO/	2026	UBUS	Aggregatec	Aggregatec	NG	5530.867	608641.3105	22123.46739	0	0.480067824	0	0	1984.736889	0	0	6.276381954	0	0	0.00337172	0	0	0.033354761	0.068799132	0.003225861

The Jeff Hotel Project, Culver City, CA
EMFAC2017 Data Outputs

EMFAC2017 (v1.0.2) Emission Rates
Region Type: Air District
Region: SOUTH COAST AQMD
Calendar Year: 2020, 2021, 2022, 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RI

Region	Calendar Y	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	PM2_5_IDLEX	PM2_5_STREX	PM2_5_PMTW	PM2_5_PMBW	SOx_RUNEX	SOx_IDLEX	SOx_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX
SOUTH CO	2020	HHDT	Aggregated	Aggregated	GAS	87.83189	7670.468393	1757.340415	0	0.001110475	0.005000001	0.026460008	0.021555425	0	0.000497317	0.172169706	0	0.022822008
SOUTH CO	2020	HHDT	Aggregated	Aggregated	DSL	103820.4	12807959.19	1065500.159	0.131908001	0	0.008873693	0.026088657	0.013989881	0.115231476	0	0.232761419	1.917202999	0
SOUTH CO	2020	HHDT	Aggregated	Aggregated	NG	4398.413	179076.229	17153.81106	0.054678965	0	0.009000003	0.026460008	0	0	0	0.717812668	0.862386437	0
SOUTH CO	2020	LDA	Aggregated	Aggregated	GAS	6343244	250946804.6	29952289.22	0	0.001930114	0.002000001	0.015750005	0.002832956	0	0.000570676	0.005335457	0	0.027588405
SOUTH CO	2020	LDA	Aggregated	Aggregated	DSL	51115.55	2093562.117	242023.4737	0	0	0.002000001	0.015750005	0.002077915	0	0	0.034549742	0	0
SOUTH CO	2020	LDA	Aggregated	Aggregated	ELEC	90985.72	3568728.994	456458.1804	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2020	LDT1	Aggregated	Aggregated	GAS	692884.6	26159714.71	3181017.639	0	0.002828366	0.002000001	0.015750005	0.003293435	0	0.00066895	0.010791132	0	0.03157781
SOUTH CO	2020	LDT1	Aggregated	Aggregated	DSL	447.0053	10577.7496	1564.205034	0	0	0.002000001	0.015750005	0.004350584	0	0	0.07233768	0	0
SOUTH CO	2020	LDT1	Aggregated	Aggregated	ELEC	2466.328	92670.64319	12156.12935	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2020	LDT2	Aggregated	Aggregated	GAS	2169628	83699648.08	10158608.89	0	0.001909854	0.002000001	0.015750005	0.003603081	0	0.000739597	0.0083685	0	0.036252275
SOUTH CO	2020	LDT2	Aggregated	Aggregated	DSL	11367.52	511152.7811	56413.22504	0	0	0.002000001	0.015750005	0.002853392	0	0	0.047443692	0	0
SOUTH CO	2020	LDT2	Aggregated	Aggregated	ELEC	12535.43	424456.7871	63666.289	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2020	LHDT1	Aggregated	Aggregated	GAS	178175.5	6494353.996	2654549.228	0	0.000425748	0.002000001	0.032760009	0.00811199	0.001213987	0.000190404	0.014923828	0.003289204	0.043482352
SOUTH CO	2020	LHDT1	Aggregated	Aggregated	DSL	106680.2	4404637.682	1341902.266	0.026556216	0	0.003000001	0.032760009	0.004559483	0.001283731	0	0.075811061	0.021344748	0
SOUTH CO	2020	LHDT2	Aggregated	Aggregated	GAS	29750.07	1051653.666	443231.7796	0	0.000343861	0.002000001	0.038220011	0.009310368	0.001402239	0.00021628	0.015797422	0.003222917	0.043238289
SOUTH CO	2020	LHDT2	Aggregated	Aggregated	DSL	41895.25	1694144.207	526989.5855	0.026993279	0	0.003000001	0.038220011	0.005025489	0.002059816	0	0.083559407	0.034248806	0
SOUTH CO	2020	MCY	Aggregated	Aggregated	GAS	276047.6	1990434.04	552095.1922	0	0.003140075	0.001	0.005040001	0.002163474	0	0.000598935	0.065453981	0	0.015016847
SOUTH CO	2020	MDV	Aggregated	Aggregated	GAS	1557729	56408480.36	7193015.573	0	0.002121869	0.002000001	0.015750005	0.004404222	0	0.00091131	0.010725129	0	0.040036481
SOUTH CO	2020	MDV	Aggregated	Aggregated	DSL	27451.54	1159329.066	135395.1637	0	0	0.002000001	0.015750005	0.003717598	0	0	0.061812945	0	0
SOUTH CO	2020	MDV	Aggregated	Aggregated	ELEC	3954.471	138125.1853	20276.62835	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2020	MH	Aggregated	Aggregated	GAS	36100.69	340582.2237	3611.512816	0	0.000388428	0.003000001	0.055860016	0.016958454	0	0.000262934	0.026875225	0	0.033949464
SOUTH CO	2020	MH	Aggregated	Aggregated	DSL	12007.37	118161.7969	1200.737369	0	0	0.004000001	0.055860016	0.009285957	0	0	0.154398723	0	0
SOUTH CO	2020	MHDT	Aggregated	Aggregated	GAS	25210.15	1381572.63	504404.7546	0	0.00041513	0.003000001	0.055860016	0.016924172	0.005486381	0.000394947	0.027216794	0.007554532	0.028830277
SOUTH CO	2020	MHDT	Aggregated	Aggregated	DSL	120277.1	7555230.165	1196267.58	0.029983424	0	0.003000001	0.055860016	0.009347875	0.007960362	0	0.155528461	0.132443239	0
SOUTH CO	2020	OBUS	Aggregated	Aggregated	GAS	5971.384	262419.3817	119475.4563	0	0.000249649	0.003000001	0.055860016	0.017081736	0.00380708	0.000268455	0.027140186	0.005409475	0.025417002
