

EXHIBIT C
Environmental Documents

ENV-2020-1839-MND

**DEPARTMENT OF
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11070 North Borden Avenue Residential Project

Case Number: ENV-2020-1839-MND

Project Location: 11070-11100 North Borden Avenue, Los Angeles, California, 91331

Community Plan Area: Arleta – Pacoima

Council District: 7—Rodriguez

Project Description: The project involves the subdivision of one (1) lot into ten (10) smaller lots and a Zone Change for nine (9) of the new lots from A2-1-CUGU to RS-1-CUGU to allow for the development of nine (9) single-family dwellings. The tenth lot will contain a church use, which has previously been approved under Case No. ZA 2016-4986(C)(ZV)(ZAA)(F). The existing lot is currently vacant and there is no construction being proposed as part of this project.

The requested entitlements include (1) a Vesting Tentative Tract Map to permit the subdivision of one lot into ten lots, (2) a zone change to modify the existing A2-1-CUGU zone to RS-1-CUGU, and any additional actions including, but not limited to, tree removal, grading, excavation, haul routes, and building permits. Removal of street trees are subject to the review and approval by the Board of Public Works, Urban Forestry Division.

PREPARED BY:

The City of Los Angeles
Department of City Planning

APPLICANT:

Roman Catholic Archdiocese of Los Angeles

November 2020

INITIAL STUDY

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INITIAL STUDY

1 INTRODUCTION

This Initial Study (IS) document evaluates potential environmental effects resulting from construction and operation of the proposed **11070 North Borden Avenue Residential Project** (“Project”). The proposed Project is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). Therefore, this document has been prepared in compliance with the relevant provisions of CEQA and the State CEQA Guidelines as implemented by the City of Los Angeles (City). Based on the analysis provided within this Initial Study, the City has concluded that the Project will not result in significant impacts on the environment. This Initial Study and Mitigated Negative Declaration are intended as informational documents, and are ultimately required to be adopted by the decision maker prior to project approval by the City.

1.1 PURPOSE OF AN INITIAL STUDY

The California Environmental Quality Act was enacted in 1970 with several basic purposes: (1) to inform governmental decision makers and the public about the potential significant environmental effects of proposed projects; (2) to identify ways that environmental damage can be avoided or significantly reduced; (3) to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of feasible alternatives or mitigation measures; and (4) to disclose to the public the reasons behind a project’s approval even if significant environmental effects are anticipated.

An application for the proposed project has been submitted to the City of Los Angeles Department of City Planning for discretionary review. The Department of City Planning, as Lead Agency, has determined that the project is subject to CEQA, and the preparation of an Initial Study is required.

An Initial Study is a preliminary analysis conducted by the Lead Agency, in consultation with other agencies (responsible or trustee agencies, as applicable), to determine whether there is substantial evidence that a project may have a significant effect on the environment. If the Initial Study concludes that the Project, with mitigation, may have a significant effect on the environment, an Environmental Impact Report should be prepared; otherwise the Lead Agency may adopt a Negative Declaration or a Mitigated Negative Declaration.

This Initial Study has been prepared in accordance with CEQA (Public Resources Code §21000 et seq.), the State CEQA Guidelines (Title 14, California Code of Regulations, §15000 et seq.), and the City of Los Angeles CEQA Guidelines (1981, amended 2006).

1.2. ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into four sections as follows:

1 INTRODUCTION

Describes the purpose and content of the Initial Study, and provides an overview of the CEQA process.

2 EXECUTIVE SUMMARY

Provides Project information, identifies key areas of environmental concern, and includes a determination whether the project may have a significant effect on the environment.

3 PROJECT DESCRIPTION

Provides a description of the environmental setting and the Project, including project characteristics and a list of discretionary actions.

4 EVALUATION OF ENVIRONMENTAL IMPACTS

Contains the completed Initial Study Checklist and discussion of the environmental factors that would be potentially affected by the Project.

INITIAL STUDY

2 EXECUTIVE SUMMARY

PROJECT TITLE	11070 NORTH BORDEN AVENUE RESIDENTIAL PROJECT
ENVIRONMENTAL CASE NO.	ENV-2020-1839-MND
RELATED CASES	VTT-74450, APCNV-2020-1838-ZC

PROJECT LOCATION	11070 NORTH BORDEN AVENUE
COMMUNITY PLAN AREA	ARLETA – PACOIMA
GENERAL PLAN DESIGNATION	LOW RESIDENTIAL
ZONING	A2-1-CUGU
COUNCIL DISTRICT	7

LEAD AGENCY	City of Los Angeles
STAFF CONTACT	ESTHER AHN
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APPLICANT	ROMAN CATHOLIC ARCHDIOCESE OF LOS ANGELES
ADDRESS	3424 WILSHIRE BOULEVARD, LOS ANGELES, CA 90010
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PROJECT DESCRIPTION

The project involves the subdivision of one (1) lot into ten (10) smaller lots and a Zone Change for nine (9) of the new lots from A2-1-CUGU to RS-1-CUGU to allow for the development of nine (9) single-family dwellings. The tenth lot will contain a church use, which has previously been approved under Case No. ZA 2016-4986(CU)(ZV)(ZAA)(F). The existing lot is currently vacant and there is no construction being proposed as part of this project. The project also involves the creation of a cul-de-sac to provide access to the newly created single-family lots.

The requested entitlements include (1) a Vesting Tentative Tract Map to permit the subdivision of one lot into ten lots, (2) a zone change to modify the existing A2-1-CUGU zone to RS-1-CUGU for nine (9) of the resulting lots, and any additional actions including, but not limited to, tree removal, grading, excavation, haul routes, and building permits. Removal of street trees are subject to the review and approval by the Board of Public Works, Urban Forestry Division.

(For additional detail, see “Section 3. PROJECT DESCRIPTION”).

ENVIRONMENTAL SETTING

The project site consists of two (2) rectangular parcels, encompassing 217,752 square feet of gross lot area, or 196,769 square feet of net area, with approximately 345 feet of frontage along Borden Avenue. The subject property is located northeast of Borden Avenue, northwest of Terra Bella Street, southwest of Phillippi Avenue, and southeast of Gain Street. The project site is currently vacant and unimproved. The project would add nine (9) new lots for single-family homes and retain one (1) lot for a church use that has previously been approved under Case No. ZA-2016-4986(CU)(ZV)(ZAA)(F). There is no construction being proposed as part of this project.

The site is currently zoned A2-1-CUGU and is located within the Arleta – Pacoima Community Plan with a land use designation of Low Residential. The site is not located within any Specific Plan areas, but is subject to Clean Up Green Up (CUGU): Pacoima/Sun Valley (ZI-2458) and Equine Keeping in the City of Los Angeles (ZI-2438). The project site is located within an Urban Agriculture Incentive Zone, the Verdugo Fault Zone, and a Special Grading Area (BOE Basic Grid Map A-13372). The site is not located within a Methane Buffer Zone, a Very High Fire Hazard Severity Zone, Flood Zone, Landslide Zone, Liquefaction Zone, or Tsunami Inundation Zone.

Surrounding properties are generally within the RS-1-CUGU and RA-1-CUGU Zones. There is also PF, OS, and RD zoning in the general vicinity of the project site. The surrounding area is characterized by generally level topography and improved streets. The southern adjoining properties are zoned RS-1-CUGU and are developed with several single-family homes surrounding a cul-de-sac. The northern and eastern adjoining properties are also zoned RS-1-CUGU and developed with single-family homes. Properties to the west, across Borden Avenue, are zoned RS-1-CUGU, RA-1-CUGU, PF-1VL-CUGU, (T)(Q)RD6-1-CUGU, and RA-1 and developed with single-family homes and several schools, including Sara Coughlin Elementary School, Bert Corona Charter High School, and Maclay Middle School.

(For additional detail, see “Section 3. PROJECT DESCRIPTION”).

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

(e.g. permits, financing approval, or participation agreement)

None.

CALIFORNIA NATIVE AMERICAN CONSULTATION

Yes

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

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

DETERMINATION

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions on the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find 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 earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Esther Ahn
PRINTED NAME

City Planner
TITLE


SIGNATURE

10/27/2020
DATE

EVALUATION OF ENVIRONMENTAL IMPACTS

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

INITIAL STUDY

3 PROJECT DESCRIPTION

3.1 PROJECT SUMMARY

The project involves the subdivision of one (1) lot into ten (10) smaller lots and a Zone Change for nine (9) of the new lots from A2-1-CUGU to RS-1-CUGU to allow for the development of nine (9) single-family dwellings. The tenth lot will contain a church use, which has previously been approved under Case No. ZA 2016-4986(CU)(ZV)(ZAA)(F). The existing lot is currently vacant and there is no construction being proposed as part of this project.

The requested entitlements include (1) a Vesting Tentative Tract Map to permit the subdivision of one lot into ten lots, (2) a zone change to modify the existing A2-1-CUGU zone to RS-1-CUGU for nine (9) of the resulting lots, and any additional actions including, but not limited to, tree removal, grading, excavation, haul routes, and building permits. Removal of street trees are subject to the review and approval by the Board of Public Works, Urban Forestry Division.

3.2 ENVIRONMENTAL SETTING

3.2.1 Project Location and Existing Conditions

The project site consists of two (2) rectangular parcels, encompassing 217,752 square feet of gross lot area, or 196,769 square feet of net area, with approximately 345 feet of frontage along Borden Avenue. The subject property is located northeast of Borden Avenue, northwest of Terra Bella Street, southwest of Phillippi Avenue, and southeast of Gain Street. The project site is currently vacant and unimproved. The project would add nine (9) new lots for single-family homes and retain one (1) lot for a church use that has previously been approved under Case No. ZA-2016-4986(CU)(ZV)(ZAA)(F). There is no construction being proposed as part of this project.

The site is currently zoned A2-1-CUGU and is located within the Arleta – Pacoima Community Plan with a land use designation of Low Residential. The site is not located within any Specific Plan areas, but is subject to Clean Up Green Up (CUGU): Pacoima/Sun Valley (ZI-2458) and Equine Keeping in the City of Los Angeles (ZI-2438). The project site is located within an Urban Agriculture Incentive Zone, the Verdugo Fault Zone, and a Special Grading Area (BOE Basic Grid Map A-13372). The site is not located within a Methane Buffer Zone, a Very High Fire Hazard Severity Zone, Flood Zone, Landslide Zone, Liquefaction Zone, or Tsunami Inundation Zone.

3.2.2 Surrounding Land Uses

Surrounding properties are generally within the RS-1-CUGU and RA-1-CUGU Zones. There is also PF, OS, and RD zoning in the general vicinity of the project site. The surrounding area is characterized by generally level topography and improved streets. The southern adjoining properties are zoned RS-1-CUGU and are developed with several single-family homes surrounding a cul-de-sac. The northern and eastern adjoining properties are also zoned RS-1-CUGU and developed with single-family homes. Properties to the west, across Borden Avenue, are zoned RS-1-CUGU, RA-1-CUGU, PF-1VL-CUGU, (T)(Q)RD6-1-CUGU, and RA-1 and developed with single-family homes and several schools, including Sara Coughlin Elementary School, Bert Corona Charter High School, and Maclay Middle School.

3.3 DESCRIPTION OF PROJECT

3.3.1 Project Overview

The project involves the subdivision of one (1) lot into ten (10) smaller lots and a Zone Change for nine (9) of the new lots from A2-1-CUGU to RS-1-CUGU to allow for the development of nine (9) single-family dwellings. The tenth lot will contain a church use, which has previously been approved under Case No. ZA 2016-4986(CU)(ZV)(ZAA)(F). The existing lot is currently vacant and there is no construction being proposed as part of this project.

The requested entitlements include (1) a Vesting Tentative Tract Map to permit the subdivision of one lot into ten lots, (2) a zone change to modify the existing A2-1-CUGU zone to RS-1-CUGU for nine (9) of the resulting lots, and any additional actions including, but not limited to, tree removal, grading, excavation, haul routes, and building permits. Removal of street trees are subject to the review and approval by the Board of Public Works, Urban Forestry Division.

3.4 REQUESTED PERMITS AND APPROVALS

The list below includes the anticipated requests for approval of the Project. The Mitigated Negative Declaration will analyze impacts associated with the Project and will provide environmental review sufficient for all necessary entitlements and public agency actions associated with the Project. The discretionary entitlements, reviews, permits and approvals required to implement the Project include, but are not necessarily limited to, the following:

- Pursuant to LAMC Section 12.32, a Zone Change from A2-1-CUGU to RS-1-CUGU; and
- Pursuant to LAMC Sections 17.03, 17.06 and 17.15, a Vesting Tentative Tract Map for the subdivision of one (1) lot into ten (10) lots; and
- Other discretionary and ministerial permits and approvals that may be deemed necessary, including, but not limited to, temporary street closure permits, grading permits, excavation permits, foundation permits, building permits, and sign permits.

INITIAL STUDY

4 ENVIRONMENTAL IMPACT ANALYSIS

I. AESTHETICS

Senate Bill (SB) 743 [Public Resources Code (PRC) §21099(d)] sets forth new guidelines for evaluating project transportation impacts under CEQA, as follows: “Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area (TPA) shall not be considered significant impacts on the environment.” PRC Section 21099 defines a “transit priority area” as an area within 0.5 mile of a major transit stop that is “existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations.” PRC Section 21064.3 defines “major transit stop” as “a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.” PRC Section 21099 defines an “employment center project” as “a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 and that is located within a transit priority area. PRC Section 21099 defines an “infill site” as a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses. This state law supersedes the aesthetic impact thresholds in the 2006 L.A. CEQA Thresholds Guide, including those established for aesthetics, obstruction of views, shading, and nighttime illumination.

The related City of Los Angeles Department of City Planning Zoning Information (ZI) File ZI No. 2452 provides further instruction concerning the definition of transit priority projects and that “visual resources, aesthetic character, shade and shadow, light and glare, and scenic vistas or any other aesthetic impact as defined in the City’s CEQA Threshold Guide shall not be considered an impact for infill projects within TPAs pursuant to CEQA.”¹

PRC Section 21099 applies to the Project. Therefore, the Project is exempt from aesthetic impacts. The analysis in this initial study (or in the EIR, if any aesthetic impact discussion is included), is for informational purposes only and not for determining whether the Project will result in significant impacts to the environment. Any aesthetic impact analysis in this initial study (or the EIR) is included to discuss what aesthetic impacts would occur from the Project if PRC Section 21099(d) was not in effect. As such, nothing in the aesthetic impact discussion in this initial study (or the EIR) shall trigger the need for any CEQA findings, CEQA analysis, or CEQA mitigation measures.

¹ City of Los Angeles Department of City Planning, Zoning Information File ZA No. 2452, Transit Priority Areas (TPAs)/Exemptions to Aesthetics and Parking Within TPAs Pursuant to CEQA. Available at: <http://zimas.lacity.org/documents/zoneinfo/ZI2452.pdf>. Accessed Dec. 2, 2016.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------	--	------------------------------	-----------

Except as provided in Public

Resources Code Section 21099 would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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

No Impact. A significant impact would occur if the proposed project would have a substantial adverse effect on a scenic vista. A scenic vista refers to views of focal points or panoramic views of broader geographic areas that have visual interest. A focal point view would consist of a view of a notable object, building, or setting. Diminishment of a scenic vista would occur if the bulk or design of a building or development contrasts enough with a visually interesting view, so that the quality of the view is permanently affected. The project involves the subdivision of one lot into ten smaller lots and a zone change to permit the creation of nine residential units. The project site is currently vacant and within a heavily urbanized neighborhood, with large swaths of single-family homes surrounding the site and three schools that are adjacent. The project is not located in any Specific Plan or hillside. Therefore, no impacts related to scenic vistas will occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, or other locally recognized desirable aesthetic natural feature within a state scenic highway?

No Impact. A significant impact would occur if the proposed project would substantially damage scenic resources within a State Scenic Highway. The City of Los Angeles General Plan

Transportation Element (Map E: Scenic Highways in the City of Los Angeles) indicates that no City-designated scenic highways are located near the project site. Furthermore, there are no historic buildings or other locally recognized desirable aesthetic natural features within a state scenic highway in proximity to the project site. The subject site is currently a large plot of vacant and undeveloped land surrounding by a heavily urbanized and substantially developed neighborhood within Pacoima. Therefore, no impacts related to scenic highways 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 in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact. A significant impact would occur if the proposed project would substantially degrade the existing visual character or quality of the project site and its surroundings. Significant impacts to the visual character of the site and its surroundings are generally based on the removal of features with aesthetic value, the introduction of contrasting urban features into a local area, and the degree to which the elements of the proposed project detract from the visual character of an area. The proposed project will not change the visual character of its surroundings. Surrounding properties are developed with a tight-knit grid of single-family residences as well as three schools. The project is in an urbanized area and conforms to applicable zoning and other regulations governing scenic quality. Therefore, no impact is anticipated.

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

No Impact. A significant impact would occur if light and glare substantially altered the character of off-site areas surrounding the site or interfered with the performance of an off-site activity. Light impacts are typically associated with the use of artificial light during the evening and night-time hours. Glare may be a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass and reflective cladding materials, and may interfere with the safe operation of a motor vehicle on adjacent streets. Daytime glare is common in urban areas and is typically associated with mid- to high-rise buildings with exterior facades largely or entirely comprised of highly reflective glass or mirror-like materials. Nighttime glare is primarily associated with bright point-source lighting that contrasts with existing low ambient light conditions. The project involves the subdivision of one lot into ten smaller lots and a zone change to permit the creation of nine residential units. There is no construction proposed as part of the project, but the most intense development that could occur would be the construction of nine single-family homes, which would not have potential to generate substantial light or glare that would adversely affect daytime or nighttime views in the area. Therefore, no impacts related to light or glare would occur.

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 Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 within a developed and urbanized area of the City. No farmland or agricultural activity exists on or near the Project Site. No portion of the Project Site is designated as Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. Furthermore, no portion of the Project Site is shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. The project site is currently vacant and unimproved, containing a total of 12 non-protected trees. As such, no impacts would occur, and no mitigation is required.

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

No Impact. The Project Site is located within the jurisdiction of the City of Los Angeles and is subject to the applicable land use and zoning requirements of the LAMC. Although the Project Site is zoned A2-1-CUGU, the Project Site has a land use designation of Low Residential and is substantially surrounded by RS-1-CUGU zoning, a residential zone that permits residential developments. The Project proposes a Zone Change to be compatible with the General Plan land use designation and character of the surrounding neighborhood. The site is currently vacant and unimproved with a total of 12 non-protected trees across the entire site. As such, the Project Site is not intended for agricultural production, and there is no farmland at the Project Site. In addition, no Williamson Act Contracts are in effect for the Project Site. As such, no impacts would occur, and no mitigation is required.

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 mentioned previously, the Project Site has a land use designation of Low Residential and is proposing to be rezoned to RS-1-CUGU in order to fit the character of the surrounding neighborhood. As such, the Project Site is not zoned as forest land or timberland, and there is no timberland production at the Project Site. As such, no impacts would occur, and no mitigation is required.

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

No Impact. The Project Site is not designated or zoned for forest or timberland or used for foresting. Additionally, the Project Site is located in an urbanized area of the City and is not within any forestland area. As such, no impacts would occur, and no mitigation is required.

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. Neither the Project Site nor nearby properties are currently utilized for agricultural or forestry uses. The Project Site is not classified in any "Farmland" category designated by the

State of California or mapped as such. As such, no impacts would occur, and no mitigation is required.

III. AIR QUALITY

Where available, the significance criteria established by the South Coast Air Quality Management District (SCAQMD) may be relied upon to make the following determinations.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

The South Coast Air Quality Management District (SCAQMD) is the agency primarily responsible for comprehensive air pollution control in the South Coast Air Basin and reducing emissions from area and point stationary, mobile, and indirect sources. SCAQMD prepared the 2012 Air Quality Management Plan (AQMP) to meet federal and state ambient air quality standards. A significant air quality impact may occur if a project is inconsistent with the AQMP or would in some way represent a substantial hindrance to employing the policies or obtaining the goals of that plan. The proposed project is not expected to conflict with or obstruct the implementation of the AQMP and SCAQMD rules. According to the Air Quality Study prepared by Meridian Consultants dated April 2020 and utilizing CalEEMod, the project does not reach the established threshold of potential significance for air quality per the SCAQMD. Therefore, impacts would be less than significant.

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

A significant impact would occur if the proposed project would violate any air quality standard or contribute substantially to an existing or projected air quality violation. Project construction and operation emissions are estimated using California Emissions Estimator Model (CalEEMod), a statewide land use emissions computer model designed to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from land use projects. According to the CalEEMod model results as summarized in the Air Quality Study prepared by Meridian Consultants dated April 2020, Overall Construction (Maximum Daily Emission) for the proposed project would not exceed the SCAQMD thresholds for the criteria pollutants Reactive Organic Compounds (ROG), Nitrogen Oxides (NOx), Carbon Monoxide (CO), Sulfur Dioxide (SO₂), and Respirable Particulate Matter (PM₁₀ and PM_{2.5}). The project is estimated to generate less than the SCAQMD threshold of 75 pounds per day (lbs/day) for ROG, 100 lbs/day for NOx, 550 lbs/day for CO, 150 lbs per day for SO₂, 150 lbs/day for PM₁₀, and 55 lbs/day for PM_{2.5}. Additionally, the project output is also below the significance thresholds for these criteria pollutants with regard to Overall Operational Emissions. The project is estimated to generate less than the SCAQMD threshold of 55 pounds per day (lbs/day) for ROG, 55 lbs/day for NOx, 550 lbs/day for CO, 150 lbs per day for SO₂, 150 lbs/day for PM₁₀, and 55 lbs/day for PM_{2.5}. Motor vehicles that access the project site would be the predominant source of long-term project emissions. Additional emissions would be generated by area sources, such as energy use and landscape maintenance activities. Therefore, the proposed project would result in a less-than-significant impact related to regional operational emissions.

c) Expose sensitive receptors to substantial pollutant concentrations?

A significant impact would occur if the proposed project were to expose sensitive receptors to pollutant concentrations. The SCAQMD identifies the following as sensitive receptors: long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, child care centers, and athletic facilities. The project site is surrounded by single-family residential uses and three schools. Although the project does not propose any demolition or construction, any subsequent development activity would adhere to demolition, grading, and construction standards to mitigate air pollution and dust impacts. Additionally, the project is not expected to contribute to pollutant concentrations or expose surrounding residences and other sensitive receptors to substantial pollutant concentrations. The project is required to meet SCAQMD District Rule 403 as well as the City's requirements for demolition, grading, and construction related to air pollution. Therefore, construction and operation of the project would result in a less than significant impact for both localized and regional air pollution emissions.

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

Potential sources that may emit odors during construction activities include equipment exhaust and architectural coatings. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. Construction of the proposed six-unit small lot project would not cause an odor nuisance. According to the SCAQMD CEQA Air Quality Handbook, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. The proposed residential land use would not result in activities that create objectionable odors. Therefore, the proposed project would result in a less than significant impact related to objectionable odors.

IV. BIOLOGICAL RESOURCES

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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

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

No Impact. The proposed nine-unit subdivision project is within a highly urbanized area that does not contain any biological resources or habitat area. Although the site is zoned A2-1-CUGU, the General Plan Land Use Designation is Low Residential and, as such, the site is substantially surrounded by single-family residential development. The site is vacant and unimproved with twelve non-protected trees on site. No impact will result.

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

No Impact. A significant impact would occur if any riparian habitat or natural community would be lost or destroyed as a result of urban development. The project site does not contain any riparian habitat and does not contain any streams or water courses necessary to support riparian habitat. Therefore, the proposed project would not have any effect on 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 the United States Fish and Wildlife Services, and 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. A Significant impact would occur if federally protect wetlands would be modified or removed by a project. The project site does not contain any federally protected wetlands, wetland resources, or other waters of the United States as defined by Section 404 of the Clean Water Act. The project site is located in a highly urbanized area and exists as a vacant and unimproved site. Therefore, the proposed project would not have any effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means, and 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 wildlife nursery sites?

