

EXHIBIT D

ENVIRONMENTAL CLEARANCE

ENV-2023-5877-CE

- D1 – Notice of Exemption & Justification for
Categorical Exemption
- D2 – Transportation Assessment Form
- D3 – Tree Disclosure Statement and Report
- D4 – Geology and Soils Report Approval Letter
- D5 – Air Quality Technical Report
- D6 – Noise Technical Report

COUNTY CLERK'S USE

CITY OF LOS ANGELES
OFFICE OF THE CITY CLERK
200 NORTH SPRING STREET, ROOM 395
LOS ANGELES, CALIFORNIA 90012

CALIFORNIA ENVIRONMENTAL QUALITY ACT

NOTICE OF EXEMPTION

(PRC Section 21152; CEQA Guidelines Section 15062)

Pursuant to Public Resources Code § 21152(b) and CEQA Guidelines § 15062, the notice should be posted with the County Clerk by mailing the form and posting fee payment to the following address: Los Angeles County Clerk/Recorder, Environmental Notices, P.O. Box 1208, Norwalk, CA 90650. Pursuant to Public Resources Code § 21167 (d), the posting of this notice starts a 35-day statute of limitations on court challenges to reliance on an exemption for the project. Failure to file this notice as provided above, results in the statute of limitations being extended to 180 days.

PARENT CASE NUMBER(S) / REQUESTED ENTITLEMENTS
CPC-2023-5876-CU-DB-DRB-SPP-VHCA

LEAD CITY AGENCY
City of Los Angeles (Department of City Planning)

CASE NUMBER
ENV-2023-5877-CE

PROJECT TITLE
10756 Wilkins Ave

COUNCIL DISTRICT
5 – Katy Yaroslavsky

PROJECT LOCATION (Street Address and Cross Streets and/or Attached Map) Map attached.
10756 West Wilkins Avenue

The project is the construction of a new 5-story, 56-foot-tall multi-family residential building consisting of 11 dwelling units (including two (2) Very Low Income Units). The project will be approximately 11,941 square feet with a Floor Area Ratio ("FAR") of approximately 3.66:1. The project will provide seven (7) vehicular parking spaces and 12 long-term bicycle parking spaces in one (1) subterranean level. The site is currently improved with a single-family dwelling that will be demolished. No Protected or Significant Trees are located on the property. The project includes necessary grading and a haul route for the cut and export of 3,200 cubic yards of soil.

NAME OF APPLICANT / OWNER:
FIN Holdings LLC & Wilkins Group LLC

CONTACT PERSON (If different from Applicant/Owner above) (AREA CODE) TELEPHONE NUMBER | EXT.
Daniel Ahadian, nur – Development | Consulting (310) 339 - 7344

EXEMPT STATUS: (Check all boxes, and include all exemptions, that apply and provide relevant citations.)

STATE CEQA STATUTE & GUIDELINES

STATUTORY EXEMPTION(S)
Public Resources Code Section(s) _____

CATEGORICAL EXEMPTION(S) (State CEQA Guidelines Sec. 15301-15333 / Class 1-Class 33)
CEQA Guideline Section(s) / Class(es) Sections 15301 (Class 1) & 15332 (Class 32)

OTHER BASIS FOR EXEMPTION (E.g., CEQA Guidelines Section 15061(b)(3) or (b)(4) or Section 15378(b))

JUSTIFICATION FOR PROJECT EXEMPTION: Additional page(s) attached

The Project qualifies for a Class 1 Categorical Exemption because it involves the demolition of one (1) single-family dwelling. The Project qualifies for a Class 32 Categorical Exemption as it is developed on an infill site and meets the following conditions: (a) Consistency with the applicable general plan designation and policies, & applicable zoning designation and regulations; (b) Within city limits on a site of no more than five acres substantially surrounded by urban uses; (c) No value as habitat for endangered, rare or threatened species; (d) Approval would not result in any significant effects relating to traffic, noise, air quality, or water quality; and (e) The Site can be adequately served by all required utilities and public services.

None of the exceptions in CEQA Guidelines Section 15300.2 to the categorical exemption(s) apply to the Project.

The project is identified in one or more of the list of activities in the City of Los Angeles CEQA Guidelines as cited in the justification.

IF FILED BY APPLICANT, ATTACH CERTIFIED DOCUMENT ISSUED BY THE CITY PLANNING DEPARTMENT STATING THAT THE DEPARTMENT HAS FOUND THE PROJECT TO BE EXEMPT.
If different from the applicant, the identity of the person undertaking the project.

CITY STAFF USE ONLY:

CITY STAFF NAME AND SIGNATURE *Kevin Fulton* STAFF TITLE
Kevin Fulton City Planning Associate

ENTITLEMENTS APPROVED
Conditional Use, Density Bonus, Project Permit Compliance, & Design Review

**DEPARTMENT OF
CITY PLANNING**

COMMISSION OFFICE
(213) 978-1300

CITY PLANNING COMMISSION

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DEPUTY DIRECTOR

LISA M. WEBBER, AICP
DEPUTY DIRECTOR

**JUSTIFICATION FOR PROJECT EXEMPTION
CASE NO. ENV-2023-5877-CE**

The Department of City Planning determined, based on the whole of the administrative record, that the Project is exempt from the California Environmental Quality Act (“CEQA”) pursuant to State CEQA Guidelines, Article 19, Sections 15301 (Class 1) & 15332 (Class 32), and there is no substantial evidence demonstrating that an exception to a categorical exemption pursuant to CEQA Guidelines, Section 15300.2 applies. The Notice of Exemption and Justification for Project Exemption for Environmental Case No. ENV-2023-5877-CE is provided in the case file.

Project Description

The project is the construction of a new 5-story, 56-foot-tall multi-family residential building consisting of 11 dwelling units (including two (2) Very Low Income Units). It will consist of six (6) two-bedroom units and five (5) one-bedroom units. The project will be approximately 11,941 square feet with a Floor Area Ratio (“FAR”) of approximately 3.66:1. The project will provide seven (7) vehicular parking spaces and 12 long-term bicycle parking spaces in one (1) subterranean level with access from a two-way driveway on Ohio Avenue. One (1) short-term bicycle parking space will be provided at ground level. According to a Tree Report prepared by Lisa Smith, The Tree Resource, dated August 17, 2023, there are no protected trees on the subject site or public right-of-way. However, there are two (2) non-protected trees on the subject site proposed for removal as part of the project. There are also five (5) street trees in the public right-of-way that will be retained and protected in place. The project includes necessary grading and a haul route for the cut and export of 3,200 cubic yards of soil. The site is currently improved with a vacant single-family dwelling proposed for demolition.

CEQA Determination – Class 1 Categorical Exemption Applies

A project qualifies for a Class 1 Categorical Exemption if it involves the demolition and removal of individual small structures, including up to three (3) single-family residences in urbanized areas. The proposed project qualifies for a Class 1 Categorical Exemption because it involves the demolition of a single-family dwelling on a site located in an urbanized area within the City of Los Angeles.

CEQA Determination – Class 32 Categorical Exemption Applies

A project qualifies for a Class 32 Categorical Exemption if it is developed on an infill site and meets the following criteria:

- (a) **The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with the applicable zoning designation and regulations.**

The project site is located within the Westwood Community Plan, Westwood Community Multi-Family Specific Plan (WMFSP), Westwood Community Design Review Board Specific Plan, and the West Los Angeles Transportation Improvement and Mitigation Specific Plan. Please see Findings 10 and 11 regarding the project's consistency with the WMFSP and the Westwood Community Design Review Board Specific Plan.

The subject site has a Low Medium II Residential land use designation, with corresponding zones of RD1.5-1, RD2, RW2, and RZ2.5. The site is zoned [Q]RD1.5-1, consistent with the land use designation. The RD1.5 Zone allows for one dwelling unit per 1,500 square feet of lot area. The project site is also in Height District 1 which permits a floor area of three times the Buildable Area (FAR 3:1) and a maximum building height of 45 feet in the RD1.5 Zone. The Q condition on the project site, enacted through Ordinance No. 163,187, requires that all projects with two (2) or more units be subject to review by the Westwood Community Design Review Board.

The project site, located at 10756 West Wilkins Avenue, has frontages of approximately 109 feet on both Wilkins and Ohio Avenue and 56.63 feet along both abutting properties, resulting in a total area of 6,744 square feet. The Bureau of Engineering will require a 3-foot dedication along Ohio Avenue as part of the project, resulting in a net lot area of 6,217 square feet. As such, the project site is consistent with the minimum lot width and lot area requirements for the RD1.5 Zone. Pursuant to State Density Bonus Law and LAMC Section 12.22 – A.25, the applicant is requesting On & Off-Menu Incentives and Waivers of Development Standards in exchange for providing two (2) Very Low Income Units for 55 years.

First, the proposed project is consistent with the following goals, objectives, and policies of the General Plan Framework Element:

Objective 3.1: Accommodate a diversity of uses that support the needs of the City's existing and future residents, businesses, and visitors.

Policy 3.2.3: Provide for the development of land use patterns that emphasize pedestrian/bicycle access and use in appropriate locations.

Objective 3.7: Provide for the stability and enhancement of multi-family residential neighborhoods and allow for growth in areas where there is sufficient public infrastructure and services and the residents' quality of life can be maintained or improved.

Objective 4.2: Encourage the location of new multi-family housing development to occur in proximity to transit stations, along some transit corridors, and within some high activity areas with adequate transitions and buffers between higher density developments and surrounding lower density residential neighborhoods.

Policy 4.2.1: Offer incentives to include housing for very low and low-income households in mixed-use developments.

Objective 7.9: Ensure that the available range of housing opportunities is sufficient, in terms of location, concentration, type, size, price/rent/range, access to local services and access to transportation, to accommodate future population growth and enable a reasonable portion of the City's work force to both live and work in the City.

Policy 7.9.1: *Promote the provision of affordable housing through means which require minimal subsidy levels and which, therefore, are less detrimental to the City's fiscal structure.*

The project involves the construction of a 11-unit, five-story multi-family dwelling on a site located approximately 2,500 feet from the future Metro D (Purple) Line station at the corner of Wilshire & Westwood Boulevard. The development will emphasize pedestrian/bicycle access by limiting onsite automobile parking to seven (7) spaces while also providing 12 long-term bicycle parking spaces. Moreover, the site is located within walking distance from UCLA, Ronald Reagan UCLA Medical Center, the West Los Angeles VA Medical Center, major commercial corridors along Westwood Boulevard and Westwood Village, and a variety of other employment and commercial uses.

The project is also located in an area with sufficient public infrastructure and services because the proposed multi-family residential building will be on a previously developed site that was served by all required utilities and public services and is consistent with the General Plan. The project site is served by the Los Angeles Police Department and Los Angeles Fire Department, Los Angeles Unified School District, and other public services. Additionally, the site is currently served by the Los Angeles Department of Water and Power, the Southern California Gas Company, and the Bureau of Sanitation. As such, the site can be adequately served by all required utilities and public services.

Finally, the project is utilizing Density Bonus incentives and waivers in exchange for the provision of two (2) Very Low Income Units for 55 years. The Very Low Income Units will not require any public subsidy.

The proposed project is also consistent with the following goals, objectives, and policies of the General Plan Housing Element:

Goal 1: *A City where housing production results in an ample supply of housing to create more equitable and affordable options that meet existing and projected needs.*

Objective 1.2: *Facilitate the production of housing, especially projects that include Affordable Housing and/or meet Citywide Housing Priorities.*

Objective 1.3: *Promote a more equitable distribution of affordable housing opportunities throughout the city, with a focus on increasing Affordable Housing in Higher Opportunity Areas and in ways that further Citywide Housing Priorities.*

Policy 1.3.2: *Prioritize the development of new Affordable Housing in all communities, particularly those that currently have fewer Affordable units.*

Goal 3: *A City in which housing creates healthy, livable, sustainable, and resilient communities that improve the lives of all Angelenos.*

Objective 3.2: *Promote environmentally sustainable buildings and land use patterns that support a mix of uses, housing for various income levels and provide access to jobs, amenities, services, and transportation options.*

Policy 3.2.2: *Promote new multi-family housing, particularly Affordable and mixed income housing, in areas near transit, jobs, and Higher Opportunity Areas, in order to facilitate a*

better jobs-housing balance, help shorten commutes, and reduce greenhouse gas emissions.

The proposed project will result in a net increase of 10 new dwelling units to the City's housing stock and conforms with the applicable provisions of the Housing Element. The project will provide two (2) Low Income Units among the 11 total units in a "Higher Opportunity Area" as defined in the Housing Element. Additionally, this mixed-income development will be located near public transit options and a variety of retail, commercial, entertainment, recreational, educational, and employment opportunities. The development is also in a community that currently has fewer affordable units. According to the Department of City Planning's Housing Progress Dashboard, 69 affordable units were approved in the Westwood Community Plan Area between 2015 – 2022. The citywide average over the same period was 669 affordable units per Plan Area.

Next, the project is consistent with the following goals, objectives, and policies of the Westwood Community Plan, one of the Land Use Elements of the General Plan:

Goal 1: *A safe, secure, and high quality residential environment for all economic, age, and ethnic segments of the community.*

Objective 1-1: *To provide for the preservation of existing housing and for the development of new housing to meet the diverse economic and physical needs for the existing residents and projected population of the Plan area to the year 2010.*

Policy 1-1.2: *Protect the quality of residential environment and promote the maintenance and enhancement of the visual and aesthetic environment of the community.*

Policy 1-1.3: *Provide for adequate multi-family residential development.*

Policy 1-2.1: *Locate higher density residential within designated multiple family areas and near commercial centers and major bus routes where public service facilities and infrastructure will support this development.*

Objective 1-3: *To preserve and enhance the varied and distinct residential character and integrity of existing residential neighborhoods.*

Objective 1-4: *To promote the adequacy and affordability of multiple-family housing and increase its accessibility to more segments of the population.*

Policy 1-4.1: *Promote greater individual choice in type, quality, price, and location of housing, including student housing within one mile of the UCLA campus.*

Policy 1-4.2: *Ensure that new housing opportunities minimize displacement of residents.*

The proposed project meets the above goals, policies, and objectives by providing multi-family dwelling units in a new, safe, and secure building. The proposed project is located within a neighborhood designated for Low Medium II Residential Land Uses, which includes multi-family residential uses, and is well served by facilities and necessary infrastructure. The project site is located approximately 3,078 feet from the UCLA campus and will result in a net increase of 10 dwelling units, including two (2) Very Low Income Units. The site is located in a Transit Priority Area (TPA) and within a ½ mile of the future Los Angeles Metropolitan Transportation Authority Purple (D) Line station at the corner of Wilshire & Westwood Boulevards, along with multiple local and rapid bus stops that encourage alternative modes of transportation. Finally, the project will

not displace any existing residents as the site is currently improved with a vacant single-family dwelling.

Finally, the project is consistent with the following policies of the General Plan Mobility Element:

Policy 3.1: Access for All: Recognize all modes of travel, including pedestrian, bicycle, transit, and vehicular modes - including goods movement – as integral components of the City’s transportation system.

Policy 3.3: Land Use Access and Mix: Promote equitable land use decisions that result in fewer vehicle trips by providing greater proximity and access to jobs, destinations, and other neighborhood services.

The project is a pedestrian oriented development that provides affordable and market-rate units and is located 2,500 feet from the future Metro D (Purple) Line Station and several other public transit options. The site is also within walking distance from commercial corridors on Westwood Boulevard and Westwood Village as well as UCLA and a variety of other employment opportunities. The project will promote multi-modal transportation by limiting onsite vehicular parking to seven (7) spaces and providing 12 long term bicycle parking spaces.

As such, the project is consistent with the applicable Westwood Community Plan designation and policies and all applicable zoning designations and regulations as permitted by State Density Bonus Law.

(b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

The subject site is wholly within the City of Los Angeles, on a site that is approximately 0.16 acres (6,774 square feet). It will be 0.14 acres (6,217 square feet) following dedications required by the Bureau of Engineering as part of the project. The subject site is in an urbanized area near the University of California - Los Angeles (UCLA) campus, Ronald Reagan UCLA Medical Center, and the West Los Angeles VA Medical Center. Surrounding properties along this block of Wilkins and Ohio Avenue (bounded by Selby Avenue to the east and Malcolm Avenue to the west) are also zoned [Q]RD1.5-1 and improved with multi-family dwellings ranging from one (1) to four (4) stories in height. The directly abutting properties to the west along Wilkins and Ohio Avenue are improved with two-story multi-family dwellings. The properties to the north are zoned [Q]RD1.5-1, R1-1-O, [Q]R3-1-O, and [Q]R5-3-O. These properties are improved with single & multi-family dwellings ranging from one (1) to three (3) stories in height as well as a mixed-use corridor along Wilshire Boulevard improved with high-rise residential and commercial structures. The properties to the east are zoned [Q]RD1.5-1 and R1-1-O and improved with single & multi-family dwellings ranging from one (1) to three (3) stories in height. The properties to the south are zoned [Q]RD1.5-1-O, R1-1, and [Q]PF-1XL-O and improved with educational and religious uses, including St. Paul the Apostle Church (a Historic/Cultural Landmark), St. Paul the Apostle School, Ralph Waldo Emerson Community Charter School, and the Los Angeles California Mormon Temple complex. Properties to the south are also improved with multi-family residential uses ranging from one (1) to five (5) stories in height. The properties to the west are zoned [Q]RD1.5-1, R1-1, and C4-1VL-POD. These properties are improved with single & multi-family dwellings as well as commercial structures along Westwood Boulevard that range from one (1) to three (3) stories in height.