SOUTH CO	2020	OBUS	Aggregated	Aggregated	DSL	4179.048	309243.7025	40903.23601	0.115509358	0	0.003000001	0.055860016	0.011552033	0.028507588	0	0.192200885	0.474304718	0
SOUTH CO	2020	SBUS	Aggregated	Aggregated	GAS	2327.941	97616.62301	9311.762921	0	0.000397805	0.002000001	0.319200087	0.008814745	0.026237746	0.00048425	0.027280636	0.085068231	0.052008469
SOUTH CO	2020	SBUS	Aggregated	Aggregated	DSL	6542.861	206832.8804	75503.7145	0.065563772	0	0.003000001	0.319200091	0.01181365	0.034695901	0	0.196553636	0.5772649	0
SOUTH CO	2020	UBUS	Aggregated	Aggregated	GAS	938.2571	88202.7311	3753.028589	0	0.000315137	0.002638926	0.049490658	0.01767482	0	0.00077855	0.020531821	0	0.069897638
SOUTH CO	2020	UBUS	Aggregated	Aggregated	DSL	18.19692	1877.446227	72.78767323	0	0	0.006775015	0.037362467	0.015212261	0	0	0.252936089	0	0
SOUTH CO	2020	UBUS	Aggregated	Aggregated	ELEC	17.11694	1343.18541	68.46775545	0	0	0.004207336	0.049944098	0	0	0	0	0	0
SOUTH CO	2020	UBUS	Aggregated	Aggregated	NG	5325.955	586393.9078	21303.81879	0	0	0.008344613	0.029455884	0	0	0	0.401677892	0	0
SOUTH CO	2021	HHDT	Aggregated	Aggregated	GAS	82.02365	7779.478841	1641.129268	0	0.000865589	0.005000001	0.026460008	0.02092256	0	0.000479136	0.161123597	0	0.020274776
SOUTH CO	2021	HHDT	Aggregated	Aggregated	DSL	106416.5	13098099.52	1096767.394	0.092097767	0	0.008873382	0.026087742	0.013700867	0.116680488	0	0.227952854	1.941311427	0
SOUTH CO	2021	HHDT	Aggregated	Aggregated	NG	4728.678	192520.0593	18441.84402	0.047701408	0	0.009000003	0.026460008	0	0	0	0.707694623	0.847865991	0
SOUTH CO	2021	LDA	Aggregated	Aggregated	GAS	6444755	251960829.1	30445138.88	0	0.001828077	0.002000001	0.015750005	0.002763981	0	0.000556225	0.004872989	0	0.026578213
SOUTH CO	2021	LDA	Aggregated	Aggregated	DSL	55086.24	2235697.578	261421.0655	0	0	0.002000001	0.015750005	0.002027814	0	0	0.033716709	0	0
SOUTH CO	2021	LDA	Aggregated	Aggregated	ELEC	107407.1	4288811.557	537483.7872	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2021	LDT1	Aggregated	Aggregated	GAS	715053.2	26787165.5	3291669.777	0	0.002617145	0.002000001	0.015750005	0.003215391	0	0.000651533	0.009625649	0	0.03017115
SOUTH CO	2021	LDT1	Aggregated	Aggregated	DSL	416.2374	9768.779686	1451.630325	0	0	0.002000001	0.015750005	0.004312299	0	0	0.071701113	0	0
SOUTH CO	2021	LDT1	Aggregated	Aggregated	ELEC	3765.999	150723.395	18801.15656	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2021	LDT2	Aggregated	Aggregated	GAS	2207489	84313978.67	10346294.88	0	0.001818044	0.002000001	0.015750005	0.003482925	0	0.000714734	0.00750331	0	0.034226286
SOUTH CO	2021	LDT2	Aggregated	Aggregated	DSL	12809.41	562270.3473	63393.99266	0	0	0.002000001	0.015750005	0.002775459	0	0	0.046147893	0	0
SOUTH CO	2021	LDT2	Aggregated	Aggregated	ELEC	17082.5	567118.9552	86612.02796	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2021	LHDT1	Aggregated	Aggregated	GAS	176982.4	6390713.726	2636774.003	0	0.000397988	0.002000001	0.032760009	0.008048526	0.001206531	0.000188459	0.013594304	0.003270433	0.042608384
SOUTH CO	2021	LHDT1	Aggregated	Aggregated	DSL	113082.1	4621741.237	1422430.214	0.026467715	0	0.003000001	0.032760009	0.004498296	0.001268325	0	0.074793704	0.021088585	0
SOUTH CO	2021	LHDT2	Aggregated	Aggregated	GAS	29883.23	1046372.376	445215.6738	0	0.000330945	0.002000001	0.038220011	0.00923906	0.0013937	0.000214731	0.014376371	0.00320061	0.042526177
SOUTH CO	2021	LHDT2	Aggregated	Aggregated	DSL	44616.37	1781625.741	561217.7994	0.026907055	0	0.003000001	0.038220011	0.00495932	0.002036605	0	0.082459202	0.03386288	0
SOUTH CO	2021	MCY	Aggregated	Aggregated	GAS	286160.6	2034867.698	572321.1261	0	0.003066605	0.001	0.005040001	0.002166811	0	0.000595138	0.065369508	0	0.015029007
SOUTH CO	2021	MDV	Aggregated	Aggregated	GAS	1569538	56209459.55	7250478.016	0	0.002014406	0.002000001	0.015750005	0.004275463	0	0.000883796	0.009601848	0	0.037849238
SOUTH CO	2021	MDV	Aggregated	Aggregated	DSL	30443.6	1257907.778	149745.6331	0	0	0.002000001	0.015750005	0.003617606	0	0	0.060150366	0	0
SOUTH CO	2021	MDV	Aggregated	Aggregated	ELEC	7447.233	256086.1071	38184.47758	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2021	MH	Aggregated	Aggregated	GAS	35586.6	336910.0236	3560.08352	0	0.000345518	0.003000001	0.055860016	0.016738412	0	0.000257201	0.024557895	0	0.034956478
SOUTH CO	2021	MH	Aggregated	Aggregated	DSL	12385.97	120326.0615	1238.596705	0	0	0.004000001	0.055860016	0.009198298	0	0	0.152941203	0	0