No Impact. A significant impact would occur if the proposed project would interfere with, or remove access to, a migratory wildlife corridor or impede use of native wildlife nursery sites. Due to the highly urbanized nature of the project site and surrounding area, the project site does not

support habitat for native resident or migratory species or contain native nurseries. Therefore, the proposed project would not interfere with wildlife movement or impede the use of native wildlife nursery sites, and no impact would occur.

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

No Impact. A significant impact would occur if the proposed project would be inconsistent with local regulations pertaining to biological resources. The proposed project would not conflict with any policies or ordinances protecting biological resources, such as the City of Los Angeles Protected Tree Ordinance (No. 177,404). The project site does not contain locally protected biological resources, such as oak trees, Southern California black walnut, western sycamore, and California bay trees. The proposed project would be required to comply with the provisions of the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (CFGF). Both the MBTA and CFGF protects migratory birds that may use trees on or adjacent to the project site for nesting, and may be disturbed during construction of the proposed project. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands), and no impacts would occur.

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?

conservation plan?

No Impact. The project site and its vicinity are not part of any draft or adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan. Therefore, the proposed project would not conflict with the provisions of any adopted conservation plan, and no impacts would occur.

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Cause a substantial adverse change in the significance of a historical resource as pursuant to State CEQA Guidelines §15064.5?

No Impact. A significant impact would occur if the proposed project would substantially alter the environmental context of, or remove identified historical resources. The project is currently a vacant and unimproved site, with no structures that have been identified as a historic resource by local or state agencies, and the project site has not been determined to be eligible for listing in the National Register of Historic Places, California Register of Historical Resources, and the Los Angeles Historic-Cultural Monuments Register. In addition, the site was not found to be a potential historic resource based on communication with the Planning Department's Office of Historic Resources, and data available on the City's HistoricPlacesLA website (the City's new online information and management system created to inventory Los Angeles' significant historic resources). Therefore, no impacts would occur.

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

Less than Significant Impact. A significant impact would occur if a known or unknown archaeological resource was removed, altered, or destroyed as a result of the proposed project. Section 15064.5 of the State CEQA guidelines defines significant archaeological resources as resources that meet the criteria for historical resources, or resources that constitute unique archaeological resources. The applicant shall abide by current law if archaeological resources are discovered during grading or construction. Therefore, impacts will be less than significant.

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

Less than Significant Impact. A significant impact would occur if previously interred human remains would be disturbed during excavation activities associated with project construction. No human remains are expected to be located on the project site; however, the applicant shall abide

by current law if human remains are discovered during grading or construction. Therefore, impacts will be less than significant.

VI. ENERGY

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

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 be designed and operated in accordance with the applicable State Building Code Title 24 regulations and City of Los Angeles Green Building Code, which impose energy conservation measures. The majority of the energy usage in the project consists of lighting and climate control. Adherence to the aforementioned energy requirements will ensure conformance with the State’s goal of promoting energy and lighting efficiency. As such, impacts of the project would be less than significant, and no mitigation is required.

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

Less Than Significant Impact. The project involves the subdivision of an existing vacant, unimproved lot for the future development of nine single family homes. The entire region is fully urbanized and substantially surrounded by large swaths of single-family neighborhoods. As stated above, the project’s improvements and operations would be in accordance with applicable State Building Code Title 24 regulations and City of Los Angeles Green Building Code, which impose energy conservation measures. As such, impacts of the project would be less than significant, and no mitigation is required.

VII. GEOLOGY AND SOILS

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

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. A significant impact would occur if the proposed project would cause personal injury or death or result in property damage as a result of a fault rupture occurring on the project site and if the project site is located within a State-designated Alquist-Priolo Zone or other designated fault zone. According to the California Department of Conservation Special Studies Zone Map, the project site is not located within an Alquist-Priolo Special Studies Zone or Fault Rupture Study Area. As such, the proposed project would not expose people or structures to potential adverse effects resulting from the rupture of known earthquake faults. According to the Zoning Information and Map Access System (ZIMAS), however, the project site is indicated as being within the Verdugo Fault Zone. Nevertheless, the Alquist-Priolo Earthquake Fault Zoning Act is intended to mitigate the hazard of surface fault rupture on structures for human occupancy, and all California and Los Angeles Building Code requirements to assess such hazards will require compliance for any future construction across the project site. Therefore, impacts related to rupture of a known earthquake fault will be less than significant.

ii) Strong seismic ground shaking?

Less Than Significant Impact. A significant impact would occur if the proposed project would cause personal injury or death or resulted in property damage as a result of seismic ground shaking. The entire Southern California region is susceptible to strong ground shaking from severe earthquakes. Consequently, the proposed project could expose people and structures to strong seismic ground shaking. The design of the Project would be in accordance with the provisions of the latest California Building Code and Los Angeles Building Code (implemented at the time of building permits) will mitigate the potential effects of strong ground shaking. The design and construction of the Project is required to comply with the most current codes regulating seismic risk, including the California Building Code and the LAMC, which incorporates the IBC. Compliance with current California Building Code and LAMC requirements will minimize the potential to expose people or structures to substantial risk of loss, injury or death. Therefore, impacts related to seismic ground shaking will be less than significant.

iii) Seismic-related ground failure, including liquefaction?

No Impact. A significant impact may occur if a proposed project site is located within a liquefaction zone. Liquefaction is the loss of soil strength or stiffness due to a buildup of pore-water pressure during severe ground shaking. The site is not located in the California Department of Conservation's Seismic Hazard Zones Map, and the project site is not located within a liquefaction zone. Therefore, no impact related to seismic-related ground failure, including liquefaction, would occur.

iv) Landslides?

No Impact. A significant impact would occur if the proposed project would be implemented on a site that would be located in a hillside area with unstable geological conditions or soil types that would be susceptible to failure when saturated. According to the California

Department of Conservation, Division of Mines and Geology, the Seismic Hazard Zones Map for this area shows the project site is not located within a landslide hazard zone. Additionally, the project site and surrounding area are relatively flat. Therefore, the proposed project would not expose people or structures to potential effects resulting from landslides, and no impacts would occur.

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

Less Than Significant Impact. Although there is no construction or subterranean development being proposed, subsequent construction of the nine newly allowable single-family units would result in ground surface disturbance during site clearance, excavation, and grading, which could create the potential for soil erosion to occur. Construction activities would be performed in accordance with the requirements of the Los Angeles Building Code and the Los Angeles Regional Water Quality Control Board (LARWQBC) through the City's Stormwater Management Division. Therefore, the proposed project would not result in substantial soil erosion or the loss of topsoil, and 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. A significant impact would occur if any unstable geological conditions would result in any type of geological failure, including lateral spreading, off-site landslides, liquefaction, or collapse. The proposed project would not have the potential to expose people and structures to seismic-related ground failure, including liquefaction and landslide. Subsidence and ground collapse generally occur in areas with active groundwater withdrawal or petroleum production. The extraction of groundwater or petroleum from sedimentary source rocks can cause the permanent collapse of the pore space previously occupied by the removed fluid. The project site is not identified as being located in an oil field or within an oil drilling area. The proposed project would be required to implement standard construction practices that would ensure that the integrity of the project site and the proposed structures is maintained. The nine-unit residential subdivision will be required by the Department of Building and Safety to comply with the City of Los Angeles Uniform Building Code (UBC) which is designed to assure safe construction and includes building foundation requirements appropriate to site conditions. With the implementation of the Building Code requirements, the potential for landslide lateral spreading, subsidence, liquefaction or collapse would be less-than-significant.

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?

No Impact. A significant impact would occur if the proposed project would be built on expansive soils without proper site preparation or design features to provide adequate foundations for project buildings, thus, posing a hazard to life and property. Expansive soils have relatively high clay mineral and expand with the addition of water and shrink when dried, which can cause damage to overlying structures. Soils on the project site may have the potential to shrink and swell resulting from changes in the moisture content. The project site is not located in an area known to have expansive soils. Therefore, no impact will result.

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

No Impact. A project would cause a significant impact if adequate wastewater disposal is not available. The project site is located in a highly urbanized area, where wastewater infrastructure is currently in place. The proposed project would connect to existing sewer lines that serve the project site and would not use septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

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

Less Than Significant Impact. Based on the criteria established in the State’s CEQA Guidelines and Appendix G, a significant impact could occur if grading or excavation activities associated with the Project were to disturb unique paleontological resources or unique geologic features that presently exist within the Project Site. The Project Site is located within an urbanized area that has been subject to grading and development in the past and is not known to contain any unique paleontological resource or site or unique geologic feature. Potential paleontological or geologic impacts of the Project would be less than significant, and no mitigation is required.

VIII. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less Than Significant Impact. Greenhouse gases (GHG) are those gaseous constituents of the atmosphere, both natural and anthropogenic (human generated), that absorb and emit radiation at specific wavelengths within the spectrum of terrestrial radiation emitted by the earth’s surface, the atmosphere itself, and by clouds. The greenhouse effect compares the Earth and the

atmosphere surrounding it to a greenhouse with glass panes. The glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. GHGs, such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), keep the average surface temperature of the Earth close to 60 degrees Fahrenheit (°F). Without the greenhouse effect, the Earth would be a frozen globe with an average surface temperature of about 5°F. The City has adopted the LA Green Plan to provide a citywide plan for achieving the City's GHG emissions targets, for both existing and future generation of GHG emissions. In order to implement the goal of improving energy conservation and efficiency, the Los Angeles City Council has adopted multiple ordinances and updates to establish the current Los Angeles Green Building Code (LAGBC) (Ordinance No. 179,890). The LAGBC requires projects to achieve a 20 percent reduction in potable water use and wastewater generation. As the LAGBC includes applicable provisions of the State's CALGreen Code, a new project that can demonstrate it complies with the LAGBC is considered consistent with statewide GHG reduction goals and policies including AB32 (California Global Warming Solutions Act of 2006). Through required implementation of the LAGBC, the proposed project would be consistent with local and statewide goals and policies aimed at reducing the generation of GHGs. Therefore, the proposed project's generation of GHG emissions would not make a cumulatively considerable contribution to emissions. Impacts will be less than significant.

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

Less Than Significant Impact. The California legislature passed Senate Bill (SB) 375 to connect regional transportation planning to land use decisions made at a local level. SB 375 requires the metropolitan planning organizations to prepare a Sustainable Communities Strategy (SCS) in their regional transportation plans to achieve the per capita GHG reduction targets. For the SCAG region, the SCS is contained in the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The 2012-2035 RTP/SCS focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas on existing main streets, in downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. In addition, SB 743, adopted September 27, 2013, encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled that contribute to GHG emissions, as required by AB 32. The project is a nine-unit residential subdivision in an area zoned for residential uses. It would not interfere with SCAG's ability to implement the regional strategies outlined in the 2012-2035 RTP/SCS. Impacts will be less than significant.

IX. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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. A significant impact would occur if the proposed project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The project involves the subdivision of nine new single-family dwellings that would involve the limited use and storage of common hazardous substances typical of those used in commercial developments, including lubricants, paints, solvents, custodial products (e.g., cleaning supplies), pesticides and other landscaping supplies. No industrial uses or activities are proposed that would result in the use or discharge of unregulated hazardous materials and/or substances, or create a public hazard through transport, use, or disposal. The project will comply with all applicable rules of the Southern California Air Quality Management District. With compliance to applicable standards and regulations and adherence to manufacturer's instructions related to the transport, use, or disposal of hazardous materials, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and 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?

No Impact. A significant impact would occur if the proposed project created a significant hazard to the public or environment due to a reasonably foreseeable release of hazardous materials. The site is currently vacant, except for 12 non-protected trees, and has been vacant to the extent known by the property Owner. There is no construction or demolition proposed as part of this Project, but any subsequent development would require compliance with existing State laws regarding removal of hazardous materials, if any. Since there are no structures on-site, however, there is no impact anticipated with regard to the release of asbestos-containing materials (ACMs) or lead-based paint (LBP). As such, the proposed project would result in no impact related to asbestos and LBP.

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

No Impact. A significant impact would occur if the proposed project created a significant hazard to the public or environment due to a reasonably foreseeable release of hazardous materials. The removal of asbestos is regulated by SCAQMD Rule 1403; therefore, any asbestos found on-site would be required to be removed by a certified asbestos containment contractor in accordance with applicable regulations prior to demolition. There are at least three existing or proposed schools within one-quarter mile of the project site; however, the project site is currently vacant with the exception of 12 non-protected trees. With no demolition occurring on the site, it is unlikely that lead-based paint or other hazardous substances would be emitted from the use and construction of nine single family homes. As such, the proposed project would not result in any impact.

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

No Impact. A significant impact would occur if the project site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would create a significant hazard to the public or the environment. The California Department of Toxic Substances Control (DTSC) maintains a database (EnviroStor) that provides access to detailed information on hazardous waste permitted sites and corrective action facilities, as well as existing site cleanup information. EnviroStor also provides information on investigation, cleanup, permitting, and/or corrective actions that are planned, being conducted, or have been completed under DTSC's oversight. A review of EnviroStor did not identify any records of hazardous waste facilities on the project site. Therefore, the proposed project would not be located on a site that is included on a list of hazardous materials sites or create a significant hazard to the public or the environment, and no impact would occur.

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 in any airport land use plan area or within two miles of a public airport or public use airport. The project is the subdivision of one lot into ten with an associated zone change to allow for nine single-family units. Therefore, the proposed project would not result in a safety hazard for people residing or working in the project area, and no impacts would occur.

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

No Impact. The project is located in close proximity to the nearest emergency route – San Fernando Boulevard (City of Los Angeles, Safety Element of the Los Angeles City General Plan, Critical Facilities and Lifeline Systems, Exhibit H, November 1996.) The proposed project would not require the closure of any public or private streets and would not impede emergency vehicle access to the project site or surrounding area. Additionally, emergency access to and from the project site would be provided in accordance with requirements of the Los Angeles Fire Department (LAFD). Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and no impact would occur.

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 located within a highly urbanized area of the City and does not include wildlands or high-fire-hazard terrain or vegetation. In addition, the project site is not identified by the City as being located within an area susceptible to fire hazards. Although the project site is within a High Wind Velocity Area, the proposed project would not create a fire hazard that has the potential to exacerbate the current environmental condition relative to wildfires. Therefore, the project would not subject people or structures to a significant risk or loss, injury, or

death as a result of exposure to wildland fires. No impacts related to this issue would occur, and no mitigation is required.

X. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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; or				
iv. Impede or redirect flood flows?				
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Less Than Significant Impact. Based on the criteria established in the State's CEQA Guidelines and Appendix G, a project could have a significant impact on surface water quality if discharges associated with the project were to create pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code (CWC) or that cause regulatory standards to be violated, as defined in the applicable National Pollution Discharge Elimination System (NPDES) stormwater permit or Water Quality Control Plan for the receiving water body. For the purpose of this specific issue, a significant impact may occur if the project would discharge water that does not meet the quality standards of local agencies that regulate surface water quality and water discharge into stormwater drainage systems.

The project is expected to comply with all applicable regulations with regard to surface water quality as governed by the State Water Resources Control Board (SWRCB). These regulations include the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements to reduce potential water quality impacts and the City's Low Impact Development (LID) Ordinance. The purpose of the LID standards is to reduce the peak discharge rate, volume, and duration of flow through the use of site design and stormwater quality control measures. The LID Ordinance requires that the project retain or treat the first three-quarters of an inch of rainfall in a 24-hour period. LID practices can effectively remove nutrients, bacteria, and metals while reducing the volume and intensity of stormwater flows.

The project consists of subdivision allowing for nine new single-family dwellings in an area heavily characterized by single-family residential uses. The project does not involve the introduction of new activities or features that could be sources of contaminants that would degrade groundwater quality. As a result, the project would not create or contribute runoff water that would exceed the pollutant profile associated with the existing condition of the Project Site and its surroundings. As such, potential water quality impacts from the project would be less than significant, and no mitigation measures are required.

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. Based on the criteria established in the State's CEQA Guidelines and Appendix G, a project could have a significant impact on groundwater level if the project were to change potable water levels sufficiently to (a) reduce the ability of a water utility to use the groundwater basin for public water supplies, conjunctive use purposes, storage of imported water, summer/winter peaking, or respond to emergencies and drought; (b) reduce yields of adjacent wells or well fields (public or private); (c) adversely change the rate or direction of flow of groundwater; or (d) result in demonstrable and sustained reduction in groundwater recharge capacity. The project is not adjacent to a well field nor part of a groundwater recharge area. As such, the project site is not a source of substantial groundwater recharge. Impacts on groundwater would be less than significant, and no mitigation is required.

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

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

Less Than Significant Impact. Site-generated surface water runoff would continue to flow to the City's storm drain system. Impermeable surfaces resulting from the development of the project would not significantly change the volume of stormwater runoff. Accordingly, since the volume of runoff from the site would not measurably increase over existing conditions, water runoff after development would not exceed the capacity of existing or planned drainage systems. Any project that creates, adds, or replaces 500 square feet of impervious surface must comply with the Low Impact Development (LID) Ordinance or alternatively, the City's Standard Urban Stormwater Mitigation Plan (SUSMP), as an LAMC requirement to address water runoff and storm water pollution. Therefore, the proposed project would result in less-than-significant impacts related to existing storm drain capacities or water quality.

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. Based on the criteria established in the State's CEQA Guidelines and Appendix G, a project could have a significant impact on surface water hydrology if the project were to result in a permanent, adverse change to the movement of surface water sufficient to produce a substantial change in the current or direction of water flow. The project site does not contain, nor is adjacent to, any stream or river. The project would connect to existing drainage infrastructure and therefore would not alter existing drainage patterns. Impacts would be less than significant, and no mitigation is required.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than Significant Impact. Based on the criteria established in the State's CEQA Guidelines and Appendix G, a project could have a significant impact on surface water quality if discharges associated with the project were to create pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code (CWC) or that cause regulatory standards to be violated, as defined in the applicable NPDES stormwater permit or Water Quality Control Plan for the receiving water body. Runoff from the project site would be collected on the site and directed towards existing storm drains in the project vicinity. Pursuant to local practice and City regulations, stormwater retention would be required as part of SUSMP implementation features and the requirements of the Low Impact Development (LID) ordinance requirements. The primary purpose of the LID ordinance is to ensure that development and redevelopment projects mitigate runoff in a manner that captures rainwater and removes pollutants while reducing the volume and intensity of stormwater flows. Accordingly, with compliance to the LID ordinance, the

project would not create or contribute to surface runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be less than significant, and no mitigation is required.

iv. Impede or redirect flood flows?

No Impact. The project site is located in an urbanized area that is currently served by storm drain infrastructure. The project would not change this local drainage pattern; therefore, the project would not have the potential to impede or redirect floodwater flows. No impact would occur, and no mitigation measures are necessary.

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

No Impact. A significant impact would occur if the project site were sufficiently close to the ocean or other water body to potentially be at risk of seismically induced tidal phenomena (e.g., seiche and tsunami), or was within a flood zone, and if the project site utilized, stored or otherwise contained pollutants that would be at risk of release if inundated. The Project Site is not located within a Tsunami Inundation Zone or Flood Zone. Furthermore, the proposed use does not involve the storage or use of substantial quantities of potential pollutants. No impacts would occur, and no mitigation measures are necessary.

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

No Impact. A significant impact could occur if the project includes potential sources of water pollutants that would have the potential to interfere with a water quality control plan or sustainable groundwater management plan. The project involves a subdivision and Zone Change to allow for the addition of nine single-family homes. As compared to existing conditions, the project would not introduce different uses or potential sources of water pollutants. Moreover, the project would comply with the City's Low Impact Development (LID) ordinance, the primary purpose of which is to ensure that development and redevelopment projects mitigate runoff in a manner that captures rainwater and removes pollutants while reducing the volume and intensity of storm water flows. No impacts would occur, and no mitigation measures are necessary.

XI. LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Physically divide an established community?

Less Than Significant Impact. A significant impact would occur if the proposed project would be sufficiently large or configured in such a way so as to create a physical barrier within an established community. A physical division of an established community is caused by an impediment to through travel or a physical barrier, such as a new freeway with limited access between neighborhoods on either side of the freeway, or major street closures. The proposed project would not involve any street vacation or closure or result in development of new thoroughfares or highways; however, the project will result in the creation of a new cul-de-sac. The cul-de-sac fits the existing pattern of the neighborhood and would not create any physical divisions as its length would be less than one block. Therefore, the impact 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. A significant impact may occur if a project is inconsistent with the General Plan or zoning designations currently applicable to the project site, and would cause adverse environmental effects, which the General Plan and zoning ordinance are designed to avoid or mitigation. The site is located within the Arleta – Pacoima Community Plan Area. It is zoned A2-1-CUGU with a General Plan land use designation of Low Residential. The proposed project involves the subdivision and rezoning of newly created parcels to allow for the addition of nine single-family residences. The proposed zone change is allowable within the General Plan land use designation. The new zone would permit single-family homes as a by-right use and thus, the proposed project would conform to the allowable land uses pursuant to the Los Angeles Municipal Code. The decision maker will determine whether the discretionary requests will conflict with applicable plans/policies. Impacts related to land use have been mitigated elsewhere, or are address through compliance with existing regulations. Therefore, the impact would be less than significant.

XII. MINERAL RESOURCES

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

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

No Impact. A significant impact would occur if the proposed project would result in the loss of availability of known mineral resources of regional value or locally important mineral recovery site. The project site is not classified by the City as containing significant mineral deposits. The project site is currently designated for Low Residential land uses and not as a mineral extraction land use. In addition, the project site is not identified by the City as being located in an oil field or within an oil drilling area. Therefore, the proposed project would not result in the loss of availability of any known, regionally or locally valuable mineral resource, and no impact would occur.

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

No Impact. A significant impact would occur if the proposed project would result in the loss of availability of known mineral resources of regional value or locally important mineral resource recovery site. The project site is not classified by the City as containing significant mineral deposits. The project site is currently designated for Low Residential land uses and not as a mineral extraction land use. In addition, the project site is not identified by the City as being located in an oil field or within an oil drilling area. Therefore, the proposed project would not result in the loss of availability of any known, regionally- or locally-valuable mineral resource, and no impact would occur.

XIII. NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Less Than Significant Impact. According to the Noise Study conducted by Meridian Consultants dated April 2020, a noise impact is considered potentially significant if project construction activities extended beyond ordinance time limits to construction or construction-related noise levels exceed the ordinance noise level standards unless technically infeasible to do so. The proposed project consists of the creation of nine new lots which will allow for the addition of nine single-family residences. Construction noise levels will vary at any given receptor and are dependent on the construction phase, equipment type, duration of use, distance between the noise source and receptor, and the presence or absence of barriers between the noise source and receptor. The project does not propose to deviate from any requirements of the Noise Element of the General Plan, Section 111 of the L.A.M.C., or any other applicable noise standard. The project shall comply with the City of Los Angeles Noise Ordinance No. 144,331 and 161,574, and any subsequent ordinances, which prohibit the emission or creation of noise beyond certain levels at adjacent uses unless technically infeasible. Construction noise is typically governed by ordinance limits on allowable times of equipment operations. The City of Los Angeles limits construction activities to the hours of 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on any Saturday. Construction is not permitted on any national holiday or on any Sunday. Noise associated with cumulative operational sources would not be significant, as determined by the Noise Study previously mentioned. Therefore, impacts will be less than significant.

b) Generation of, excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. The City of Los Angeles does not address vibration in the LAMC or in the Noise Element of the General Plan. According to the Federal Transit Administration (FTA), ground vibrations from construction activities very rarely reach the level capable of damaging structures. The construction activities that typically generate the most severe vibrations are blasting and impact pile driving. These types of activities are not proposed by the project. The FTA has published standard vibration velocities for various construction equipment operations. The estimated vibration velocity levels from construction equipment would be well below the significance thresholds. Therefore, project impacts would be less than significant.