(c) The project site has no value as habitat for endangered, rare or threatened species.

The site is previously disturbed and surrounded by development and therefore is not, and has no value as, a habitat for endangered, rare or threatened species. The site is currently developed with a vacant single-family dwelling. According to a Tree Report prepared by Lisa Smith, The Tree Resource, dated August 17, 2023, there are no protected trees on the subject site or public right-of-way. However, there are two (2) non-protected trees on the subject site proposed for removal as part of the project. There are also five (5) street trees in the public right-of-way that will be retained and protected in place. Furthermore, the project site does not adjoin any open space or wetlands that could support habitat for endangered, rare or threatened species. Therefore, the site does not contain or have value as habitat for endangered, rare or threatened species and is not located adjacent to any habitat for endangered, rare or threatened species.

(d) **Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.**

A Noise Technical Report prepared by DKA Planning, dated August 2023, confirmed that the Project would not result in significant construction-related or operational noise impacts on the environment. The analysis considered noise from construction activities, operational noise sources from periodic delivery and trash hauling, outdoor use areas, conversation, rooftop equipment, off-site traffic, vibration, impacts to sensitive receptors. The analysis concluded that the project would not result in any significant effects relating to noise.

Furthermore, the project does not exceed the threshold criteria established by LADOT for preparing a traffic study. According to the City of Los Angeles VMT Calculator Version 1.4 and LADOT Transportation Assessment Referral Form, dated September 5, 2023, the proposed 11-unit multi-family dwelling with six (6) onsite vehicular parking spaces is expected to generate 39 daily vehicle trips, well below the minimum 250 daily vehicle trips that would require a traffic study. The Project will also be governed by an approved haul route under City Code requirements, which will regulate the route hauling trucks will travel, and the times at which they may leave the site, thereby reducing any potential traffic impacts to less than significant.

The project's potential air quality effects were evaluated by estimating the potential construction and operations emissions of criteria pollutants and comparing those levels to significance thresholds provided by the Southern California Air Quality Management District (SCAQMD). The project's emissions were estimated using the CalEEMod 2022.1.1.17 model for the purposes of evaluating air quality impacts of proposed projects. The analysis considered construction activity emissions during site preparation, grading, building construction, paving, and architectural coating, as well as effects to sensitive receptors. The analysis confirms that the project would not exceed SCAQMD significance thresholds for air quality impacts.

Additionally, the project will be subject to Regulatory Compliance Measures (RCMs). These require compliance with the City of Los Angeles Noise Ordinance, pollutant discharge, dewatering, stormwater mitigations; and Best Management Practices for stormwater runoff. RCMs include but are not limited to:

- **Regulatory Compliance Measure RC-AQ-1 (Demolition, Grading and Construction Activities): Compliance with provisions of the SCAQMD District Rule 403.** The project shall comply with all applicable standards of the Southern California Air Quality Management District, including the following provisions of District Rule 403:
 - All unpaved demolition and construction areas shall be wetted at least twice daily during excavation and construction, and temporary dust covers shall be used to reduce dust emissions and meet SCAQMD District Rule 403. Wetting could reduce fugitive dust by as much as 50 percent.

- The construction area shall be kept sufficiently dampened to control dust caused by grading and hauling, and at all times provide reasonable control of dust caused by wind.
 - All clearing, earth moving, or excavation activities shall be discontinued during periods of high winds (i.e., greater than 15 mph), so as to prevent excessive amounts of dust.
 - All dirt/soil loads shall be secured by trimming, watering or other appropriate means to prevent spillage and dust.
 - All dirt/soil materials transported off-site shall be either sufficiently watered or securely covered to prevent excessive amount of dust.
 - General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions.
 - Trucks having no current hauling activity shall not idle but be turned off.
- **Regulatory Compliance Measure RC-NO-1 (Demolition, Grading, and Construction Activities):** The project shall comply with the City of Los Angeles Noise Ordinance and any subsequent ordinances, which prohibit the emission or creation of noise beyond certain levels at adjacent uses unless technically infeasible.
 - **Regulatory Compliance Measure RC-GEO-1 (Seismic):** The design and construction of the project shall conform to the California Building Code seismic standards as approved by the Department of Building and Safety.
 - **Regulatory Compliance Measure RC-HAZ-2: Explosion/Release (Methane Zone):** As the Project Site is within a methane zone, prior to the issuance of a building permit, the Site shall be independently analyzed by a qualified engineer, as defined in Ordinance No. 175,790 and Section 91.7102 of the LAMC, hired by the Project Applicant. The engineer shall investigate and design a methane mitigation system in compliance with the LADBS Methane Mitigation Standards for the appropriate Site Design Level which will prevent or retard potential methane gas seepage into the building. The Applicant shall implement the engineer's design recommendations subject to DOGGR, LADBS and LAFD plan review and approval.
 - **Regulatory Compliance Measure RC-HAZ-3: Explosion/Release (Soil Gases):** During subsurface excavation activities, including borings, trenching and grading, OSHA worker safety measures shall be implemented as required to preclude any exposure of workers to unsafe levels of soil-gases, including, but not limited to, methane.

These RCMs will ensure the project will not have significant impacts on noise, air quality, and water quality. Furthermore, the project does not exceed the threshold criteria established by LADOT for preparing a traffic study. Therefore, approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

(e) **The site can be adequately served by all required utilities and public services.**

The project site will be adequately served by all public utilities and services because the proposed multi-family residential building will be on a previously developed site that was served by all required utilities and public services and is consistent with the General Plan. The project site is served by the Los Angeles Police Department and Los Angeles Fire Department, Los Angeles Unified School District, and other public services. Additionally, the site is currently served by the Los Angeles Department of Water and Power, the Southern California Gas Company, and the

Bureau of Sanitation. As such, the site can be adequately served by all require utilities and public services.

Therefore, the project meets all of the Criteria for the Class 32 Categorical Exemption.

CEQA Section 15300.2: Exceptions to the Use of Categorical Exemptions

There are five (5) Exceptions which must be considered in order to find a project exempt under Class 32:

- (a) **Cumulative Impacts.** *All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.*

Properties in the vicinity are predominantly developed with a mix of single and multi-family dwellings and the subject site is of a similar size and slope to nearby properties. According to Navigate LA and the Department of Building and Safety Haul Route Requests Status Table, there are two approved (10757 – 10759 West Wilkins Avenue & 10770 – 10776 West Wilkins Avenue), and zero pending haul route applications within 600 feet of the project site. However, the Director of Planning received a letter from the 10757 – 10759 West Wilkins Avenue project applicant on September 11, 2022, requesting abandonment of the project approved under Case Nos. DIR-2019-2657-DRB-SPP-TOC-1A and ENV-2019-2658-CE.

In light of the increase in construction activity in Grading Hillside Areas and the increase in associated truck traffic related to the import and export of soil, a haul route monitoring program is being implemented by the Department of Building and Safety for Council Districts 4 and 5 for added enforcement to ensure safety and to protect the quality of life of area residents. As part of this program, a haul route monitor is assigned to a geographic area to monitor haul routes and keep track of daily activities in order to minimize impacts to neighboring residents. Haul routes are tracked via a Map for each district to identify the locations of construction sites for which a haul route was required.

In addition, haul route approvals will be subject to recommended conditions prepared by LADOT to be considered by the Board of Building and Safety Commissioners that will reduce the impacts of construction related hauling activity, monitor the traffic effects of hauling, and reduce haul trips in response to congestion. While there are three other known projects of the same type in the same neighborhood as the subject project, the hauling periods will be reviewed by LADOT and LADBS to reduce overlap. The proposed project shall comply with the conditions contained within the Department of Building and Safety's Geology and Soils Report Approval Letter (Log #118330), dated August 6, 2021, for the proposed project and as it may be subsequently amended or modified.

There is a succession of projects of the same type within this neighborhood; however, there is no evidence in the file (including in any technical studies) that there is a foreseeable cumulative significant impact from these projects in an any impact category; including in transportation due to LADOT and LADBS permitting and monitoring practices. Therefore, in conjunction with citywide RCMs and compliance with other applicable regulations, no foreseeable cumulative impacts are expected.

- (b) **Significant Effect Due to Unusual Circumstances.** *A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.*

The project proposes an 11-unit multi-family residential building in an area zoned and designated for such development. The project site is also of a similar size and slope to nearby properties. The surrounding properties on the adjacent blocks of Wilkins and Ohio Avenue are improved with single and multi-family dwellings ranging from one (1) to four (4) stories in height that host between one (1) and fifteen dwellings per site. While the proposed project is slightly taller than most of the surrounding structures, the applicant qualifies for a 11-foot height increase pursuant to LAMC Section 12.25 A.25 and State Density Bonus Law. Furthermore, there is no substantial evidence in the administrative record that this project will cause a significant effect. Thus, there are no unusual circumstances which may lead to a significant effect on the environment, and this exception does not apply.

- (c) **Scenic Highways.** *A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway.*

The only State Scenic Highway within the City of Los Angeles is the Topanga Canyon State Scenic Highway, State Route 27, which travels through a portion of Topanga State Park. State Route 27 is located approximately nine (9) miles west of the subject site. Therefore, the subject site will not create any impacts within a designated state scenic highway, and this exception does not apply.

- (d) **Hazardous Waste Sites.** *A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code*

According to Envirostor, the State of California's database of Hazardous Waste Sites, neither the subject site, nor any site in the vicinity, is identified as a hazardous waste site. The project site is not identified as a hazardous waste site or is on any list compiled pursuant to Section 65962.5 of the Government Code.

- (e) **Historical Resources.** *A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.*

The project site is currently developed with a single-family dwelling that is not listed in the National Register of Historic Places, California Register of Historical Resources, the Los Angeles Historic-Cultural Monuments Register, and/or any local register, and was not found to be a potential historic resource based on the City's HistoricPlacesLA website or SurveyLA, the citywide survey of Los Angeles.

The property directly across Ohio Avenue from the project site is improved with St. Paul the Apostle Catholic Church and School, a designated Historic/Cultural Landmark in the City of Los Angeles. However, the project's height, massing, and other defining features would not obscure or take away from the aesthetic of the historic resource due to the physical separation between the historic resource and proposed project – which would be located a minimum of 80 feet from the church. Additionally, the proposed project will not expand over the street and St. Paul the Apostle Church and School will remain visible from the public right-of-way along this block of Ohio Avenue. Moreover, the Los Angeles City Planning Office of Historic Resources reviewed the proposal and noted that the proposed project would not have any adverse impacts to the historic resource.

As such, the project will not result in a substantial adverse change to the significance of a historic resource and this exception does not apply.



REFERRAL FORMS:

TRANSPORTATION STUDY ASSESSMENT

DEPARTMENT OF TRANSPORTATION - REFERRAL FORM

RELATED CODE SECTION: Los Angeles Municipal Code Section 16.05 and various code sections.

PURPOSE: The Department of Transportation (LADOT) Referral Form serves as an initial assessment to determine whether a project requires a Transportation Assessment.

GENERAL INFORMATION

- Administrative: Prior to the submittal of a referral form with LADOT, a Planning case must have been filed with Los Angeles City Planning.
- All new school projects, including by-right projects, must contact LADOT for an assessment of the school's proposed drop-off/pick-up scheme and to determine if any traffic controls, school warning and speed limit signs, school crosswalk and pavement markings, passenger loading zones and school bus loading zones are needed.
- Unless exempted, projects located within a transportation specific plan area may be required to pay a traffic impact assessment fee regardless of the need to prepare a transportation assessment.
- Pursuant to LAMC Section 19.15, a review fee payable to LADOT may be required to process this form. The applicant should contact the appropriate LADOT Development Services Office to arrange payment.
- LADOT's Transportation Assessment Guidelines, VMT Calculator, and VMT Calculator User Guide can be found at <http://ladot.lacity.org>.
- A transportation study is not needed for the following project applications:
 - Ministerial / by-right projects
 - Discretionary projects limited to a request for change in hours of operation
 - Tenant improvement within an existing shopping center for change of tenants
 - Any project only installing a parking lot or parking structure
 - Time extension
 - Single family home (unless part of a subdivision)
- This Referral Form is not intended to address the project's site access plan, driveway dimensions and location, internal circulation elements, dedication and widening, and other issues. These items require separate review and approval by LADOT.

SPECIAL REQUIREMENTS

When submitting this referral form to LADOT, include the completed documents listed below.

- Copy of Department of City Planning Application ([CP-7771.1](#)).
- Copy of a fully dimensioned site plan showing all existing and proposed structures, parking and loading areas, driveways, as well as on-site and off-site circulation.
- If filing for purposes of Site Plan Review, a copy of the Site Plan Review Supplemental Application.
- Copy of project-specific VMT Calculator analysis results.

TO BE VERIFIED BY PLANNING STAFF PRIOR TO LADOT REVIEW

LADOT DEVELOPMENT SERVICES DIVISION OFFICES: Please route this form for processing to the appropriate LADOT Development Review Office as follows (see [this map](#) for geographical reference):

Metro
213-972-8482
100 S. Main St, 9th Floor
Los Angeles, CA 90012

West LA
213-485-1062
7166 W. Manchester Blvd
Los Angeles, CA 90045

Valley
818-374-4699
6262 Van Nuys Blvd, 3rd Floor
Van Nuys, CA 91401

1. PROJECT INFORMATION

Case Number: _____

Address: _____

Project Description: _____

Seeking Existing Use Credit (will be calculated by LADOT): Yes _____ No _____ Not sure _____

Applicant Name: _____

Applicant E-mail: _____ Applicant Phone: _____

Planning Staff Initials: _____ Date: _____

2. PROJECT REFERRAL TABLE

	Land Use (list all)	Size / Unit	Daily Trips ¹
Proposed ¹			
	<i>Total trips¹:</i>		39
<p>a. Does the proposed project involve a discretionary action? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>b. Would the proposed project generate 250 or more daily vehicle trips²? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>c. If the project is replacing an existing number of residential units with a smaller number of residential units, is the proposed project located within one-half mile of a heavy rail, light rail, or bus rapid transit station³? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If YES to a. and b. or c., or to all of the above, the Project <u>must</u> be referred to LADOT for further assessment.</p> <p>Verified by: Planning Staff Name: _____ Phone: _____</p> <p style="text-align: center;">Signature: <i>Kevin Fulton</i> Date: _____</p>			

¹ Qualifying Existing Use to be determined by LADOT staff on following page, per LADOT's Transportation Assessment Guidelines.

² To calculate the project's total daily trips, use the VMT Calculator. Under 'Project Information', enter the project address, land use type, and intensity of all proposed land uses. Select the '+' icon to enter each land use. After you enter the information, copy the 'Daily Vehicle Trips' number into the total trips in this table. Do not consider any existing use information for screening purposes. For additional questions, consult LADOT's [VMT Calculator User Guide](#) and the LADOT Transportation Assessment Guidelines (available on the LADOT website).

³ Relevant transit lines include: Metro Red, Purple, Blue, Green, Gold, Expo, Orange, and Silver line stations; and Metrolink stations.

TO BE COMPLETED BY LADOT

3. PROJECT INFORMATION

	Land Use (list all)	Size / Unit	Daily Trips
Proposed			
	<i>Total new trips:</i>		
Existing			
	<i>Total existing trips:</i>		
<i>Net Increase / Decrease (+ or -)</i>			

- a. Is the project a single retail use that is less than 50,000 square feet? Yes No
- b. Would the project generate a net increase of 250 or more daily vehicle trips? Yes No
- c. Would the project generate a net increase of 500 or more daily vehicle trips? Yes No
- d. Would the project result in a net increase in daily VMT? Yes No
- e. If the project is replacing an existing number of residential units with a smaller number of residential units, is the proposed project located within one-half mile of a heavy rail, light rail, or bus rapid transit station? Yes No
- f. Does the project trigger Site Plan Review (LAMC 16.05)? Yes No
- g. Project size:
 - i. Would the project generate a net increase of 1,000 or more daily vehicle trips? Yes No
 - ii. Is the project's frontage 250 linear feet or more along a street classified as an Avenue or Boulevard per the City's General Plan? Yes No
 - iii. Is the project's building frontage encompassing an entire block along a street classified as an Avenue or Boulevard per the City's General Plan? Yes No

VMT Analysis (CEQA Review)

If **YES** to **a.** and **NO** to **e.** a VMT analysis is **NOT** required.
 If **YES** to both **b.** and **d.**; or to **e.** a VMT analysis **is** required.

Access, Safety, and Circulation Assessment (Corrective Conditions)

If **YES** to **c.**, a project access, safety, and circulation evaluation may be required.
 If **YES** to **f.** and either **g.i.**, **g.ii.**, or **g.iii.**, an access assessment may be required.

LADOT Comments:

Please note that this form is not intended to address the project's site access plan, driveway dimensions and location, internal circulation elements, dedication and widening, and other issues. These items require separate review and approval by LADOT. Qualifying Existing Use to be determined per LADOT's Transportation Assessment Guidelines.