SOUTH CO	2021	MHDT	Aggregated	Aggregated	GAS	25312.95	1374104.99	506461.4329	0	0.000396266	0.003000001	0.055860016	0.016719985	0.005441214	0.000388182	0.023868596	0.007735779	0.028944201
SOUTH CO	2021	MHDT	Aggregated	Aggregated	DSL	122608.9	7755175.552	1223035.655	0.024538093	0	0.003000001	0.055860016	0.009150946	0.007798781	0	0.152251991	0.129754884	0
SOUTH CO	2021	OBUS	Aggregated	Aggregated	GAS	5971.381	256430.9176	119475.3831	0	0.00024401	0.003000001	0.055860016	0.016878965	0.003777952	0.000264554	0.024826931	0.005467261	0.025356712
SOUTH CO	2021	OBUS	Aggregated	Aggregated	DSL	4250.338	317904.7019	41510.49338	0.081931476	0	0.003000001	0.055860016	0.011321632	0.027758911	0	0.188367512	0.46184835	0
SOUTH CO	2021	SBUS	Aggregated	Aggregated	GAS	2478.675	102530.0329	9914.699156	0	0.000401589	0.002000001	0.319200087	0.008720886	0.025986704	0.00047778	0.026100826	0.085550674	0.052416966
SOUTH CO	2021	SBUS	Aggregated	Aggregated	DSL	6588.549	208177.801	76030.94486	0.05953746	0	0.003000001	0.319200091	0.011691279	0.034566048	0	0.194517652	0.575104426	0
SOUTH CO	2021	UBUS	Aggregated	Aggregated	GAS	943.9678	88729.36464	3775.87135	0	0.000324573	0.002638926	0.049490658	0.017657764	0	0.000777265	0.021330773	0	0.070557169
SOUTH CO	2021	UBUS	Aggregated	Aggregated	DSL	14.14142	1478.085683	56.56567323	0	0	0.007794978	0.032364653	0.01606726	0	0	0.267152251	0	0
SOUTH CO	2021	UBUS	Aggregated	Aggregated	ELEC	17.11694	1343.18541	68.46775545	0	0	0.004207336	0.049944098	0	0	0	0	0	0
SOUTH CO	2021	UBUS	Aggregated	Aggregated	NG	5362.039	590313.6899	21448.15649	0	0	0.008340911	0.029474175	0	0	0	0.402495866	0	0
SOUTH CO	2022	HHDT	Aggregated	Aggregated	GAS	77.82251	7970.98117	1557.072798	0	0.000781242	0.005000001	0.026460008	0.020337736	0	0.000469929	0.151162066	0	0.015570448
SOUTH CO	2022	HHDT	Aggregated	Aggregated	DSL	108362	13373431.11	1118616.808	0.035716897	0	0.008873108	0.026086937	0.013295811	0.118539891	0	0.2212136	1.972247894	0
SOUTH CO	2022	HHDT	Aggregated	Aggregated	NG	5023.711	204625.173	19592.47418	0.041825523	0	0.009000003	0.026460008	0	0	0	0.69756624	0.833799401	0
SOUTH CO	2022	LDA	Aggregated	Aggregated	GAS	6542832	252244145.8	30915700.59	0	0.001739569	0.002000001	0.015750005	0.002691066	0	0.000541733	0.004493468	0	0.025615648
SOUTH CO	2022	LDA	Aggregated	Aggregated	DSL	58937.5	2358229.535	279973.4391	0	0	0.002000001	0.015750005	0.001975961	0	0	0.032854546	0	0
SOUTH CO	2022	LDA	Aggregated	Aggregated	ELEC	127532.6	5177709.154	637025.3739	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2022	LDT1	Aggregated	Aggregated	GAS	736905.6	27300895.56	3399511.906	0	0.002428387	0.002000001	0.015750005	0.003134269	0	0.00063437	0.008633663	0	0.02886365
SOUTH CO	2022	LDT1	Aggregated	Aggregated	DSL	387.1571	9037.122412	1348.407804	0	0	0.002000001	0.015750005	0.00425796	0	0	0.070797602	0	0
SOUTH CO	2022	LDT1	Aggregated	Aggregated	ELEC	5339.042	221507.355	26794.46811	0	0	0.002000001	0.015750005	0	0	0	0	0	0

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SOUTH CO	2022	LDT2	Aggregatec	Aggregatec	GAS	2246303	84740129.27	10535909.69	0	0.001740385	0.002000001	0.015750005	0.003362871	0	0.00069058	0.00677134	0	0.032289374
SOUTH CO	2022	LDT2	Aggregatec	Aggregatec	DSL	14234.59	607996.5113	70193.21532	0	0	0.002000001	0.015750005	0.00269885	0	0	0.044874102	0	0
SOUTH CO	2022	LDT2	Aggregatec	Aggregatec	ELEC	22589.96	734756.0744	114302.6498	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2022	LHDT1	Aggregatec	Aggregatec	GAS	175903.1	6298251.455	2620693.985	0	0.000384656	0.002000001	0.032760009	0.007964965	0.001197565	0.000186934	0.012289986	0.003235333	0.041601158
SOUTH CO	2022	LHDT1	Aggregatec	Aggregatec	DSL	119380.7	4817006.913	1501659.07	0.02639172	0	0.003000001	0.032760009	0.00443268	0.001252191	0	0.073702695	0.02082033	0
SOUTH CO	2022	LHDT2	Aggregatec	Aggregatec	GAS	30009.92	1040649.06	447103.1237	0	0.000319307	0.002000001	0.038220011	0.009145957	0.001383595	0.00021301	0.01301057	0.003165872	0.041621973
SOUTH CO	2022	LHDT2	Aggregatec	Aggregatec	DSL	47335.63	1861640.337	595422.6751	0.026843704	0	0.003000001	0.038220011	0.004887929	0.002012074	0	0.081272176	0.033454988	0
SOUTH CO	2022	MCY	Aggregatec	Aggregatec	GAS	295960.1	2072370.126	591920.16	0	0.00300824	0.001	0.005040001	0.002167072	0	0.000591751	0.065286726	0	0.015038799
SOUTH CO	2022	MDV	Aggregatec	Aggregatec	GAS	1579640	55888916.43	7302407.352	0	0.001899896	0.002000001	0.015750005	0.004139788	0	0.000855224	0.008524791	0	0.035699312