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

No Impact. The project is not located within two miles of a private airstrip or an airport land use plan. No impact will result.

XIV. POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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. A potentially significant impact would occur if the proposed project would induce substantial population growth that would not have otherwise occurred as rapidly or in as great a magnitude. The proposed project would result in the addition of eight net residential units, which would not be considered a substantial increase in population. The project will accommodate residential population growth in keeping with the Arleta- Pacoima Community Plan land use and density designations, and would not substantially induce population growth in

the project area, either directly or indirectly. The physical secondary or indirect impacts of population growth such as increased traffic or noise have been adequately mitigated in other portions of this document. Therefore, the impact would be less than significant.

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

Less Than Significant Impact. A significant impact may occur if a project would result in the displacement of existing housing units, necessitating the construction of replacement housing elsewhere. The Project Site is vacant and unimproved. The Project does not represent a displacement of substantial numbers of existing housing and will result in a net gain of eight dwelling units. Therefore, impacts will be less than significant.

XV. PUBLIC SERVICES

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Fire protection?

Less Than Significant Impact. A significant impact would occur if the Los Angeles Fire Department (LAFD) could not adequately serve the proposed project, necessitating a new or physically altered station. The project site and the surrounding area are currently served by LAFD Fire Station 98, located at 13035 Van Nuys Boulevard, located approximately 1 mile west of the project site. The proposed project involves the net addition of eight single-family dwellings, which could increase the number of emergency calls and demand for LAFD fire and emergency services. To maintain the level of fire protection and emergency services, the LAFD may require additional fire personnel and equipment. However, it is not anticipated that there would be a need to build a new or expand an existing fire station to serve the proposed project and maintain acceptable service ratios, response times, or other performance objectives for fire protection. By analyzing data from previous years and continuously monitoring current data regarding response times, types of incidents, and call frequencies, LAFD can shift resources to meet local demands for fire protection and emergency services. The proposed project would neither create capacity or service level problems nor result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for fire protection. Therefore, the proposed project would result in a less than significant impact.

b) Police protection?

Less Than Significant Impact. The additional residential units has the potential to increase the demand for police services in the area. However, the project site and the surrounding area are

currently served by the LAPD Foothill Community Police Station at 12760 Osborne Street, approximately 1.7 miles south of the project site. Given that there is a police station in close proximity to the project site, it is not anticipated that there would be a need to build a new or expand an existing police station to serve the proposed project and maintain acceptable service ratios, response times, or other performance objectives for police protection. Impacts will be less than significant.

c) Schools?

Less than Significant Impact. A significant impact would occur if the proposed project would include substantial employment or population growth, which could generate a demand for school facilities that would exceed the capacity of the school district. The proposed project would result in a net increase of eight units, which could increase enrollment at schools that service the area. However, development of the proposed project would be subject to California Government Code Section 65995, which would allow LAUSD to collect impact fees from developers of new residential units. Conformance to California Government Code Section 65995 is deemed to provide full and complete mitigation of impacts to school facilities. Therefore, the proposed project would result in a less-than-significant impact to public schools.

d) Parks?

Less Than Significant Impact. A significant impact would occur if the proposed project would exceed the capacity or capability of the local park system to serve the proposed project. The City of Los Angeles Department of Recreation and Parks (RAP) is responsible for the provision, maintenance, and operation of public recreational and park facilities and services in the City. The proposed project would result in the potential creation of nine new residential units (eight net additional units compared to what is currently allowed per the existing zoning and land use), which could result in increased demand for parks and recreation facilities. The proposed project would include private open space in the form of outdoor patios which are substantial in size given the lot areas and existing pattern of single-family development in the neighborhood. These project features would reduce the demand for park space created by the proposed project to less than significant levels. Nevertheless, payment of required impact fees by the proposed residential development per LAMC Section 17.12 would further offset some of the increased demand by helping fund new facilities, as well as the expansion of existing facilities. Therefore, the project would not create capacity or service level problems, or result in substantial physical impacts associated with the provision or new or altered parks facilities, and project impacts would be less than significant.

e) Other public facilities?

Less Than Significant Impact. The proposed project would result in the potential creation of nine new residential units, which could result in increased demand for library services and resources of the LAPL System. While the increase in population as a result of the proposed project may create a demand for library services, the proposed project would not create substantial capacity or service level problems that would require the provision of new or physically altered

library facilities in order to maintain an acceptable level of service for libraries. Therefore, the proposed project would result in a less than significant impact on library services.

XVI. RECREATION

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

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

Less Than Significant Impact. Although the project may increase the use of existing neighborhood and regional parks or other recreational facilities due to the addition of nine single-family homes, the residential units will provide ample open space on-site within each individual home. The proposed RS zoning and existing neighborhood development pattern features limited lot coverage and large outdoor patios. The provision of private recreation space and the payment of required impact fees by the proposed development per LAMC Section 17.12 would further offset some of the increased demand for recreational facilities by helping fund new facilities, as well as the expansion of existing facilities. Therefore, the project would not create capacity or service level problems, or result in substantial physical impacts associated with the provision or new or altered parks facilities, and project impacts would be less than significant.

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

Less Than Significant Impact. The proposed project would not require the construction or expansion of recreational facilities beyond the limits of the project site. Although the proposed project would place some additional demands on park facilities, the increase in demand would be met through a combination of on-site amenities and existing parks in the project area. The proposed residential use's increased demands upon recreational facilities would not in and of

itself result in the construction of a new park, which might have an adverse physical effect on the environment. Thus, impacts to park and recreational facilities would be less than significant.

XVII. TRANSPORTATION²

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Less than Significant Impact. The project will increase the daily vehicle miles traveled; however it does not reach a threshold that requires preliminary review by the Department of Transportation (LADOT) for the potential need of a traffic study or further assessment, as referenced in the letter dated June 16, 2020 and included in the case file. Therefore, it is not expected to contribute significantly to any traffic congestion or affect any congestion management program. Impacts will be less than significant.

b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less than Significant Impact. A significant impact may occur if the adopted Los Angeles County Metropolitan Transportation authority (Metro) thresholds for a significant project impact would be exceeded. The Congestion Management Program (CMP) was adopted to regulate and monitor regional traffic growth and transportation improvement programs. The CMP designates a transportation network that includes all state highways and some arterials within the County of Los Angeles. The amount of trips the project would generate is below the threshold needed for further evaluation. The project will increase the daily vehicle miles traveled; however it does not

² While the new VMT Transportation Thresholds have been adopted, this is in place as an option until July 1, 2020.

reach a threshold that requires preliminary review by the Department of Transportation for the potential need of a traffic study, as referenced in the letter dated June 16, 2020 and included in the case file. Therefore, it is not expected to contribute significantly to any traffic congestion or affect any congestion management program. Impacts will be less than significant.

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. A significant impact could occur if a project were to include new roadway design or introduces a new land use or features into an area with specific transportation requirements and characteristics that have not been previously experienced in that area, or if access or other features were designed in such a way as to create hazard conditions. The project site is currently vacant and unimproved. The project proposes the creation of a new cul-de-sac to access the newly created residential lots that will be an extension of Chivers Avenue. Although the project introduces a geometric design feature, it will not significantly change the surrounding road system or substantially increase hazards. The arrangement of single-family residences surrounding a neighborhood block-sized cul-de-sac is a common design feature in the existing neighborhood and serves to slow down traffic and relieve impacts on the main roads. The project would utilize a single curb cut for access onto each new single-family residence and would not include unusual design features. Adherence to all emergency response plan requirements set forth by the City and LAFD would be required through the duration of the project's construction and operation phases. The impacts regarding hazards due to a design feature are less than significant, and no mitigation is required.

d) Result in inadequate emergency access?

Less than Significant Impact. A significant impact would occur if the proposed project would result in inadequate emergency access. The project does not propose any changes to emergency access, and will require approval of plans by the Fire Department. Further, the project must comply with all applicable City fire safety regulations. The impacts are expected to be less than significant and no mitigation is required.

XVIII. TRIBAL CULTURAL RESOURCES

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:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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: 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)?

Less than Significant Impact. A significant impact would occur if the project would 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, which is Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). The site is not 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(l). Therefore, impacts would be less than significant.

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of

the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less than Significant with Mitigation Incorporated. Approved by Governor Brown on September 25, 2014, Assembly Bill 52 (AB52) establishes a formal consultation process for California Native American Tribes to identify potential significant impacts to Tribal Cultural Resources (TCRs), as defined in Public Resources Code Section 21074, as part of CEQA. Effective July 1, 2015, AB 52 applies to projects that file a Notice of Preparation on or after July 1, 2015. PRC Section 21084.2 now establishes that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment. To help determine whether a project may have such an effect, PRC Section 21080.3.1 requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. As a result of AB 52, the following must take place: 1) prescribed notification and response timelines; 2) consultation on alternatives, resource identification, significance determinations, impact evaluation, and mitigation measures; and 3) documentation of all consultation efforts to support CEQA findings for the administrative record.

Under AB 52, if a lead agency determines that a project may cause a substantial adverse change to a TCR, the lead agency must consider measures to mitigate that impact. PRC Section 21074 provides a definition of a TCR. In brief, in order to be considered a TCR, a resource must be either: 1) listed, or determined to be eligible for listing, on the national, State, or local register of historic resources, or 2) a resource that the lead agency chooses, in its discretion supported by substantial evidence, to treat as a TCR. In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the State register of historic resources or City Designated Cultural Resource. In applying those criteria, a lead agency shall consider the value of the resource to the tribe.

As specified in AB 52, lead agencies must provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if the tribe has submitted a written request to be notified. The tribe must respond to the lead agency within 30 days of receipt of the notification if it wishes to engage in consultation on the project, and the lead agency must begin the consultation process within 30 days of receiving the request for consultation. In compliance with AB 52, the City provided notice to tribes soliciting requests for consultation on August 25, 2020. On September 10, 2020, response was received from the Fernandeno Tataviam Band of Mission Indians (FTBMI) which indicated that the project is located within the traditional FTBMI ancestral territory and, therefore, is of interest to the tribe. On September 28, 2020, a record search of the Native American Heritage Commission (NAHC) Sacred Lands Files Search was completed for the project site upon the request of the FTBMI, and the results were negative.

Subsequently, the Fernandeno Tataviam Band of Mission Indians requested a consultation which was held on October 14, 2020. The FTBMI representative explained that a known tribal cultural resource site exists between 0.25 and 0.5 miles of the project site near the Hansen Dam region. While the City's existing RCMs address the inadvertent discovery of tribal cultural resources for all projects, there is a high possibility of tribal remains or artifacts that may be found on the site that should be consulted with not only an archeologist, but also the Native American tribes upon discovery. As a result, FTBMI requested to be notified if and when cultural resources are encountered during ground-disturbing activities to assure that all cultural materials on the surface and subsurface (if any) and any inadvertent discovery are properly documented, salvaged, and protected. Therefore, with the implementation of Mitigation Measures TCR-1 through TRC-3, impacts related to tribal and cultural resources will be less than significant.

Mitigation Measures

- TCR-1** In the event that Native American cultural resources are discovered during Project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall assess the find. The Fernandeno Tataviam Band of Mission Indians (FTBMI) shall be contacted to consult if any such find occurs. The archaeologist shall complete all relevant California State Department of Parks and Recreation (DPR) 523 Series forms to document the find and submit this documentation to the applicant, Lead Agency, and FTBMI.
- TCR-2** The Lead Agency and/or applicant shall, in good faith, consult with the Fernandeno Tataviam Band of Mission Indians on the disposition and treatment of any Tribal Cultural Resource encountered during the Project grading.
- TCR-3** If human remains or funerary objects are encountered during any activities associated with the Project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County coroner shall be contacted. If the human remains are determined to be Native American in origin by the County coroner, the applicant shall immediately notify the Lead Agency, the Fernandeno Tataviam Band of Mission Indians, and consulting Tribes.

XIX. UTILITIES AND SERVICE SYSTEMS

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

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

Less Than Significant Impact. Prior to any construction activities, the developer or project applicant would be required to coordinate with the City of Los Angeles Bureau of Sanitation (BOS) to determine the exact wastewater conveyance requirements of the proposed project, and any upgrades to the wastewater lines in the vicinity of the project site that are needed to adequately serve the proposed project would be undertaken as part of the project. Therefore, impacts related to wastewater treatment 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. A significant impact would occur if the proposed project would increase water consumption or wastewater generation to such a degree that the capacity of facilities currently serving the project site would be exceeded. The Los Angeles Department of Water and Power (LADWP) conducts water planning based on forecast population growth. Accordingly, the increase in residential population resulting from the proposed project would not be considered substantial in consideration of anticipated growth. The total increase of nine residential units (or net increase of eight units) resulting from implementation of the proposed project would be consistent with Citywide growth, and, therefore, the project demand for water is not anticipated to require new water supply entitlements and/or require the expansion of existing or construction of new water treatment facilities beyond those already considered in the LADWP 2010 Urban Water Management Plan. Thus, it is anticipated that the proposed project would not create any water system capacity issues, and there would be sufficient reliable water supplies available to meet project demands. Prior to any construction activities, the project applicant would be required to coordinate with the City of Los Angeles Bureau of Sanitation (BOS) to determine the exact wastewater conveyance requirements of the proposed project, and any upgrades to the wastewater lines in the vicinity of the project site that are needed to adequately serve the proposed project would be undertaken as part of the project. Therefore, the proposed project would have a less-than-significant impact related to water or wastewater infrastructure.

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. The project will be served by the City's sewer system and is not expected to exceed wastewater treatment requirements in the area. Impacts will be less than significant.

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

Less Than Significant Impact. The proposed new single-family lots to allow for up to nine new single-family homes will be required to comply with current regulations required by the Department of Building and Safety (LAMC Section 99.04.408.1) and the Bureau of Sanitation (LAMC Section 66.32), which requires the recycling and proper disposal of solid waste. Impacts will be less than significant.

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

Less than Significant Impact. A significant impact could occur if a project would generate solid waste that was not disposed of in accordance with applicable regulations. These regulations include:

- California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939). AB 939 requires cities and counties to reduce the amount of solid waste entering existing landfills

through recycling, reuse, and waste prevention efforts. These efforts have included permitting procedures for waste haulers and handlers.

- California Solid Waste Reuse and Recycling Access Act of 1991 (AB 1327), which requires local jurisdictions to adopt an ordinance requiring commercial buildings to provide an adequate storage area for the collection and removal of recyclable materials. The City of Los Angeles passed such an ordinance in 1997.
- AB 341 of 2012 requires businesses to arrange for recycling services.
- Los Angeles Green Code incorporates the CALGreen Code and is applicable to the construction of new buildings by addressing construction waste reduction, disposal, and recycling.
- Los Angeles Citywide Construction and Demolition Waste Recycling Ordinance requires haulers and contractors responsible for handling C&D waste to obtain a Private Solid Waste Hauler Permit from the Bureau of Sanitation prior to collecting, hauling, and transporting C&D waste, and C&D waste can only be taken to City-certified C&D processing facilities.

The proposed project must comply with federal, state, and local statutes and regulations relating to solid waste. Impacts will therefore be less than significant.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones:

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

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

No Impact. The Project is not located in or near State responsibility areas or lands classified as very high fire hazard zones. The Project Site is located within an urbanized area of the City and does not include wildlands or high-fire-hazard terrain. As such, no impacts would occur, and no mitigation is required.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less Than Significant Impact. Although the Project is located in a High Wind Velocity Area, the project is not located on any significant slopes or lands classified as very high fire hazard zones. The Project Site is located within an urbanized area of the City and does not include wildlands or high-fire-hazard terrain. As such, impacts would be less than significant, and no mitigation is required.

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?

Less Than Significant Impact. The Project is will be constructed a new cul-de-sac as part of the subdivision to provide access to the nine new single-family lots. However, the length of this new road will not even be the length of a single block. The construction of this cul-de-sac is to align with the established pattern of development in the surrounding vicinity where single-family residences commonly surround a cul-de-sac for better public safety related to traffic and parking. The proposed project is in a highly urbanized area that is already fully developed with several single-family neighborhoods and does not include any wildlands or high-fire-hazard terrain. In addition, the Project Site is not identified by the City as being located within an area susceptible to fire hazards. As such, project impacts would be less than significant, and no mitigation is required.

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. The Project is not located on any significantly sloping terrain and is not located in any Flood Zone or Tsunami Inundation Zone. The Project Site is located within an urbanized area of the City and does not include wildlands or high-fire-hazard terrain. In addition, as previously discussed, the Project Site is not susceptible to potential flooding or landslide, nor would the Project result in potential drainage changes. As such, no impacts would occur and no mitigation is required.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

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

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact. Based on the analysis of this Initial Study, the proposed project would not have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. However, during project construction, the proposed project may encounter unknown cultural resources, including archaeological and paleontological resources. Compliance with existing regulations would reduce impacts to less than significant levels.

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. A significant impact may occur if the proposed project, in conjunction with related projects, would result in impacts that are less than significant when viewed separately but significant when viewed together. The proposed project would result in the addition of nine new single-family homes to align with the existing pattern of the neighborhood and entire surrounding area, which are already fully built out. Although projects may be constructed in the project vicinity, the cumulative impacts to which the proposed project would contribute would be less than significant.

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

Less Than Significant Impact. A significant impact may occur if the proposed project has the potential to result in significant impacts, as discussed in the preceding sections. The project proposes to subdivide a vacant lot and allow for the creation of nine new single-family residences in a single-family neighborhood. Therefore, the project would not have the potential to result in substantial adverse impacts on human beings either directly or indirectly, and impacts will be less than significant.

Air Quality Study
for the
Vesting Tentative Tract Map No. 74450 Project
11070 – 11100 Borden Avenue, Los Angeles, CA 91331

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EXECUTIVE SUMMARY

This Air Quality Study assesses and discusses the potential air quality impacts that may occur with the Vesting Tentative Tract Map No. 74450 Project (Project), located in the City of Los Angeles (City). The analysis estimates future emission levels at surrounding land uses resulting from construction and operation of the Project and identifies the potential for significant impacts. An evaluation of the Project's contribution to potential cumulative air quality impacts is also provided. Air quality worksheets are provided in **Attachment A: CalEEMod Air Quality Emission Output Files**.

This report summarizes the potential for the Project to conflict with an applicable air quality plan; violate an air quality standard or threshold; result in a cumulatively net increase of criteria pollutant emissions; expose sensitive receptors to substantial pollutant concentrations; or create objectionable odors affecting a substantial number of people. The findings of the analyses are as follows:

- The Project would be consistent with air quality policies set forth by the South Coast Air Quality Management District (SCAQMD) and the Air Quality Management Plan.
- Construction and operational emissions would not contribute to short- or long-term emissions that would increase the carcinogenic effects on sensitive receptors. Emissions associated with operation would not exceed the SCAQMD-recommended thresholds. Thus, the Project would not result in a regional violation of applicable air quality standards or jeopardize the timely attainment of such standards in the South Coast Air Basin.
- Operation of the Project will not employ toxic air contaminant-emitting processes. No substantial pollutant concentration would be generated.
- Project construction and operations would not result in significant levels of odors.
- The Project would result in less than significant cumulative air quality impacts during construction and operation of the Project.

INTRODUCTION

This Air Quality Study was prepared to evaluate the potential impacts during construction and operation of the Vesting Tentative Tract Map No. 74450 Project (Project) in the City of Los Angeles, California (City). The report provides a summary of the Project components; describes the existing regulatory framework for air pollutants; discusses the environmental setting of the Project; and assesses the potential environmental impacts pertaining to air quality that may result from Project implementation. Determination of significance for Project impacts is based on analysis in accordance with the applicable regulatory thresholds.

PROJECT DESCRIPTION

The Project site is located at 11070—11100 Borden Avenue (Project site), northeast of Borden Avenue, northwest of Terra Bella Street, southwest of Phillippi Avenue, and southeast of Gain Street, in the Pacoima Neighborhood of the City, as shown in **Figure 1: Regional and Local Vicinity Map**. The Project site is currently vacant and consists of two lots (Assessor Parcel Numbers 2532-015-011 and -012) totaling a net area (post-dedications) of 196,769 square feet (4.5 acres). The proposed Project includes the request of a zone change for nine parcels from Agriculture (A2) to One-Family Residential (RS) and a tract map application for the subdivision of one lot into 10 smaller lots. The proposed development consists of nine (9) single-family homes and one lot for church uses.

REGULATORY SETTING

Ambient air quality emissions present complex environmental issues that require regulatory attention on both large and small scales. The cumulative nature of project-level and localized emissions contributing to greater regional conditions warrants that regulatory policies be instituted on national, State, and regional levels to address air quality concerns. The following sections outline the applicable regulatory framework that exists at the national, State, and regional levels for air quality.

Background

The United States Environmental Protection Agency (USEPA) is responsible for federal oversight and enforcement of air quality management policies under the 1970 Clean Air Act (CAA). Each individual state is tasked with preparing and adhering to State Implementation Plans¹ (SIPs) for achieving the goals set forth within the CAA. California has some of the most stringent air quality policies in the country and, through the California Air Resources Board (CARB) branch of the California Environmental Protection Agency (CalEPA), has developed its own ambient air quality standards (AAQS).

1 A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain National Ambient Air Quality Standards.

The State is divided into air quality jurisdictions; each jurisdiction is governed by a regional air district that oversees policy implementation, permitting of air pollution emission sources, and enforcement of regulatory requirements. Six criteria air pollutants (CAPs) are monitored at the federal, State, and regional levels. These six CAPs—ozone, particulate matter PM10 and PM2.5, nitrogen dioxide, carbon monoxide, lead, and sulfur dioxide—were identified based on a consensus of decades of research that concluded inhalation of each of the chemicals results in adverse health effects in humans. The six pollutants are identified below in **Table 1: Sources and Health Effects of Criteria Air Pollutants**, along with their common sources and primary health effects from inhalation exposure.

Table 1
Sources and Health Effects of Criteria Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O3)	Formed when VOCs and NOx react in the presence of sunlight; VOC sources include any source that burns fuels (e.g., gasoline, natural gas, wood, oil), solvents, petroleum processing, and storage and pesticides	Breathing difficulties; lung tissue damage; damage to rubber and some plastics
Respirable particulate matter (PM10)	Road dust, windblown dust (agriculture) and construction (fireplaces); also formed from other pollutants (e.g., acid rain, NOx, oxides of sulfur [SOx], organics) and from incomplete combustion of any fuel	Increases respiratory disease, lung damage, cancer, premature death; reduced visibility; surface soiling
Fine particulate matter (PM2.5)	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; also formed from reaction of other pollutants (e.g., acid rain, NOx, SOx, organics)	Increases respiratory disease, lung damage, cancer, premature death; reduced visibility; surface soiling
Carbon monoxide (CO)	Any source that burns fuel, such as automobiles, trucks, heavy construction equipment, farming equipment, and residential heating	Chest pain in heart patients; headaches; reduced mental alertness
Nitrogen dioxide (NO2)	See carbon monoxide.	Lung irritation and damage
Lead (Pb)	Metal smelters, resource recovery, leaded gasoline, deterioration of lead paint	Learning disabilities; brain and kidney damage
Sulfur dioxide (SO2)	Coal- or oil-burning power plants and industries, refineries, diesel engines	Increases lung disease and breathing problems for asthmatics; reacts in the atmosphere to form acid rain

Source: California Air Resources Board, "Common Air Pollutants," <https://ww2.arb.ca.gov/resources/common-air-pollutants> (accessed April 2020).

Ozone

Ozone (O3) is a gas formed when volatile organic compounds (VOCs) and oxides of nitrogen (NOx), both byproducts of internal combustion engine exhaust and other sources, undergo slow photochemical

reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months, when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

Volatile Organic Compounds

VOCs are compounds comprised primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Adverse effects on human health are not caused directly by VOCs, but rather by reactions of VOCs to form secondary air pollutants, including ozone. VOCs themselves are not criteria pollutants; however, they contribute to the formation of ozone and are regulated under State policies.