4. Specific Plan with Trip Fee or TDM Requirements: **Yes** **No**

Fee Calculation Estimate: _____

VMT Analysis Required (Question b. satisfied): **Yes** **No**

Access, Safety, and Circulation Evaluation Required (Question c. satisfied): **Yes** **No**

Access Assessment Required (Question c., f., and either g.i., g.ii. or g.iii satisfied): **Yes** **No**

Prepared by DOT Staff Name: _____ Phone: _____

Signature: _____ Date: _____

CITY OF LOS ANGELES VMT CALCULATOR Version 1.4



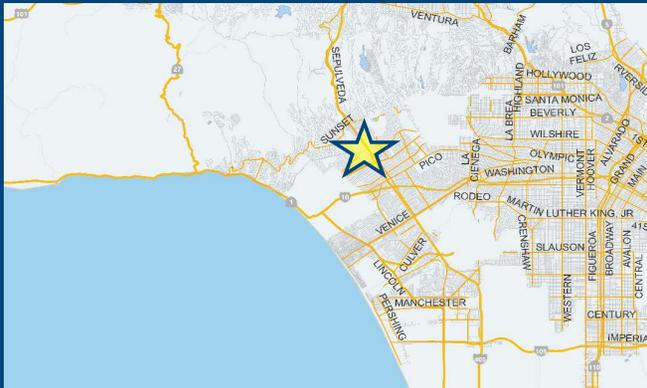
Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Project Information

Project:

Scenario:

Address:



Is the project replacing an existing number of residential units with a smaller number of residential units AND is located within one-half mile of a fixed-rail or fixed-guideway transit station?

Yes No

Existing Land Use

Land Use Type	Value	Unit
Housing Single Family	1	DU
Housing Single Family	1	DU

[Click here to add a single custom land use type \(will be included in the above list\)](#)

Proposed Project Land Use

Land Use Type	Value	Unit
Housing Multi-Family	9	DU
Housing Affordable Housing - Family	2	DU
Housing Multi-Family	9	DU

[Click here to add a single custom land use type \(will be included in the above list\)](#)

Project Screening Summary

Existing Land Use	Proposed Project
6 Daily Vehicle Trips	39 Daily Vehicle Trips
38 Daily VMT	253 Daily VMT

Tier 1 Screening Criteria

Project will have less residential units compared to existing residential units & is within one-half mile of a fixed-rail station.

Tier 2 Screening Criteria

The net increase in daily trips < 250 trips **33**
Net Daily Trips

The net increase in daily VMT ≤ 0 **215**
Net Daily VMT

The proposed project consists of only retail land uses ≤ 50,000 square feet total. **0.000**
ksf

The proposed project is not required to perform VMT analysis.





TREE DISCLOSURE STATEMENT

Los Angeles Municipal Code (LAMC) Section 46.00 requires disclosure and protection of certain trees located on private and public property, and that they be shown on submitted and approved site plans. Any discretionary application on a property that includes changes to the building footprint or any other change to the areas of the property not currently built upon or paved, including demolition, grading, or fence permit applications, or any discretionary change that could potentially remove or affect trees or shrubs, shall provide a Tree Disclosure Statement completed and signed by the Property Owner.

If the Tree Disclosure Statement indicates that there are any protected trees or protected shrubs on the project site and/or any trees within the adjacent public right-of-way that may be impacted or removed as a result of the project, a Tree Report ([CP-4068](#)) will be required, and the field visit must be conducted by a qualified Tree Expert, prepared and conducted within the last 12 months.

Property Address: 10756 Wilkins Avenue, Los Angeles, CA 90024

Date of Field Visit: August 6, 2022

Does the property contain any of the following protected trees or shrubs?

- Yes (Mark any that apply below)
 - Oak, including Valley Oak (*Quercus lobota*) and California Live Oak (*Quercus agrifolia*) or any other tree of the oak genus indigenous to California, but excluding the Scrub Oak
 - Southern California Black Walnut (*Juglans californica*)
 - Western Sycamore (*Platanus racemosa*)
 - California Bay (*Umbellularia californica*)
 - Mexican Elderberry (*Sambucus mexicana*)
 - Toyon (*Heteromeles arbutifolia*)
- No

Does the property contain any street trees in the adjacent public right-of-way?

- Yes No

Does the project occur within the Mt. Washington/Glassell Park Specific Plan Area and contain any trees 12 inches or more diameter at 4.5 feet above average natural grade at base of tree and/or is more than 35 feet in height?

- Yes No

Does the project occur within the Coastal Zone and contain any of the following trees?

Yes (Mark any that apply below)

- Blue Gum Eucalyptus (*Eucalyptus globulus*)
- Red River Gum Eucalyptus (*Eucalyptus camaldulensis*)
- Other Eucalyptus species

No

Have any trees or shrubs been removed in the last two years?

Yes No

If Yes, were any protected species (as listed in Ordinance No. 186,873)?

Yes No

If Yes, provide permit information: _____

Tree Expert Credentials (if applicable)

Name of Tree Expert: Lisa Smith

Mark which of the following qualifications apply:

- Certified arborist with the International Society of Arboriculture who holds a license as an agricultural pest control advisor
- Certified arborist with the International Society of Arboriculture who is a licensed landscape architect
- Registered consulting arborist with the American Society of Consulting Arborists

Certification/License No.: #WE3782B

Owner's Declaration

I acknowledge and understand that knowingly or negligently providing false or misleading information in response to this disclosure requirement constitutes a violation of the Los Angeles Municipal Code Section 46.00, which can lead to criminal and/or civil legal action. I certify that the information provided on this form relating to the project site and any of the above trees and/or biological resources is accurate to the best of my knowledge.

Name of the Owner (Print) Babak Nehoray

Owner Signature *Babak Nehoray*
Babak Nehoray (Aug 10, 2023 14:33 PDT)

Date 08/02/2023



TREE REPORT

PREPARED FOR

Babak Nehoray

PROPERTY

10756 Wilkins Avenue
Los Angeles, CA 90024

CONTACT

Pouya Payan, Labyrinth Design Studio Inc.
818.200.5005
pouya@labyrinth-ds.com

August 17, 2023

PREPARED BY

LISA SMITH, **THE TREE RESOURCE** ®
REGISTERED CONSULTING ARBORIST #464
ISA BOARD CERTIFIED MASTER ARBORIST #WE3782B
ISA TREE RISK ASSESSOR QUALIFIED - INSTRUCTOR
MEMBER OF AMERICAN SOCIETY OF CONSULTING ARBORISTS
P.O. BOX 49314, LOS ANGELES, CA 90049
T 310-663-2290 E lisa@thetreeresource.com

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TREE REPORT

10756 Wilkins Avenue
 Los Angeles, CA 90024

SUMMARY

PROJECT OVERVIEW	
Site Address	10756 Wilkins Avenue, Los Angeles, CA 90024
Location and/or Specific Plan	Westwood
Project Description	Multi-family housing
Date of Site Visit	August 25, 2023
Number of Protected Trees on Site	0
Number of Recommended Removals	0

This Tree Report was prepared at the request of the property owner, Babak Nehoray, who is preparing to build multi-family housing on this property. The subject property is 6,754 square feet and is located in the Westwood area of Los Angeles.

PROTECTED TREES, URBAN FORESTRY DIVISION

This property is under the jurisdiction of the City of Los Angeles and guided by the Native Tree Protection Ordinance No. 186873. **Protected Trees** are defined by this ordinance as oaks (*Quercus* sp.) indigenous to California but excluding the scrub oak (*Quercus dumosa*); Southern California black walnut (*Juglans californica* var. *californica*); Western sycamore (*Platanus racemosa*) and California bay laurel (*Umbellularia californica*) trees with a diameter at breast height (DBH) of four inches (4") or greater. **Protected Shrubs** are defined as Mexican elderberry (*Sambucus mexicana*); Toyon (*Heteromeles arbutifolia*) which measure four inches or more in cumulative diameter, four and one-half feet above the ground level at the base of the shrub.

There are NO trees or shrubs on this property that would be considered protected within the City of Los Angeles Native Tree Protection Ordinance.

NEIGHBOR TREES

I have also inspected the neighboring properties to confirm there are no protected tree species that are adjacent to the construction zone, or in areas of impact.

CITY OF LOS ANGELES STREET TREES, URBAN FORESTRY DIVISION

There are five (5) trees located in the parkway perimeter that are considered **City of Los Angeles Street Trees**. These trees will receive no impact and will be retained and protected in place.

NON-PROTECTED SIGNIFICANT TREES, DEPARTMENT OF CITY PLANNING

The Department of City Planning requires the identification of the location, size, type and condition of all existing trees on the site with a DBH of 8 inches (8") or greater. These trees will be identified as **Non-Protected Significant Trees**.

At this time, I observed two (2) **Non-Protected Significant Trees** on the property. These trees will be impacted by construction and are recommended for removal and replacement to the satisfaction of the City of Los Angeles Department of City Planning.

ASSIGNMENT

The Assignment included:

- Field Observation and Inventory of Trees on Site
- Evaluation of potential construction impacts
- Photographs of the subject trees are included in Appendix B
- Matrix of proposed tree removals and trees to remain

LIMITS OF THE ASSIGNMENT

The field inspection was a visual, grade level tree assessment. No special tools or equipment were used. No tree risk assessments were performed. My site examination and the information in this report is limited to the date and time the inspection occurred. The information in this report is limited to the condition of the trees at the time of my inspection.

TREE CHARACTERISTICS AND SITE CONDITIONS

Detailed information with respect to size, condition, species and recommendations are included in the Summary of Field Inspections in Appendix C. The trees are numbered on the Tree Location Map in Appendix A.

IMPACT ANALYSIS AND SPECIFIC RECOMMENDATIONS

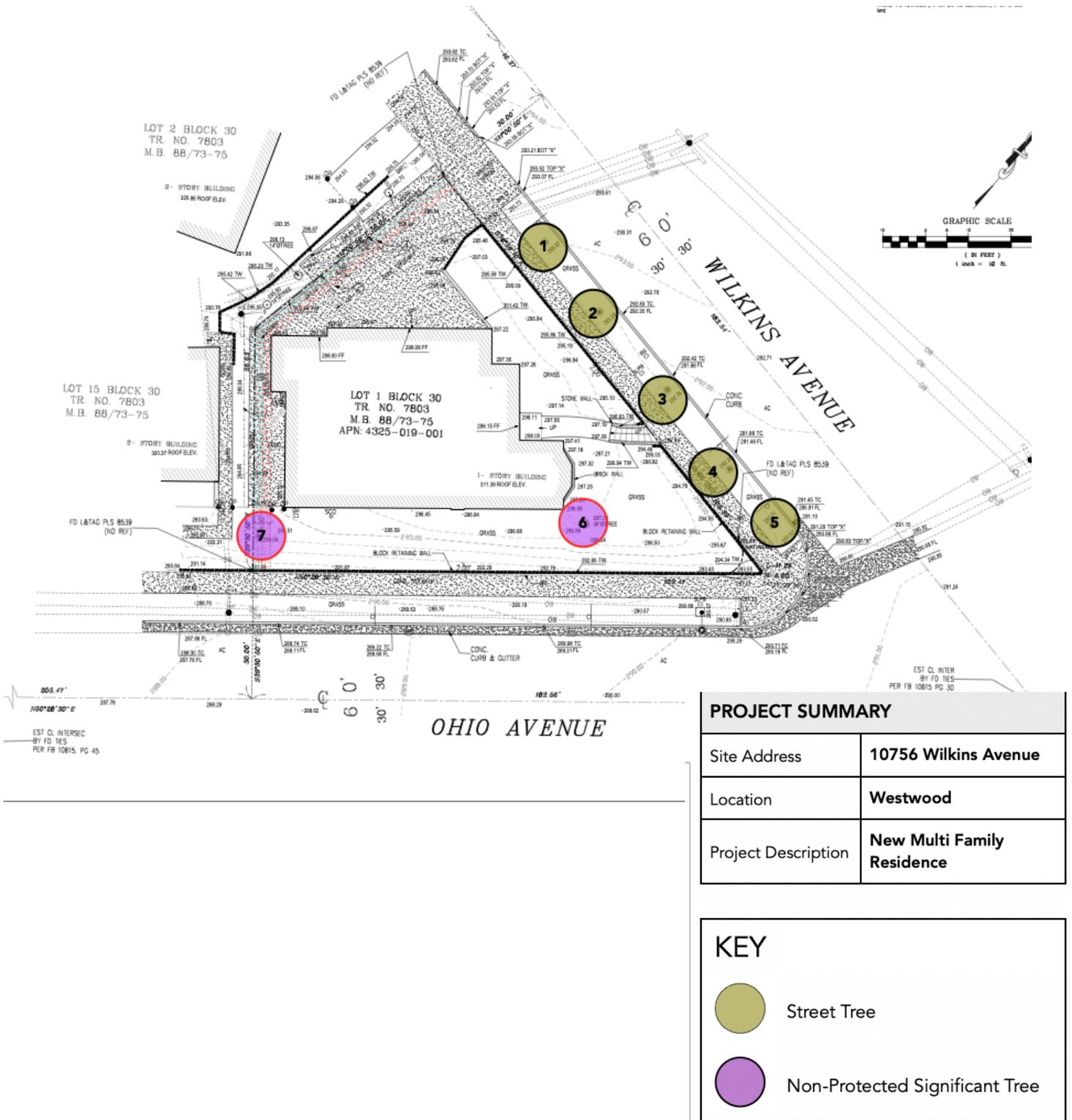
STREET TREES

Five (5) City of Los Angeles Street Trees Queen Palm trees #1-#5 located in the parkway perimeter will receive no impact and will be retained and protected in place.

NON-PROTECTED TREES

Two (2) Non-Protected Significant Deodar Cedar Trees #6 and #7 are in the direct footprint of the new construction and are recommended for removal.

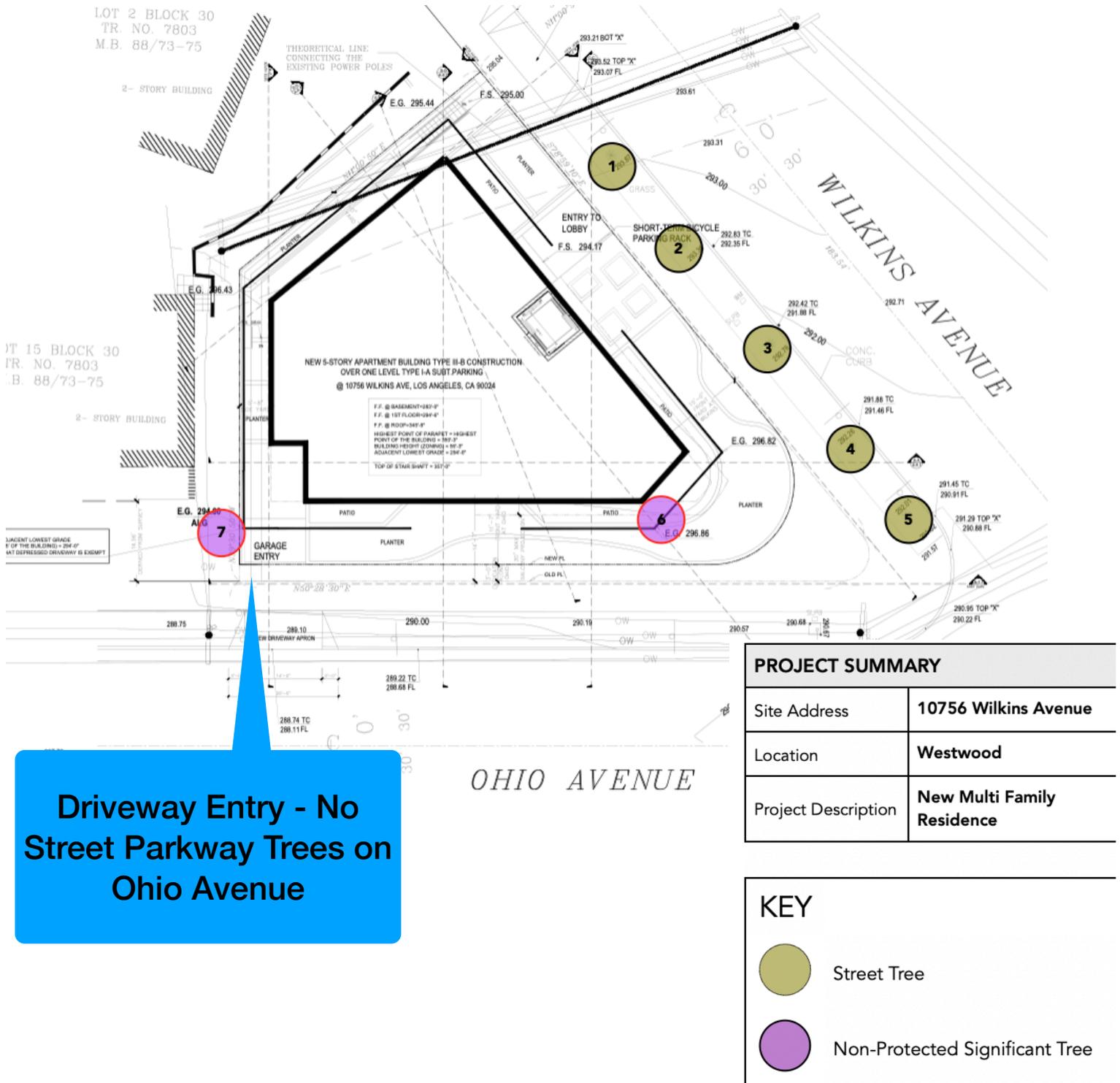
APPENDIX A.1 - TREE LOCATION MAP



PROJECT SUMMARY	
Site Address	10756 Wilkins Avenue
Location	Westwood
Project Description	New Multi Family Residence

KEY	
	Street Tree
	Non-Protected Significant Tree

APPENDIX A.2 - TREE LOCATION MAP on SITE PLAN



APPENDIX A.3 - Landscaping Plan, REDUCED



PROJECT: 10756 W. WILKINS AVE. LOS ANGELES, CA 90024

Scale: As Shown
Date: March 2023
City: Los Angeles
County: LA
Drawing: P-1

LP-1

PROJECT SUMMARY	
Site Address	10756 Wilkins Avenue
Location	Westwood
Project Description	New Multi Family Residence

KEY

Street Tree

APPENDIX B - PHOTOGRAPHS



PHOTO 1 - The (5) Queen Palm trees located in the parkway along Wilkins Avenue to be retained. Also shows the two non-proceed Deodar cedar trees for removal.