SOUTH CO	2022	MDV	Aggregatec	Aggregatec	DSL	33348.92	1344806.362	163526.2835	0	0	0.002000001	0.015750005	0.003516579	0	0	0.05847058	0	0
SOUTH CO	2022	MDV	Aggregatec	Aggregatec	ELEC	11658.48	391944.2778	59625.29995	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2022	MH	Aggregatec	Aggregatec	GAS	35097.75	333282.4015	3511.17938	0	0.000328698	0.003000001	0.055860016	0.016509163	0	0.000253412	0.022499319	0	0.035925222
SOUTH CO	2022	MH	Aggregatec	Aggregatec	DSL	12758.81	122359.1731	1275.881024	0	0	0.004000001	0.055860016	0.009096201	0	0	0.151243626	0	0
SOUTH CO	2022	MHDT	Aggregatec	Aggregatec	GAS	25445.41	1367743.276	509111.7939	0	0.000381623	0.003000001	0.055860016	0.016502566	0.005393097	0.000381445	0.020987597	0.007896366	0.02903852
SOUTH CO	2022	MHDT	Aggregatec	Aggregatec	DSL	123310	7939339.808	1231987.666	0.014517101	0	0.003000001	0.055860016	0.008848701	0.007603378	0	0.147223279	0.126503798	0
SOUTH CO	2022	OBUS	Aggregatec	Aggregatec	GAS	5959.443	250653.5146	119236.5275	0	0.000246759	0.003000001	0.055860016	0.016642428	0.003745021	0.000261232	0.02266912	0.005523611	0.02526455
SOUTH CO	2022	OBUS	Aggregatec	Aggregatec	DSL	4274.499	325950.0826	41607.39015	0.026621194	0	0.003000001	0.055860016	0.010998653	0.026611543	0	0.182993847	0.442758631	0
SOUTH CO	2022	SBUS	Aggregatec	Aggregatec	GAS	2630.829	107369.7838	10523.31785	0	0.000407778	0.002000001	0.319200087	0.008638239	0.025765255	0.000471939	0.025110353	0.08596208	0.05278086
SOUTH CO	2022	SBUS	Aggregatec	Aggregatec	DSL	6631.313	209546.1335	76524.43389	0.054006125	0	0.003000001	0.319200091	0.011562825	0.034402753	0	0.192380443	0.572387535	0
SOUTH CO	2022	UBUS	Aggregatec	Aggregatec	GAS	952.146	89255.99818	3808.584112	0	0.000367002	0.002638926	0.049490658	0.017501018	0	0.000768643	0.021589633	0	0.069907573
SOUTH CO	2022	UBUS	Aggregatec	Aggregatec	DSL	14.14142	1478.085683	56.56567323	0	0	0.007794978	0.032364653	0.01606726	0	0	0.267152251	0	0
SOUTH CO	2022	UBUS	Aggregatec	Aggregatec	ELEC	17.11694	1343.18541	68.46775545	0	0	0.004207336	0.049944098	0	0	0	0	0	0
SOUTH CO	2022	UBUS	Aggregatec	Aggregatec	NG	5394.05	593834.1114	21576.1994	0	0	0.008340847	0.029474493	0	0	0	0.404702267	0	0
SOUTH CO	2023	HHDT	Aggregatec	Aggregatec	GAS	75.10443	8265.097091	1502.689423	0	0.000700693	0.005000001	0.026460008	0.019840084	0	0.000466819	0.143101057	0	0.013843012
SOUTH CO	2023	HHDT	Aggregatec	Aggregatec	DSL	109818.7	13648007.93	1133618.402	0.028574779	0	0.008872804	0.026086044	0.012553132	0.113820135	0	0.208857025	1.89372133	0
SOUTH CO	2023	HHDT	Aggregatec	Aggregatec	NG	5312.035	216378.9448	20716.93508	0.036962253	0	0.009000003	0.026460008	0	0	0	0.687854052	0.820145773	0
SOUTH CO	2023	LDA	Aggregatec	Aggregatec	GAS	6635002	252710542.7	31352477.48	0	0.001666521	0.002000001	0.015750005	0.002617338	0	0.00052716	0.004178635	0	0.024671624
SOUTH CO	2023	LDA	Aggregatec	Aggregatec	DSL	62492.98	2469815.67	297086.5583	0	0	0.002000001	0.015750005	0.001924386	0	0	0.031996991	0	0
SOUTH CO	2023	LDA	Aggregatec	Aggregatec	ELEC	150700.4	6237105.777	751566.0196	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2023	LDT1	Aggregatec	Aggregatec	GAS	758467.6	27812996.47	3504562.533	0	0.002263043	0.002000001	0.015750005	0.00305326	0	0.000617423	0.007776862	0	0.02762443
SOUTH CO	2023	LDT1	Aggregatec	Aggregatec	DSL	360.7799	8408.618214	1256.879517	0	0	0.002000001	0.015750005	0.004193767	0	0	0.069730263	0	0
SOUTH CO	2023	LDT1	Aggregatec	Aggregatec	ELEC	7122.934	303507.5334	35798.18926	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2023	LDT2	Aggregatec	Aggregatec	GAS	2285150	85272415.53	10723314.74	0	0.001677553	0.002000001	0.015750005	0.003246213	0	0.000667086	0.006150751	0	0.030490895
SOUTH CO	2023	LDT2	Aggregatec	Aggregatec	DSL	15594.68	650362.8069	76635.8271	0	0	0.002000001	0.015750005	0.002624551	0	0	0.043638722	0	0
SOUTH CO	2023	LDT2	Aggregatec	Aggregatec	ELEC	28809.64	917592.8423	145405.4455	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2023	LHDT1	Aggregatec	Aggregatec	GAS	174910.4	6216642.74	2605904.115	0	0.000372088	0.002000001	0.032760009	0.007870265	0.001187223	0.00018527	0.011087683	0.003195196	0.040573231
SOUTH CO	2023	LHDT1	Aggregatec	Aggregatec	DSL	125545.1	4994753.051	1579199.198	0.026341808	0	0.003000001	0.032760009	0.004364996	0.001235436	0	0.072577316	0.020541741	0
SOUTH CO	2023	LHDT2	Aggregatec	Aggregatec	GAS	30102.75	1034569.096	448486.1701	0	0.0003096	0.002000001	0.038220011	0.009041009	0.001372003	0.000211087	0.011767434	0.003128138	0.04063689