Respirable Particulate Matter

Respirable particulate matter (PM₁₀) consists of extremely small, suspended particles or droplets 10 micrometers (µm) or smaller in diameter. Some sources of PM₁₀, like pollen and windstorms, are naturally occurring. However, in populated areas, most PM₁₀ is caused by road dust, diesel soot, combustion products, the abrasion of tires and brakes, and construction activities.

Fine Particulate Matter

PM_{2.5} refers to fine particulate matter that is 2.5 µm or smaller in size. Sources of PM_{2.5} include fuel combustion from automobiles, power plants, wood burning, industrial processes, and diesel-powered vehicles, such as buses and trucks. These fine particles are also formed in the atmosphere when gases, such as sulfur dioxide (SO₂), NO_x, and VOCs are transformed in the air by chemical reactions.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, and because motor vehicles operating at slow speeds are the primary source of CO in the South Coast Air Basin (Basin), the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

Nitrogen Dioxide

Nitrogen dioxide (NO₂) is a reddish-brown, highly reactive gas that is formed in the ambient air through the oxidation of nitric oxide (NO). NO₂ is also a byproduct of fuel combustion. The principle form of NO₂ produced by combustion is NO, but NO reacts quickly to form NO₂, creating the mixture of NO and NO₂ referred to as NO_x. NO₂ acts as an acute irritant and, in equal concentrations, is more injurious than NO.

At atmospheric concentrations, however, NO_x is only potentially irritating. NO₂ absorbs blue light, the result of which is a brownish-red cast to the atmosphere and reduced visibility.

Lead

Lead (Pb) occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the Basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so most such combustion emissions are associated with off-road vehicles, such as race cars, that use leaded gasoline. Other sources of Pb include the manufacturing and recycling of batteries; sanding or removal of lead-based paint; ink; ceramics; ammunition; and secondary lead smelters.

Sulfur Dioxide

SO₂ is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of the burning of high-sulfur-content fuel oils and coal, as well as from chemical processes occurring at chemical plants and refineries. When SO₂ oxidizes in the atmosphere, it forms sulfates (SO₄).

Federal

The USEPA sets national vehicle and stationary source emission standards; oversees approval of all SIPs; provides research and guidance for air pollution programs; and sets National Ambient Air Quality Standards (NAAQS). The NAAQS for the six CAPs are shown in **Table 2: Ambient Air Quality Standards** and were identified from provisions of the 1970 CAA. The sections of the CAA that are most applicable to the Project include Title I: Nonattainment Provisions and Title II: Mobile Source Provisions.

The CAA and the promulgated standards have evolved as a living document over time as research into the effects of air pollution has enhanced regulatory understanding of the associated issues. The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones. On the national level, the USEPA designates regions as achieving “attainment” or suffering from “nonattainment” of the NAAQS based on air quality monitoring data. Regions that are designated as being in nonattainment are responsible for devising localized strategies for reducing emissions of CAPs and achieving regional attainment within a predetermined timeframe set by the USEPA.

The NAAQS were further amended in July 1997 to include an 8-hour standard for ozone and to adopt an NAAQS for PM_{2.5}. The NAAQS were amended again in September 2006 to include an established

methodology for calculating PM_{2.5}, as well as to revoke the annual PM₁₀ threshold. Additional revisions to the AAQS may be implemented in the future as the science of air quality progresses.

Table 2
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O ₃)	1 hour	0.09 ppm (180 µg/m ³)	Ultraviolet photometry	—	Same as primary standard	Ultraviolet photometry
	8 hours	0.07 ppm (137 µg/m ³)		0.075 ppm (147 µg/m ³)		
Respirable particulate matter (PM ₁₀)	24 hours	50 µg/m ³	Gravimetric or beta attenuation	150 µg/m ³	Same as primary standard	Inertial separation and gravimetric analysis
	Annual arithmetic mean	20 µg/m ³		—		
Fine particulate matter (PM _{2.5})	24 hours	No separate State standard	Gravimetric or beta attenuation	35 µg/m ³	Same as primary standard	Inertial separation and gravimetric analysis
	Annual arithmetic mean	12 µg/m ³		15 µg/m ³		
Carbon monoxide (CO)	8 hours	9.0 ppm (10 mg/m ³)	Nondispersive infrared photometry (NDIR)	9 ppm (10 mg/m ³)	None	NDIR
	1 hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)		
Nitrogen dioxide (NO ₂)	Annual arithmetic mean	0.03 ppm (57 µg/m ³)	Gas phase chemiluminescence	0.053 ppm (100 µg/m ³)	Same as primary standard	Gas phase chemiluminescence
	1 hour	0.18 ppm (339 µg/m ³)		0.100 ppm (188 µg/m ³)		

Source: California Air Resources Board website at: <http://www.arb.ca.gov/research/aaqs/aaqs.htm> (accessed April 2020).

Note: ppm = parts per million.

State

The California Clean Air Act, signed into law in 1988, requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. CARB is responsible for the coordination and administration of both State and federal air pollution control programs within California. In this capacity, CARB conducts research, sets CAAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions

standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions and the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the State. The CAAQS are provided in **Table 2**; it should be noted that the CAAQS are generally more stringent than the NAAQS, reflecting California's diligent efforts toward reducing air pollution and improving air quality.

Regional

In California, jurisdiction over air quality management, enforcement, and planning divided into 35 geographic regions. Within each region, a local air district is responsible for oversight of air quality monitoring, modeling, permitting, and enforcement to ensure that regulatory violations are avoided wherever possible.

The Project site is located within the 6,700-square-mile Basin and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Basin includes the southern two-thirds of Los Angeles County, all of Orange County, and the western urbanized portions of Riverside and San Bernardino Counties.

South Coast Air Quality Management District

SCAQMD shares responsibility with CARB for ensuring that all State and federal AAQS are achieved and maintained over an area of approximately 10,743 square miles. This area includes the South Coast and Salton Sea Air Basins, all of Orange County, and the nondesert portions of Los Angeles, Riverside, and San Bernardino Counties. It does not include the Antelope Valley or the nondesert portion of western San Bernardino County.

SCAQMD is responsible for controlling emissions, primarily from stationary sources. SCAQMD maintains air quality monitoring stations throughout the air basins. SCAQMD, in coordination with the Southern California Association of Governments (SCAG), is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the air basins. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as being in nonattainment of the NAAQS or CAAQS. The term "nonattainment area" is used to refer to an air basin in which one or more AAQS are exceeded. SCAQMD also prepares the SIP for its jurisdiction and promulgates rules and regulations. The SIP includes strategies and tactics to be used to attain the federal ozone standards in the South Coast Air Basin. The SIP elements are taken from the most recent AQMP.

SCAQMD approved a Final 2016 AQMP on March 3, 2017.² The 2016 AQMP includes transportation control measures developed by SCAG from its *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy*, as well as the integrated strategies and measures needed to meet the NAAQS. The 2016 AQMP demonstrates attainment of the 1-hour and 8-hour ozone NAAQS, as well as the latest 24-hour and annual PM_{2.5} standards.

SCAQMD is responsible for limiting the amount of emissions that can be generated throughout the air basins by various stationary, area, and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board that limit the emissions that can be generated by various uses/activities and identifying specific pollution-reduction measures that must be implemented in association with various uses and activities. These rules regulate not only the emissions of the federal and State criteria pollutants, but also toxic air contaminants (TACs) and acutely hazardous materials. The rules are also subject to ongoing refinement by SCAQMD.

Among the SCAQMD rules applicable to the Project are Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings). Rule 403 requires the use of stringent best available control measures (BACMs) to minimize PM₁₀ emissions during grading and construction activities. Rule 1113 limits the VOC content of coatings, with a VOC content limit for flat coatings of 50 grams per liter (g/L).³ Additional details regarding these rules and other potentially applicable rules are presented as follows.

Rule 402 (Nuisance): This rule states that a “person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or to the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.”⁴

Rule 403 (Fugitive Dust). This rule requires fugitive dust sources to implement BACMs for all sources and prohibits all forms of visible particulate matter from crossing any property line. BACMs may include application of water or chemical stabilizers to disturbed soils covering haul vehicles; restricting vehicle speeds on unpaved roads to 15 miles per hour (mph); sweeping loose dirt from paved site-access roadways; cessation of construction activity when winds exceed 25 mph; and establishing a permanent

2 South Coast Air Quality Management District (SCAQMD), “Final 2016 Air Quality Management Plan” (2016), accessed April 2020, <https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15>.

3 SCAQMD, “Rule 1113 Architectural Coating” (amended September 6, 2013), accessed April 2020, <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf>.

4 SCAQMD, “Rule 402—Nuisance,” accessed April 2020, <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf>.

ground cover on finished sites. SCAQMD Rule 403 is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust (see also Rule 1186).

Rule 1113 (Architectural Coatings). This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Rule 1146.2 (Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters). This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NOx emissions from natural-gas-fired water heaters, boilers, and process heaters as defined in this rule.

Rule 1186 (PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations). This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM10 emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

Stationary emissions sources subject to these rules are regulated through SCAQMD's permitting process. Through this permitting process, SCAQMD also monitors the amount of stationary emissions being generated and uses this information in developing AQMPs.

ENVIRONMENTAL SETTING

Regional Air Quality

The USEPA is the federal agency responsible for overseeing the country's air quality and setting the NAAQS for the CAPs. The NAAQS were devised based on extensive modeling and monitoring of air pollution across the country; they are designed to protect public health and prevent the formation of atmospheric ozone. Air quality of a region is considered to be in attainment of the NAAQS if the measured ambient air pollutant levels do not exceed the applicable concentration threshold. **Table 2** presents the federal and State AAQS.

As noted previously, the CARB is the State agency responsible for setting the CAAQS. Air quality of a region is considered to be in attainment of the CAAQS if the measured ambient air pollutant levels for O3, CO, NO2, SO2, PM10, PM2.5, and Pb are not exceeded, and all other standards are not equaled or exceeded at any time in any consecutive 3-year period. The CAAQS are also presented in **Table 2**.

For evaluation purposes, the SCAQMD territory is divided into 38 source receptor areas (SRAs). These SRAs are designated to provide a general representation of the local meteorological, terrain, and air quality conditions within the particular geographical area.

The Project site is within SRA 7, East San Fernando Valley.⁵ The nearest air monitoring station SCAQMD operates is located at 18330 Gault Street.⁶ This station monitors O₃, NO₂, and PM_{2.5}. **Table 3: Air Quality Monitoring Summary** summarizes published monitoring data from 2016 through 2018, the most recent 3-year period available. The data show that during the past few years, the region has exceeded the O₃ and PM_{2.5} standards.

Table 3
Air Quality Monitoring Summary

Air Pollutant	Average Time (Units)	2016	2017	2018
Ozone (O ₃)	State Max 1 hour (ppm)	0.122	0.140	0.120
	Days > CAAQS threshold (0.09 ppm)	9	26	14
	National Max 8 hour (ppm)	0.098	0.114	0.101
	Days > NAAQS threshold (0.075 ppm)	23	64	49
	State Max 8 hour (ppm)	0.099	0.115	0.101
	Days > CAAQS threshold (0.07 ppm)	23	67	50
Carbon monoxide (CO)		—	—	—
Nitrogen dioxide (NO ₂)	National Max 1 hour (ppm)	0.056	0.063	0.057
	Days > NAAQS threshold (0.100 ppm)	0	0	0
	State Max 1 hour (ppm)	0.055	0.062	0.057
	Days > CAAQS threshold (0.18 ppm)	0	0	0
Respirable particulate matter (PM ₁₀)		—	—	—
Fine particulate matter (PM _{2.5})	National Max (µg/m ³)	30.0	35.2	38.9
	National Annual Average (µg/m ³)	9.1	9.7	—
	Days > NAAQS threshold (35 µg/m ³)	0	0	1
	State Max (µg/m ³)	41.5	61.3	63.7
	State Annual Average (µg/m ³)	16.9	16.8	15.8

Source: CARB, iADAM: Air Quality Data Statistics.

Note: (—) = Data not available.

- 5 SCAQMD, *General Forecast Areas and Air Monitoring Areas*, map, accessed April 2020, <http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf>.
- 6 South Coast Air Quality Management District, *Site Survey Report for Reseda*, AQS ID 060371201, accessed April 2020, <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-monitoring-network-plan/aaqmpn-reseda.pdf?sfvrsn=16>.

The USEPA and the CARB designate air basins where AAQS are exceeded as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered “unclassified.” Federal nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

The current attainment designations for the Basin are shown in **Table 4: South Coast Air Basin Attainment Status**. The Basin is currently designated as being in nonattainment at the federal level for O₃ and PM_{2.5}; and at the State level for O₃, PM₁₀, and PM_{2.5}.

Table 4
South Coast Air Basin Attainment Status

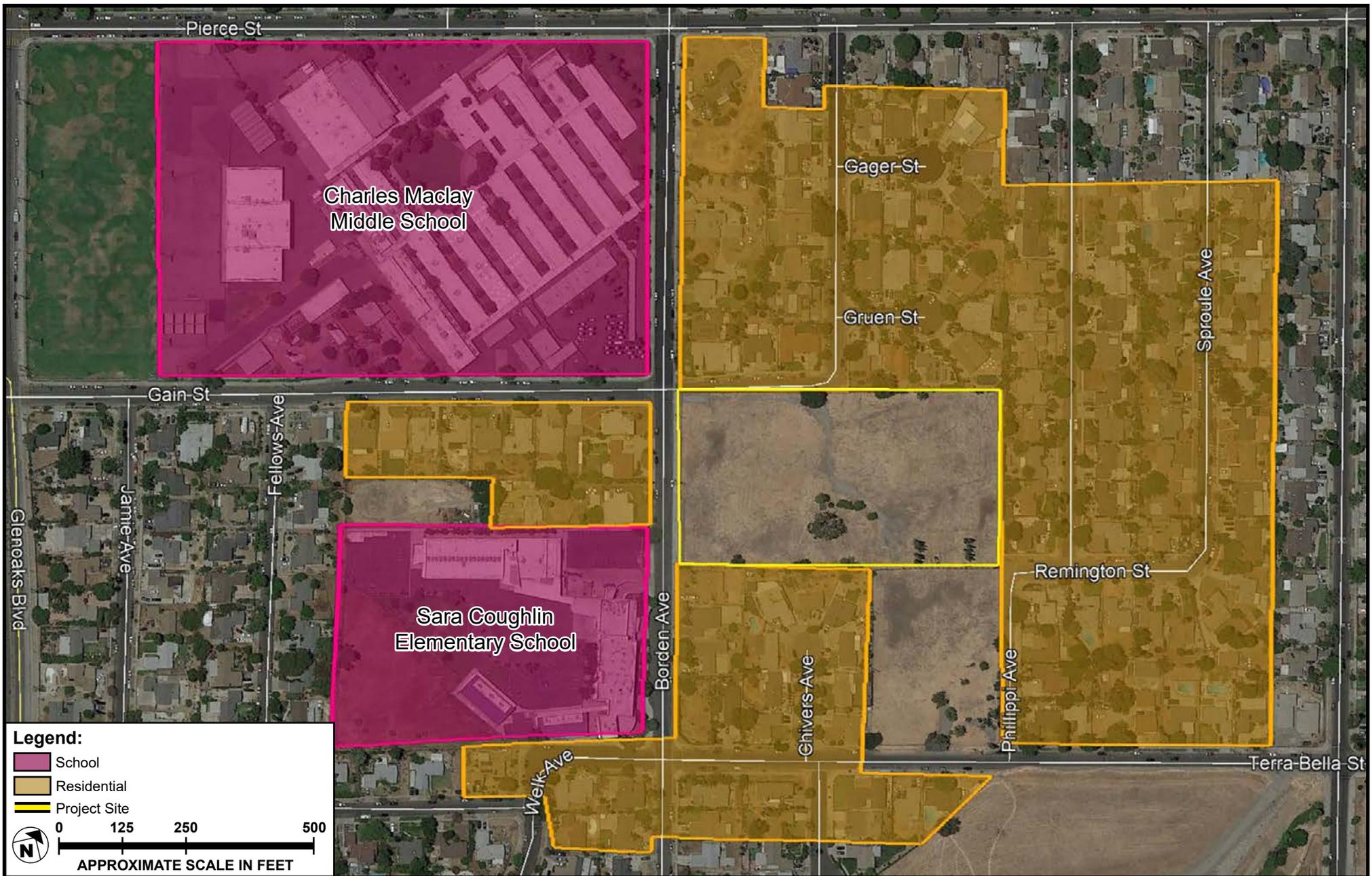
Pollutant	State Status	National Status
Ozone (O ₃)	Nonattainment	Nonattainment
Carbon monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen dioxide (NO ₂)	Attainment	Unclassified/Attainment
Sulfur dioxide (SO ₂)	Attainment	Unclassified/Attainment
Respirable particulate matter (PM ₁₀)	Nonattainment	Attainment
Fine particulate matter (PM _{2.5})	Nonattainment	Nonattainment

Source: California Air Resources Board (CARB) Area Designation Maps / State and National, accessed April 2020, <http://www.arb.ca.gov/desig/adm/adm.htm>, last reviewed October 24, 2019.

Sensitive Receptors

The SCAQMD considers a sensitive receptor to be a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant. Sensitive receptors are identified near sources of air pollution to determine the potential for health hazards. Locations evaluated for exposure to air pollution include but are not limited to residences, schools, hospitals, and convalescent facilities.

Residential neighborhoods lie to the north along Gain Street, adjacent to the south along Borden Avenue and Chivers Avenue and adjacent to the east along Phillippi Avenue. Additionally, the Charles Maclay Middle School is located to the northwest along Pierce Street and the Sarah Coughlin Elementary School to the southwest along Borden Avenue. **Figure 2: Sensitive Receptor Map** provides a detailed image of the proximal land uses and identifies the sensitive receptors closest to the Project site. These uses represent the nearest sensitive receptors who may be impacted by emissions of air pollutants from Project implementation.



SOURCE: Google Earth - 2020; Meridian Consultants - 2020

FIGURE 2

METHODOLOGY

Construction

Construction of the Project has the potential to generate temporary criteria pollutant emissions through the use of heavy-duty construction equipment and through vehicle trips generated from workers and haul trucks traveling to and from the Project site. In addition, fugitive dust emissions would result from various soil-handling activities. Mobile-source emissions, primarily NO_x, would result from the use of construction equipment, such as dozers and loaders. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. The Project would be required comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located with the SCAB. Therefore, the following condition, which would be required to reduce fugitive dust in compliance with SCAQMD Rule 403, were included in CalEEMod as a regulatory compliance measure:

- **Control Efficiency of PM₁₀.** During construction, methods and techniques should be applied to various operations or equipment when appropriate to reduce estimated emissions related to particulate matter. This includes replacing ground cover in disturbed areas as quick as possible, yielding to emission reduction efficiency of 15 – 49 percent.⁷

In addition, SCAQMD Staff recommends that the Lead Agency require the use of Tier 4 construction equipment of 50 horsepower or greater during construction. Alternative, applicable strategies. Such equipment should be outfitted with Best Available Control Technology (BACT) devices, but not limited to, a CARB certified Level 3 Diesel Particulate Filters (DPF). Level 3 DPFs are capable of achieving at least an 85 percent reduction in particulate matter emissions.⁸ Therefore, the following condition were included in CalEEMod as a regulatory compliance measure:

7 SCAQMD, CEQA Handbook, Tables 11-4, p. 11-15 and A11-9-A, page A11-77, accessed June 2019, <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-sample-construction-scenario-report.pdf>.

8 California Air Resources Board. *Diesel Off-Road Equipment Measure – Workshop*. Page 17, November 16 – 17, 2004, accessed October 2019, https://ww3.arb.ca.gov/msprog/ordiesel/presentations/nov16-04_workshop.pdf.

- **Construction Equipment Controls.** During construction, all off-road construction equipment greater than 50 horsepower shall meet U.S. EPA Tier 3 emission standards with Level 3 DPF to minimize emissions of NO_x associated with diesel construction equipment.

The emissions are estimated using the CalEEMod (Version 2016.3.2) software, an emissions inventory software program recommended by the SCAQMD. The emissions are estimated using the SCAQMD-recommended CalEEMod software. CalEEMod is based on outputs from the CARB off-road emissions model (OFFROAD) and the CARB on-road vehicle emissions model (EMFAC), which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including on- and off-road vehicles. The input values used in this analysis are based on conservative assumptions in CalEEMod, with appropriate, Project-specific adjustments based on equipment types and expected construction activities. 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 **Attachment A**.

Operation

Operation of the Project has the potential to generate criteria pollutant emissions through vehicle trips traveling to and from the Project site. In addition, emissions would result from area sources on site, such as natural gas combustion, landscaping equipment, and use of consumer products.

Operational emissions were estimated using the CalEEMod software, which was used to forecast the daily regional emissions from area sources that would occur during long-term Project operations. In calculating mobile-source emissions, trip-length values were based on the distances provided in CalEEMod.

Area-source emissions are based on natural gas (building heating and water heaters), landscaping equipment, and consumer product (including paint) usage rates provided in CalEEMod. Natural gas usage factors in CalEEMod are based on the California Energy Commission's California Commercial End Use Survey data set, which provides energy demand by building type and climate zone.

SCAQMD AIR QUALITY SIGNIFICANCE THRESHOLDS

Significance Criteria

The *L.A. CEQA Thresholds Guide* states that the determination of a project's significance on air quality shall be made considering the factors provided in the *SCAQMD CEQA Air Quality Handbook* (Handbook). The City has not adopted specific Citywide significance thresholds for air quality impacts; rather, the *L.A. CEQA*

Thresholds Guide references the thresholds and methodologies contained in the SCAQMD Handbook evaluating projects in the City.⁹

The thresholds for determining the significance of impacts are set forth by the SCAQMD for both construction and operational emissions. These thresholds are described below.

Construction Emission Thresholds

The Project will have a significant impact if it exceeds the construction thresholds listed in **Table 5: Construction Thresholds**.

**Table 5
Construction Thresholds**

Pollutant	Construction Emissions (pounds/day)
Volatile organic compounds (VOCs)	75
Nitrogen dioxide (NO ₂)	100
Carbon monoxide (CO)	550
Sulfur dioxide (SO ₂)	150
Respirable particulate matter (PM ₁₀)	150
Fine particulate matter (PM _{2.5})	55

Construction and Operational Localized Significance Thresholds

The local significance thresholds are based on the SCAQMD's Final *Localized Significance Threshold (LST) Methodology* (LST Methodology)¹⁰ guidance document for short-duration construction activities. The SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Project site because of construction activities. The SCAQMD provides voluntary guidance on the evaluation of localized air quality impacts to public agencies conducting environmental review of projects located within its jurisdiction. Localized air quality impacts are evaluated by examining the on-site generation of pollutants and their resulting downwind concentrations. For construction, pollutant concentrations are compared to significance thresholds for particulates (PM₁₀ and PM_{2.5}), CO, and NO₂. The significance threshold for PM₁₀ represents compliance with SCAQMD Rule 403 (Fugitive Dust). The threshold for PM_{2.5} is designed to limit emissions and to allow progress toward attainment of

⁹ City of Los Angeles, *L.A. CEQA Thresholds Guide* (2006), p. B-1.

¹⁰ South Coast Air Quality Management District, *Final Localized Significance Threshold (LST) Methodology*, (June 2003, rev. July 2008).

the AAQS. Thresholds for CO and NO₂ represent the allowable increase in concentrations above background levels that would not cause or contribute to an exceedance of their respective AAQS.

The LST Methodology provides lookup tables of emissions that are based on construction projects of up to 5 acres in size. These LST lookup tables were developed to assist lead agencies with a simple tool for evaluating the impacts from small typical projects. Ambient conditions for East San Fernando Valley, as recorded in SRA 7 by the SCAQMD, were used for ambient conditions in determining appropriate threshold levels. Thresholds for each criteria pollutant for construction activity and Project operation of the 4.5-acre Project site are listed in **Table 6: Localized Significance Thresholds**.