APPENDIX C - SUMMARY OF FIELD INSPECTION

Rating Code: A = Excellent, B = Good, C = Fair, D = Poor, E = Nearly Dead, F = Dead

Tree #	Species	Status	DBH (")	Height (')	Spread (')	Summary of Condition	Retain or Remove
1	Queen Palm <i>Syagrus romanzoffiana</i>	Street - Parkway	10"+	30	10	Fair	Retain
2	Queen Palm <i>Syagrus romanzoffiana</i>	Street - Parkway	10"+	20	10	Fair	Retain
3	Queen Palm <i>Syagrus romanzoffiana</i>	Street - Parkway	10"+	15	10	Fair	Retain
4	Queen Palm <i>Syagrus romanzoffiana</i>	Street - Parkway	10"+	20	10	Fair	Retain
5	Queen Palm <i>Syagrus romanzoffiana</i>	Street - Parkway	10"+	20	10	Fair	Retain
6	Deodar Cedar <i>Cedrus deodara</i>	Non-protected	30	50	35	Fair	Remove
7	Deodar Cedar <i>Cedrus deodara</i>	Non-protected	30	50	35	Fair	Remove

APPENDIX D - SUMMARY OF DATA

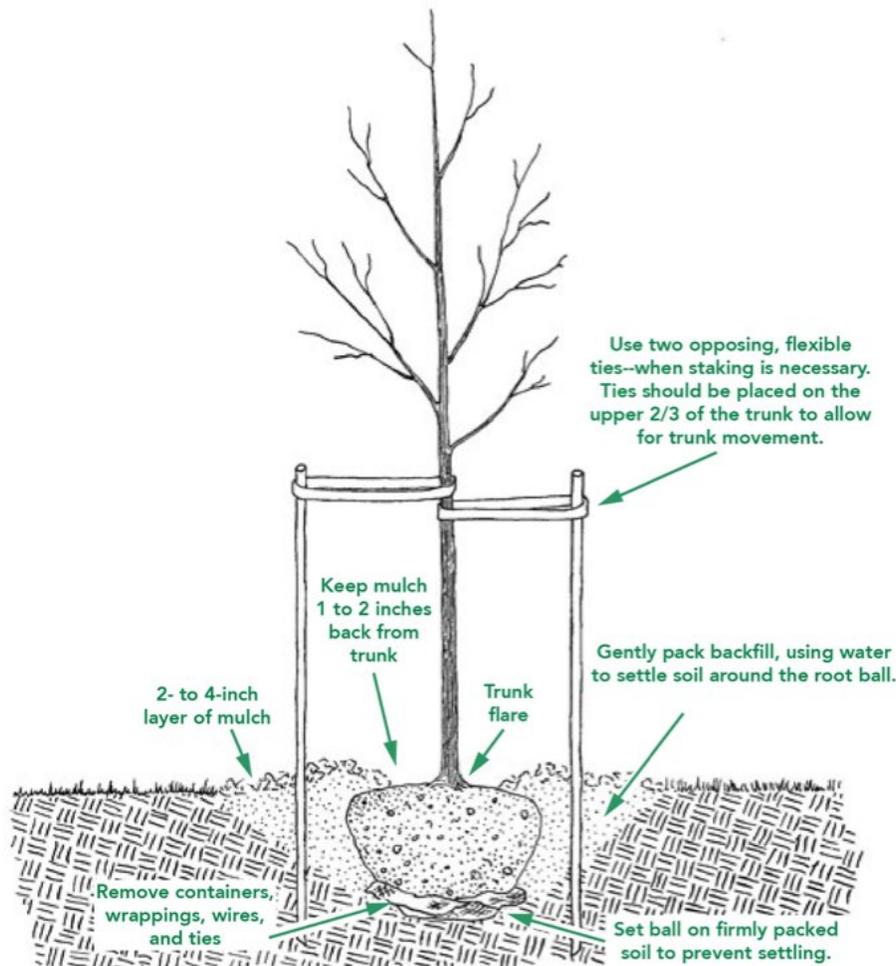
Table 2. Schedule of Proposed Removals

Tree #	Species	Status	Condition	RECOMMENDATION	
				Retain or Remove	Reason for Removal
6	Deodar Cedar <i>Cedrus deodara</i>	Non-protected	Fair	Remove	Construction Impact
7	Deodar Cedar <i>Cedrus deodara</i>	Non-protected	Fair	Remove	Construction Impact

Recommended Species and Size of Replacement Trees

Non-protected trees to be replaced to the satisfaction of the City of Los Angeles.

NEW TREE PLANTING



The ideal time to plant trees and shrubs is during the dormant season, in the fall after leaf drop or early spring before budbreak. Weather conditions are cool and allow plants to establish roots in the new location before spring rains and summer heat stimulate new top growth. Before you begin planting your tree, be sure you have had all underground utilities located prior to digging.

If the tree you are planting is balled or bare root, it is important to understand that its root system has been reduced by 90 to 95 percent of its original size during transplanting. As a result of the trauma caused by the digging process, trees commonly exhibit what is known as transplant shock. Containerized trees may also experience transplant shock, particularly if they have circling roots that must be cut. Transplant shock is indicated by slow growth and reduced vigor following transplanting. Proper site preparation before and during planting coupled with good follow-up care reduces the amount of time the plant experiences transplant shock and allows the tree to quickly establish in its new location. Carefully follow nine simple steps, and you can significantly reduce the stress placed on the plant at the time of planting.

NEW TREE PLANTING, continued

- 1. Dig a shallow, broad planting hole.** Make the hole wide, as much as three times the diameter of the root ball but only as deep as the root ball. It is important to make the hole wide because the roots on the newly establishing tree must push through surrounding soil in order to establish. On most planting sites in new developments, the existing soils have been compacted and are unsuitable for healthy root growth. Breaking up the soil in a large area around the tree provides the newly emerging roots room to expand into loose soil to hasten establishment.
- 2. Identify the trunk flare.** The trunk flare is where the roots spread at the base of the tree. This point should be partially visible after the tree has been planted (see diagram). If the trunk flare is not partially visible, you may have to remove some soil from the top of the root ball. Find it so you can determine how deep the hole needs for proper planting.
- 3. Remove tree container for containerized trees.** Carefully cutting down the sides of the container may make this easier. Inspect the root ball for circling roots and cut or remove them. Expose the trunk flare, if necessary.
- 4. Place the tree at the proper height.** Before placing the tree in the hole, check to see that the hole has been dug to the proper depth and no more. The majority of the roots on the newly planted tree will develop in the top 12 inches of soil. If the tree is planted too deeply, new roots will have difficulty developing because of a lack of oxygen. It is better to plant the tree a little high, 1-2 inches above the base of the trunk flare, than to plant it at or below the original growing level. This planting level will allow for some settling.
- 5. Straighten the tree in the hole.** Before you begin backfilling, have someone view the tree from several directions to confirm that the tree is straight. Once you begin backfilling, it is difficult to reposition the tree.
- 6. Fill the hole gently but firmly.** Fill the hole about one-third full and gently but firmly pack the soil around the base of the root ball. Be careful not to damage the trunk or roots in the process. Fill the remainder of the hole, taking care to firmly pack soil to eliminate air pockets that may cause roots to dry out. To avoid this problem, add the soil a few inches at a time and settle with water. Continue this process until the hole is filled and the tree is firmly planted. It is not recommended to apply fertilizer at time of planting.
- 7. Stake the tree, if necessary.** If the tree is grown properly at the nursery, staking for support will not be necessary in most home landscape situations. Studies have shown that trees establish more quickly and develop stronger trunk and root systems if they are not staked at the time of planting. However, protective staking may be required on sites where lawn mower damage, vandalism, or windy conditions are concerns. If staking is necessary for support, there are three methods to choose among: staking, guying, and ball stabilizing. One of the most common methods is staking. With this method, two stakes used in conjunction with a wide, flexible tie material on the lower half of the tree will hold the tree upright, provide flexibility, and minimize injury to the trunk (see diagram). Remove support staking and ties after the first year of growth.
- 8. Mulch the base of the tree.** Mulch is simply organic matter applied to the area at the base of the tree. It acts as a blanket to hold moisture, it moderates soil temperature extremes, and it reduces competition from grass and weeds. A 2- to 3-inch layer is ideal. More than 3 inches may cause a problem with oxygen and moisture levels. When placing mulch, be sure that the actual trunk of the tree is not covered. Doing so may cause decay of the living bark at the base of the tree. A mulch-free area, 1 to 2 inches wide at the base of the tree, is sufficient to avoid moist bark conditions and prevent decay.

TREE MAINTENANCE AND PRUNING

Some trees do not generally require pruning. The occasional removal of dead twigs or wood is typical. Occasionally a tree has a defect or structural condition that would benefit from pruning. Any pruning activity should be performed under the guidance of a certified arborist or tree expert.

Because each cut has the potential to change the growth of the tree, no branch should be removed without a reason. Common reasons for pruning are to remove dead branches, to remove crowded or rubbing limbs, and to eliminate hazards. Trees may also be pruned to increase light and air penetration to the inside of the tree's crown or to the landscape below. In most cases, mature trees are pruned as a corrective or preventive measure.

Routine thinning does not necessarily improve the health of a tree. Trees produce a dense crown of leaves to manufacture the sugar used as energy for growth and development. Removal of foliage through pruning can reduce growth and stored energy reserves. Heavy pruning can be a significant health stress for the tree.

Yet if people and trees are to coexist in an urban or suburban environment, then we sometimes have to modify the trees. City environments do not mimic natural forest conditions. Safety is a major concern. Also, we want trees to complement other landscape plantings and lawns. Proper pruning, with an understanding of tree biology, can maintain good tree health and structure while enhancing the aesthetic and economic values of our landscapes.

Pruning Techniques – From the I.S.A. Guideline

Specific types of pruning may be necessary to maintain a mature tree in a healthy, safe, and attractive condition.

Cleaning is the removal of dead, dying, diseased, crowded, weakly attached, and low- vigor branches from the crown of a tree.

Thinning is the selective removal of branches to increase light penetration and air movement through the crown. Thinning opens the foliage of a tree, reduces weight on heavy limbs, and helps retain the tree's natural shape.

Raising removes the lower branches from a tree to provide clearance for buildings, vehicles, pedestrians, and vistas.

Reduction reduces the size of a tree, often for clearance for utility lines. Reducing the height or spread of a tree is best accomplished by pruning back the leaders and branch terminals to lateral branches that are large enough to assume the terminal roles (at least one-third the diameter of the cut stem). Compared to topping, reduction helps maintain the form and structural integrity of the tree.

TREE MAINTENANCE AND PRUNING, continued

How Much Should Be Pruned?

Mature trees should require little routine pruning. A widely accepted rule of thumb is never to remove more than one-quarter of a tree's leaf-bearing crown. In a mature tree, pruning even that much could have negative effects. Removing even a single, large-diameter limb can create a wound that the tree may not be able to close. The older and larger a tree becomes, the less energy it has in reserve to close wounds and defend against decay or insect attack. Pruning of mature trees is usually limited to removal of dead or potentially hazardous limbs.

Wound Dressings

Wound dressings were once thought to accelerate wound closure, protect against insects and diseases, and reduce decay. However, research has shown that dressings do not reduce decay or speed closure and rarely prevent insect or disease infestations. Most experts recommend that wound dressings not be used.

DISEASES AND INSECTS

Continual observation and monitoring of your tree can alert you to any abnormal changes. Some indicators are: excessive leaf drop, leaf discoloration, sap oozing from the trunk and bark with unusual cracks. Should you observe any changes, you should contact a Tree specialist or Certified Arborist to review the tree and provide specific recommendations. Trees are susceptible to hundreds of pests, many of which are typical and may not cause enough harm to warrant the use of chemicals. However, diseases and insects may be indication of further stress that should be identified by a professional.

GRADE CHANGES

The growing conditions and soil level of trees are subject to detrimental stress should they be changed during the course of construction. Raising the grade at the base of a tree trunk can have long-term negative consequences. This grade level should be maintained throughout the protected zone. This will also help in maintaining the drainage in which the tree has become accustomed.

INSPECTION

The property owner should establish an inspection calendar based on the recommendation provided by the tree specialist. This calendar of inspections can be determined based on several factors: the maturity of the tree, location of tree in proximity to high-use areas vs. low-use area, history of the tree, prior failures, external factors (such as construction activity) and the perceived value of the tree to the homeowner.

Assumptions and Limiting Conditions

No warranty is made, expressed or implied, that problems or deficiencies of the trees or the property will not occur in the future, from any cause. The Consultant shall not be responsible for damages or injuries caused by any tree defects, and assumes no responsibility for the correction of defects or tree related problems.

The owner of the trees may choose to accept or disregard the recommendations of the Consultant, or seek additional advice to determine if a tree meets the owner's risk abatement standards.

The Consulting Arborist has no past, present or future interest in the removal or retaining of any tree. Opinions contained herein are the independent and objective judgments of the consultant relating to circumstances and observations made on the subject site.

The recommendations contained in this report are the opinions of the Consulting Arborist at the time of inspection. These opinions are based on the knowledge, experience, and education of the Consultant. The field inspection was a visual, grade level tree assessment.

The Consulting Arborist shall not be required to give testimony, perform site monitoring, provide further documentation, be deposed, or to attend any meeting without subsequent contractual arrangements for this additional employment, including payment of additional fees for such services as described by the Consultant.

The Consultant assumes no responsibility for verification of ownership or locations of property lines, or for results of any actions or recommendations based on inaccurate information.

This Arborist report may not be reproduced without the express permission of the Consulting Arborist and the client to whom the report was issued. Any change or alteration to this report invalidates the entire report.

Should you have any further questions regarding this property, please contact me at (310) 663-2290.

Respectfully submitted,



Lisa Smith

Registered Consulting Arborist #464
ISA Board Certified Master Arborist #WE3782B
ISA Tree Risk Assessor Qualified- Instructor
American Society of Consulting Arborists, Member



CITY OF LOS ANGELES

CALIFORNIA

BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

VAN AMBATIELOS
PRESIDENT

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SOILS REPORT APPROVAL LETTER

August 6, 2021

LOG # 118330
SOILS/GEOLOGY FILE - 2

Karim M Makarechi
4212 La Palma Ave.
Anaheim, CA 92807

TRACT: TR 7803
BLOCK: 30
LOT(S): 1
LOCATION: 10756 W. Wilkins Ave.

<u>CURRENT REFERENCE</u>	<u>REPORT</u>	<u>DATE OF</u>	<u>PREPARED BY</u>
<u>REPORT/LETTER(S)</u>	<u>No.</u>	<u>DOCUMENT</u>	
Soils Report	IC 21082-I	07/16/2021	Irvine Geotechnical
Laboratory Test Report	SL21.3673	07/08/2021	Soil Labworks, LLC

The Grading Division of the Department of Building and Safety has reviewed the referenced reports that provide recommendations for the proposed 5-story apartment building with one level subterranean parking. The earth materials at the subsurface exploration locations consist of up to 0.5 feet of uncertified fill underlain by native soils. The consultants recommend to support the proposed structure(s) on conventional foundations bearing on native undisturbed soils.

Groundwater was not encountered during exploration to a depth of 15 feet below the existing grade and the historically highest groundwater level in the area is approximately 20 feet below the ground surface, according to the consultants.

The referenced reports are acceptable, provided the following conditions are complied with during site development:

(Note: Numbers in parenthesis () refer to applicable sections of the 2020 City of LA Building Code. P/BC numbers refer the applicable Information Bulletin. Information Bulletins can be accessed on the internet at LADBS.ORG.)

1. Approval shall be obtained from the Department of Public Works, Bureau of Engineering, Development Services and Permits Program for the proposed removal of support and/or retaining of slopes adjoining to public way (3307.3.2).

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2. The soils engineer shall review and approve the detailed plans prior to issuance of any permit. This approval shall be by signature on the plans that clearly indicates the soils engineer has reviewed

the plans prepared by the design engineer; and, that the plans included the recommendations contained in their reports (7006.1).

3. All recommendations of the report(s) that are in addition to or more restrictive than the conditions contained herein shall be incorporated into the plans.
4. A copy of the subject and appropriate referenced reports and this approval letter shall be attached to the District Office and field set of plans (7006.1). Submit one copy of the above reports to the Building Department Plan Checker prior to issuance of the permit.
5. A grading permit shall be obtained for all structural fill and retaining wall backfill (106.1.2).
6. Prior to the issuance of any permit, an accurate volume determination shall be made and included in the final plans, with regard to the amount of earth material to be exported from the site. For grading involving import or export of more than 1000 cubic yards of earth materials within the grading hillside area, approval is required by the Board of Building and Safety. Application for approval of the haul route must be filed with the Board of Building and Safety Commission Office. Processing time for application is approximately 8 weeks to hearing plus 10-day appeal period.
7. All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D 1557. Where cohesionless soil having less than 15 percent finer than 0.005 millimeters is used for fill, it shall be compacted to a minimum of 95 percent relative compaction based on maximum dry density. Placement of gravel in lieu of compacted fill is only allowed if complying with LAMC Section 91.7011.3.
8. Existing uncertified fill shall not be used for support of footings, concrete slabs or new fill (1809.2, 7011.3).
9. Drainage in conformance with the provisions of the Code shall be maintained during and subsequent to construction (7013.12).
10. Grading shall be scheduled for completion prior to the start of the rainy season, or detailed temporary erosion control plans shall be filed in a manner satisfactory to the Grading Division of the Department and the Department of Public Works, Bureau of Engineering, B-Permit Section, for any grading work in excess of 200 cubic yards (7007.1).