SOUTH CO	2023	LHDT2	Aggregatec	Aggregatec	DSL	50003.13	1935029.912	628976.486	0.026795792	0	0.003000001	0.038220011	0.004814618	0.0019865	0	0.08005323	0.033029767	0
SOUTH CO	2023	MCY	Aggregatec	Aggregatec	GAS	305044.5	2104623.657	610089.0281	0	0.002888581	0.001	0.005040001	0.0021672	0	0.000588332	0.065214635	0	0.015042273
SOUTH CO	2023	MDV	Aggregatec	Aggregatec	GAS	1589863	55684188.36	7354859.885	0	0.001799723	0.002000001	0.015750005	0.004005272	0	0.000827382	0.007642482	0	0.033629449
SOUTH CO	2023	MDV	Aggregatec	Aggregatec	DSL	36128.1	1425691.372	176566.9105	0	0	0.002000001	0.015750005	0.003418858	0	0	0.056845756	0	0
SOUTH CO	2023	MDV	Aggregatec	Aggregatec	ELEC	16376.68	537591.7438	83475.9529	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2023	MH	Aggregatec	Aggregatec	GAS	34679.51	330042.9197	3469.337722	0	0.000314548	0.003000001	0.055860016	0.016299898	0	0.000249807	0.020781031	0	0.036724559
SOUTH CO	2023	MH	Aggregatec	Aggregatec	DSL	13122.69	124302.0239	1312.269387	0	0	0.004000001	0.055860016	0.009003604	0	0	0.149703993	0	0
SOUTH CO	2023	MHDT	Aggregatec	Aggregatec	GAS	25624.32	1363694.415	512691.2965	0	0.000371215	0.003000001	0.055860016	0.016298766	0.005345724	0.00037515	0.018591811	0.008034104	0.02909883
SOUTH CO	2023	MHDT	Aggregatec	Aggregatec	DSL	122124.5	8120623.353	1221858.451	0.004140381	0	0.003000001	0.055860016	0.008473463	0.00727638	0	0.140980132	0.121063263	0
SOUTH CO	2023	OBUS	Aggregatec	Aggregatec	GAS	5955.292	245774.0168	119153.4751	0	0.00024949	0.003000001	0.055860016	0.016422114	0.003713359	0.000258181	0.0208689	0.00557139	0.025184431
SOUTH CO	2023	OBUS	Aggregatec	Aggregatec	DSL	4286.94	333969.8185	41558.28926	0.003934907	0	0.003000001	0.055860016	0.010672801	0.025202773	0	0.177572365	0.419319737	0
SOUTH CO	2023	SBUS	Aggregatec	Aggregatec	GAS	2783.643	112189.6089	11134.57227	0	0.00041676	0.002000001	0.319200087	0.008564108	0.025566266	0.000466616	0.024296415	0.086294336	0.053345466
SOUTH CO	2023	SBUS	Aggregatec	Aggregatec	DSL	6671.826	210853.9115	76991.94375	0.048998711	0	0.003000001	0.319200091	0.011434316	0.034207885	0	0.190242339	0.569145356	0
SOUTH CO	2023	UBUS	Aggregatec	Aggregatec	GAS	957.7686	89782.63172	3831.074474	0	0.00053762	0.002638926	0.049490658	0.016663898	0	0.000733912	0.017958509	0	0.06492379
SOUTH CO	2023	UBUS	Aggregatec	Aggregatec	DSL	13.00046	1416.621572	52.00184381	0	0	0.008003021	0.03134524	0.016268801	0	0	0.270503303	0	0
SOUTH CO	2023	UBUS	Aggregatec	Aggregatec	ELEC	16.11694	1320.163255	64.46775545	0	0	0.004123757	0.050353634	0	0	0	0	0	0
SOUTH CO	2023	UBUS	Aggregatec	Aggregatec	NG	5428.202	597439.0192	21712.80613	0	0	0.00834026	0.029477405	0	0	0	0.404608946	0	0
SOUTH CO	2024	HHDT	Aggregatec	Aggregatec	GAS	74.26701	8620.013986	1485.934371	0	0.000645003	0.005000001	0.026460008	0.019368563	0	0.000455305	0.137915956	0	0.011519938
SOUTH CO	2024	HHDT	Aggregatec	Aggregatec	DSL	112561	13933380.76	1167770.445	0.027786287	0	0.008872473	0.026085071	0.012372176	0.112725772	0	0.205846304	1.875513492	0
SOUTH CO	2024	HHDT	Aggregatec	Aggregatec	NG	5589.308	227691.5934	21798.30289	0.032759259	0	0.009000003	0.026460008	0	0	0	0.676786089	0.805190169	0
SOUTH CO	2024	LDA	Aggregatec	Aggregatec	GAS	6721891	253006673.7	31758651.73	0	0.00160517	0.002000001	0.015750005	0.002553397	0	0.000512394	0.003928912	0	0.023713365
SOUTH CO	2024	LDA	Aggregatec	Aggregatec	DSL	65701.81	2569094.642	312770.0626	0	0	0.002000001	0.015750005	0.001881294	0	0	0.031280504	0	0
SOUTH CO	2024	LDA	Aggregatec	Aggregatec	ELEC	176700.2	7452589.244	879861.9304	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2024	LDT1	Aggregatec	Aggregatec	GAS	779748.6	28286817.37	3606828.302	0	0.002119403	0.002000001	0.015750005	0.002984855	0	0.000600706	0.007068493	0	0.026419935
SOUTH CO	2024	LDT1	Aggregatec	Aggregatec	DSL	336.6362	7857.181353	1175.366913	0	0	0.002000001	0.015750005	0.00414282	0	0	0.06888317	0	0
SOUTH CO	2024	LDT1	Aggregatec	Aggregatec	ELEC	9097.581	395805.8648	45700.55861	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2024	LDT2	Aggregatec	Aggregatec	GAS	2324382	85796127.87	10909752.6	0	0.001626974	0.002000001	0.015750005	0.00314581	0	0.000644274	0.005650086	0	0.028819712
SOUTH CO	2024	LDT2	Aggregatec	Aggregatec	DSL	16866.7	688058.7876	82641.57951	0	0	0.002000001	0.015750005	0.002562948	0	0	0.042614445	0	0