Table 6
Localized Significance Thresholds

Pollutant	Construction	Operational
	pounds/day	
Nitrogen dioxide (NO ₂)	168	168
Carbon monoxide (CO)	1,326	1,326
Respirable particulate matter (PM ₁₀)	13	4
Fine particulate matter (PM _{2.5})	7	2

Notes:

Based on a distance to sensitive receptors of 25 meters (82 feet). SCAQMD's Localized Significance Threshold (LST) Methodology for CEQA Evaluations guidance document provides that projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. LST values for 4.5-acre site.

Operational Thresholds

Based on the SCAQMD Handbook, thresholds for each criteria pollutant for the operations of the Project are provided in **Table 7: Operational Thresholds**.

Table 7
Operational Thresholds

Pollutant	Operational Emissions (pounds/day)
Volatile organic compounds (VOCs)	55
Nitrogen dioxide (NO ₂)	55
Carbon monoxide (CO)	550
Sulfur dioxide (SO ₂)	150
Respirable particulate matter (PM ₁₀)	150
Fine particulate matter (PM _{2.5})	55

Toxic Air Contaminants

As set forth in the *L.A. CEQA Thresholds Guide*, the determination of significance of a project with respect to TACs shall be made on a case-by-case basis, considering the following factors:

- Regulatory framework for toxic materials and process involved;
- Proximity of TACs to sensitive receptors;
- Quantity, volume, and toxicity of the contaminants expected to be emitted;
- Likelihood and potential level of exposure; and
- Degree to which project design will reduce risk of exposure.

Consistency with Applicable Air Quality Plans

Section 15125 of the State CEQA Guidelines requires an analysis of project consistency with applicable governmental plans and policies. In accordance with the SCAQMD Handbook, the following criteria were used to evaluate the Project's consistency with SCAQMD and SCAG regional plans and policies, including the AQMP:

- Will the Project result in any of the following:
 - Increase the frequency or severity of existing air quality violations?
 - Cause or contribute to new air quality violations?
 - Delay the timely attainment of the air quality standards or the interim emission reductions specified in the AQMP?
- Will the Project exceed the assumptions utilized in preparing the AQMP?
 - Is the Project consistent with the population and employment growth projections upon which AQMP forecasted emission levels are based?
 - Does the Project include air quality mitigation measures?
 - To what extent is Project development consistent with the AQMP land use policies?

Cumulative Threshold

SCAQMD recommends that a project be considered to result in a cumulatively considerable impact to air quality if any construction-related emissions and operational emissions from individual development projects exceed the mass daily emissions thresholds for individual projects.¹¹

¹¹ SCAQMD, *White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions*, board meeting, Agenda No. 29 (September 5, 2003), Appendix D, p. D-3.

The SCAQMD neither recommends quantified analyses of the emissions generated by a set of cumulative development projects nor provides thresholds of significance to be used to assess the impacts associated with these emissions.

A project is also considered to result in a cumulatively considerable contribution to significant impacts if the population and employment projections for the project exceed the rate of growth defined in SCAQMD's AQMP.

IMPACT ANALYSIS

Emissions of air pollutants were estimated for construction and operation of the Project. In California, the California Air Pollution Control Officer's Association recommends the use CalEEMod to calculate and organize emissions data for new development projects. CalEEMod is a program that relies on project-specific information pertaining to geographic setting, utility service provision, construction scheduling and equipment inventory, and operational design features to generate estimates of air pollutant and GHG emissions. Information needed to parameterize the Project in CalEEMod was obtained from the construction engineer and the Project architect.

Table 8: Project Construction Schedule provides the dates and durations of each of the activities will take place during construction, as well as a brief description of the scope of work. Future dates represent approximations based on the general Project timeline and are subject to change pending unpredictable circumstances that may arise.

Table 8
Project Construction Schedule

Construction Activity	Start Date	End Date	Duration (Days)	Description
Building Construction	4/1/2021	2/16/2022	230	Development of nine lots for single-family homes and one lot for church uses.
Architectural Coating ^a	1/20/2022	2/16/2022	20	Application of architectural coatings to building materials
Paving	1/20/2022	2/16/2022	20	Paving of asphalt surfaces

Note: Refer to **Attachment A.1 (Proposed Summer)** and **Attachment A.2 (Proposed Winter)**, Section 3.0: Construction Detail.

^a Architectural coating will be taking place intermittently throughout building construction.

Construction

An assessment of air pollutant emissions was prepared utilizing the construction schedule in **Table 9**. It was assumed that all heavy-duty diesel equipment engines would meet minimum Tier 3 standards in accordance with CARB fleet requirements. **Table 9: Project Construction Diesel Equipment Inventory** displays the construction equipment required for each activity described in **Table 8**. It was assumed that all construction activities have adhered or would adhere to SCAQMD Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings).

Table 9
Project Construction Diesel Equipment Inventory

Phase	Off-Road Equipment Type	Amount	Daily Hours	Horsepower [HP] (Load Factor)
Building Construction	Cranes	1	7	231 (0.29)
	Forklifts	3	8	89 (0.20)
	Generator	1	8	84 (0.74)
	Tractors/Loaders/Backhoes	3	7	97 (0.37)
Architectural Coating	Air compressors	1	6	78 (0.48)
Paving	Pavers	2	8	130 (0.42)
	Rollers	2	8	80 (0.38)
	Paving Equipment	2	8	132 (0.36)

Refer to **Attachment A.1 (Proposed Summer)** and **Attachment A.2 (Proposed Winter)**, Section 3.0: Construction Detail, for equipment inventory information.

Maximum daily emissions of air pollutants during construction of the Project were calculated using CalEEMod. **Table 10: Unmitigated Maximum Construction Emissions** identifies daily emissions that are estimated for peak construction days for each construction year. It is important to note, baseline emissions presented in **Table 10** do not include regulatory compliance measures such as construction equipment controls (Tier 3 emissions standards with Level 3 DPF) or control efficiency of PM10 (dust control measures). Based on the modeling, construction of the Project would not exceed regional VOC, NO_x, CO, SO_x, PM10, and PM2.5 concentration thresholds. All criteria air pollutants would be below SCAQMD construction thresholds. Construction of the Project would not generate any significant environmental impacts associated with air quality compliance.

Table 10
Unmitigated Maximum Construction Emissions

Source	VOC	NOx	CO	SOx	PM10	PM2.5
	pounds/day					
Unmitigated Year 2021	2	18	17	<1	1	1
Unmitigated Year 2022	17	29	34	<1	2	1
Unmitigated Maximum	17	29	34	<1	2	1
SCAQMD Mass Daily Threshold	75	100	550	150	150	55
Threshold exceeded?	No	No	No	No	No	No

Source: CalEEMod.

Notes:

CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; SOx = sulfur oxides; VOC = volatile organic compounds.

Refer to **Attachment A.1 (Proposed Summer)** and **Attachment A.2 (Proposed Winter)**, Sections 3.2 through 3.7, for maximum on-site plus off-site emissions during both the summer and winter seasons.

Operation

The results presented in **Table 11: Unmitigated Maximum Operational Emissions** are compared to the SCAQMD-established operational significance thresholds. It is important to note, baseline emissions presented in **Table 11** do not include regulatory compliance measures such as compliance with green building standards. Operational emissions will result primarily from passenger vehicles traveling to and from the Project site. As shown in **Table 11**, the operational emissions would not exceed the regional VOC, NOx, CO, SOx, PM10, and PM2.5 concentration thresholds.

Table 11
Unmitigated Maximum Operational Emissions

Source	VOC	NOx	CO	SOx	PM10	PM 2.5
	pounds/day					
Area	1	<1	1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	1	5	13	<1	4	1
Total	2	5	14	<1	4	1
SCAQMD Mass Daily Threshold	55	55	550	150	150	55
Threshold exceeded?	No	No	No	No	No	No

Source: CalEEMod.

Notes: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; SOx = sulfur oxides; VOC = volatile organic compounds.

Refer to **Attachment A.1 (Proposed Summer)** and **Attachment A.2 (Proposed Winter)**, Section 2.2, for maximum operational emissions during both the summer and winter seasons.

Localized Significance Thresholds

The result of the LST analysis are provided in **Table 12: Localized Construction and Operational Emissions**. These estimates assume the maximum area that would be disturbed during construction on any given day during Project buildout. Construction would comply with the SCAQMD's Rule 403 (Fugitive Dust), which requires watering of the site during dust-generating construction activities, stabilizing disturbed areas with water or chemical stabilizers, and preventing track-out dust from construction vehicles. As shown in **Table 12**, emissions would not exceed the localized significance construction and operational thresholds.

Table 12
Localized Construction and Operational Emissions

Source	NOx	CO	PM10	PM2.5
	On-Site Emissions (pounds/day)			
Construction				
Total maximum emissions	17	17	1	1
LST threshold	168	1,326	13	7
Threshold Exceeded?	No	No	No	No
Operational				
Project area/energy emissions	<1	1	<1	<1
LST threshold	168	1,326	4	2
Threshold Exceeded?	No	No	No	No

Notes:

Totals in table may not appear to add exactly due to rounding in the computer model calculations.

CO = carbon monoxide; NOx = nitrogen oxide; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns.

* = 0.1 lb/day.

Refer to **Attachment A.1 (Proposed Summer)** and **Attachment A.2 (Proposed Winter)**, Sections 3.2 through 3.7, for maximum on-site emissions during both the summer and winter seasons.

Toxic Air Contaminants

Project construction would result in short-term emissions of diesel particulate matter, which is a TAC. Off-road heavy-duty diesel equipment would emit diesel particulate matter over the course of the construction period. Sensitive receptors are located within 25 meters of the Project, as shown in **Figure 2**. Localized diesel particulate emissions (strongly correlated with PM2.5 emissions) would be minimal and would be substantially below localized thresholds, as shown in **Table 12**. Project compliance with the CARB anti-idling measure, which limits idling to no more than 5 minutes at any location for diesel-fueled commercial vehicles, would further minimize diesel particulate matter emissions in the Project area.

Project operations would generate only minor amounts of diesel emissions from residential delivery trucks and incidental maintenance activities. Trucks would comply with the applicable provisions of the CARB Truck and Bus regulation to minimize and reduce emission from existing diesel trucks. In addition, Project operations would only result in minimal emissions of air toxics from maintenance or other ongoing activities, such as from the use of architectural coatings or household cleaning products. As a result, toxic or carcinogenic air pollutants are not expected to occur in any meaningful amounts in conjunction with operation of the proposed residential and church uses within the Project site. Based on the uses expected on the Project site, potential long-term operational impacts associated with the release of TACs would be minimal and would not be expected to exceed the SCAQMD thresholds of significance.

Odors

As shown in **Table 12**, the construction of the Project would result in emissions below the localized significance thresholds. Mandatory compliance with SCAQMD Rule 1113 would limit the amount of VOCs in architectural coatings and solvents. According to the SCAQMD, while almost any source may emit objectionable odors, some land uses are more likely to produce odors because of their operation. Land uses more likely to produce odors include agriculture, chemical plants, composting operations, dairies, fiberglass molding manufacturing, landfills, refineries, rendering plants, rail yards, and wastewater treatment plants. The Project does not contain any active manufacturing activities and would not convert current agricultural land to residential land uses. Therefore, objectionable odors would not be emitted by the residential uses.

Any unforeseen odors generated by the Project will be controlled in accordance with SCAQMD Rule 402. As previously noted, Rule 402 prohibits the discharge of air contaminants that harm, endanger, or annoy individuals or the public; endanger the comfort, health or safety of individuals or the public; or cause injury or damage to business or property. Failure to comply with Rule 402 could subject the offending facility to possible fines and/or operational limitations in an approved odor control or odor abatement plan.

Consistency with AQMP

The Basin is designated nonattainment at the federal and State level for ozone and PM_{2.5}. SCAQMD developed regional emissions thresholds, as shown in **Table 5** and **Table 7**, to determine whether a project would contribute to air pollutant violations. If a project exceeds the regional air pollutant thresholds, then it would significantly contribute to air quality violations in the Basin.

As shown in **Table 10**, temporary emissions associated with construction of the Project would fall below SCAQMD thresholds for VOCs, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}.

As shown in **Table 11**, long-term emissions associated with operation of the Project would not exceed SCAQMD thresholds for VOCs, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}.

The Project's maximum potential NO_x, CO, PM₁₀, and PM_{2.5} daily emissions during construction and operation were analyzed to determine potential effects on localized concentrations and to determine if the potential exists for such emissions to cause or affect a violation of an applicable AAQS. As shown in **Table 12**, NO_x, CO, PM₁₀, and PM_{2.5} emissions would not exceed the SCAQMD localized significance thresholds.

The Project is also located in an urban area, which would reduce vehicle trips and vehicle miles traveled due to the Project's urban infill characteristic and proximity to public transit stops. These measures and features are consistent with existing recommendations to reduce air emissions.

Cumulative

Development of the Project in conjunction with the related projects near the Project would result in an increase in construction and operational emissions in an already urbanized area of the City. However, cumulative air quality impacts from construction, based on SCAQMD guidelines, are not analyzed in a manner similar to project-specific air quality impacts. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project-specific impacts. According to the SCAQMD, individual development projects that generate construction or operational emissions that exceed the SCAQMD recommended daily regional or localized thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

With the implementation of regulatory compliance measures such as Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coating), the Project's construction and operational emissions are not expected to significantly contribute to cumulative emissions for CO, NO_x, PM₁₀, and PM_{2.5}. As such, the Project's contribution to cumulative air quality emissions in combination with the related projects would not be cumulatively considerable.

As discussed previously, the Project would not jeopardize the attainment of air quality standards in the 2016 AQMP for the South Coast Air Basin and the Los Angeles County portion of the South Coast Air Basin. As such, the Project would not have a cumulatively considerable contribution to a potential conflict with or obstruction of the implementation of the AQMP regional reduction plans.

Attachment A

CalEEMod Air Quality Emission Output Files

TTM 74450 Development - Los Angeles-South Coast County, Summer

TTM 74450 Development
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Place of Worship	19.68	1000sqft	0.00	19,677.00	0
Single Family Housing	9.00	Dwelling Unit	5.29	16,200.00	26

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2023
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MW hr)	1227.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project site is 5.29 acres.

Construction Phase - Estimated construction schedule.

Woodstoves - No woodstoves.

Construction Off-road Equipment Mitigation - As recommended by SCAQMD, alternative applicable strategies include construction equipment with Tier 3 emissions standards.

Area Mitigation - Compliant with SCAQMD Rule 1113 - Architectural Coating (<50gms/liter).

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	0.45	0.00
tblLandUse	LandUseSquareFeet	19,680.00	19,677.00
tblLandUse	LotAcreage	0.45	0.00
tblLandUse	LotAcreage	2.92	5.29

tblWoodstoves	NumberCatalytic	0.45	0.00
tblWoodstoves	NumberNoncatalytic	0.45	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	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	1.9645	17.8558	17.1601	0.0293	0.1597	0.9605	1.1202	0.0429	0.9030	0.9460	0.0000	2,799.9685	2,799.9685	0.6265	0.0000	2,815.6315
2022	17.3303	28.5955	33.9312	0.0569	0.3498	1.4619	1.8116	0.0933	1.3683	1.4617	0.0000	5,471.0629	5,471.0629	1.3593	0.0000	5,505.0459
Maximum	17.3303	28.5955	33.9312	0.0569	0.3498	1.4619	1.8116	0.0933	1.3683	1.4617	0.0000	5,471.0629	5,471.0629	1.3593	0.0000	5,505.0459

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	0.7375	14.6498	18.4586	0.0293	0.1597	0.9054	1.0652	0.0429	0.9053	0.9483	0.0000	2,799.9685	2,799.9685	0.6265	0.0000	2,815.6315
2022	15.6110	27.3248	38.1756	0.0569	0.3498	1.6112	1.9610	0.0933	1.6110	1.7043	0.0000	5,471.0629	5,471.0629	1.3593	0.0000	5,505.0459
Maximum	15.6110	27.3248	38.1756	0.0569	0.3498	1.6112	1.9610	0.0933	1.6110	1.7043	0.0000	5,471.0629	5,471.0629	1.3593	0.0000	5,505.0459

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	15.27	9.64	-10.85	0.00	0.00	-3.89	-3.22	0.00	-10.78	-10.17	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	0.8255	0.1355	0.7987	8.5000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	163.3413	163.3413	4.4000e-003	2.9700e-003	164.3364
Energy	0.0185	0.1634	0.1092	1.0100e-003		0.0128	0.0128		0.0128	0.0128		201.3215	201.3215	3.8600e-003	3.6900e-003	202.5179
Mobile	1.1345	4.5390	13.1274	0.0478	3.9174	0.0355	3.9529	1.0483	0.0330	1.0813		4,871.2518	4,871.2518	0.2401		4,877.2547
Total	1.9785	4.8380	14.0353	0.0497	3.9174	0.0626	3.9800	1.0483	0.0601	1.1084	0.0000	5,235.9146	5,235.9146	0.2484	6.6600e-003	5,244.1090

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	0.8005	0.1355	0.7987	8.5000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	163.3413	163.3413	4.4000e-003	2.9700e-003	164.3364
Energy	0.0185	0.1634	0.1092	1.0100e-003		0.0128	0.0128		0.0128	0.0128		201.3215	201.3215	3.8600e-003	3.6900e-003	202.5179
Mobile	1.1345	4.5390	13.1274	0.0478	3.9174	0.0355	3.9529	1.0483	0.0330	1.0813		4,871.2518	4,871.2518	0.2401		4,877.2547
Total	1.9535	4.8380	14.0353	0.0497	3.9174	0.0626	3.9800	1.0483	0.0601	1.1084	0.0000	5,235.9146	5,235.9146	0.2484	6.6600e-003	5,244.1090

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	1.26	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	Building Construction	Building Construction	4/1/2021	2/16/2022	5	230	
2	Paving	Paving	1/20/2022	2/16/2022	5	20	
3	Architectural Coating	Architectural Coating	1/20/2022	2/16/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 32,805; Residential Outdoor: 10,935; Non-Residential Indoor: 29,516; Non-Residential Outdoor: 9,839; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	12.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0122	0.3884	0.1015	1.0300e-003	0.0256	7.9000e-004	0.0264	7.3700e-003	7.6000e-004	8.1300e-003		109.9523	109.9523	6.4800e-003	110.1142	
Worker	0.0514	0.0354	0.4833	1.3700e-003	0.1341	1.0800e-003	0.1352	0.0356	1.0000e-003	0.0366		136.6524	136.6524	4.0300e-003	136.7530	
Total	0.0636	0.4237	0.5849	2.4000e-003	0.1597	1.8700e-003	0.1616	0.0429	1.7600e-003	0.0447		246.6046	246.6046	0.0105	246.8672	

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	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

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	0.0122	0.3884	0.1015	1.0300e-003	0.0256	7.9000e-004	0.0264	7.3700e-003	7.6000e-004	8.1300e-003		109.9523	109.9523	6.4800e-003		110.1142

Worker	0.0514	0.0354	0.4833	1.3700e-003	0.1341	1.0800e-003	0.1352	0.0356	1.0000e-003	0.0366		136.6524	136.6524	4.0300e-003		136.7530
Total	0.0636	0.4237	0.5849	2.4000e-003	0.1597	1.8700e-003	0.1616	0.0429	1.7600e-003	0.0447		246.6046	246.6046	0.0105		246.8672

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0114	0.3693	0.0961	1.0200e-003	0.0256	6.9000e-004	0.0263	7.3700e-003	6.6000e-004	8.0400e-003		108.9944	108.9944	6.2500e-003		109.1507
Worker	0.0482	0.0319	0.4459	1.3200e-003	0.1341	1.0500e-003	0.1352	0.0356	9.7000e-004	0.0365		131.8455	131.8455	3.6400e-003		131.9365
Total	0.0596	0.4013	0.5420	2.3400e-003	0.1597	1.7400e-003	0.1615	0.0429	1.6300e-003	0.0446		240.8398	240.8398	9.8900e-003		241.0872

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	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0114	0.3693	0.0961	1.0200e-003	0.0256	6.9000e-004	0.0263	7.3700e-003	6.6000e-004	8.0400e-003		108.9944	108.9944	6.2500e-003		109.1507
Worker	0.0482	0.0319	0.4459	1.3200e-003	0.1341	1.0500e-003	0.1352	0.0356	9.7000e-004	0.0365		131.8455	131.8455	3.6400e-003		131.9365
Total	0.0596	0.4013	0.5420	2.3400e-003	0.1597	1.7400e-003	0.1615	0.0429	1.6300e-003	0.0446		240.8398	240.8398	9.8900e-003		241.0872

3.3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104

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	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206

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	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206

3.4 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.1889					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	14.3934	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

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	8.0300e-003	5.3200e-003	0.0743	2.2000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003		21.9743	21.9743	6.1000e-004		21.9894
Total	8.0300e-003	5.3200e-003	0.0743	2.2000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003		21.9743	21.9743	6.1000e-004		21.9894

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	14.1889					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	14.2483	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0300e-003	5.3200e-003	0.0743	2.2000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003		21.9743	21.9743	6.1000e-004		21.9894
Total	8.0300e-003	5.3200e-003	0.0743	2.2000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003		21.9743	21.9743	6.1000e-004		21.9894

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	1.1345	4.5390	13.1274	0.0478	3.9174	0.0355	3.9529	1.0483	0.0330	1.0813		4,871.2518	4,871.2518	0.2401		4,877.2547
Unmitigated	1.1345	4.5390	13.1274	0.0478	3.9174	0.0355	3.9529	1.0483	0.0330	1.0813		4,871.2518	4,871.2518	0.2401		4,877.2547

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Place of Worship	179.28	204.08	720.88	554,947	554,947
Single Family Housing	85.68	89.19	77.58	290,541	290,541
Total	264.96	293.27	798.46	845,488	845,488

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %
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Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Place of Worship	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Single Family Housing	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0185	0.1634	0.1092	1.0100e-003		0.0128	0.0128		0.0128	0.0128		201.3215	201.3215	3.8600e-003	3.6900e-003	202.5179
NaturalGas Unmitigated	0.0185	0.1634	0.1092	1.0100e-003		0.0128	0.0128		0.0128	0.0128		201.3215	201.3215	3.8600e-003	3.6900e-003	202.5179

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas 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					
Place of Worship	975.764	0.0105	0.0957	0.0804	5.7000e-004		7.2700e-003	7.2700e-003		7.2700e-003	7.2700e-003		114.7957	114.7957	2.2000e-003	2.1000e-003	115.4779
Single Family Housing	735.469	7.9300e-003	0.0678	0.0288	4.3000e-004		5.4800e-003	5.4800e-003		5.4800e-003	5.4800e-003		86.5258	86.5258	1.6600e-003	1.5900e-003	87.0400
Total		0.0185	0.1634	0.1092	1.0000e-003		0.0128	0.0128		0.0128	0.0128		201.3215	201.3215	3.8600e-003	3.6900e-003	202.5179

Mitigated

	Natural Gas 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					
Place of Worship	0.975764	0.0105	0.0957	0.0804	5.7000e-004		7.2700e-003	7.2700e-003		7.2700e-003	7.2700e-003		114.7957	114.7957	2.2000e-003	2.1000e-003	115.4779
Single Family Housing	0.735469	7.9300e-003	0.0678	0.0288	4.3000e-004		5.4800e-003	5.4800e-003		5.4800e-003	5.4800e-003		86.5258	86.5258	1.6600e-003	1.5900e-003	87.0400
Total		0.0185	0.1634	0.1092	1.0000e-003		0.0128	0.0128		0.0128	0.0128		201.3215	201.3215	3.8600e-003	3.6900e-003	202.5179

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8005	0.1355	0.7987	8.5000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	163.3413	163.3413	4.4000e-003	2.9700e-003	164.3364
Unmitigated	0.8255	0.1355	0.7987	8.5000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	163.3413	163.3413	4.4000e-003	2.9700e-003	164.3364

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	0.0778					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7104					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0149	0.1269	0.0540	8.1000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	162.0000	162.0000	3.1000e-003	2.9700e-003	162.9627
Landscaping	0.0226	8.5800e-003	0.7447	4.0000e-005		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003		1.3413	1.3413	1.3000e-003		1.3737
Total	0.8255	0.1355	0.7987	8.5000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	163.3413	163.3413	4.4000e-003	2.9700e-003	164.3364

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	0.0528					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7104					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0149	0.1269	0.0540	8.1000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	162.0000	162.0000	3.1000e-003	2.9700e-003	162.9627
Landscaping	0.0226	8.5800e-003	0.7447	4.0000e-005		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003		1.3413	1.3413	1.3000e-003		1.3737
Total	0.8005	0.1355	0.7987	8.5000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	163.3413	163.3413	4.4000e-003	2.9700e-003	164.3364

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

TTM 74450 Development - Los Angeles-South Coast County, Winter

TTM 74450 Development
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Place of Worship	19.68	1000sqft	0.00	19,677.00	0
Single Family Housing	9.00	Dwelling Unit	5.29	16,200.00	26

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	12			Operational Year	2023
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MW hr)	1227.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project site is 5.29 acres.