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11. All loose foundation excavation material shall be removed prior to commencement of framing. Slopes disturbed by construction activities shall be restored (7005.3).
12. The applicant is advised that the approval of this report does not waive the requirements for excavations contained in the General Safety Orders of the California Department of Industrial Relations (3301.1).
13. Temporary excavations that remove lateral support to the public way, adjacent property, or adjacent structures shall be supported by shoring, as recommended. Note: Lateral support shall be considered to be removed when the excavation extends below a plane projected downward at an angle of 45 degrees from the bottom of a footing of an existing structure, from the edge of the public way or an adjacent property. (3307.3.1)
14. Where any excavation, not addressed in the approved reports, would remove lateral support (as defined in 3307.3.1) from a public way, adjacent property or structures, a supplemental report shall be submitted to the Grading Division of the Department containing recommendations for shoring, underpinning, and sequence of construction. Report shall include a plot plan and cross-section(s)

- showing the construction type, number of stories, and location of adjacent structures, and analysis incorporating all surcharge loads that demonstrate an acceptable factor of safety against failure. (7006.2 & 3307.3.2)
15. Prior to the issuance of any permit that authorizes an excavation where the excavation is to be of a greater depth than are the walls or foundation of any adjoining building or structure and located closer to the property line than the depth of the excavation, the owner of the subject site shall provide the Department with evidence that the adjacent property owner has been given a 30-day written notice of such intent to make an excavation (3307.1).
 16. The soils engineer shall review and approve the shoring plans prior to issuance of the permit (3307.3.2).
 17. Prior to the issuance of the permits, the soils engineer and the structural designer shall evaluate the surcharge loads used in the report calculations for the design of the retaining walls and shoring. If the surcharge loads used in the calculations do not conform to the actual surcharge loads, the soil engineer shall submit a supplementary report with revised recommendations to the Department for approval.
 18. Unsurcharged temporary excavations over 5 feet exposing soil shall be trimmed back at a gradient not exceeding 1:1, as recommended.
 19. Shoring shall be designed for the lateral earth pressures specified in the section titled "Temporary Shoring" starting on page 15 of the 07/16/2021 report; all surcharge loads shall be included into the design.
 20. Shoring shall be designed for a maximum lateral deflection of 1 inch, provided there are no structures within a 1:1 plane projected up from the base of the excavation. Where a structure is within a 1:1 plane projected up from the base of the excavation, shoring shall be designed for a maximum lateral deflection of ½ inch, or to a lower deflection determined by the consultant that does not present any potential hazard to the adjacent structure.
 21. A shoring monitoring program shall be implemented to the satisfaction of the soils engineer.
 22. All foundations shall derive entire support from native undisturbed soils, as recommended and approved by the soils engineer by inspection.
 23. Footings supported on approved compacted fill or expansive soil shall be reinforced with a minimum of four (4), ½-inch diameter (#4) deformed reinforcing bars. Two (2) bars shall be placed near the bottom and two (2) bars placed near the top of the footing.
 24. The foundation/slab design shall satisfy all requirements of the Information Bulletin P/BC 2017-116 "Foundation Design for Expansive Soils" (1803.5.3).
 25. Slabs placed on approved compacted fill shall be at least 3½ inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced a maximum of 16 inches on center each way.
 26. Concrete floor slabs placed on expansive soil shall be placed on a 4-inch fill of coarse aggregate or on a moisture barrier membrane. The slabs shall be at least 3½ inches thick and shall be reinforced with ½-inch diameter (#4) reinforcing bars spaced a maximum of 16 inches on center each way.
 27. The seismic design shall be based on a Site Class D, as recommended. All other seismic design parameters shall be reviewed by LADBS building plan check. According to ASCE 7-16 Section 11.4.8, the long period coefficient (F_v) may be selected per Table 11.4-2 in ASCE 7-16, provided that the value of the Seismic Response Coefficient (C_s) is determined by Equation 12.8-2 for values

of the fundamental period of the building (T) less than or equal to $1.5T_s$, and taken as 1.5 times the value computed in accordance with either Equation 12.8-3 for T greater than $1.5T_s$ and less than or equal to T_L or Equation 12.8-4 for T greater than T_L . Alternatively, a supplemental report containing a site-specific ground motion hazard analysis in accordance with ASCE 7-16 Section 21.2 shall be submitted for review and approval.

28. Retaining walls shall be designed for the lateral earth pressures specified in the section titled "Retaining Walls" starting on page 12 of the 07/16/2021 report. Note: All surcharge loads shall be included into the design.
29. Retaining walls higher than 6 feet shall be designed for lateral earth pressure due to earthquake motions as specified on page 13 of the 07/16/2021 report (1803.5.12).

Note: Lateral earth pressure due to earthquake motions shall be in addition to static lateral earth pressures and other surcharge pressures.
30. Basement walls and other walls in which horizontal movement is restricted at the top shall be designed for at-rest pressure as specified on page 12 of the 07/16/2021 report (1610.1). All surcharge loads shall be included into the design.
31. All retaining walls shall be provided with a standard surface backdrain system and all drainage shall be conducted in a non-erosive device to the street in an acceptable manner (7013.11).
32. With the exception of retaining walls designed for hydrostatic pressure, all retaining walls shall be provided with a subdrain system to prevent possible hydrostatic pressure behind the wall. Prior to issuance of any permit, the retaining wall subdrain system recommended in the soils report shall be incorporated into the foundation plan which shall be reviewed and approved by the soils engineer of record (1805.4).
33. Installation of the subdrain system shall be inspected and approved by the soils engineer of record and the City grading/building inspector (108.9).
34. Basement walls and floors shall be waterproofed/damp-proofed with an LA City approved "Below-grade" waterproofing/damp-proofing material with a research report number (104.2.6).
35. Prefabricated drainage composites (Miradrain, Geotextiles) may be only used in addition to traditionally accepted methods of draining retained earth.
36. Where the ground water table is lowered and maintained at an elevation not less than 6 inches below the bottom of the lowest floor, or where hydrostatic pressures will not occur, the floor and basement walls shall be damp-proofed. Where a hydrostatic pressure condition exists, and the design does not include a ground-water control system, basement walls and floors shall be waterproofed. (1803.5.4, 1805.1.3, 1805.2, 1805.3)
37. The structure shall be connected to the public sewer system per P/BC 2020-027.
38. All roof, pad and deck drainage shall be conducted to the street in an acceptable manner in non-erosive devices or other approved location in a manner that is acceptable to the LADBS and the Department of Public Works (7013.10).
39. An on-site storm water infiltration system at the subject site shall not be implemented, as recommended.
40. All concentrated drainage shall be conducted in an approved device and disposed of in a manner approved by the LADBS (7013.10).

41. The soils engineer shall inspect all excavations to determine that conditions anticipated in the report have been encountered and to provide recommendations for the correction of hazards found during grading (7008, 1705.6 & 1705.8).
42. Prior to pouring concrete, a representative of the consulting soils engineer shall inspect and approve the footing excavations. The representative shall post a notice on the job site for the LADBS Inspector and the Contractor stating that the work inspected meets the conditions of the report. No concrete shall be poured until the LADBS Inspector has also inspected and approved the footing excavations. A written certification to this effect shall be filed with the Grading Division of the Department upon completion of the work. (108.9 & 7008.2)
43. Prior to excavation an initial inspection shall be called with the LADBS Inspector. During the initial inspection, the sequence of construction; shoring; protection fences; and, dust and traffic control will be scheduled (108.9.1).
44. Installation of shoring shall be performed under the inspection and approval of the soils engineer and deputy grading inspector (1705.6, 1705.8).
45. Prior to the placing of compacted fill, a representative of the soils engineer shall inspect and approve the bottom excavations. The representative shall post a notice on the job site for the LADBS Inspector and the Contractor stating that the soil inspected meets the conditions of the report. No fill shall be placed until the LADBS Inspector has also inspected and approved the bottom excavations. A written certification to this effect shall be included in the final compaction report filed with the Grading Division of the Department. All fill shall be placed under the inspection and approval of the soils engineer. A compaction report together with the approved soil report and Department approval letter shall be submitted to the Grading Division of the Department upon completion of the compaction. In addition, an Engineer's Certificate of Compliance with the legal description as indicated in the grading permit and the permit number shall be included (7011.3).
46. No footing/slab shall be poured until the compaction report is submitted and approved by the Grading Division of the Department.

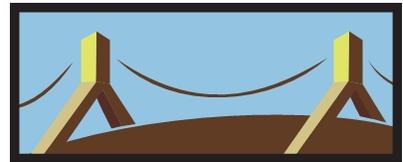
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LA District Office

10756 WEST WILKINS AVENUE PROJECT

Air Quality Technical Report



Prepared by DKA Planning
20445 Prospect Road, Suite C
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August 2023

AIR QUALITY TECHNICAL REPORT

Introduction

This technical report addresses the air quality impacts generated by construction and operation of the Proposed Project at 10756 West Wilkins Avenue in the City of Los Angeles. The analysis evaluates the consistency of the Project with the air quality policies set forth within the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (AQMP) and the City's General Plan. The analysis of Project-generated air emissions focuses on whether the Project would cause an exceedance of an ambient air quality standard or SCAQMD significance threshold. Calculation worksheets, assumptions, and model outputs used in the analysis are included in the Technical Appendix to this analysis.

Regulatory Framework

Federal

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years, with the most recent amendments in 1990. At the federal level, the United States Environmental Protection Agency (USEPA) is responsible for implementation of some portions of the CAA (e.g., certain mobile source and other requirements). Other portions of the CAA (e.g., stationary source requirements) are implemented by state and local agencies. In California, the CCAA is administered by the California Air Resources Board (CARB) at the state level and by the air quality management districts and air pollution control districts at the regional and local levels.

The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the National Ambient Air Quality Standard (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. The sections of the CAA which are most applicable to the Project include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).

NAAQS have been established for seven major air pollutants: CO (carbon monoxide), NO₂ (nitrogen dioxide), O₃ (ozone), PM_{2.5} (particulate matter, 2.5 microns), PM₁₀ (particulate matter, 10 microns), SO₂ (sulfur dioxide), and Pb (lead).

The Clean Air Act (CAA) requires the USEPA to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Title I provisions are implemented for the purpose of attaining NAAQS. The federal standards are summarized in Table 1. The USEPA has classified the Los Angeles County portion of the South Coast Air Basin (Basin) as a nonattainment area for O₃, PM_{2.5}, and Pb.

**Table 1
State and National Ambient Air Quality Standards and Attainment Status for LA County**

Pollutant	Averaging Period	California		Federal	
		Standards	Attainment Status	Standards	Attainment Status
Ozone (O ₃)	1-hour	0.09 ppm (180 µg/m ³)	Non-attainment	--	--
	8-hour	0.070 ppm (137 µg/m ³)	N/A ¹	0.070 ppm (137 µg/m ³)	Non-attainment
Respirable Particulate Matter (PM ₁₀)	24-hour	50 µg/m ³	Non-attainment	150 µg/m ³	Maintenance
	Annual Arithmetic Mean	20 µg/m ³	Non-attainment	--	--
Fine Particulate Matter (PM _{2.5})	24-hour	--	--	35 µg/m ³	Non-attainment
	Annual Arithmetic Mean	12 µg/m ³	Non-attainment	12 µg/m ³	Non-attainment
Carbon Monoxide (CO)	1-hour	20 ppm (23 mg/m ³)	Attainment	35 ppm (40 mg/m ³)	Maintenance
	8-hour	9.0 ppm (10 mg/m ³)	Attainment	9 ppm (10 mg/m ³)	Maintenance
Nitrogen Dioxide (NO ₂)	1-hour	0.18 ppm (338 µg/m ³)	Attainment	100 ppb (188 µg/m ³)	Maintenance
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	Attainment	53 ppb (100 µg/m ³)	Maintenance
Sulfur Dioxide (SO ₂)	1-hour	0.25 ppm (655 µg/m ³)	Attainment	75 ppb (196 µg/m ³)	Attainment
	24-hour	0.04 ppm (105 µg/m ³)	Attainment	--	--
Lead (Pb)	30-day average	1.5 µg/m ³	Attainment	--	--
	Calendar Quarter	--	--	0.15 µg/m ³	Non-attainment
Visibility Reducing Particles	8-hour	Extinction of 0.07 per kilometer	N/A	No Federal Standards	
Sulfates	24-hour	25 µg/m ³	Attainment	No Federal Standards	
Hydrogen Sulfide (H ₂ S)	1-hour	0.03 ppm (42 µg/m ³)	Unclassified	No Federal Standards	
Vinyl Chloride	24-hour	0.01 ppm (26 µg/m ³)	N/A	No Federal Standards	

¹N/A = not available

Source: CARB, Ambient Air Quality Standards, and attainment status, 2020 (www.arb.ca.gov/desig/adm/adm.htm).

CAA Title II pertains to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline and automobile pollution control devices are examples of the mechanisms the USEPA uses to regulate mobile air emission sources. The provisions of Title II have resulted in tailpipe emission standards for vehicles, which have been strengthened in recent years to improve air quality. For example, the standards for NO_x emissions have been lowered substantially and the specification requirements for cleaner burning gasoline are more stringent.

The USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. USEPA has jurisdiction over emission sources outside state waters (e.g., beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in states other than California. Automobiles sold in California must meet stricter emission standards established by CARB. USEPA adopted multiple tiers of emission standards to reduce emissions from non-road diesel engines (e.g., diesel-powered construction equipment) by integrating engine and fuel controls as a system to gain the greatest emission reductions. The first federal standards (Tier 1) for new non-road (or off-road) diesel engines were adopted in 1994 for engines over 50 horsepower, to be phased-in from 1996 to 2000. On August 27, 1998, USEPA introduced Tier 1 standards for equipment under 37 kW (50 horsepower) and increasingly more stringent Tier 2 and Tier 3 standards for all equipment with phase-in schedules from 2000 to 2008. The Tier 1 through 3 standards were met through advanced engine design, with no or only limited use of exhaust gas after-treatment (oxidation catalysts). Tier 3 standards for NO_x and hydrocarbon are similar in stringency to the 2004 standards for highway engines. However, Tier 3 standards for particulate matter were never adopted. On May 11, 2004, USEPA signed the final rule introducing Tier 4 emission standards, which were phased-in between 2008 and 2015. The Tier 4 standards require that emissions of particulate matter and NO_x be further reduced by about 90 percent. Such emission reductions are achieved through the use of control technologies—including advanced exhaust gas after-treatment.

State

California Clean Air Act. In addition to being subject to the requirements of CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). In California, CCAA is administered by CARB at the state level and by the air quality management districts and air pollution control districts at the regional and local levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for meeting the state requirements of the CAA, administering the CCAA, and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA, as amended in 1992, requires all air districts in the State to endeavor to achieve and maintain the CAAQS. CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

CARB regulates mobile air pollution sources, such as motor vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB established passenger vehicle fuel specifications in March 1996. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels. The State standards are summarized in Table 1.

The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS thresholds have been achieved. Under the CCAA,

areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are not used as a basis for designating areas as nonattainment. Under the CCAA, the non-desert Los Angeles County portion of the Basin is designated as a nonattainment area for O₃, PM₁₀, and PM_{2.5}.

In August 2022, CARB approved regulations to ban new gasoline-powered cars beginning with 2035 models. Automakers will gradually electrify their fleet of new vehicles, beginning with 35 percent of 2026 models sold. In March 2023, USEPA approved CARB's regulations that mandate that all new medium- and heavy-duty trucks would be zero emissions by 2045 where feasible. Trucking companies would also have to gradually convert their existing fleets to zero emission vehicles.

Toxic Air Contaminant Identification and Control Act. The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California. CARB's statewide comprehensive air toxics program was established in the early 1980s. The Toxic Air Contaminant Identification and Control Act created California's program to reduce exposure to air toxics. Under the Toxic Air Contaminant Identification and Control Act, CARB is required to use certain criteria in the prioritization for the identification and control of air toxics. In selecting substances for review, CARB must consider criteria relating to "the risk of harm to public health, amount or potential amount of emissions, manner of, and exposure to, usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community" [Health and Safety Code Section 39666(f)].

The Toxic Air Contaminant Identification and Control Act also requires CARB to use available information gathered from the Air Toxics "Hot Spots" Information and Assessment Act program to include in the prioritization of compounds. CARB identified particulate emissions from diesel-fueled engines (diesel PM) TACs in August 1998. Following the identification process, CARB was required by law to determine if there is a need for further control, which led to the risk management phase of the program. For the risk management phase, CARB formed the Diesel Advisory Committee to assist in the development of a risk management guidance document and a risk reduction plan. With the assistance of the Diesel Advisory Committee and its subcommittees, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines. The Board approved these documents on September 28, 2000, paving the way for the next step in the regulatory process: the control measure phase. During the control measure phase, specific Statewide regulations designed to further reduce diesel PM emissions from diesel-fueled engines and vehicles have and continue to be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce diesel PM emissions. Breathing H₂S at levels above the state standard could result in exposure to a disagreeable rotten eggs odor. The State does not regulate other odors.