SOUTH CO	2024	LDT2	Aggregatec	Aggregatec	ELEC	35655.35	1112020.476	179446.8993	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2024	LHDT1	Aggregatec	Aggregatec	GAS	174005.1	6143072.551	2592417.176	0	0.000361111	0.002000001	0.032760009	0.007796009	0.001175618	0.000183491	0.010032646	0.003153215	0.039547264
SOUTH CO	2024	LHDT1	Aggregatec	Aggregatec	DSL	131545.2	5156710.286	1654673.617	0.026302263	0	0.003000001	0.032760009	0.004305054	0.001218208	0	0.071580654	0.020255284	0
SOUTH CO	2024	LHDT2	Aggregatec	Aggregatec	GAS	30198.86	1028982.266	449917.9665	0	0.000302413	0.002000001	0.038220011	0.008961118	0.001359104	0.000209006	0.010708003	0.003089316	0.039618282
SOUTH CO	2024	LHDT2	Aggregatec	Aggregatec	DSL	52580.79	2001241.348	661400.1538	0.026777379	0	0.003000001	0.038220011	0.004750827	0.001959985	0	0.078992571	0.032588901	0
SOUTH CO	2024	MCY	Aggregatec	Aggregatec	GAS	313845.7	2132419.376	627691.4524	0	0.00278765	0.001	0.005040001	0.002176277	0	0.000585292	0.065203146	0	0.015041464
SOUTH CO	2024	MDV	Aggregatec	Aggregatec	GAS	1599677	55496538.13	7405446.286	0	0.001710122	0.002000001	0.015750005	0.003886881	0	0.00079953	0.006883849	0	0.031611323
SOUTH CO	2024	MDV	Aggregatec	Aggregatec	DSL	38789.91	1499058.187	188910.1338	0	0	0.002000001	0.015750005	0.003338265	0	0	0.055505737	0	0
SOUTH CO	2024	MDV	Aggregatec	Aggregatec	ELEC	21546.74	690718.3728	109429.4116	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO	2024	MH	Aggregatec	Aggregatec	GAS	34296.13	327056.6532	3430.984949	0	0.000304599	0.003000001	0.055860016	0.016064122	0	0.000245787	0.019412389	0	0.037396334
SOUTH CO	2024	MH	Aggregatec	Aggregatec	DSL	13472.14	126106.7887	1347.214217	0	0	0.004000001	0.055860016	0.00890347	0	0	0.148039067	0	0
SOUTH CO	2024	MHDT	Aggregatec	Aggregatec	GAS	25804.01	1359447.346	516286.6944	0	0.000364358	0.003000001	0.055860016	0.01608667	0.005284586	0.000368386	0.016637363	0.008146799	0.029118911
SOUTH CO	2024	MHDT	Aggregatec	Aggregatec	DSL	127715.1	8302936.698	1282757.095	0.003550553	0	0.003000001	0.055860016	0.008365714	0.007126089	0	0.139187429	0.118562734	0
SOUTH CO	2024	OBUS	Aggregatec	Aggregatec	GAS	5954.495	241431.3981	119137.5421	0	0.000254114	0.003000001	0.055860016	0.016191279	0.003672797	0.000254634	0.019282228	0.00560803	0.025095017
SOUTH CO	2024	OBUS	Aggregatec	Aggregatec	DSL	4446.353	342309.6953	43067.16004	0.003914271	0	0.003000001	0.055860016	0.010571243	0.024923006	0	0.175882657	0.414665018	0
SOUTH CO	2024	SBUS	Aggregatec	Aggregatec	GAS	2938.098	117037.9587	11752.39082	0	0.000429929	0.002000001	0.319200087	0.008464833	0.025296209	0.000459985	0.023240673	0.086790211	0.053410068

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SOUTH CO/	2024	SBUS	Aggregatec	Aggregatec	DSL	6709.768	212099.0577	77429.79185	0.044406014	0	0.003000001	0.319200091	0.011288261	0.033948971	0	0.187812292	0.564837586	0
SOUTH CO/	2024	UBUS	Aggregatec	Aggregatec	GAS	963.3912	90309.26527	3853.564835	0	0.000621401	0.002638926	0.049490658	0.016110188	0	0.000712675	0.017022155	0	0.063144588
SOUTH CO/	2024	UBUS	Aggregatec	Aggregatec	DSL	10.42282	1204.585498	41.69128879	0	0	0.008883673	0.027030045	0.016866926	0	0	0.280448397	0	0
SOUTH CO/	2024	UBUS	Aggregatec	Aggregatec	ELEC	16.11694	1320.163255	64.46775545	0	0	0.004123757	0.050353634	0	0	0	0	0	0
SOUTH CO/	2024	UBUS	Aggregatec	Aggregatec	NG	5462.79	601171.4768	21851.15959	0	0	0.008338318	0.029487005	0	0	0	0.404591637	0	0
SOUTH CO/	2025	HHDT	Aggregatec	Aggregatec	GAS	73.98518	9005.52904	1480.295497	0	0.000590004	0.005000001	0.026460008	0.018899207	0	0.000447734	0.134371934	0	0.008815549
SOUTH CO/	2025	HHDT	Aggregatec	Aggregatec	DSL	114510.1	14172365.37	1194128.743	0.027094894	0	0.008872017	0.026083731	0.012137461	0.111347323	0	0.201941145	1.852579082	0
SOUTH CO/	2025	HHDT	Aggregatec	Aggregatec	NG	5856.035	238581.2969	22838.53694	0.029105407	0	0.009000003	0.026460008	0	0	0	0.665658957	0.790345651	0
SOUTH CO/	2025	LDA	Aggregatec	Aggregatec	GAS	6805727	253145342.8	32143253.37	0	0.001556609	0.002000001	0.015750005	0.002478635	0	0.000497475	0.003719174	0	0.022733768
SOUTH CO/	2025	LDA	Aggregatec	Aggregatec	DSL	68721.91	2656428.369	327385.003	0	0	0.002000001	0.015750005	0.001829224	0	0	0.030414718	0	0
SOUTH CO/	2025	LDA	Aggregatec	Aggregatec	ELEC	205237.2	8815934.14	1020366.918	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO/	2025	LDT1	Aggregatec	Aggregatec	GAS	800497.3	28711777.34	3705072.539	0	0.001996646	0.002000001	0.015750005	0.002904279	0	0.000584012	0.006457782	0	0.025253346