Construction Phase - Estimated construction schedule.

Woodstoves - No woodstoves.

Construction Off-road Equipment Mitigation - As recommended by SCAQMD, alternative applicable strategies include construction equipment with Tier 3 emissions standards.

Area Mitigation - Compliant with SCAQMD Rule 1113 - Architectural Coating (<50gms/liter).

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	0.45	0.00
tblLandUse	LandUseSquareFeet	19,680.00	19,677.00
tblLandUse	LotAcreage	0.45	0.00
tblLandUse	LotAcreage	2.92	5.29

tblWoodstoves	NumberCatalytic	0.45	0.00
tblWoodstoves	NumberNoncatalytic	0.45	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	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	1.9709	17.8588	17.1294	0.0292	0.1597	0.9605	1.1203	0.0429	0.9031	0.9460	0.0000	2,788.9722	2,788.9722	0.6267	0.0000	2,804.6399
2022	17.3444	28.6027	33.8474	0.0567	0.3498	1.4619	1.8117	0.0933	1.3684	1.4617	0.0000	5,449.4552	5,449.4552	1.3592	0.0000	5,483.4350
Maximum	17.3444	28.6027	33.8474	0.0567	0.3498	1.4619	1.8117	0.0933	1.3684	1.4617	0.0000	5,449.4552	5,449.4552	1.3592	0.0000	5,483.4350

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	0.7439	14.6528	18.4280	0.0292	0.1597	0.9055	1.0652	0.0429	0.9053	0.9483	0.0000	2,788.9722	2,788.9722	0.6267	0.0000	2,804.6399
2022	15.6250	27.3320	38.0918	0.0567	0.3498	1.6112	1.9610	0.0933	1.6110	1.7043	0.0000	5,449.4552	5,449.4552	1.3592	0.0000	5,483.4350
Maximum	15.6250	27.3320	38.0918	0.0567	0.3498	1.6112	1.9610	0.0933	1.6110	1.7043	0.0000	5,449.4552	5,449.4552	1.3592	0.0000	5,483.4350

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	15.25	9.64	-10.87	0.00	0.00	-3.89	-3.22	0.00	-10.78	-10.17	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	0.8255	0.1355	0.7987	8.5000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	163.3413	163.3413	4.4000e-003	2.9700e-003	164.3364
Energy	0.0185	0.1634	0.1092	1.0100e-003		0.0128	0.0128		0.0128	0.0128		201.3215	201.3215	3.8600e-003	3.6900e-003	202.5179
Mobile	1.0975	4.6194	12.6236	0.0454	3.9174	0.0357	3.9531	1.0483	0.0332	1.0815		4,632.2637	4,632.2637	0.2409		4,638.2868
Total	1.9415	4.9183	13.5314	0.0473	3.9174	0.0628	3.9802	1.0483	0.0603	1.1087	0.0000	4,996.9265	4,996.9265	0.2492	6.6600e-003	5,005.1411

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	0.8005	0.1355	0.7987	8.5000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	163.3413	163.3413	4.4000e-003	2.9700e-003	164.3364
Energy	0.0185	0.1634	0.1092	1.0100e-003		0.0128	0.0128		0.0128	0.0128		201.3215	201.3215	3.8600e-003	3.6900e-003	202.5179
Mobile	1.0975	4.6194	12.6236	0.0454	3.9174	0.0357	3.9531	1.0483	0.0332	1.0815		4,632.2637	4,632.2637	0.2409		4,638.2868
Total	1.9165	4.9183	13.5314	0.0473	3.9174	0.0628	3.9802	1.0483	0.0603	1.1087	0.0000	4,996.9265	4,996.9265	0.2492	6.6600e-003	5,005.1411

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	1.29	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	Building Construction	Building Construction	4/1/2021	2/16/2022	5	230	
2	Paving	Paving	1/20/2022	2/16/2022	5	20	
3	Architectural Coating	Architectural Coating	1/20/2022	2/16/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 32,805; Residential Outdoor: 10,935; Non-Residential Indoor: 29,516; Non-Residential Outdoor: 9,839; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	12.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.3876	0.1123	1.0000e-003	0.0256	8.2000e-004	0.0264	7.3700e-003	7.8000e-004	8.1600e-003		106.9382	106.9382	6.9000e-003		107.1108
Worker	0.0572	0.0391	0.4419	1.2900e-003	0.1341	1.0800e-003	0.1352	0.0356	1.0000e-003	0.0366		128.6701	128.6701	3.7900e-003		128.7648
Total	0.0700	0.4267	0.5542	2.2900e-003	0.1597	1.9000e-003	0.1617	0.0429	1.7800e-003	0.0447		235.6083	235.6083	0.0107		235.8756

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	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.3876	0.1123	1.0000e-003	0.0256	8.2000e-004	0.0264	7.3700e-003	7.8000e-004	8.1600e-003		106.9382	106.9382	6.9000e-003		107.1108

Worker	0.0572	0.0391	0.4419	1.2900e-003	0.1341	1.0800e-003	0.1352	0.0356	1.0000e-003	0.0366		128.6701	128.6701	3.7900e-003		128.7648
Total	0.0700	0.4267	0.5542	2.2900e-003	0.1597	1.9000e-003	0.1617	0.0429	1.7800e-003	0.0447		235.6083	235.6083	0.0107		235.8756

3.2 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0120	0.3683	0.1063	9.9000e-004	0.0256	7.2000e-004	0.0263	7.3700e-003	6.9000e-004	8.0600e-003		105.9881	105.9881	6.6600e-003		106.1546
Worker	0.0537	0.0354	0.4070	1.2500e-003	0.1341	1.0500e-003	0.1352	0.0356	9.7000e-004	0.0365		124.1483	124.1483	3.4200e-003		124.2338
Total	0.0657	0.4037	0.5133	2.2400e-003	0.1597	1.7700e-003	0.1615	0.0429	1.6600e-003	0.0446		230.1364	230.1364	0.0101		230.3884

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	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0120	0.3683	0.1063	9.9000e-004	0.0256	7.2000e-004	0.0263	7.3700e-003	6.9000e-004	8.0600e-003		105.9881	105.9881	6.6600e-003		106.1546
Worker	0.0537	0.0354	0.4070	1.2500e-003	0.1341	1.0500e-003	0.1352	0.0356	9.7000e-004	0.0365		124.1483	124.1483	3.4200e-003		124.2338
Total	0.0657	0.4037	0.5133	2.2400e-003	0.1597	1.7700e-003	0.1615	0.0429	1.6600e-003	0.0446		230.1364	230.1364	0.0101		230.3884

3.3 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104

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	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922

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	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922

3.4 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	14.1889					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	14.3934	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

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	8.9600e-003	5.8900e-003	0.0678	2.1000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003		20.6914	20.6914	5.7000e-004		20.7056
Total	8.9600e-003	5.8900e-003	0.0678	2.1000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003		20.6914	20.6914	5.7000e-004		20.7056

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	14.1889					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	14.2483	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9600e-003	5.8900e-003	0.0678	2.1000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003		20.6914	20.6914	5.7000e-004		20.7056
Total	8.9600e-003	5.8900e-003	0.0678	2.1000e-004	0.0224	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003		20.6914	20.6914	5.7000e-004		20.7056

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	1.0975	4.6194	12.6236	0.0454	3.9174	0.0357	3.9531	1.0483	0.0332	1.0815		4,632.2637	4,632.2637	0.2409		4,638.2868
Unmitigated	1.0975	4.6194	12.6236	0.0454	3.9174	0.0357	3.9531	1.0483	0.0332	1.0815		4,632.2637	4,632.2637	0.2409		4,638.2868

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Place of Worship	179.28	204.08	720.88	554,947	554,947
Single Family Housing	85.68	89.19	77.58	290,541	290,541
Total	264.96	293.27	798.46	845,488	845,488

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Place of Worship	16.60	8.40	6.90	0.00	95.00	5.00	64	25	11
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Place of Worship	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862
Single Family Housing	0.545842	0.044768	0.205288	0.119317	0.015350	0.006227	0.020460	0.031333	0.002546	0.002133	0.005184	0.000692	0.000862

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0185	0.1634	0.1092	1.0100e-003		0.0128	0.0128		0.0128	0.0128		201.3215	201.3215	3.8600e-003	3.6900e-003	202.5179
NaturalGas Unmitigated	0.0185	0.1634	0.1092	1.0100e-003		0.0128	0.0128		0.0128	0.0128		201.3215	201.3215	3.8600e-003	3.6900e-003	202.5179

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas 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					
Place of Worship	975.764	0.0105	0.0957	0.0804	5.7000e-004		7.2700e-003	7.2700e-003		7.2700e-003	7.2700e-003		114.7957	114.7957	2.2000e-003	2.1000e-003	115.4779
Single Family Housing	735.469	7.9300e-003	0.0678	0.0288	4.3000e-004		5.4800e-003	5.4800e-003		5.4800e-003	5.4800e-003		86.5258	86.5258	1.6600e-003	1.5900e-003	87.0400
Total		0.0185	0.1634	0.1092	1.0000e-003		0.0128	0.0128		0.0128	0.0128		201.3215	201.3215	3.8600e-003	3.6900e-003	202.5179

Mitigated

	Natural Gas 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					
Place of Worship	0.975764	0.0105	0.0957	0.0804	5.7000e-004		7.2700e-003	7.2700e-003		7.2700e-003	7.2700e-003		114.7957	114.7957	2.2000e-003	2.1000e-003	115.4779
Single Family Housing	0.735469	7.9300e-003	0.0678	0.0288	4.3000e-004		5.4800e-003	5.4800e-003		5.4800e-003	5.4800e-003		86.5258	86.5258	1.6600e-003	1.5900e-003	87.0400
Total		0.0185	0.1634	0.1092	1.0000e-003		0.0128	0.0128		0.0128	0.0128		201.3215	201.3215	3.8600e-003	3.6900e-003	202.5179

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8005	0.1355	0.7987	8.5000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	163.3413	163.3413	4.4000e-003	2.9700e-003	164.3364
Unmitigated	0.8255	0.1355	0.7987	8.5000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	163.3413	163.3413	4.4000e-003	2.9700e-003	164.3364

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	0.0778					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7104					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0149	0.1269	0.0540	8.1000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	162.0000	162.0000	3.1000e-003	2.9700e-003	162.9627
Landscaping	0.0226	8.5800e-003	0.7447	4.0000e-005		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003		1.3413	1.3413	1.3000e-003		1.3737
Total	0.8255	0.1355	0.7987	8.5000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	163.3413	163.3413	4.4000e-003	2.9700e-003	164.3364

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	0.0528					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7104					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0149	0.1269	0.0540	8.1000e-004		0.0103	0.0103		0.0103	0.0103	0.0000	162.0000	162.0000	3.1000e-003	2.9700e-003	162.9627
Landscaping	0.0226	8.5800e-003	0.7447	4.0000e-005		4.1200e-003	4.1200e-003		4.1200e-003	4.1200e-003		1.3413	1.3413	1.3000e-003		1.3737
Total	0.8005	0.1355	0.7987	8.5000e-004		0.0144	0.0144		0.0144	0.0144	0.0000	163.3413	163.3413	4.4000e-003	2.9700e-003	164.3364

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

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
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Noise Study
for the
Vesting Tentative Tract Map No. 74450 Project
11070 – 11100 Borden Avenue, Los Angeles, CA 91331

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April 2020

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EXECUTIVE SUMMARY

This Noise Study assesses and discusses the potential noise and vibration impacts that may occur with the Vesting Tentative Tract Map No. 74450 Project (Project), located in the City of Los Angeles (City), California. The analysis describes the existing environment in the Project area; estimates future noise and vibration levels at surrounding land uses resulting from construction and operation of the Project; and identifies the potential for significant impacts. An evaluation of the Project's contribution to potential cumulative noise impacts is also provided. The study summarizes the potential for the Project to conflict with applicable noise and vibration regulations, standards, and thresholds. The findings of the analyses are as follows:

- Construction activities would potentially result in short-term and temporary noise impacts to nearby noise-sensitive receptors due to on-site construction equipment and activities. Implementation of noise-attenuation techniques and placement of the construction-staging area and earthmoving equipment away from noise-sensitive sites would lower construction noise levels.
- Construction of the Project would generate sporadic, temporary vibration effects adjacent to the Project area but would not be expected to exceed the significance thresholds.
- Noise associated with cumulative construction activities would be reduced to the degree reasonably and technically feasible through proposed recommended measures for each individual project and compliance with locally adopted and enforced noise ordinances. Given that construction activities would be required to comply with the City's allowable hours and would be temporary, construction-related noise would not be significant.
- Noise associated with cumulative operational sources would not be significant.
- Due to the rapid attenuation characteristics of ground-borne vibration and the distance of the cumulative projects to the Project site, no potential exists for cumulative construction- or operational-related impacts with respect to ground-borne vibration.

INTRODUCTION

The purpose of this Noise Study is to assess and discuss the impact of potential noise impacts that may occur with the Vesting Tentative Tract Map No. 74450 Project, located in the City of Los Angeles, California (City). The noise report analyzes short-term noise and ground-borne vibration impacts associated with the Project. The report also discusses the applicable federal, State, and local noise and vibration regulations; the applicable noise and vibration thresholds; the methodology used to analyze potential noise and vibration impacts; and the modeled roadway noise.

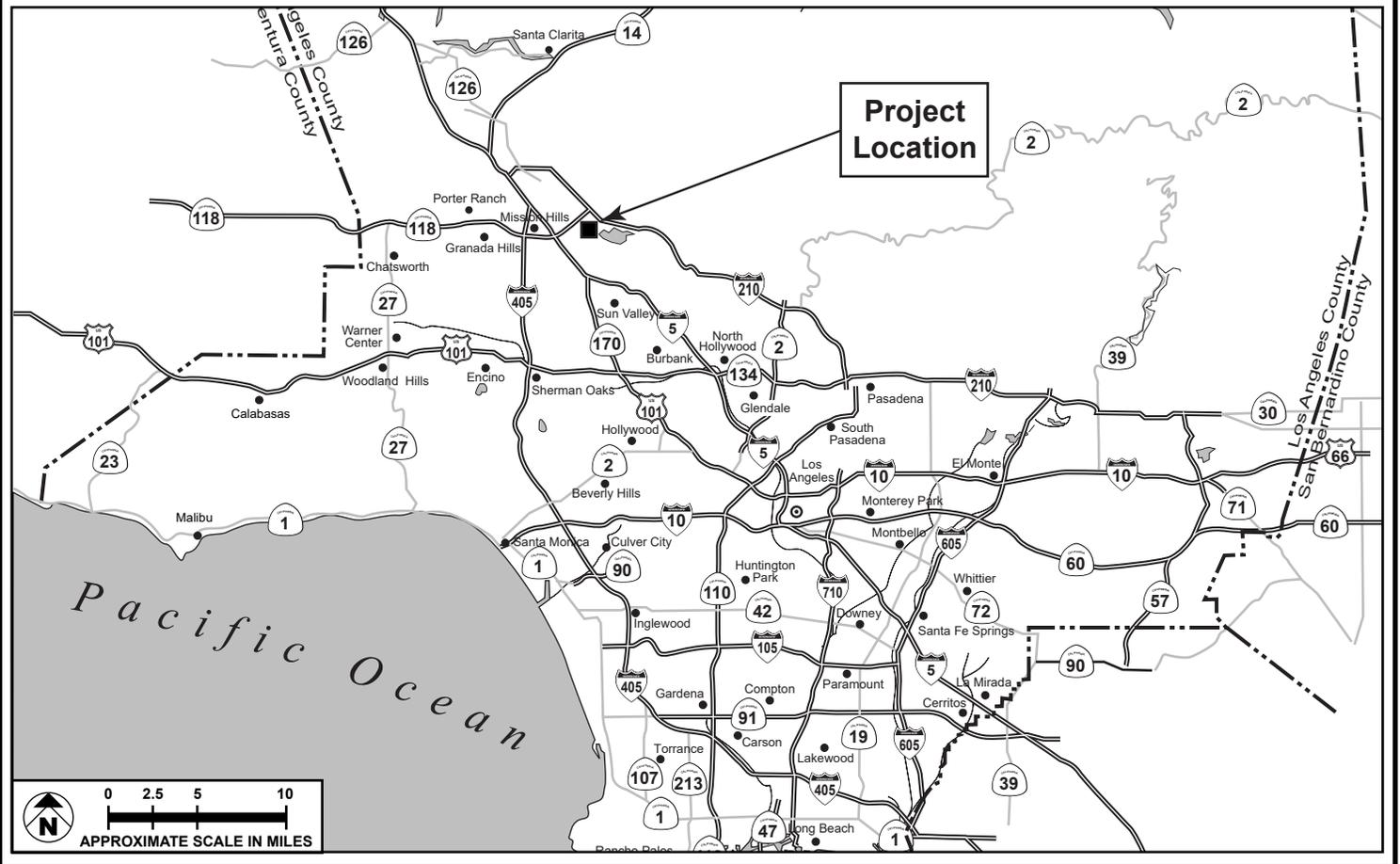
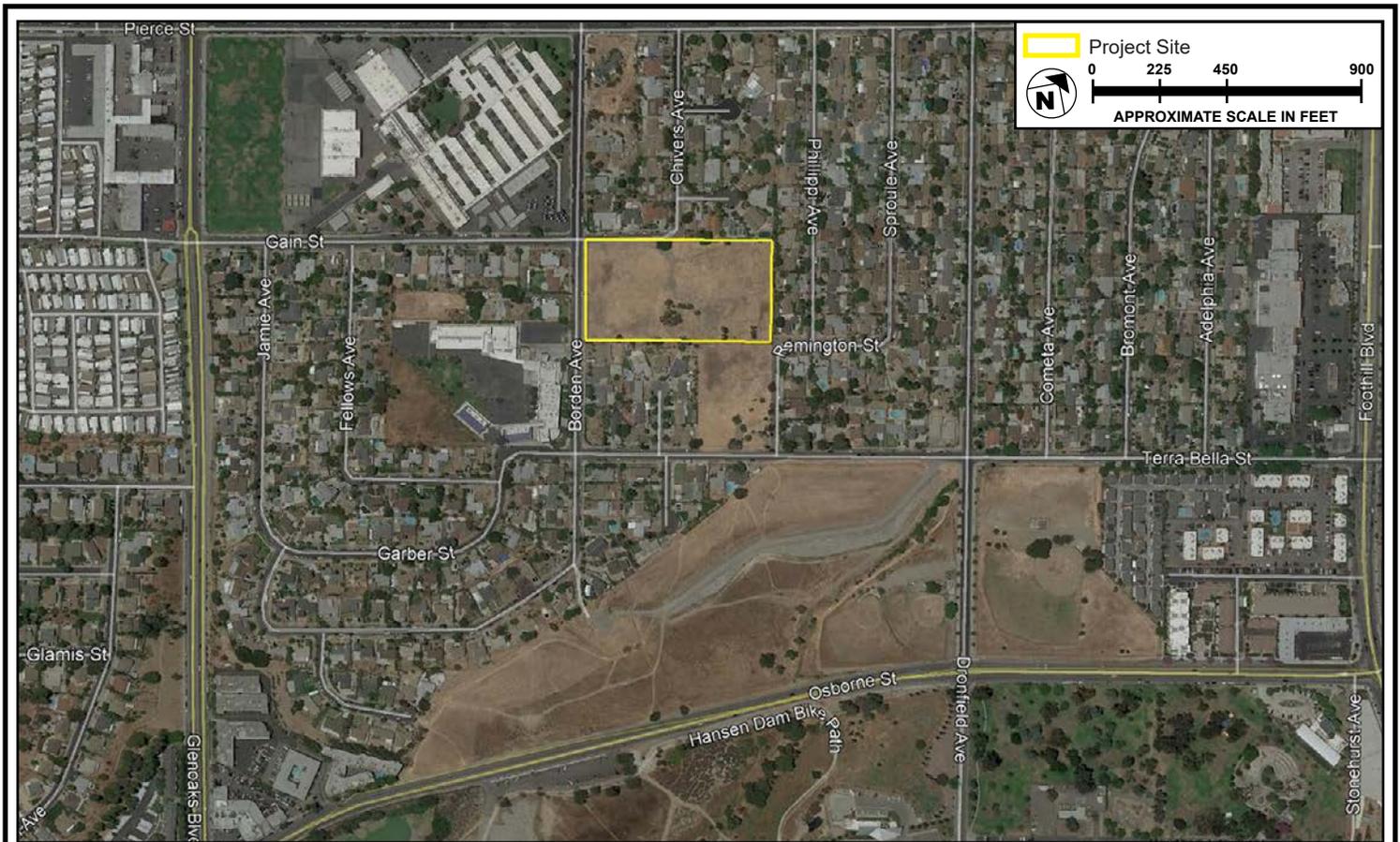
Project Description

The Project site is located at 11070—11100 Borden Avenue (Project site), northeast of Borden Avenue, northwest of Terra Bella Street, southwest of Phillippi Avenue, and southeast of Gain Street, in the Pacoima Neighborhood of the City, as shown in **Figure 1: Regional and Local Vicinity Map**. The Project site is currently vacant and consists of two lots (Assessor Parcel Numbers 2532-015-011 and -012) totaling a net area (post-dedications) of 196,769 square feet (4.5 acres). The proposed Project includes the request of a zone change for nine parcels from Agriculture (A2) to One-Family Residential (RS) and a tract map application for the subdivision of one lot into 10 smaller lots. The proposed development consists of nine (9) single-family homes and one lot for church uses.

NOISE DESCRIPTORS

Fundamentals of Sound

Because the human ear does not respond uniformly to sounds at all frequencies, sound-pressure level alone is not a reliable indicator of loudness. For example, the human ear is less sensitive to low and high frequencies than to the medium frequencies that more closely correspond to human speech. In response to the sensitivity of the human ear to certain sound frequencies, the A-weighted noise level, referenced in units of dBA, was developed to better correspond with people's subjective judgment of sound levels. To support assessing a community reaction to noise, scales have been developed that average sound-pressure levels over time and quantify the result in terms of a single numerical descriptor. Several scales have been developed that address community noise levels. The equivalent sound level (Leq) is the average A-weighted sound level measured over a given time interval. Leq can be measured over any period but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods.



SOURCE: Google Earth - 2020; Meridian Consultants, LLC - 2020

FIGURE 1

Table 1: Noise Descriptors identifies various noise descriptors developed to measure sound levels over different periods of time.