California Air Toxics Program. The California Air Toxics Program was established in 1983, when the California Legislature adopted Assembly Bill (AB) 1807 to establish a two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air.¹ In the risk identification step, CARB and the Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified, or "listed," as a TAC in

¹ California Air Resources Board, California Air Toxics Program, www.arb.ca.gov/toxics/toxics.htm, last reviewed by CARB September 24, 2015.

California. Since inception of the program, a number of such substances have been listed, including benzene, chloroform, formaldehyde, and particulate emissions from diesel-fueled engines, among others.² In 1993, the California Legislature amended the program to identify the 189 federal hazardous air pollutants as TACs.

In the risk management step, CARB reviews emission sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on results of that review, CARB has promulgated a number of airborne toxic control measures (ATCMs), both for mobile and stationary sources. In 2004, CARB adopted an ATCM to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel PM and other TACs. The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given time.

In addition to limiting exhaust from idling trucks, CARB adopted regulations on July 26, 2007 for off-road diesel construction equipment such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles to reduce emissions by installation of diesel particulate filters and encouraging the replacement of older, dirtier engines with newer emission-controlled models. In April 2021, CARB proposed a 2020 Mobile Source Strategy that seeks to move California to 100 percent zero-emission off-road equipment by 2035.

Assembly Bill 2588 Air Toxics “Hot Spots” Program. The AB 1807 program is supplemented by the AB 2588 Air Toxics “Hot Spots” program, which was established by the California Legislature in 1987. Under this program, facilities are required to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks if present. In 1992, the AB 2588 program was amended by Senate Bill (SB) 1731 to require facilities that pose a significant health risk to the community to reduce their risk through implementation of a risk management plan.

Air Quality and Land Use Handbook: A Community Health Perspective. The *Air Quality and Land Use Handbook: A Community Health Perspective* provides important air quality information about certain types of facilities (e.g., freeways, refineries, rail yards, ports) that should be considered when siting sensitive land uses such as residences.³ CARB provides recommended site distances from certain types of facilities when considering siting new sensitive land uses. The recommendations are advisory and should not be interpreted as defined “buffer zones.” If a project is within the siting distance, CARB recommends further analysis. Where possible, CARB recommends a minimum separation between new sensitive land uses and existing sources.

Air Quality and Land Use Handbook. CARB published the *Air Quality and Land Use Handbook* (CARB Handbook) on April 28, 2005 to serve as a general guide for considering health effects associated with siting sensitive receptors proximate to sources of TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children,

² California Air Resources Board, Toxic Air Contaminant Identification List, www.arb.ca.gov/toxics/id/taclist.htm, last reviewed by CARB July 18, 2011.

³ California Air Resources Board, *Air Quality and Land Use Handbook, a Community Health Perspective*, April 2005.

the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); and (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines.

California Code of Regulations. The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended or repealed by the state agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that pertain to air quality emissions. Specifically, Section 2485 in CCR Title 13 states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) used during construction shall be limited to five minutes at any location. In addition, Section 93115 in CCR Title 17 states that operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

Regional (South Coast Air Quality Management District)

The SCAQMD was created in 1977 to coordinate air quality planning efforts throughout Southern California. SCAQMD is the agency principally responsible for comprehensive air pollution control in the region. Specifically, SCAQMD is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain the CAAQS and NAAQS in the district. SCAQMD has jurisdiction over an area of 10,743 square miles consisting of Orange County; the non-desert portions of Los Angeles, Riverside, and San Bernardino counties; and the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin. The Basin portion of SCAQMD's jurisdiction covers an area of 6,745 square miles. The Basin includes all of Orange County and the non-desert portions of Los Angeles (including the Project Area), Riverside, and San Bernardino counties.

Programs that were developed by SCAQMD to attain and maintain the CAAQS and NAAQS include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions. SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases. However, SCAQMD has primary authority over about 20 percent of NO_x emissions, a precursor to ozone formation. All projects in the SCAQMD jurisdiction are subject to SCAQMD rules and regulations, including, but not limited to the following:

- SCAQMD Rule 402, which states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other materials 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 the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- SCAQMD Rule 403, would reduce the amount of particulate matter entrained in ambient air as a result of anthropogenic fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

- SCAQMD Rule 431.2, would require use of low-sulfur fuel in construction equipment.
- SCAQMD Rule 445 would prohibit the inclusion of wood burning fireplaces in any residences.
- SCAQMD Rule 1113, which limits the VOC content of architectural coatings.
- In accordance with Section 2485 in Title 13 of the California Code of Regulations, the idling of all diesel-fueled commercial vehicles (with gross vehicle weight over 10,000 pounds) during construction would be limited to five minutes at any location.
- In accordance with Section 93115 in Title 17 of the California Code of Regulations, operation of any stationary, diesel-fueled, compression-ignition engines would meet specific fuel and fuel additive requirements and emissions standards.

Air Quality Management Plan. SCAQMD adopted the 2022 Air Quality Management Plan (AQMP) on December 2, 2022, updating the region’s air quality attainment plan to address the “extreme” ozone non-attainment status for the Basin and the severe ozone non-attainment for the Coachella Valley Basin by laying a path for attainment by 2037. This includes reducing NOx emissions by 67 percent more than required by adopted rules and regulations in 2037. The AQMP calls on strengthening many stationary source controls and addressing new sources like wildfires, but still concludes that the region will not meet air quality standards without a significant shift to zero emission technologies and significant federal action. The 2022 AQMP relies on the growth assumptions in SCAG’s 2020-2045 RTP/SCS.

Multiple Air Toxics Exposure Study V. To date, the most comprehensive study on air toxics in the Basin is the Multiple Air Toxics Exposure Study V, released in August 2021.⁴ The report included refinements in aircraft and recreational boating emissions and diesel conversion factors. It finds a Basin average cancer risk of 455 in a million (population-weighted, multi-pathway), which represents a decrease of 54 percent compared to the estimate in MATES IV (page ES-13). The monitoring program measured more than 30 air pollutants, including both gases and particulates. The monitoring study was accompanied by computer modeling that estimated the risk of cancer from breathing toxic air pollution based on emissions and weather data. About 88 percent of the risk is attributed to emissions associated with mobile sources, with the remainder attributed to toxics emitted from stationary sources, which include large industrial operations, such as refineries and metal processing facilities, as well as smaller businesses such as gas stations and chrome plating facilities (page ES-12). The results indicate that diesel PM is the largest contributor to air toxics risk, accounting on average for about 50 percent of the total risk (Figure ES-2).

Regional (Southern California Association of Governments)

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements, including the Transportation Conformity Rule and other applicable federal, state, and air district laws and regulations. As the federally designated Metropolitan Planning Organization

⁴ South Coast Air Quality Management District, MATES-V Study. <https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v>

(MPO) for the six-county Southern California region, SCAG is required by law to ensure that transportation activities “conform” to, and are supportive of, the goals of regional and state air quality plans to attain the NAAQS. In addition, SCAG is a co-producer, with the SCAQMD, of the transportation strategy and transportation control measure sections of the AQMP for the Air Basin.

SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) on September 23, 2020. The RTP/SCS aims to address the transportation and air quality impacts of 3.7 million additional residents, 1.6 additional households, and 1.6 million additional jobs from 2016 to 2045. The Plan calls for \$639 billion in transportation investments and reducing VMT by 19 percent per capita from 2005 to 2035. The updated plan accommodates 21.3 percent growth in population from 2016 (3,933,800) to 2045 (4,771,300) and a 15.6 percent growth in jobs from 2016 (1,848,300) to 2045 (2,135,900). The regional plan projects several benefits:

- Decreasing drive-along work commutes by three percent
- Reducing per capita VMT by five percent and vehicle hours traveled per capita by nine percent
- Increasing transit commuting by two percent
- Reducing travel delay per capita by 26 percent
- Creating 264,500 new jobs annually
- Reducing greenfield development by 29 percent by focusing on smart growth
- Locating six more percent household growth in High Quality Transit Areas (HQTAs), which concentrate roadway repair investments, leverage transit and active transportation investments, reduce regional life cycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and housing affordability.
- Locating 15 percent more jobs in HQTAs
- Reducing PM_{2.5} emissions by 4.1 percent
- Reducing GHG emissions by 19 percent by 2035

Local (City of Los Angeles)

City of Los Angeles General Plan Air Quality Element. The Air Quality Element of the City’s General Plan was adopted on November 24, 1992, and sets forth the goals, objectives, and policies, which guide the City in the implementation of its air quality improvement programs and strategies. The Air Quality Element acknowledges the interrelationships among transportation and land use planning in meeting the City’s mobility and air quality goals.

The Air Quality Element includes six key goals:

- Goal 1:** Good air quality in an environment of continued population growth and healthy economic structure.
- Goal 2:** Less reliance on single-occupant vehicles with fewer commute and non-work trips.
- Goal 3:** Efficient management of transportation facilities and system infrastructure using cost-effective system management and innovative demand management techniques.
- Goal 4:** Minimize impacts of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.

Goal 5: Energy efficiency through land use and transportation planning, the use of renewable resources and less-polluting fuels and the implementation of conservation measures including passive measures such as site orientation and tree planting.

Goal 6: Citizen awareness of the linkages between personal behavior and air pollution and participation in efforts to reduce air pollution.

Clean Up Green Up Ordinance. The City of Los Angeles adopted a Clean Up Green Up Ordinance (Ordinance Number 184,245) on April 13, 2016, which among other provisions, includes provisions related to ventilation system filter efficiency in mechanically ventilated buildings. This ordinance added Sections 95.314.3 and 99.04.504.6 to the Los Angeles Municipal Code (LAMC) and amended Section 99.05.504.5.3 to implement building standards and requirements to address cumulative health impacts resulting from incompatible land use patterns.

California Environmental Quality Act. In accordance with CEQA requirements, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The City uses the SCAQMD's *CEQA Air Quality Handbook* and SCAQMD's supplemental online guidance/information for the environmental review of development proposals within its jurisdiction.

Land Use Compatibility. In November 2012, the Los Angeles City Planning Commission (CPC) issued an advisory notice (Zoning Information 2427) regarding the siting of sensitive land uses within 1,000 feet of freeways. The CPC deemed 1,000 feet to be a conservative distance to evaluate projects that house populations considered to be more at-risk from the negative effects of air pollution caused by freeway proximity. The CPC advised that applicants of projects requiring discretionary approval, located within 1,000 feet of a freeway and contemplating residential units and other sensitive uses (e.g., hospitals, schools, retirement homes) perform a Health Risk Assessment (HRA). The Project Site is 3,750 feet east of the northbound mainline of the San Diego Freeway (I-405).

On April 12, 2018, the City updated its guidance on siting land uses near freeways, resulting in an updated Advisory Notice effective September 17, 2018 requiring all proposed projects within 1,000 feet of a freeway adhere to the Citywide Design Guidelines, including those that address freeway proximity. It also recommended that projects consider avoiding location of sensitive uses like schools, day care facilities, and senior care centers in such projects, locate open space areas as far from the freeway, locate non-habitable uses (e.g., parking structures) nearest the freeway, and screen project sites with substantial vegetation and/or a wall barrier. Requirements for preparing HRAs were removed.

Existing Conditions

Pollutants and Effects

Air quality is defined by ambient air concentrations of seven specific pollutants identified by the USEPA to be of concern with respect to health and welfare of the general public. These specific pollutants, known as "criteria air pollutants," are defined as pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants include carbon monoxide (CO), ground-level ozone (O₃), nitrogen oxides (NO_x), sulfur oxides (SO_x), particulate matter ten microns or less in diameter (PM₁₀), particulate matter

2.5 microns or less in diameter (PM_{2.5}), and lead (Pb). The following descriptions of each criteria air pollutant and their health effects are based on information provided by the SCAQMD.⁵

Carbon Monoxide (CO). CO is primarily emitted from combustion processes and motor vehicles due to incomplete combustion of fuel. Elevated concentrations of CO weaken the heart's contractions and lower the amount of oxygen carried by the blood. It is especially dangerous for people with chronic heart disease. Inhalation of CO can cause nausea, dizziness, and headaches at moderate concentrations and can be fatal at high concentrations.

Ozone (O₃). O₃ is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_x)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. O₃ concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. An elevated level of O₃ irritates the lungs and breathing passages, causing coughing and pain in the chest and throat, thereby increasing susceptibility to respiratory infections and reducing the ability to exercise. Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure may lead to scarring of lung tissue and may lower lung efficiency.

Nitrogen Dioxide (NO₂). NO₂ is a byproduct of fuel combustion and major sources include power plants, large industrial facilities, and motor vehicles. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), which reacts quickly to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. NO₂ absorbs blue light and results in a brownish-red cast to the atmosphere and reduced visibility. NO₂ also contributes to the formation of PM₁₀. Nitrogen oxides irritate the nose and throat, and increase one's susceptibility to respiratory infections, especially in people with asthma. The principal concern of NO_x is as a precursor to the formation of ozone.

Sulfur Dioxide (SO₂). Sulfur oxides (SO_x) are compounds of sulfur and oxygen molecules. SO₂ is the pre-dominant form found in the lower atmosphere and is a product of burning sulfur or burning materials that contain sulfur. Major sources of SO₂ include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of sulfur dioxide aggravate lung diseases, especially bronchitis. It also constricts the breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. SO₂ potentially causes wheezing, shortness of breath, and coughing. High levels of particulates appear to worsen the effect of sulfur dioxide, and long-term exposures to both pollutants leads to higher rates of respiratory illness.

Particulate Matter (PM₁₀ and PM_{2.5}). The human body naturally prevents the entry of larger particles into the body. However, small particles, with an aerodynamic diameter equal to or less than 10 microns (PM₁₀), and even smaller particles with an aerodynamic diameter equal to or less than 2.5 microns (PM_{2.5}), can enter the body and become trapped in the nose, throat, and upper respiratory tract. These small particulates can potentially aggravate existing heart and lung diseases, change the body's defenses against inhaled materials, and damage lung tissue. The elderly, children, and those with chronic lung or heart disease are most sensitive to PM₁₀ and PM_{2.5}. Lung impairment can persist for two

⁵ South Coast Air Quality Management District, Final Program Environmental Impact Report for the 2012 AQMP, December 7, 2012.

to three weeks after exposure to high levels of particulate matter. Some types of particulates can become toxic after inhalation due to the presence of certain chemicals and their reaction with internal body fluids.

Lead (Pb). Lead is emitted from industrial facilities and from the sanding or removal of old lead-based paint. Smelting or processing the metal is the primary source of lead emissions, which is primarily a regional pollutant. Lead affects the brain and other parts of the body's nervous system. Exposure to lead in very young children impairs the development of the nervous system, kidneys, and blood forming processes in the body.

State-Only Criteria Pollutants

Visibility-Reducing Particles. Deterioration of visibility is one of the most obvious manifestations of air pollution and plays a major role in the public's perception of air quality. Visibility reduction from air pollution is often due to the presence of sulfur and NO_x, as well as PM.

Sulfates (SO₄²⁻). Sulfates are the fully oxidized ionic form of sulfur. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized during the combustion process and subsequently converted to sulfate compounds in the atmosphere. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, due to fact that they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide (H₂S). H₂S is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation. Breathing H₂S at levels above the state standard could result in exposure to a very disagreeable odor.

Vinyl Chloride. Vinyl chloride is a colorless, flammable gas at ambient temperature and pressure. It is also highly toxic and is classified as a known carcinogen by the American Conference of Governmental Industrial Hygienists and the International Agency for Research on Cancer. At room temperature, vinyl chloride is a gas with a sickly-sweet odor that is easily condensed. However, it is stored at cooler temperatures as a liquid. Due to the hazardous nature of vinyl chloride to human health, there are no end products that use vinyl chloride in its monomer form. Vinyl chloride is a chemical intermediate, not a final product. It is an important industrial chemical chiefly used to produce polyvinyl chloride (PVC). The process involves vinyl chloride liquid fed to polymerization reactors where it is converted from a monomer to a polymer PVC. The final product of the polymerization process is PVC in either a flake or pellet form. Billions of pounds of PVC are sold on the global market each year. From its flake or pellet form, PVC is sold to companies that heat and mold the PVC into end products such as PVC pipe and bottles. Vinyl chloride emissions are historically associated primarily with landfills.

Toxic Air Contaminants (TACs)

TACs refer to a diverse group of "non-criteria" air pollutants that can affect human health but have not had ambient air quality standards established for them. This is not because they are fundamentally different from the pollutants discussed above but because their effects tend to be local rather than

regional. TACs are classified as carcinogenic and noncarcinogenic, where carcinogenic TACs can cause cancer and noncarcinogenic TAC can cause acute and chronic impacts to different target organ systems (e.g., eyes, respiratory, reproductive, developmental, nervous, and cardiovascular). CARB and OEHHA determine if a substance should be formally identified, or “listed,” as a TAC in California. A complete list of these substances is maintained on CARB’s website.⁶

Diesel particulate matter (DPM), which is emitted in the exhaust from diesel engines, was listed by the state as a TAC in 1998. DPM has historically been used as a surrogate measure of exposure for all diesel exhaust emissions. DPM consists of fine particles (fine particles have a diameter less than 2.5 micrometer (μm)), including a subgroup of ultrafine particles (ultrafine particles have a diameter less than 0.1 μm). Collectively, these particles have a large surface area which makes them an excellent medium for absorbing organics. The visible emissions in diesel exhaust include carbon particles or “soot.” Diesel exhaust also contains a variety of harmful gases and cancer-causing substances.