SOUTH CO/	2025	LDT1	Aggregatec	Aggregatec	DSL	314.0764	7370.62386	1101.554527	0	0	0.002000001	0.015750005	0.004060463	0	0	0.067513797	0	0
SOUTH CO/	2025	LDT1	Aggregatec	Aggregatec	ELEC	11260.19	498412.9596	56475.75047	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO/	2025	LDT2	Aggregatec	Aggregatec	GAS	2364309	86303467.33	11096373.45	0	0.001585664	0.002000001	0.015750005	0.003035546	0	0.000622019	0.005232051	0	0.027325486
SOUTH CO/	2025	LDT2	Aggregatec	Aggregatec	DSL	18091.4	722150.5811	88340.72944	0	0	0.002000001	0.015750005	0.002489798	0	0	0.041398171	0	0
SOUTH CO/	2025	LDT2	Aggregatec	Aggregatec	ELEC	43109.08	1316602.996	216309.8691	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO/	2025	LHDT1	Aggregatec	Aggregatec	GAS	173430.4	6082106.238	2583853.887	0	0.00035233	0.002000001	0.032760009	0.007683656	0.001162852	0.00018159	0.009090882	0.003110848	0.038518513
SOUTH CO/	2025	LHDT1	Aggregatec	Aggregatec	DSL	137399.6	5304568.502	1728313.877	0.026283606	0	0.003000001	0.032760009	0.004234676	0.00120055	0	0.070410463	0.019961681	0
SOUTH CO/	2025	LHDT2	Aggregatec	Aggregatec	GAS	30280.26	1023279.202	451130.7451	0	0.000297833	0.002000001	0.038220011	0.008837045	0.001344895	0.000206787	0.009768904	0.003050268	0.038613668
SOUTH CO/	2025	LHDT2	Aggregatec	Aggregatec	DSL	55100.27	2061805.728	693092.1078	0.026786646	0	0.003000001	0.038220011	0.004674807	0.001932678	0	0.077728572	0.032134861	0
SOUTH CO/	2025	MCY	Aggregatec	Aggregatec	GAS	322405.1	2156492.828	644810.2364	0	0.002782548	0.001	0.005040001	0.002176379	0	0.000582616	0.065148413	0	0.015036286
SOUTH CO/	2025	MDV	Aggregatec	Aggregatec	GAS	1610759	55349775.96	7459996.66	0	0.001644937	0.002000001	0.015750005	0.003754393	0	0.000772206	0.006250712	0	0.029733077
SOUTH CO/	2025	MDV	Aggregatec	Aggregatec	DSL	41295.15	1564637.726	200455.1443	0	0	0.002000001	0.015750005	0.003242712	0	0	0.053916968	0	0
SOUTH CO/	2025	MDV	Aggregatec	Aggregatec	ELEC	27149.64	850200.5411	137370.5198	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO/	2025	MH	Aggregatec	Aggregatec	GAS	33995.46	324472.9039	3400.905358	0	0.000296873	0.003000001	0.055860016	0.015790364	0	0.000241892	0.018218375	0	0.038037134
SOUTH CO/	2025	MH	Aggregatec	Aggregatec	DSL	13797.48	127691.6269	1379.747947	0	0	0.004000001	0.055860016	0.008781176	0	0	0.146005666	0	0
SOUTH CO/	2025	MHDT	Aggregatec	Aggregatec	GAS	25990.85	1355596.744	520024.9763	0	0.000359625	0.003000001	0.055860016	0.015822266	0.005222163	0.000361968	0.015023492	0.008242249	0.029128639
SOUTH CO/	2025	MHDT	Aggregatec	Aggregatec	DSL	132892.8	8444865.816	1340366.128	0.003050322	0	0.003000001	0.055860016	0.008225821	0.00698602	0	0.136859901	0.116232294	0
SOUTH CO/	2025	OBUS	Aggregatec	Aggregatec	GAS	5953.626	237698.4826	119120.1566	0	0.000257766	0.003000001	0.055860016	0.015900071	0.003630261	0.000251181	0.017895137	0.005643909	0.025001861
SOUTH CO/	2025	OBUS	Aggregatec	Aggregatec	DSL	4685.134	349833.854	45454.12243	0.003954046	0	0.003000001	0.055860016	0.010329201	0.024722103	0	0.171855611	0.411322419	0
SOUTH CO/	2025	SBUS	Aggregatec	Aggregatec	GAS	3092.715	121823.4096	12370.85878	0	0.000442082	0.002000001	0.319200087	0.008375219	0.02505199	0.000454265	0.022331148	0.087264614	0.053495432
SOUTH CO/	2025	SBUS	Aggregatec	Aggregatec	DSL	6746.346	213318.799	77851.89673	0.04015739	0	0.003000001	0.319200091	0.011138106	0.033653393	0	0.185314045	0.559919815	0
SOUTH CO/	2025	UBUS	Aggregatec	Aggregatec	GAS	969.366	90835.89881	3877.463997	0	0.000711367	0.002638926	0.049490658	0.015590297	0	0.000687342	0.016046773	0	0.061116129
SOUTH CO/	2025	UBUS	Aggregatec	Aggregatec	DSL	6.367322	775.5948993	25.46928879	0	0	0.008819328	0.027345335	0.016795933	0	0	0.279267987	0	0
SOUTH CO/	2025	UBUS	Aggregatec	Aggregatec	ELEC	16.11694	1320.163255	64.46775545	0	0	0.004123757	0.050353634	0	0	0	0	0	0
SOUTH CO/	2025	UBUS	Aggregatec	Aggregatec	NG	5498.856	605120.889	21995.42449	0	0	0.00833874	0.029485096	0	0	0	0.404603478	0	0
SOUTH CO/	2026	HHDT	Aggregatec	Aggregatec	GAS	73.68174	9403.551925	1474.224171	0	0.000511784	0.005000001	0.026460008	0.018490853	0	0.000435667	0.129868475	0	0.005768616
SOUTH CO/	2026	HHDT	Aggregatec	Aggregatec	DSL	116233.6	14433400.88	1216929.778	0.026247918	0	0.008871804	0.026083103	0.011892528	0.109689907	0	0.197865987	1.825003255	0
SOUTH CO/	2026	HHDT	Aggregatec	Aggregatec	NG	6117.855	249228.9578	23859.63526	0.025996992	0	0.009000003	0.026460008	0	0	0	0.654663278	0.775766788	0