**Table 1
Noise Descriptors**

Term	Definition
Decibel (dB)	The unit for measuring the volume of sound equal to 10 times the logarithm (base 10) of the ratio of the pressure of a measure sound to a reference pressure.
A-weighted decibel (dBA)	A sound measurement scale that adjusts the pressure of individual frequencies according to human sensitivities. The scale accounts for the fact that the region of highest sensitivity for the human ear is between 2,000 and 4,000 cycles per second (hertz).
Hertz (Hz)	The frequency of the pressure vibration, which is measured in cycles per second.
Kilo hertz (kHz)	One thousand cycles per second.
Equivalent sound level (Leq)	The sound level containing the same total energy as a time varying signal over a given time period. The Leq is the value that expresses the time averaged total energy of a fluctuating sound level. Leq can be measured over any time period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods.
Community noise equivalent level (CNEL)	A rating of community noise exposure to all sources of sound that differentiates between daytime, evening, and nighttime noise exposure. These adjustments add 5 dBA for the evening, 7:00 PM to 10:00 PM, and add 10 dBA for the night, 10:00 PM to 7:00 AM. The 5- and 10-dB penalties are applied to account for increased noise sensitivity during the evening and nighttime hours. The logarithmic effect of adding these penalties to the 1-hour Leq measurements typically results in a CNEL measurement that is within approximately 3 dBA of the peak-hour Leq. ^a
Nighttime (Lnight)	Lnight is the average noise exposure during the hourly periods from 10:00 PM to 7:00 AM.
Sound pressure level	The sound pressure is the force of sound on a surface area perpendicular to the direction of the sound. The sound pressure level is expressed in dB.
Ambient noise	The level of noise that is all encompassing within a given environment, being usually a composite of sounds from many and varied sources near to and far from the observer. No specific source is identified in the ambient environment.

^a California Department of Transportation, Technical Noise Supplement; A Technical Supplement to the Traffic Noise Analysis Protocol, (Sacramento, California: November 2009), pp. N51–N54.

A doubling of sound energy results in a 3 dBA increase in sound, which means that a doubling of sound wave energy (e.g., doubling the volume of traffic on a roadway) would result in a barely perceptible change in sound level. In general, changes in a noise level of less than 3 dBA are not noticed by the human ear.¹ Changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise. An increase of greater than 5 dBA is readily noticeable, while the human ear perceives a 10 dBA increase in sound level to be a doubling of sound volume.

Noise sources can generally be categorized in two types: (1) point sources, such as stationary equipment; and (2) line sources, such as a roadway. Sound generated by a point source typically diminishes (attenuates) at a rate of 6 dBA for each doubling of distance from the source to the receptor at acoustically hard sites, and at a rate of 7.5 dBA at acoustically soft sites.² A hard or reflective site consists of asphalt, concrete, or very hard-packed soil, which does not provide any excess ground-effect attenuation. An acoustically soft or absorptive site is characteristic of normal earth and most ground with vegetation. As an example, a 60-dBA noise level measured at 50 feet from a point source at an acoustically hard site would be 54 dBA at 100 feet from the source and 48 dBA at 200 feet from the source. Noise from the same point source at an acoustically soft site would be 52.5 dBA at 100 feet and 45 dBA at 200 feet from the source. Sound generated by a line source typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling of distance from the source to the receptor for hard and soft sites, respectively.³ Noise levels generated by a variety of activities are shown in **Figure 2: Common Noise Levels**. Man-made or natural barriers can also attenuate sound levels, as illustrated in **Figure 3: Noise Attenuation by Barriers**.

Fundamentals of Vibration

Vibration is commonly defined as an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. The peak particle velocity (PPV) or root-mean-square (RMS) velocity is typically used to describe vibration amplitudes. PPV is defined as the maximum instantaneous peak of the vibration signal, while RMS is defined as the square root of the average of the squared amplitude of the signal. PPV is typically used for evaluating potential building damage, whereas RMS is typically more suitable for evaluating human response to ground-borne vibration. The RMS vibration velocity level can be presented in inches per second (ips) or in VdB+ (a decibel unit referenced to 1 microinch per second). Commonly, ground-borne vibration generated by man-made activities (i.e., road traffic, construction) attenuates rapidly with distance from the source of the vibration.

-
- 1 US Department of Transportation, Federal Highway Administration (USDOT FHWA), *Fundamentals and Abatement of Highway Traffic Noise* (Springfield, VA: Author, September 1980), 81.
 - 2 USDOT FHWA, *Fundamentals and Abatement*, 97.
 - 3 USDOT FHWA, *Fundamentals and Abatement*, 97.

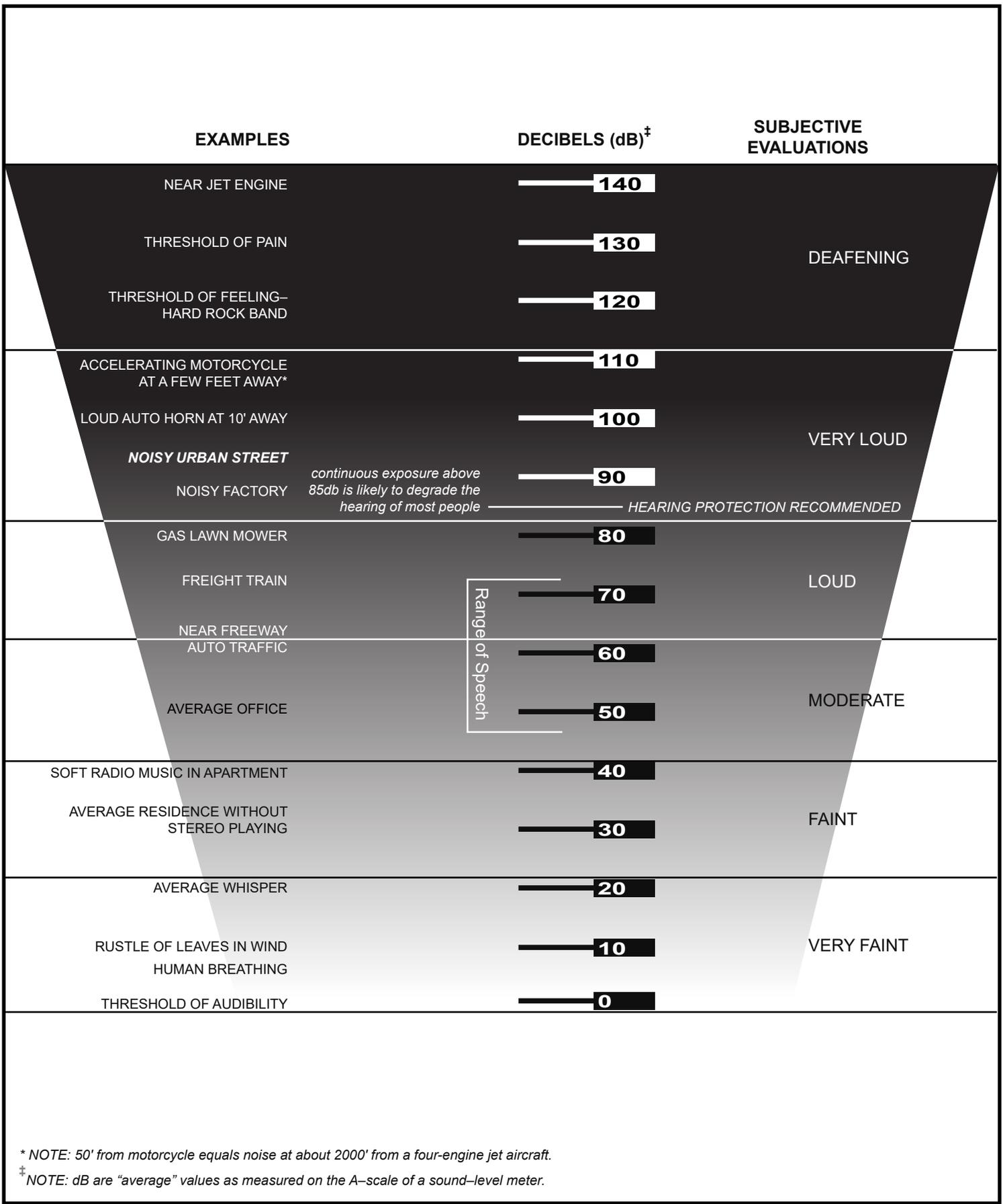
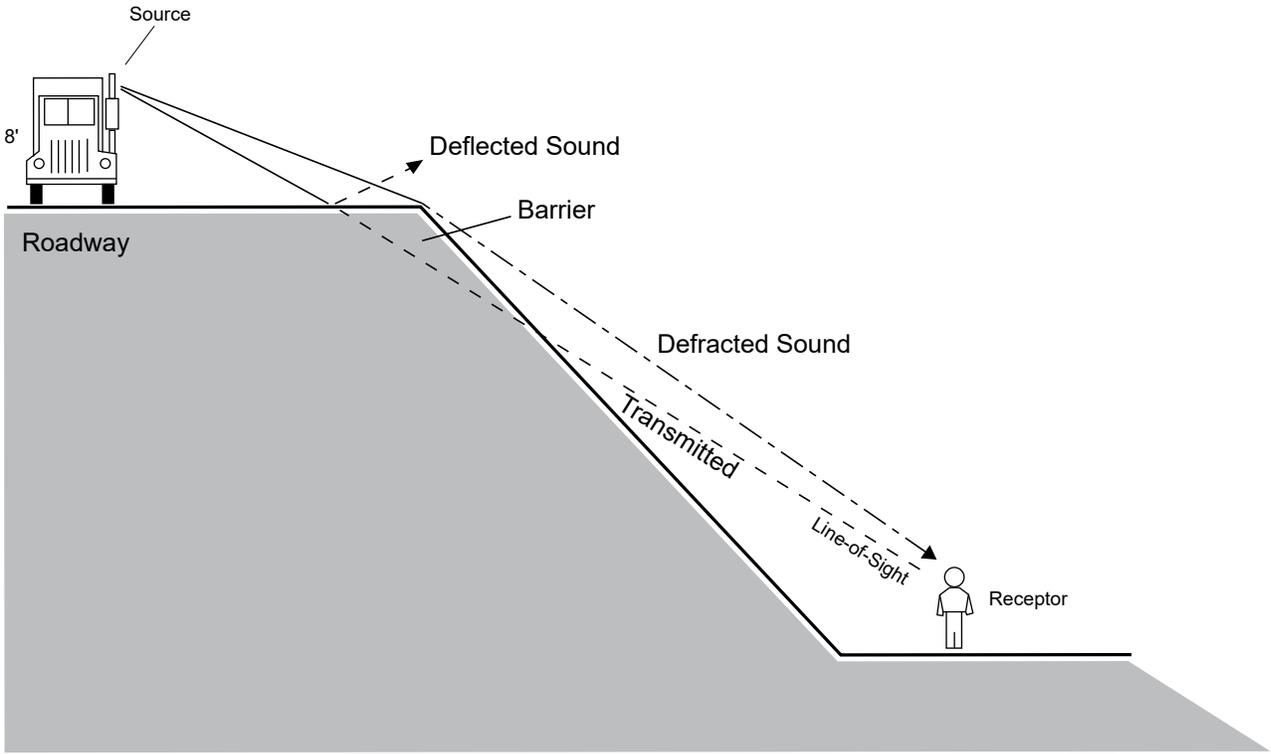
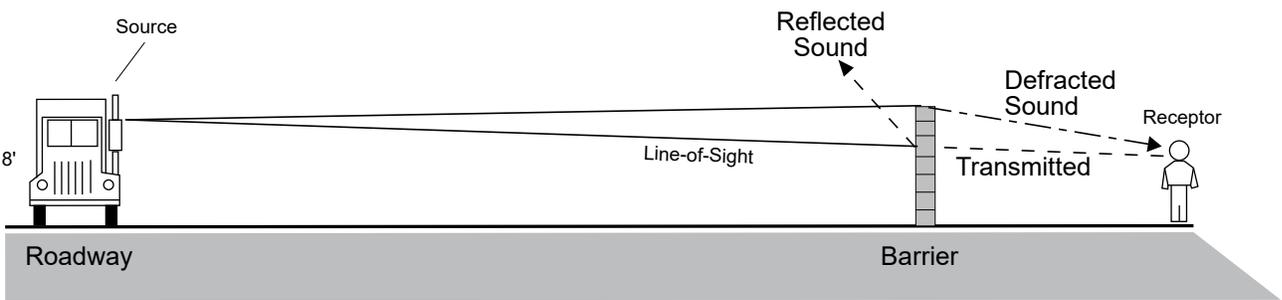


FIGURE 2



"Barrier Effect" Resulting from Differences in Elevation.



"Barrier Effect" Resulting from Typical Soundwall.

FIGURE 3

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings such as the operation of mechanical equipment, the movement of people, or the slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration from traffic is barely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

SIGNIFICANCE THRESHOLDS

Construction Noise

The L.A. CEQA Thresholds Guide⁴ defines the following significance thresholds for construction activities lasting more than 10 days in a 3-month period or occurring during the hours of 9:00 PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or anytime on Sunday:

- On-site Project construction activities cause the exterior ambient noise level to increase by 5 dBA or more at a noise-sensitive use, as measured at the property line of any sensitive use.
- Off-site Project construction traffic causes the exterior ambient noise level to increase by 5 dBA CNEL or more at a noise-sensitive use, as measured at the property line of any sensitive use.

Operation Noise

Operational noise impacts are evaluated for Project-related off-site roadway traffic noise impacts and on-site stationary source noise from on-site activities and equipment.

- The Project would cause any ambient noise levels to increase by 5 dBA CNEL or more and the resulting noise falls on a noise-sensitive land use within an area categorized as either “normally acceptable” or “conditionally acceptable” (see **Table 2: City of Los Angeles Land Use Compatibility for Community Noise** for description of these categories); or cause ambient noise levels to increase by 3 dBA CNEL or more and the resulting noise falls on a noise-sensitive land use within an area categorized as either “normally acceptable” or “clearly unacceptable.”
- Project-related operational (i.e., nonroadway) noise sources such as outdoor activities, building mechanical/electrical equipment, etc., increase ambient noise level by 5 dBA, causing a violation of the City Noise Ordinance.

4 City of Los Angeles, *L.A. CEQA Threshold Guide* (2006), accessed March 2020, <http://www.environmentla.org/programs/Thresholds/Complete%20Threshold%20Guide%202006.pdf>.

Table 2
City of Los Angeles Land Use Compatibility for Community Noise

Land Use	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
	Community Noise Exposure CNEL (dBA)			
Single-Family, Duplex, Mobile Homes	50–60	55–70	70–75	Above 70
Multi-Family Homes	50–65	60–70	70–75	Above 70
Schools, Libraries, Churches, Hospitals, Nursing Homes	50–70	60–70	70–80	Above 80
Transient Lodging—Motels, Hotels	50–65	60–70	70–80	Above 80
Auditoriums, Concert Halls, Amphitheaters	—	50–70	—	Above 65
Sports Arena, Outdoor Spectator Sports	—	50–75	—	Above 70
Playgrounds, Neighborhood Parks	50–70	—	67–75	Above 72
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50–75	—	70–80	Above 80
Office Buildings, Business and Professional Commercial	50–70	67–77	Above 75	—
Industrial, Manufacturing, Utilities, Agriculture	50–75	70–80	Above 75	—

Source: City of Los Angeles, L.A. CEQA Thresholds Guide (2006).

Notes:

Normally Acceptable: Specified land use is satisfactory, based on the assumption that any buildings involved are of normal conventional construction without any special noise-insulation requirements.

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.

Normally Unacceptable: New construction or development should generally 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.

Clearly Unacceptable: New construction or development should generally not be undertaken.

Ground-Borne Vibration

The City has not adopted a significance threshold to assess vibration impacts during construction. Thus, the Caltrans *Transportation and Construction Vibration Guidance Manual*⁵ is used as a screening tool to assess the potential for adverse vibration effects related to structural damage.

- **Potential Building Damage.** Project construction activities cause ground-borne vibration levels to exceed 0.5 ips PPV at the nearest off-site residential buildings.

5 Caltrans, *Transportation and Construction Vibration Guidance Manual* (September 2013), accessed March 2020, <https://cityofdavis.org/home/showdocument?id=4521>.

METHODOLOGY

Ambient Noise Measurements

Noise-level monitoring was conducted by Meridian Consultants on March 18, 2020, at three locations within the Project area vicinity, as shown in **Figure 4: Noise Monitoring Locations**. Noise-level monitoring was conducted for 15-minute intervals at each location using a Larson Davis Model 831 sound-level meter. This meter satisfies the American National Standards Institute (ANSI) standard for general environmental noise measurement instrumentation. The ANSI specifies several types of sound-level meters according to their precision. Types 1, 2, and 3 are referred to as “precision,” “general-purpose,” and “survey” meters, respectively. Most measurements carefully taken with a Type 1 sound-level meter will have a margin of error not exceeding 1 dB.

The Larson Davis Model 831 is a Type 1 precision sound-level meter. This meter meets all requirements of ANSI S1.4-1983 and ANSI1.43-1997 Type 1 standards, as well as International Electrotechnical Commission (IEC) IEC61672-1 Ed. 1.0, IEC60651 Ed 1.2, and IEC60804 Type 1, Group X standards.

The sound-level meter was located approximately 5 feet above ground and was covered with a Larson Davis windscreen. The sound-level meter was field calibrated with an external calibrator prior to operation.

Construction Scenario

Project construction would begin in April and is expected to last until February 2022. Construction would occur over three phases: (1) building construction; (2) architectural coating; and (3) paving.

Each phase of construction would result in varying levels of intensity and a number of construction personnel. The construction workforce would consist of approximately 12 worker trips per day and 4 vendor trips per day during building construction; 2 worker trips per day during architectural coating; and 15 worker trips per day during paving.

Ground-Borne Vibration

Ground-borne vibration impacts were evaluated by identifying potential vibration sources, estimating the distance between vibration sources and surrounding structure locations and surrounding structure locations and vibration sensitive receptors, and making a significance determination based on the significance thresholds.

City of Los Angeles General Plan Noise Element

The City's General Plan Noise Element identifies sources of noise and provides objectives and policies to ensure that noise from various sources does not create an unacceptable noise environment. The following Noise Element policies and objectives are applicable to the Project:⁶

Objective 2 (Nonairport): reduce or eliminate nonairport related intrusive noise, especially relative to noise sensitive uses.

Policy 2.2: Enforce and/or implement applicable city, State and federal regulations intended to mitigate proposed noise producing activities, reduce intrusive noise and alleviate noise that is deemed a public nuisance.

Objective 3 (Land Use Development): reduce or eliminate noise impacts associated with proposed development of land and changes in land use.

Policy 3.1: Develop land use policies and programs that will reduce or eliminate potential and existing noise impacts.

⁶ City of Los Angeles, *General Plan, "Noise Element"* (adopted February 3, 1999).



North



West



South



East



SOURCE: Google Earth - 2020

FIGURE 4a



North



West



South



East



SOURCE: Google Earth - 2020

FIGURE 4b



North



West



South



East



SOURCE: Google Earth - 2020

FIGURE 4c

Guidelines for Noise-Compatible Land Uses

The City has adopted local guidelines based in part on the community noise compatibility guidelines established by the State Department of Health Services for use in assessing the compatibility of various land use types with a range of noise levels. These guidelines are set forth in the L.A. CEQA Thresholds Guide in terms of the CNEL.⁷ CNEL guidelines for specific land uses are classified into four categories: (1) normally acceptable; (2) conditionally acceptable; (3) normally unacceptable; and (4) clearly unacceptable. As shown in Table 2 above, a CNEL value of 70 dBA is the upper limit of what is considered a conditionally acceptable noise environment for multifamily homes, although the upper limit of what is considered “normally acceptable” for these uses are 65 dBA CNEL. New development should generally be discouraged within the “normally unacceptable” or “clearly unacceptable” categories. However, if new development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

City of Los Angeles General Noise Ordinance

The Los Angeles Municipal Code (LAMC) indicates that in cases where the actual ambient conditions are not known, the City’s presumed daytime (7:00 AM to 10:00 PM) and nighttime (10:00 PM to 7:00 AM) minimum ambient noise levels as defined in Section 111.02 of the LAMC should be used. The presumed ambient noise levels for these areas set forth in the LAMC Sections 111.02 and 112.05 are provided in

Table 3: City of Los Angeles Presumed Ambient Noise Levels.

Table 3
City of Los Angeles Presumed Ambient Noise Levels

Zone	Daytime Hours (7:00 AM to 10:00 PM) dBA (Leq)	Nighttime Hours (10:00 PM to 7:00 AM) dBA (Leq)
Residential	50	40
Commercial	60	55
Manufacturing (M1, MR1, and MR2)	60	55
Heavy Manufacturing (M2 and M3)	65	65

Source: Los Angeles Municipal Code, sec. 111.03.

Section 41.40 of the LAMC regulates noise from demolition and construction activities. More specifically, Section 41.40 prohibits construction activity and repair work where the use of any power tool, device, or equipment would disturb persons occupying sleeping quarters in any dwelling hotel, apartment, or other

⁷ City of Los Angeles, *L.A. CEQA Thresholds Guide*.

place of residence between the hours of 9:00 PM to 7:00 AM Monday through Friday, and between 6:00 PM and 8:00 AM on Saturday. All such activities are prohibited on Sundays and all federal holidays.

Section 112.05 of the LAMC also specifies the maximum noise level of construction machinery that can be generated in any residential zone of the City or within 500 feet thereof. Specifically, any construction machinery may not generate a maximum noise level exceeding 75 dBA at 50 feet from the equipment. However, the above noise limitation does not apply where compliance is technically infeasible. LAMC Section 112.05 defines technical infeasibility to mean that “said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers and/or other noise reduction device or techniques during the operation of the equipment.”

EXISTING CONDITIONS

Ambient Noise Levels

Short-term sound monitoring was conducted at three (3) locations to measure the ambient sound environment in the Project vicinity. Measurements were taken over 15-minute intervals at each location between the hours of 12:36 PM and 1:44 PM on March 18, 2020, as indicated in **Table 4: Ambient Noise Measurements**. **Figure 4** depicts locations where ambient noise measurements were conducted. As shown in **Table 4**, ambient noise levels ranged from a low of 51.0 dBA northwest of the Project site along Gain Street (Site 1) to a high of 68.9 dBA east of the Project site along Phillippi Avenue (Site 3).

Table 4
Ambient Noise Measurements

Location Number/Description	Nearest Use	Time Period	Noise Source	dB Leq
1 Northwest frontage of the Project site along Gain Street	Residential	12:36 PM-12:51 PM	Light traffic activity along Gain Street	51.0
2 Southwest frontage of the Project site along Borden Avenue	Residential	1:08 PM–1:23 PM	Light traffic activity along Borden Avenue	59.4
3 East of the Project site at the corner of Phillippi Avenue and Remington Street	Residential	1:29 PM–1:44 PM	Residential and pedestrian activity along Phillippi Avenue and Remington Street	68.9

Source: Refer to **Attachment A** for noise monitoring data sheets.

Notes: dBA = A-weighted decibels; Leq = average equivalent sound level.

Vibration Conditions

Based on field observations, the primary source of existing ground-borne vibration in the vicinity of the Project site is vehicle traffic on local roadways. According to the Federal Transit Administration,⁸ typical road traffic–induced vibration levels are unlikely to be perceptible by people. Trucks and buses typically generate ground-borne vibration velocity levels of approximately 63 VdB (at a 50-foot distance), and these levels could reach 72 VdB when trucks and buses pass over bumps in the road. A vibration level of 72 VdB is above the 60 VdB level of perceptibility.

NOISE ANALYSIS

Construction

On-Site Construction Noise

Construction activities that would occur during the construction phases (building construction, architectural coating, and paving) would generate both steady-state and episodic noise that would be heard both on and off the Project site. Each phase involves the use of different types of construction equipment and, therefore, has its own distinct noise characteristics. Building construction would typically include equipment such as cranes, forklifts, generators, welders, and tractors/loaders/backhoes; architectural coating would typically include equipment such as air compressors; and paving would typically include equipment such as pavers, rollers, and paving equipment. The Project would be constructed using typical construction techniques; no blasting, impact pile driving, or jackhammers would be required.