Exposure to DPM may be a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. DPM levels and resultant potential health effects may be higher in close proximity to heavily traveled roadways with substantial truck traffic or near industrial facilities. According to CARB, DPM exposure may lead to the following adverse health effects: (1) aggravated asthma; (2) chronic bronchitis; (3) increased respiratory and cardiovascular hospitalizations; (4) decreased lung function in children; (5) lung cancer; and (6) premature deaths for people with heart or lung disease.^{7,8}

Project Site

The Project Site is located within the South Coast Air Basin (the Basin); named so because of its geographical formation is that of a basin, with the surrounding mountains trapping the air and its pollutants in the valleys or basins below. The 6,745-square-mile Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. It is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east; and the San Diego County line to the south. Ambient pollution concentrations recorded in Los Angeles County portion of the Basin are among the highest in the four counties comprising the Basin. USEPA has classified Los Angeles County as nonattainment areas for O_3 , $\text{PM}_{2.5}$, and lead. This classification denotes that the Basin does not meet the NAAQS for these pollutants. In addition, under the CCAA, the Los Angeles County portion of the Basin is designated as a nonattainment area for O_3 , PM_{10} , and $\text{PM}_{2.5}$. The air quality within the Basin is primarily influenced by a wide range of emissions sources, such as dense population centers, heavy vehicular traffic, industry, and meteorology.

Air pollutant emissions are generated in the local vicinity by stationary and area-wide sources, such as commercial activity, space and water heating, landscaping maintenance, consumer products, and mobile sources primarily consisting of automobile traffic.

⁶ California Air Resources Board, Toxic Air Contaminant Identification List, www.arb.ca.gov/toxics/id/taclist.htm, last reviewed by CARB July 18, 2011.

⁷ California Air Resources Board, Overview: Diesel Exhaust and Health, www.arb.ca.gov/research/diesel/diesel-health.htm, last reviewed by CARB April 12, 2016.

⁸ California Air Resources Board, Fact Sheet: Diesel Particulate Matter Health Risk Assessment Study for the West Oakland Community: Preliminary Summary of Results, March 2008.

Air Pollution Climatology. The topography and climate of Southern California combine to make the Basin an area of high air pollution potential. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean’s surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cooler surface layer which inhibits the pollutants from dispersing upward. Light winds during the summer further limit ventilation. Additionally, abundant sunlight triggers photochemical reactions which produce O₃ and the majority of particulate matter.

Air Monitoring Data. The SCAQMD monitors air quality conditions at 38 source receptor areas (SRA) throughout the Basin. The Project Site is located in SCAQMD’s Northwest Coastal LA County receptor area. Historical data from the area was used to characterize existing conditions in the vicinity of the Project area. Table 2 shows pollutant levels, State and federal standards, and the number of exceedances recorded in the area from 2019 through 2021. The one-hour State standard for O₃ was exceeded seven times during this three-year period, while the federal standard was exceeded ten times. CO and NO₂ levels did not exceed the CAAQS from 2019 to 2021 for 1-hour (and 8-hour for CO).

**Table 2
Ambient Air Quality Data**

Pollutants and State and Federal Standards	Maximum Concentrations and Frequencies of Exceedance Standards		
	2019	2020	2021
Ozone (O₃)			
Maximum 1-hour Concentration (ppm)	0.086	0.134	0.095
Days > 0.09 ppm (State 1-hour standard)	0	6	1
Days > 0.070 ppm (Federal 8-hour standard)	1	8	1
Carbon Monoxide (CO₂)			
Maximum 1-hour Concentration (ppm)	1.9	2.0	1.5
Days > 20 ppm (State 1-hour standard)	0	0	0
Maximum 8-hour Concentration (ppm)	1.2	1.2	1.0
Days > 9.0 ppm (State 8-hour standard)	0	0	0
Nitrogen Dioxide (NO₂)			
Maximum 1-hour Concentration (ppm)	0.0488	0.0766	0.0606
Days > 0.18 ppm (State 1-hour standard)	0	0	0
PM₁₀			
Maximum 24-hour Concentration (µg/m ³)	N/A	N/A	N/A
Days > 50 µg/m ³ (State 24-hour standard)	N/A	N/A	N/A
PM_{2.5}			
Maximum 24-hour Concentration (µg/m ³)	N/A	N/A	N/A
Days > 35 µg/m ³ (Federal 24-hour standard)	N/A	N/A	N/A
Sulfur Dioxide (SO₂)			
Maximum 24-hour Concentration (ppb)	N/A	N/A	N/A
Days > 0.04 ppm (State 24-hour standard)	N/A	N/A	N/A
ppm = parts by volume per million of air. µg/m ³ = micrograms per cubic meter. N/A = not available at this monitoring station. Source: SCAQMD annual monitoring data at Northwest Coastal LA County subregion (http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year) accessed August 17, 2023.			

Existing Health Risk in the Surrounding Area. Based on the MATES-V model, the calculated cancer risk in the Project area (zip code 90024) is approximately 459 in a million.⁹ The cancer risk in this area is predominately related to nearby sources of diesel particulate matter (e.g., diesel trucks and traffic on the San Diego Freeway 3,750 feet to the west). In general, the risk at the Project Site is higher than 49 percent of the population across the South Coast Air Basin.

The Office of Environmental Health Hazard Assessment, on behalf of the California Environmental Protection Agency (CalEPA), provides a screening tool called CalEnviroScreen that can be used to help identify California communities disproportionately burdened by multiple sources of pollution. According to CalEnviroScreen, the Project Site (Census tract 6037265601) is located in the 17th percentile, which means the Project Site has an overall environmental pollution burden higher than at least 17 percent of other communities within California.¹⁰

Sensitive Receptors. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The California Air Resources Board (CARB) has identified the following groups who are most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The Project Site is located in a residential area within the Westwood neighborhood. Sensitive receptors within 1,000 feet of the Project Site include, but are not limited to, the following representative sampling:

- Residence, 10758 Wilkins Avenue, five feet west of the Project Site.
- Residences, 10755 Ohio Avenue, five feet west of the Project Site.
- Residences, Wilkins Avenue (north side), as close as 70 feet north of the Project Site.
- St. Paul Catholic Church, 10750 Ohio Avenue; 100 feet south of the Project Site.
- Church of Latter Day Saints, 10740 Ohio Avenue; 270 feet east of the Project Site.
- Ralph Waldo Emerson Middle School, 1650 Selby Avenue; 550 feet south of the Project Site.

Existing Project Site Emissions. The Project Site is improved with a 2,101 square-foot single-family residence.¹¹ As summarized in Table 3, most existing air quality emissions are associated with the nine daily vehicle trips traveling to and from the Project Site.¹²

⁹ South Coast Air Quality Management District, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-V), MATES V Interactive Carcinogenicity Map, 2021, https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/home/?data_id=data_Source_105-a5ba9580e3aa43508a793fac819a5a4d%3A26&views=view_39%2Cview_1, accessed August 19, 2023.

¹⁰ Office of Environmental Health Hazard Assessment, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>, accessed August 19, 2023.

¹¹ City of Los Angeles, ZIMAS database, accessed August 16, 2023.

¹² DKA Planning, 2023, based on CalEEMod 2022.1.1.17 model using ITE Trip Generation rates (10th Edition).

**Table 3
Existing Daily Operations Emissions**

Emissions Source	Daily Emissions (Pounds Per Day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Sources	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Energy Sources	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mobile Sources	<0.1	<0.1	0.3	<0.1	0.1	<0.1
Regional Total	0.1	<0.1	0.4	<0.1	0.1	<0.1

Source: DKA Planning, 2023 based on CalEEMod 2022.1.1.17 model runs (included in Appendix).

Project Impacts

Methodology

The air quality analysis conducted for the Project is consistent with the methods described in the SCAQMD CEQA Air Quality Handbook (1993 edition), as well as the updates to the CEQA Air Quality Handbook, as provided on the SCAQMD website. The SCAQMD recommends the use of the California Emissions Estimator Model (CalEEMod, version 2022.1.1.17) as a tool for quantifying emissions of air pollutants that will be generated by constructing and operating development projects. The analyses focus on the potential change in air quality conditions due to Project implementation. Air pollutant emissions would result from both construction and operation of the Project. Specific methodologies used to evaluate these emissions are discussed below.

Construction. Sources of air pollutant emissions associated with construction activities include heavy-duty off-road diesel equipment and vehicular traffic to and from the Project construction site. Project-specific information was provided describing the schedule of construction activities and the equipment inventory required from the Applicant. Details pertaining to the schedule and equipment can be found in the Technical Appendix to this analysis. The CalEEMod model provides default values for daily equipment usage rates and worker trip lengths, as well as emission factors for heavy-duty equipment, passenger vehicles, and haul trucks that have been derived by the CARB. Maximum daily emissions were quantified for each construction activity based on the number of equipment and daily hours of use, in addition to vehicle trips to and from the Project Site.

The SCAQMD recommends that air pollutant emissions be assessed for both regional scale and localized impacts. The regional emissions analysis includes both on-site and off-site sources of emissions, while the localized emissions analysis focuses only on sources of emissions that would be located on the Project Site.

Localized impacts were analyzed in accordance with the SCAQMD Localized Significance Threshold (LST) methodology.¹³ The localized effects from on-site portion of daily emissions were evaluated at sensitive receptor locations potentially impacted by the Project according to the SCAQMD's LST methodology, which uses on-site mass emission look-up tables and Project-specific modeling, where

¹³ South Coast Air Quality Management District, Final Localized Significance Methodology, revised July 2008.

appropriate.¹⁴ SCAQMD provides LSTs applicable to the following criteria pollutants: NO_x, CO, PM₁₀, and PM_{2.5}. SCAQMD does not provide an LST for SO₂ since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant. Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. Due to the role VOCs play in O₃ formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. The mass rate look-up tables were developed for each source receptor area and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. SCAQMD provides LST mass rate look-up tables for projects with active construction areas that are less than or equal to five acres. If the project exceeds the LST look-up values, then the SCAQMD recommends that project-specific air quality modeling must be performed. Please refer to **Threshold b** below, for the analysis of localized impacts from on-site construction activities. In accordance with SCAQMD guidance, maximum daily emissions of NO_x, CO, PM₁₀, and PM_{2.5} from on-site sources during each construction activity were compared to LST values for a one-acre site having sensitive receptors within 25 meters (82 feet).¹⁵ This is appropriate given the 0.16-acre site and the proximity of sensitive receptors as close as five feet from the Project Site.

The Basin is divided into 38 SRAs, each with its own set of maximum allowable LST values for on-site emissions sources during construction and operations based on locally monitored air quality. Maximum on-site emissions resulting from construction activities were quantified and assessed against the applicable LST values.

The significance criteria and analysis methodologies in the SCAQMD's CEQA Air Quality Handbook were used in evaluating impacts in the context of the CEQA significance criteria listed below. The SCAQMD localized significance thresholds (LSTs) for NO₂, CO, and PM₁₀ were initially published in June 2003 and revised in July 2008.¹⁶ The LSTs for PM_{2.5} were established in October 2006.¹⁷ Updated LSTs were published on the SCAQMD website on October 21, 2009.¹⁸ Table 4 presents the significance criteria for both construction and operational emissions.

¹⁴ South Coast Air Quality Management District, LST Methodology Appendix C-Mass Rate LST Look-Up Table, October 2009.

¹⁵ South Coast Air Quality Management District, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2008.

¹⁶ South Coast Air Quality Management District, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2008.

¹⁷ South Coast Air Quality Management District, Final – Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds, October 2006.

¹⁸ South Coast Air Quality Management District, Final Localized Significance Threshold Methodology Appendix C – Mass Rate LST Look-Up Tables, October 21, 2009.

Table 4
SCAQMD Emissions Thresholds

Criteria Pollutant	Construction Emissions		Operation Emissions	
	Regional	Localized /a/	Regional	Localized /a/
Volatile Organic Compounds (VOC)	75	--	55	--
Nitrogen Oxides (NO _x)	100	103	55	103
Carbon Monoxide (CO)	550	562	550	562
Sulfur Oxides (SO _x)	150	--	150	--
Respirable Particulates (PM ₁₀)	150	4	150	1
Fine Particulates (PM _{2.5})	55	3	55	1

/a/ Localized significance thresholds for the Northwest Coastal LA County source receptor area assumed a 1-acre and 25-meter (82-foot) receptor distance, which are the applicable thresholds for a 0.16-acre site with adjacent receptors as close as five feet away. Pursuant to SCAQMD guidance, sensitive receptors closer than 25 meters to a construction site are to use the LSTs for receptors at 25 meters (SCAQMD Final Localized Significance Threshold Methodology, June 2008). The SCAQMD has not developed LST values for VOC or SO_x.

Operations. CalEEMod also generates estimates of daily and annual emissions of air pollutants resulting from future operation of a project. Operational emissions of air pollutants are produced by mobile sources (vehicular travel) and stationary sources (utilities demand). Utilities for the Project Site are provided by the Los Angeles Department of Water and Power (LADWP) for electricity and Southern California Gas for natural gas. CalEEMod has derived default emissions factors for electricity and natural gas usage that are applied to the size and land use type of the Project in question. CalEEMod also generates estimated operational emissions associated water use, wastewater generation, and solid waste disposal.

Similar to construction, SCAQMD’s CalEEMod software was used for the evaluation of Project emissions during operation. CalEEMod was used to calculate on-road fugitive dust, architectural coatings, landscape equipment, energy use, mobile source, and stationary source emissions.¹⁹ To determine if a significant air quality impact would occur, the net increase in regional and local operational emissions generated by the Project was compared against the SCAQMD’s significance thresholds.²⁰ Details describing the operational emissions of the Project can be found in in the Technical Appendix.

Toxic Air Contaminants Impacts (Construction and Operations). Potential TAC impacts are evaluated by conducting a qualitative analysis consistent with the CARB Handbook followed by a more detailed analysis (i.e., dispersion modeling), as necessary. The qualitative analysis consists of reviewing the Project to identify any new or modified TAC emissions sources. If the qualitative evaluation does not rule out significant impacts from a new source, or modification of an existing TAC emissions source, a more detailed analysis is conducted.

¹⁹ Energy consumption estimates with CalEEMod 2022.1.1.17 are based on the California Energy Commission’s 2020 Residential Appliance Saturation Survey (residential uses) and 2021 Commercial Forecast database, both of which reflected the 2019 Title 24 energy efficiency standards. These energy consumption estimates were adjusted to reflect the 2022 Title 24 standards that cumulatively produce a 0.49 percent reduction in electricity use and 0.45 percent reduction in natural gas use when compared to the 2019 standards.

²⁰ South Coast Air Quality Management District, Air Quality Significance Thresholds, revised March 2015. SCAQMD based these thresholds, in part on the federal Clean Air Act and, to enable defining “significant” for CEQA purposes, defined the setting as the South Coast Air Basin. (See SCAQMD, CEQA Air Quality Handbook, April 1993, pp. 6-1-6-2).

Thresholds of Significance

State CEQA Guidelines Appendix G

Would the Project:

- a) *Conflict with or obstruct implementation of the applicable air quality plan;*
- b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard;*
- c) *Expose sensitive receptors to substantial pollutant concentrations; or*
- d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

City and SCAQMD Thresholds

For this analysis the Appendix G Thresholds are relied upon. The analysis utilizes factors and considerations recommended by the City of Los Angeles and SCAQMD Thresholds, as appropriate, to assist in answering the Appendix G Threshold questions.

(a) *Construction*

The City recommends that determination of significance be made on a case-by-case basis, considering the following criteria to evaluate construction-related air emissions:

(i) *Combustion Emissions from Construction Equipment*

- Type, number of pieces and usage for each type of construction equipment;
- Estimated fuel usage and type of fuel (diesel, natural gas) for each type of equipment; and
- Emission factors for each type of equipment.

(ii) *Fugitive Dust—Grading, Excavation and Hauling*

- Amount of soil to be disturbed on-site or moved off-site;
- Emission factors for disturbed soil;
- Duration of grading, excavation and hauling activities;
- Type and number of pieces of equipment to be used; and
- Projected haul route.

(iii) *Fugitive Dust—Heavy-Duty Equipment Travel on Unpaved Road*

- Length and type of road;
- Type, number of pieces, weight and usage of equipment; and
- Type of soil.

(iv) *Other Mobile Source Emissions*

- Number and average length of construction worker trips to Project Site, per day; and
- Duration of construction activities.

In addition, the following criteria set forth in the SCAQMD's *CEQA Air Quality Handbook* serve as quantitative air quality standards to be used to evaluate project impacts under the Appendix G Thresholds. Under these thresholds, a significant threshold would occur when:²¹

- Regional emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 100 pounds per day for NO_x; (2) 75 pounds a day for VOC; (3) 150 pounds per day for PM₁₀ or SO_x; (4) 55 pounds per day for PM_{2.5}; and (5) 550 pounds per day for CO.
- Maximum on-site daily localized emissions exceed the LST, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 ppm [23,000 µg/m³] over a 1-hour period or 9.0 ppm [10,350 µg/m³] averaged over an 8-hour period) and NO₂ (0.18 ppm [339 µg/m³] over a 1-hour period, 0.1 ppm [188 µg/m³] over a three-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm [57 µg/m³] averaged over an annual period).
- Maximum on-site localized PM₁₀ or PM_{2.5} emissions during construction exceed the applicable LSTs, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed the incremental 24-hour threshold of 10.4 µg/m³ or 1.0 µg/m³ PM₁₀ averaged over an annual period.