SOUTH CO/	2026	LDA	Aggregatec	Aggregatec	GAS	6890013	252855713.3	32528383.83	0	0.001503894	0.002000001	0.015750005	0.002412057	0	0.000483888	0.003553879	0	0.021903719
SOUTH CO/	2026	LDA	Aggregatec	Aggregatec	DSL	71373.84	2727510.268	340604.7037	0	0	0.002000001	0.015750005	0.001783844	0	0	0.029660193	0	0
SOUTH CO/	2026	LDA	Aggregatec	Aggregatec	ELEC	232749.5	9798207.015	1154485.794	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO/	2026	LDT1	Aggregatec	Aggregatec	GAS	820893.1	29048632.42	3800772.095	0	0.001880786	0.002000001	0.015750005	0.002832508	0	0.000568776	0.005948511	0	0.024258093
SOUTH CO/	2026	LDT1	Aggregatec	Aggregatec	DSL	277.3894	6696.411601	994.2354937	0	0	0.002000001	0.015750005	0.003960958	0	0	0.065859317	0	0
SOUTH CO/	2026	LDT1	Aggregatec	Aggregatec	ELEC	13403.15	580090.8687	67042.39244	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO/	2026	LDT2	Aggregatec	Aggregatec	GAS	2406087	86677830.02	11289338.2	0	0.001537404	0.002000001	0.015750005	0.002937901	0	0.000601837	0.004890582	0	0.026044927
SOUTH CO/	2026	LDT2	Aggregatec	Aggregatec	DSL	19278.53	751522.0083	93783.45798	0	0	0.002000001	0.015750005	0.002428112	0	0	0.040372515	0	0
SOUTH CO/	2026	LDT2	Aggregatec	Aggregatec	ELEC	50413.02	1506666.739	252060.2663	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO/	2026	LHDT1	Aggregatec	Aggregatec	GAS	173056.7	6033376.008	2578287.329	0	0.000344502	0.002000001	0.032760009	0.007564511	0.001149035	0.000179574	0.008241342	0.003068561	0.03751365
SOUTH CO/	2026	LHDT1	Aggregatec	Aggregatec	DSL	143072.3	5442892.527	1799669.293	0.026274578	0	0.003000001	0.032760009	0.004163291	0.001182488	0	0.069223544	0.019661369	0
SOUTH CO/	2026	LHDT2	Aggregatec	Aggregatec	GAS	30380.69	1019189.783	452626.987	0	0.000293114	0.002000001	0.038220011	0.008705469	0.001329536	0.000204416	0.008893512	0.003011942	0.037673278
SOUTH CO/	2026	LHDT2	Aggregatec	Aggregatec	DSL	57537.52	2118258.655	723749.6143	0.026799669	0	0.003000001	0.038220011	0.004597658	0.001904688	0	0.076445802	0.031669472	0
SOUTH CO/	2026	MCY	Aggregatec	Aggregatec	GAS	330653.4	2179057.101	661306.7133	0	0.002771791	0.001	0.005040001	0.002176443	0	0.000580164	0.065099809	0	0.01503063
SOUTH CO/	2026	MDV	Aggregatec	Aggregatec	GAS	1623219	55156956.72	7520376.329	0	0.001582038	0.002000001	0.015750005	0.003634014	0	0.000746896	0.00573068	0	0.028089767
SOUTH CO/	2026	MDV	Aggregatec	Aggregatec	DSL	43701.21	1620690.625	211432.3811	0	0	0.002000001	0.015750005	0.003160051	0	0	0.052542539	0	0
SOUTH CO/	2026	MDV	Aggregatec	Aggregatec	ELEC	32680.43	999389.314	164663.1779	0	0	0.002000001	0.015750005	0	0	0	0	0	0
SOUTH CO/	2026	MH	Aggregatec	Aggregatec	GAS	33697.08	322202.0105	3371.0557	0	0.000288997	0.003000001	0.055860016	0.015538659	0	0.000238128	0.017105914	0	0.038688883
SOUTH CO/	2026	MH	Aggregatec	Aggregatec	DSL	14107.02	129198.2863	1410.702167	0	0	0.004000001	0.055860016	0.008669068	0	0	0.144141626	0	0
SOUTH CO/	2026	MHDT	Aggregatec	Aggregatec	GAS	26200.98	1353545.058	524229.2582	0	0.000358059	0.003000001	0.055860016	0.015575172	0.005161229	0.000355975	0.01371688	0.00831896	0.029140202
SOUTH CO/	2026	MHDT	Aggregatec	Aggregatec	DSL	137838	8588906.396	1395108.057	0.00261864	0	0.003000001	0.055860016	0.008090928	0.006856739	0	0.134615573	0.114081338	0
SOUTH CO/	2026	OBUS	Aggregatec	Aggregatec	GAS	5959.016	234710.4848	119227.9884	0	0.000260643	0.003000001	0.055860016	0.015630478	0.003589343	0.00024775	0.016597584	0.005669875	0.024986425
SOUTH CO/	2026	OBUS	Aggregatec	Aggregatec	DSL	4901.128	357325.1281	47575.00875	0.003967054	0	0.003000001	0.055860016	0.010110218	0.024449692	0	0.168212204	0.406790101	0
SOUTH CO/	2026	SBUS	Aggregatec	Aggregatec	GAS	3247.263	126614.0466	12989.05137	0	0.000453322	0.002000001	0.319200087	0.008293029	0.0248277	0.000448959	0.021664662	0.087568516	0.053912746
SOUTH CO/	2026	SBUS	Aggregatec	Aggregatec	DSL	6784.275	214549.8334	78289.58863	0.036132534	0	0.003000001	0.319200091	0.01098475	0.033324008	0	0.182762529	0.554439551	0
SOUTH CO/	2026	UBUS	Aggregatec	Aggregatec	GAS	974.9886	91362.53235	3899.954358	0	0.000725483	0.002638926	0.049490658	0.015424419	0	0.000682979	0.016470607	0	0.061573217
SOUTH CO/	2026	UBUS	Aggregatec	Aggregatec	DSL	6.367322	775.5948993	25.46928879	0	0	0.008819328	0.027345335	0.016795933	0	0	0.279267987	0	0
SOUTH CO/	2026	UBUS	Aggregatec	Aggregatec	ELEC	16.11694	1320.163255	64.46775545	0	0	0.004123757	0.050353634	0	0	0	0	0	0
SOUTH CO/	2026	UBUS	Aggregatec	Aggregatec	NG	5530.867	608641.3105	22123.46739	0	0	0.00833869	0.029485342	0	0	0	0.404601599	0	0