Typical maximum noise levels and duty cycles of representative types of equipment that would potentially be used during construction for this Project are presented in **Table 5: Typical Maximum Noise Levels for Project Construction Equipment**. Construction equipment noise would not be constant because of the variations of power, cycles, and equipment locations. For maximum noise events, this analysis considers equipment operating at the edge of the property line of the Project site.

The potential noise impact generated during construction depends on the phase of construction and the percentage of time the equipment operates over the workday. However, construction noise estimates used for the analysis are representative of worst-case conditions because it is unlikely that all the equipment contained on site would operate simultaneously.

8 Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, FTA report no. 0123 (September 2018), accessed March 2020, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

Table 5
Typical Maximum Noise Levels for Project Construction Equipment

Equipment Description	Typical Duty Cycle (%)	Spec Lmax (dBA)	Actual Lmax (dBA)
Air Compressor	40	80.0	77.7
Backhoe	40	80.0	77.6
Crane	16	85.0	80.6
Dozer	40	85.0	81.7
Forklift	40	85.0	N/A
Generator	50	82.0	80.6
Paver	50	85.0	77.2
Paving Equipment	20	85.0	89.5
Roller	20	85.0	80.0
Welder	40	73.0	74.0

Source: FHWA Roadway Construction Noise Model (RCNM) version 1.1

Note: N/A = not available.

As previously noted, the Project would be constructed using typical construction techniques; no blasting, impact pile driving, or jackhammers would be required. As would be the case for construction of most land use development projects, construction of the proposed Project would require the use of heavy-duty equipment with the potential to generate audible noise above the ambient background noise level.

Construction equipment operates at its noisiest levels for certain percentages of time during operation. Equipment such as excavators, graders, and loaders would operate at different percentages over the course of an hour.⁹ During a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently. The Project's estimated construction noise levels were calculated for a scenario in which a reasonable number of construction equipment was assumed to be operating simultaneously, given the physical size of the site and logistical limitations, and with the noise equipment located at the construction area nearest to the affected receptors to present a conservative impact analysis. This is considered a worst-case evaluation because the Project would typically use fewer overall equipment simultaneously at any given time and, as such, would likely generate lower noise levels than reported herein.

The noise levels at the nearby residential uses to the site from construction activity are shown in **Table 6: Construction Maximum Noise Estimates**. As shown, construction noise levels would result in a maximum

⁹ Federal Highway Administration, *Traffic Noise Model* (2006).

increase of 33.7 dBA above the significance threshold without implementation of regulatory compliance measures.

Table 6
Construction Maximum Noise Estimates

Noise Monitoring Site	Type of Use	Distance from Project Site (feet)	Max Leq	Ambient Noise Leq (dBA)	Significance Threshold (dBA)	Maximum Noise Increase over Significance Threshold without Regulatory Compliance Measures (dBA)
Site 1	Adjacent Residential	20	89.7	51.0	56.0	+33.7
Site 2	Residential and school uses to the west	60	85.6	59.4	64.4	+21.2
Site 3	Adjacent Residential	20	89.7	68.9	73.9	+15.8

Source: FHWA, RCNM, version. 1.1.

Refer to **Attachment B** for Construction Noise Worksheets

Note: Equipment distance to sensitive receptor may vary.

Pursuant to Section 41.40 of the LAMC, construction would be limited to the hours between 7:00 AM and 9:00 PM, Monday through Friday, and between 8:00 AM and 6:00 PM on Saturday. No construction activities would occur on Sundays or federal holidays. All construction related noise would be required to comply with the provisions of Section 112.05 of the LAMC. Pursuant to Section 112.05, the operation of any powered equipment or powered hand tool that produces a maximum noise level exceeding 75 dBA at a distance of 50 feet from the source of the noise between the hours of 7:00 AM to 9:00 PM when the source is located within 500 feet of a residential zone. Compliance with Section 112.05 of the LAMC includes the use of mufflers, shields, sound barriers, and/or other noise reduction devices or techniques. Other noise reduction techniques include a construction management plan which specifies that all construction equipment, fixed or mobile, will be equipped with properly operating and maintained mufflers and other State-required noise attenuation devices; identify the maximum distance between construction equipment staging areas and occupied residential areas; and require the use of electric air compressors and similar power tools.

Optimal muffler systems for all equipment and the break in line of sight to a sensitive receptor would reduce construction noise levels by approximately 10 dB or more.¹⁰ Limiting the number of noise-

10 FHWA, *Special Report—Measurement, Prediction, and Mitigation*, updated June 2017, accessed March 2020, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm.

generating heavy-duty off-road construction equipment (e.g., backhoes, dozers, excavators, loaders, rollers, etc.) simultaneously used on the Project site within 25 feet of off-site noise sensitive receptors surrounding the site to no more than one or two pieces of heavy-duty off-road equipment would further reduce construction noise levels by approximately 14 dBA. Also, limiting the number of noise-generating heavy-duty construction equipment to two (2) pieces operating simultaneously would reduce construction noise levels by approximately 5 dB. Temporary abatement techniques include the use of temporary and/or movable shielding for both specific and nonspecific operations. An example of such a barrier utilizes noise curtains in conjunction with trailers to create an easily movable, temporary noise barrier system. A noise barrier can achieve a 5 dB noise level reduction when it is tall enough to break the line-of-sight to the receiver. After it breaks the line-of-sight, it can achieve approximately 1.5 dB of additional noise level reduction for each one (1) meter (3.3 feet) of barrier height.¹¹ Therefore, an approximately 15-foot tall construction noise barrier would reduce construction noise levels by a minimum 7 dB. Compliance with Section 112.05, construction noise levels would be reduced by a minimum of 34 dB, dependent on the construction activity and the use and height of the temporary noise barrier.

A sign, legible at a distance of 50 feet, will be posted at the Project construction site providing a contact name and a telephone number where residents can inquire about the construction process and register complaints. This sign will indicate the dates and duration of construction activities. In conjunction with this required posting, a noise disturbance coordinator will be identified to address construction noise concerns received. The contact name and the telephone number for the noise disturbance coordinator will be posted on the sign. The coordinator will be responsible for responding to any local complaints about construction noise and will notify the City to determine the cause and implement reasonable measures to the complaint, as deemed acceptable by the City. The Project would comply with the City's Noise Ordinance as it relates to construction equipment by limiting activities to occur between 7:00 AM to 7:00 PM. Compliance with the City's Noise Ordinance would ensure construction noise levels would be reduced to the extent feasible; thus construction noise levels would not be considered significant.

Off-Site Construction Noise

Construction of the Project would require a maximum of 15 worker trips per day to and from the site. Noise associated with worker trips were estimated using the Caltrans FHWA Traffic Noise Model. Project trips would generate noise levels of approximately 40 dBA during the daytime, measured at a distance of 25 feet from the adjacent sensitive receptor. As shown in **Table 4**, existing noise levels at the Project site

¹¹ FHWA, *Special Report—Measurement, Prediction, and Mitigation*, updated June 2017, accessed March 2020, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm

ranged from 51.0 dBA to 68.9. dBA. The noise level increases from truck trips would be below the significance threshold of 5 dBA.

Construction Vibration

Table 7: Construction Vibration Levels Estimates – Building Damage present construction vibration impacts associated with on-site construction in terms of building damage. It is important to note pile driving would not be required during construction. As shown in **Table 7**, the forecasted vibration levels due to on-site construction activities would not exceed the building damage significance threshold at the nearby residential uses for vibratory rollers, large bulldozers, caisson drilling, loaded trucks, jackhammers, and small bulldozers. As such, construction vibration impacts would not be considered significant.

**Table 7:
On-Site Construction Vibration Impacts – Building Damage**

Nearest Off-Site Building Structures	Estimated Vibration Velocity Levels at the Nearest Off-Site Structures from the Project Construction Equipment							Significance Threshold (PPV ips)
	Pile Driver (impact) ¹	Vibratory Roller	Large Bulldozer	Caisson Drilling	Loaded Trucks	Jack-hammer	Small bulldozer	
	<i>FTA Reference Vibration Levels at 25 feet</i>							
	0.644	0.210	0.089	0.089	0.076	0.035	0.003	—
Adjacent Residential (Site 1 &3) – 20 feet	0.900	0.293	0.124	0.124	0.106	0.049	0.004	0.5
Residential and school uses to the west (Site 2) – 60 feet	0.173	0.056	0.024	0.024	0.020	0.009	0.001	0.5

Source: US Department of Transportation, Federal Transportation Authority, Transit Noise and Vibration Impact Assessment

Source: Refer to **Attachment C** for construction vibration worksheets.

Note:

¹ Pile driving would not be required during construction.

Operation

Fixed Mechanical Equipment Noise

The Project would introduce various stationary noise sources, including heating, ventilation, and air conditioning systems, which would be located either on the roof, the side of a structures, or on the ground. All Project mechanical equipment would be required to be designed with appropriate noise-control devices, such as sound attenuators, acoustics louvers, or sound screens/parapet walls, to comply

with noise-limitation requirements provided in LAMC Section 112.02, which prohibits the noise from such equipment from causing an increase in the ambient noise level of more than 5 dB. Therefore, operation of mechanical equipment on the Project buildings would not exceed the City's threshold of significance.

CUMULATIVE NOISE

For purposes of this analysis, development of the related projects will be considered to contribute to cumulative noise impacts. Noise, by definition, is a localized phenomenon and drastically reduces as distance from the source increases. As a result, only related projects and growth in the general area of the Project site would contribute to cumulative noise impacts. Cumulative construction-noise impacts have the potential to occur when multiple construction projects in the local area generate noise within the same time frame and contribute to the local ambient noise environment. It is expected that, as with the Project, the related projects would implement best management practices, which would minimize any noise-related nuisances during construction. Therefore, the combined construction-noise impacts of the related projects and the Project's contribution would not cause a significant cumulative impact.

With regard to stationary sources, cumulative significant noise impacts may result from cumulative development. Stationary sources of noise that could be introduced in the area by cumulative projects could include mechanical equipment, loading docks, and parking lots. Given that these projects would be required to adhere to the City's noise standards, all stationary sources would be required to have shielding or other noise-abatement measures so as not to cause a substantial increase in ambient noise levels. Moreover, due to distance, it is unlikely that noise from multiple cumulative projects would interact to create a significant combined noise impact. As such, it is not anticipated that a significant cumulative increase in permanent ambient noise levels would occur.

Attachment A

Noise Monitoring Data Sheets

Monitoring Location: Site 1
Monitoring Date: 3/18/2020

Monitoring Period

Time	LAeq	LApeak	LASmax
12:36:36	53.1	76.9	60.9
12:37:36	57.2	93.3	71.9
12:38:36	48.3	82.1	57.0
12:39:36	47.3	77.3	49.9
12:40:36	53.6	78.8	61.2
12:41:36	51.8	89.2	58.7
12:42:36	48.4	85.0	53.7
12:43:36	52.4	81.0	60.3
12:44:36	47.8	73.8	55.7
12:45:36	46.2	70.7	50.9
12:46:36	44.1	60.6	47.1
12:47:36	47.3	75.4	52.7
12:48:36	46.8	74.2	53.6
12:49:36	51.4	76.2	57.3
12:50:36	50.3	76.5	54.9
12:51:36	49.0	62.6	49.5



15-minute LAeq

51.0

Monitoring Location: Site 2
Monitoring Date: 3/18/2020

Monitoring Period

Time	LAeq	LApeak	LASmax
13:08:06	54.9	81.1	67.5
13:09:06	66.9	95.2	75.6
13:10:06	49.9	84.9	65.6
13:11:06	64.0	88.8	75.6
13:12:06	57.1	80.6	66.4
13:13:06	62.9	86.5	72.9
13:14:06	57.2	86.6	70.3
13:15:06	53.7	86.3	66.9
13:16:06	54.0	81.0	64.0
13:17:06	52.9	75.1	62.8
13:18:06	46.8	72.0	51.6
13:19:06	44.3	67.2	46.6
13:20:06	52.2	81.8	63.0
13:21:06	45.1	72.2	49.5
13:22:06	61.8	87.4	73.9
13:23:06	57.6	77.1	62.3

15-minute LAeq

59.4

Monitoring Location: Site 3
Monitoring Date: 3/18/2020

Monitoring Period

Time	LAeq	LApeak	LASmax
13:29:37	43.2	80.0	51.7
13:30:37	57.1	84.5	69.6
13:31:37	51.0	79.0	66.5
13:32:37	47.0	80.9	53.1
13:33:37	42.5	75.4	46.5
13:34:37	50.3	70.9	57.5
13:35:37	58.6	87.1	72.3
13:36:37	50.1	83.8	57.2
13:37:37	51.2	79.7	60.4
13:38:37	44.7	75.4	50.6
13:39:37	47.7	79.5	58.2
13:40:37	53.8	81.3	66.8
13:41:37	72.7	100.5	83.5
13:42:37	75.8	104.1	86.0
13:43:37	72.1	101.5	84.2
13:44:37	77.0	99.8	81.8



15-minute LAeq

68.9

Attachment B

Construction Noise Worksheet

Roadway Construction Noise Model (RCNM), Version 1.1

Report date 4/8/2020

Case Description Building Construction

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site 1	Residential	51	51	51

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Crane	No	16		80.6	170	0
Forklift	No	40	85		50	0
Forklift	No	40	85		50	0
Forklift	No	40	85		50	0
Generator	No	50		80.6	50	0
Backhoe	No	40		77.6	20	0
Backhoe	No	40		77.6	20	0
Backhoe	No	40		77.6	20	0
Welder / Torch	No	40		74	20	0

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	69.9	62
Forklift	85	81
Forklift	85	81
Forklift	85	81
Generator	80.6	77.6
Backhoe	85.5	81.5
Backhoe	85.5	81.5
Backhoe	85.5	81.5
Welder / Torch	82	78
Total	85.5	89.7

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site 2	Residential	59.4	59.4	59.4

Equipment

Spec	Actual	Receptor	Estimated
------	--------	----------	-----------

Description	Impact Device	Usage(%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Crane	No	16		80.6	170	0
Forklift	No	40	85		60	0
Forklift	No	40	85		60	0
Forklift	No	40	85		60	0
Generator	No	50		80.6	60	0
Backhoe	No	40		77.6	60	0
Backhoe	No	40		77.6	60	0
Backhoe	No	40		77.6	60	0
Welder / Torch	No	40		74	60	0

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	69.9	62
Forklift	83.4	79.4
Forklift	83.4	79.4
Forklift	83.4	79.4
Generator	79	76
Backhoe	76	72
Backhoe	76	72
Backhoe	76	72
Welder / Torch	72.4	68.4
Total	83.4	85.6

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site 3	Residential	68.9	68.9	68.9

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16		80.6	170	0
Forklift	No	40	85		50	0
Forklift	No	40	85		50	0
Forklift	No	40	85		50	0
Generator	No	50		80.6	50	0
Backhoe	No	40		77.6	20	0
Backhoe	No	40		77.6	20	0
Backhoe	No	40		77.6	20	0
Welder / Torch	No	40		74	20	0

Calculated (dBA)

Equipment	*Lmax	Leq
Crane	69.9	62
Forklift	85	81
Forklift	85	81
Forklift	85	81
Generator	80.6	77.6
Backhoe	85.5	81.5
Backhoe	85.5	81.5
Backhoe	85.5	81.5
Welder / Torch	82	78
Total	85.5	89.7

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date 4/8/2020

Case Description Paving

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site 1	Residential	51	51	51

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Paver	No	50		77.2	40	0
Paver	No	50		77.2	40	0
Pavement Scarifier	No	20		89.5	40	0
Pavement Scarifier	No	20		89.5	40	0
Roller	No	20		80	40	0
Roller	No	20		80	40	0

Calculated (dBA)

Equipment	*Lmax	Leq
Paver	79.2	76.1
Paver	79.2	76.1
Pavement Scarifier	91.4	84.4
Pavement Scarifier	91.4	84.4
Roller	81.9	74.9
Roller	81.9	74.9
Total	91.4	88.5

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site 2	Residential	59.4	59.4	59.4

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Paver	No	50		77.2	100	0
Paver	No	50		77.2	100	0
Pavement Scarifier	No	20		89.5	100	0
Pavement Scarifier	No	20		89.5	100	0

Roller	No	20	80	100	0
Roller	No	20	80	100	0

Calculated (dBA)

Equipment	*Lmax	Leq
Paver	71.2	68.2
Paver	71.2	68.2
Pavement Scarafier	83.5	76.5
Pavement Scarafier	83.5	76.5
Roller	74	67
Roller	74	67
Total	83.5	80.5

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site 3	Residential	68.9	68.9	68.9

Description	Impact	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	150	0
Paver	No	50		77.2	150	0
Pavement Scarafier	No	20		89.5	150	0
Pavement Scarafier	No	20		89.5	150	0
Roller	No	20		80	150	0
Roller	No	20		80	150	0

Calculated (dBA)

Equipment	*Lmax	Leq
Paver	67.7	64.7
Paver	67.7	64.7
Pavement Scarafier	80	73
Pavement Scarafier	80	73
Roller	70.5	63.5
Roller	70.5	63.5
Total	80	77

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report dat 4/8/2020

Case Descr Architectural Coating

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site 1	Residential	51	51	51

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	20	0

Calculated (dBA)

Equipment	*Lmax	Leq
Compressor (air)	85.6	81.6
Total	85.6	81.6

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site 2	Residential	59.4	59.4	59.4

Equipment

Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	60	0

Calculated (dBA)

Equipment	*Lmax	Leq
Compressor (air)	76.1	72.1
Total	76.1	72.1

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site 3	Residential	68.9	68.9	68.9

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Compressor (air)	No	40		77.7	20	0

Calculated (dBA)

Equipment	*Lmax	Leq
Compressor (air)	85.6	81.6
Total	85.6	81.6

*Calculated Lmax is the Loudest value.

Attachment C

Construction Vibration Worksheet

**Vesting Tentative Tract Map No. 74450 Project
Construction Vibration Model
Site 1 and 3 (Adjacent Residential)**

Equipment		Pieces of Equipment	PPV at 25 feet (in/sec)	Distance from Equipment	PPV at adjusted distance	RMS velocity amplitude in in/sec at adjusted distance ^a	RMS Vibration level in VdB at adjusted distance
Caisson drilling		1	0.089	20	0.124	0.031	90
Jackhammer		1	0.035	20	0.049	0.012	82
Large bulldozer		1	0.089	20	0.124	0.031	90
Loaded trucks		1	0.076	20	0.106	0.027	88
Pile Drive (impact)		1	0.644	20	0.900	0.225	107
Vibratory Roller		1	0.210	20	0.293	0.073	97
Small bulldozer		1	0.003	20	0.004	0.001	60

*** Suggested Vibration Thresholds per the Federal Transit Administration, United States Department of Transportation, Transit Noise and Vibration Impact Assessment (FTA-VA-90-1003-06), May 2006, pg. 12-12.**

-Fragile Buildings- 0.20 in/sec

**Vesting Tentative Tract Map No. 74450 Project
Construction Vibration Model
Site 2 (Residential and School uses to the west)**

Equipment		Pieces of Equipment	PPV at 25 feet (in/sec)	Distance from Equipment	PPV at adjusted distance	RMS velocity amplitude in in/sec at adjusted distance ^a	RMS Vibration level in VdB at adjusted distance
Caisson drilling		1	0.089	60	0.024	0.006	76
Jackhammer		1	0.035	60	0.009	0.002	67
Large bulldozer		1	0.089	60	0.024	0.006	76
Loaded trucks		1	0.076	60	0.020	0.005	74
Pile Drive (impact)		1	0.644	60	0.173	0.043	93
Vibratory Roller		1	0.210	60	0.056	0.014	83
Small bulldozer		1	0.003	60	0.001	0.000	46

*** Suggested Vibration Thresholds per the Federal Transit Administration, United States Department of Transportation, Transit Noise and Vibration Impact Assessment (FTA-VA-90-1003-06), May 2006, pg. 12-12.**

-Fragile Buildings- 0.20 in/sec



Esther Ahn <esther.ahn@lacity.org>

FW: 11070-11100 N. Borden Avenue

2 messages

Stephen T. Kia <stephenk@urban-concepts.com>
To: Esther Ahn <esther.ahn@lacity.org>

Tue, Aug 25, 2020 at 2:48 PM

From: Sheila Ahraian <sheila.ahraian@lacity.org>
Sent: Thursday, July 16, 2020 1:32 PM
To: Stephen T. Kia <stephenk@urban-concepts.com>
Cc: Brandon Wilson <Brandon.Wilson@lacity.org>
Subject: Re: 11070-11100 N. Borden Avenue

Hello Stephen,

As stated on the form since the project produces less than 250DVT, the project does not need to be referred to LADOT for further assessment. Planning should know this due to the portion they filled out on the form.

I contacted accounting and the transaction has been voided:

Converge

Credit Card Void 07/16/2020 13:15 William Christopher 52*****3811 K 430.00

I apologize for the inconvenience.

Thank you,

 **Sheila Ahraian**
Transportation Engineering Associate I
Valley Planning & Development Review



 Los Angeles Department of Transportation

 [818.374.4690](tel:818.374.4690) 



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Please consider the environment before printing this email!

On Thu, Jul 16, 2020 at 12:16 PM Stephen T. Kia <stephenk@urban-concepts.com> wrote:

Oops, I just paid the invoice! See the attached confirmation page. How do we proceed at this point? Do you communicate directly with Planning or do you send me the completed form with a note that the project produces less than 250 DVT? Also, how do we process a refund since the payment was not required? -stk

--

Stephen T. Kia

Urban Concepts

(323) 966-2610 x109

From: Sheila Ahoraian <sheila.ahoraian@lacity.org>
Sent: Thursday, July 16, 2020 12:09 PM
To: Stephen T. Kia <stephenk@urban-concepts.com>
Cc: LADOT DevReview SFV <ladot.devreview.sfv@lacity.org>
Subject: Re: 11070-11100 N. Borden Avenue

Hello Stephen,

I apologize, there is no need for your project to be referred to DOT because your project produces less than 250 DVT.

Please ignore the invoice. You are clear to proceed.

Thank you,



Sheila Ahoraian

Transportation Engineering Associate I
Valley Planning & Development Review



 Los Angeles Department of Transportation

 [818.374.4690](tel:818.374.4690)  





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 Please consider the environment before printing this email!

On Thu, Jul 16, 2020 at 9:29 AM Sheila Ahoraian <sheila.ahoraian@lacity.org> wrote:

Good morning Stephen,

I am not sure if you have been assisted yet, however I have attached below the referral form fee invoice (\$430). To pay the review fee, please review the attached invoice and proceed to the link below to complete the payment. Select PAY NOW under Developer Fees and select **my name (Sheila Ahoraian)** on the DOT staff drop-down menu.

<http://ladot.lacity.org/businesses/fees>

Please **email me the confirmation page** when you have paid. Once I receive confirmation of payment, I will send you the completed form.

Thank you,

 **Sheila Ahoraian**
 Transportation Engineering Associate I
Valley Planning & Development Review



 Los Angeles Department of Transportation

 [818.374.4690](tel:818.374.4690)  





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Please consider the environment before printing this email!

On Wed, Jul 15, 2020 at 4:43 PM Stephen T. Kia <stephenk@urban-concepts.com> wrote:

Please see the attached LADOT Referral Form for Planning Case No. CPC-2020-1838-ZC, located at 11070-11100 N. Borden Avenue in Pacoima. What are our next steps? Is there a fee required to process this form? If so, how do we pay it given the current pandemic? Your attention is much appreciated. -stk

--

Stephen T. Kia

Urban Concepts

(323) 966-2610 x109

Esther Ahn <esther.ahn@lacity.org>
To: "Stephen T. Kia" <stephenk@urban-concepts.com>

Tue, Aug 25, 2020 at 4:32 PM

Received - thank you!

[Quoted text hidden]

--



LOS ANGELES
CITY PLANNING

Esther Ahn

City Planner

Los Angeles City Planning

200 N. Spring St., Room 763

Los Angeles, CA 90012

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T: (213) 978-1486