(b) Operation

The City bases the determination of significance of operational air quality impacts on criteria set forth in the SCAQMD's *CEQA Air Quality Handbook*.²² As discussed above, the City uses Appendix G as the thresholds of significance for this analysis. Accordingly, the following serve as quantitative air quality standards to be used to evaluate project impacts under the Appendix G thresholds. Under these thresholds, a significant threshold would occur when:

- Operational emissions exceed 10 tons per year of volatile organic gases or any of the following SCAQMD prescribed threshold levels: (1) 55 pounds a day for VOC;²³ (2) 55 pounds per day for NO_x; (3) 550 pounds per day for CO; (4) 150 pounds per day for SO_x; (5) 150 pounds per day for PM₁₀; and (6) 55 pounds per day for PM_{2.5}.²⁴
- Maximum on-site daily localized emissions exceed the LST, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for CO (20 parts per million (ppm) over a 1-hour period or 9.0 ppm averaged over an

²¹ South Coast Air Quality Management District, Air Quality Significance Thresholds, revised March 2015.

²² South Coast Air Quality Management District, Air Quality Significance Thresholds, revised March 2015.

²³ For purposes of this analysis, emissions of VOC and reactive organic compounds (ROG) are used interchangeably since ROG represents approximately 99.9 percent of VOC emissions.

²⁴ South Coast Air Quality Management District, Quality Significance Thresholds, www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf, last updated March 2015.

8-hour period) and NO₂ (0.18 ppm over a 1-hour period, 0.1 ppm over a 3-year average of the 98th percentile of the daily maximum 1-hour average, or 0.03 ppm averaged over an annual period).²⁵

- Maximum on-site localized operational PM₁₀ and PM_{2.5} emissions exceed the incremental 24-hour threshold of 2.5 µg/m³ or 1.0 µg/m³ PM₁₀ averaged over an annual period.²⁶
- The Project causes or contributes to an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively; or
- The Project creates an odor nuisance pursuant to SCAQMD Rule 402.

(c) *Toxic Air Contaminants*

The City recommends that the determination of significance shall be made on a case-by-case basis, considering the following criteria to evaluate TACs:

- Would the project use, store, or process carcinogenic or non-carcinogenic toxic air contaminants which could result in airborne emissions?

In assessing impacts related to TACs in this section, the City uses Appendix G as the thresholds of significance. The criteria identified above will be used where applicable and relevant to assist in analyzing the Appendix G thresholds. In addition, the following criteria set forth in the SCAQMD's *CEQA Air Quality Handbook* serve as quantitative air quality standards to be used to evaluate project impacts under Appendix G thresholds. Under these thresholds, a significant threshold would occur when:²⁷

- The Project results in the exposure of sensitive receptors to carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0.²⁸ For projects with a maximum incremental cancer risk between 1 in one million and 10 in one million, a project would result in a significant impact if the cancer burden exceeds 0.5 excess cancer cases.

(d) *Consistency with Applicable Air Quality Plans*

CEQA Guidelines Section 15125 requires an analysis of project consistency with applicable governmental plans and policies. This analysis is conducted to assess potential project impacts against

²⁵ South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, revised July 2008.

²⁶ South Coast Air Quality Management District, Final—Methodology to Calculate Particulate Matter (PM) 2.5 and PM_{2.5} Significance Thresholds, October 2006.

²⁷ South Coast Air Quality Management District, *CEQA Air Quality Handbook*, April 1993, Chapter 6 (Determining the Air Quality Significance of a Project) and Chapter 10 (Assessing Toxic Air Pollutants).

²⁸ Hazard index is the ratio of a toxic air contaminant's concentration divided by its Reference Concentration, or safe exposure level. If the hazard index exceeds one, people are exposed to levels of TACs that may pose noncancer health risks.

Threshold (a) from the Appendix G thresholds. In accordance with the SCAQMD's *CEQA Air Quality Handbook*, the following criteria are used to evaluate a project's consistency with the AQMP:²⁹

- Will the Project result in any of the following:
 - An increase in the frequency or severity of existing air quality violations;
 - Cause or contribute to new air quality violations; or
 - Delay timely attainment of 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; or
 - To what extent is Project development consistent with the AQMP land use policies?

The Project's impacts with respect to these criteria are discussed to assess the consistency with the SCAQMD's AQMP and SCAG regional plans and policies. In addition, the Project's consistency with the City of Los Angeles General Plan Air Quality Element is discussed.

Project Design Features. The Project would comply with the 2022 Los Angeles Green Building Code (LAGBC),³⁰ which will build upon and set higher standards than those in the 2022 California Green Building Standards Code (CalGreen, effective January 1, 2023).³¹ Further energy efficiency and sustainability features would include native plants and drip/subsurface irrigation systems, individual metering or sub metering for water use, leak detection systems, and electric vehicle charging capacity. The Project would also be all electric, consistent with the City's ordinance requirements for new development.

The Project's infill location would promote the concentration of development in an urban location with extensive infrastructure and access to public transit facilities. The Project's proximity to public transportation would reduce vehicle miles traveled for residents and visitors who want options to driving cars.

²⁹ South Coast Air Quality Management District, *CEQA Air Quality Handbook*, April 1993, p. 12-3.

³⁰ City of Los Angeles Department of Building and Safety: <http://ladbs.org/forms-publications/forms/green-building>.

³¹ California Building Codes: <http://www.bsc.ca.gov/Codes.aspx>.

Analysis of Project Impacts

a. Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The Project's air quality emissions would not exceed any state or federal standards. Therefore, the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the state and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.

With respect to the determination of consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2020-2045 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria: (1) consistency with applicable population, housing, and employment growth projections; (2) project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis with respect to each of these three criteria.

- Is the project consistent with the population, housing, and employment growth projections upon which AQMP forecasted emission levels are based?

A project is consistent with the AQMP, in part, if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the 2022 AQMP, two sources of data form the basis for the projections of air pollutant emissions: the City of Los Angeles General Plan and SCAG's RTP. The General Plan serves as a comprehensive, long-term plan for future development of the City.

The 2020-2045 RTP/SCS provides socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review. The 2020-2045 RTP/SCS accommodates 4,771,300 persons; 1,793,000 households; and 2,135,900 jobs in the City of Los Angeles by 2045.

Based on the average 2020 persons-per-household rate for the City of 2.42 persons per household,³² the Project would add a net residential population of approximately 25 people to the Project Site based on the ten net dwelling units proposed. The Project's residential population would represent less than 0.003 percent of the forecast population growth between 2016 and 2045. As a result, the Project would add a de minimis number of persons to the region and would be consistent with the projections in the AQMP.

- Does the project implement feasible air quality mitigation measures?

As discussed below under Thresholds (b), (c), and (d), the Project would not result in any significant air quality impacts and therefore would not require mitigation. In addition, the Project would comply with all applicable regulatory standards as required by SCAQMD. Furthermore, with compliance with the

³² Jack Tsao, Data Analyst II, Los Angeles Department of City Planning, July 31, 2019.

regulatory requirements identified above, no significant air quality impacts would occur. As such, the proposed Project meets this AQMP consistency criterion.

- To what extent is project development consistent with the land use policies set forth in the AQMP?

With regard to land use developments such as the Project, the AQMP's air quality policies focus on the reduction of vehicle trips and vehicle miles traveled (VMT). The Project would serve to implement a number of land use policies of the City of Los Angeles, SCAQMD, and SCAG. The Project would be designed and constructed to support and promote environmental sustainability. The Project represents an infill development within an existing urbanized area that would concentrate more housing and population within a high quality transit area (HQTA). "Green" principles are incorporated throughout the Project to comply with the City of Los Angeles Green Building Code and the California Green Building Standards Code (CALGreen) through energy conservation, water conservation, and waste reduction features. In accordance with City Ordinance 187714, the Project would be all-electric with the exception of any gas-powered emergency backup systems.

The air quality plan applicable to the Project area is the 2022 AQMP, the current management plan for progression toward compliance with State and federal clean air requirements. The Project would be required to comply with all regulatory measures set forth by the SCAQMD. Implementation of the Project would not interfere with air pollution control measures listed in the 2022 AQMP. In addition, as demonstrated in the following analyses, the Project would not result in significant emissions that would jeopardize regional or localized air quality standards.

The Project Site is classified as "Low Medium II Residential" in the General Plan Framework, a classification that allows multi-family housing such as that proposed by the Project. As such, the RTP/SCS' assumptions about growth in the City accommodate the projected population on the Project Site. As a result, the Project would be consistent with the growth assumptions in the City's General Plan. Because the AQMP accommodates growth forecasts from local General Plans, the emissions associated with this Project are accounted for and mitigated in the region's air quality attainment plans. The air quality impacts of development on the Project Site are accommodated in the region's emissions inventory for the 2020-2045 RTP/SCS and 2022 AQMP. Therefore, Project impacts with respect to AQMP consistency would be less than significant.

City of Los Angeles Policies

The Project would offer convenient access to public transit and opportunities for walking and biking (including the provision of bicycle parking), thereby facilitating a reduction in VMT. In addition, the Project would be consistent with the existing land use pattern in the vicinity that concentrates urban density along major arterials and near transit options based on the following:

- The Project Site is within a HQTA, which reflects areas with rail transit service or bus service where lines have peak headways of less than 15 minutes.³³
- The Project Site is located in a Transit Priority Area, which are locations within one-half mile of a major transit stop with bus or rail transit service with frequencies of 15 minutes or less.

³³ Southern California Association of Governments Data Portal https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_active-transportation.pdf?1606001530,

- The Project Site is considered a Transit Oriented Communities (TOC) Tier 3 based on the shortest distance between any point on the lot and qualified Major Transit Stops.³⁴
- Public transit service in the area includes:
 - Santa Monica Big Blue Bus Line 1 connects Venice to UCLA via Westwood Boulevard and Santa Monica Boulevard. The nearest bus stop is 1,150 feet west of the Project Site at Ohio Avenue.
 - Santa Monica Big Blue Bus Line 8 connects Santa Monica to UCLA via Westwood Boulevard and Ocean Park Boulevard. The nearest bus stop is 1,150 feet west of the Project Site at Ohio Avenue.
 - Los Angeles County Metropolitan Transportation Authority (Metro) Line 4 connects Santa Monica to Downtown Los Angeles via Santa Monica Boulevard and other major arterials. The nearest bus stop is 2,100 feet south of the Project Site.
 - Metro Line 20 connects Santa Monica to Downtown Los Angeles via Wilshire Boulevard and other major arterials. The nearest bus stop is 1,400 feet north of the Project Site.
 - LADOT Commuter Express Line 431 provides commuter service from West Los Angeles to Downtown Los Angeles via Wilshire Boulevard and other major arterials. The nearest bus stop is 1,400 feet north of the Project Site.
- The project will provide one short- and twelve long-term bicycle parking spaces on-site.
- Ohio Avenue is a Class III bicycle path while Westwood Boulevard provides Class II bike lanes.

The City’s General Plan Air Quality Element identifies 30 policies with specific strategies for advancing the City’s clean air goals. As illustrated in Table 5, the Project is consistent with the applicable policies in the Air Quality Element, as the Project would implement sustainability features that would reduce vehicular trips, reduce VMT, and encourage the use of alternative modes of transportation. Therefore, the Project would result in a less than significant impact related to consistency with the Air Quality Element.

Table 5
Project Consistency with City of Los Angeles General Plan Air Quality Element

Strategy	Project Consistency
Policy 1.3.1. Minimize particulate emissions from construction sites.	Consistent. The Project would minimize particulate emissions during construction through best practices and/or SCAQMD rules (e.g., Rule 403, Fugitive Dust).
Policy 1.3.2. Minimize particulate emissions from unpaved roads and parking lots associated with vehicular traffic.	Not Applicable. The Project would not involve use of unpaved roads or parking lots.
Policy 2.1.1. Utilize compressed work weeks and flextime, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling related facilities in order to reduce vehicle trips and/or VMT as an employer	Consistent. The Project is a residential project and would not have any employers. Nevertheless, the Project would promote alternative commute options for residents who can take advantage of public transit and active transportation options. Santa Monica Big Blue

³⁴ Major Transit Stop is a site containing a rail station or the intersection of two or more bus routes with a service interval of 15 minutes or less during the morning and afternoon peak commute periods. The stations or bus routes may be existing, under construction or included in the most recent Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP).

Table 5
Project Consistency with City of Los Angeles General Plan Air Quality Element

Strategy	Project Consistency
and encourage the private sector to do the same to reduce work trips and traffic congestion.	bus operates two local routes on Westwood Boulevard, while Metro operates one route (Line 20) on Wilshire Boulevard and Line 4 on Santa Monica Boulevard. LADOT Commuter Express route provides commuter service to Downtown Los Angeles. Residents could use the thirteen on-site bicycle parking spaces and the Class II bike lanes on Westwood Boulevard and Class III bike path on Ohio Avenue.
Policy 2.1.2. Facilitate and encourage the use of telecommunications (i.e., telecommuting) in both the public and private sectors, in order to reduce work trips.	Consistent. Residents could use high-speed telecommunications services as an alternative to driving to work. A June 2020 study by the National Bureau of Economic Research found that 37 percent of jobs can be performed entirely from home (https://www.nber.org/papers/w26948). As such, the Proposed Project could help reduce commuting to work through telecommuting.
Policy 2.2.1. Discourage single-occupant vehicle use through a variety of measures such as market incentive strategies, mode-shift incentives, trip reduction plans and ridesharing subsidies.	Consistent. As the Project Site is classified as a TOC Tier 3 site and has allowances under AB 2097, the Project would discourage single-occupant vehicle use because of the limited parking (six spaces) for the eleven residences. This would reduce car ownership for residents that would by definition reduce single-occupancy vehicle travel. Residents and visitors can use public transit, including Santa Monica Big Blue bus operates two local routes on Westwood Boulevard, while Metro operates one route (Line 20) on Wilshire Boulevard and Line 4 on Santa Monica Boulevard. LADOT Commuter Express route provides commuter service to Downtown Los Angeles. Residents could use the thirteen on-site bicycle parking spaces and the Class II bike lanes on Westwood Boulevard and Class III bike path on Ohio Avenue.
Policy 2.2.2. Encourage multi-occupant vehicle travel and discourage single-occupant vehicle travel by instituting parking management practices.	Consistent. As noted above, the Project Site's TOC Tier 3 and AB 2097 status allows the garage to be limited to parking for six vehicles. This would reduce car ownership for residents that would by definition reduce single-occupancy vehicle travel. The development would provide transportation options to residents as an option to driving.
Policy 2.2.3. Minimize the use of single-occupant vehicles associated with special events or in areas and times of high levels of pedestrian activities.	Not Applicable. The Project would not include facilities for special events.
Policy 3.2.1. Manage traffic congestion during peak hours.	Consistent. The Project is a low traffic generator because of the nature of residential uses, which generate peak hour vehicle trips that are lower than commercial, retail, and restaurant uses. Further, the

Table 5
Project Consistency with City of Los Angeles General Plan Air Quality Element

Strategy	Project Consistency
	Project would also minimize traffic congestion based on its location near transit opportunities, which would encourage the use of alternative modes of transportation. Residents and visitors can use public transit, including Santa Monica Big Blue bus operates two local routes on Westwood Boulevard, while Metro operates one route (Line 20) on Wilshire Boulevard and Line 4 on Santa Monica Boulevard. LADOT Commuter Express route provides commuter service to Downtown Los Angeles. Residents could use the thirteen on-site bicycle parking spaces and the Class II bike lanes on Westwood Boulevard and Class III bike path on Ohio Avenue.
Policy 4.1.1. Coordinate with all appropriate regional agencies on the implementation of strategies for the integration of land use, transportation, and air quality policies.	Consistent. The Project is being entitled through the City of Los Angeles, which coordinates with SCAG, Metro, and other regional agencies on the coordination of land use, air quality, and transportation policies.
Policy 4.1.2. Ensure that project level review and approval of land use development remains at the local level.	Consistent. The Project would be entitled and environmentally cleared at the local level. The Project would not inhibit the implementation of this policy.
Policy 4.2.1. Revise the City's General Plan/Community Plans to achieve a more compact, efficient urban form and to promote more transit-oriented development and mixed-use development.	Not Applicable. This policy calls for City updates to its General Plan. The Project would not inhibit the implementation of this policy.
Policy 4.2.2. Improve accessibility for the City's residents to places of employment, shopping centers and other establishments.	Consistent. The Project would be infill development that would provide the City's residents with proximate access to jobs and services at this Project Site.
Policy 4.2.3. Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.	Consistent. The Project would promote public transit, active transportation, and alternative fuel vehicles for residents, workers, and visitors, who can use public transit, including Santa Monica Big Blue bus operates two local routes on Westwood Boulevard, while Metro operates one route (Line 20) on Wilshire Boulevard and Line 4 on Santa Monica Boulevard. LADOT Commuter Express route provides commuter service to Downtown Los Angeles. Residents could use the thirteen on-site bicycle parking spaces and the Class II bike lanes on Westwood Boulevard and Class III bike path on Ohio Avenue. The Project would also include one electric vehicle charging station and one more space with conduits and supplies for a future charging station.
Policy 4.2.4. Require that air quality impacts be a consideration in the review and approval of all discretionary projects.	Consistent. The Project's air quality impacts are analyzed in this document, and as discussed herein, all impacts with respect to air quality would be less than significant.

Table 5
Project Consistency with City of Los Angeles General Plan Air Quality Element

Strategy	Project Consistency
Policy 4.2.5. Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.	Consistent. The proposed project would support use of alternative transportation modes. The Project Site is well-served by public transit, including Santa Monica Big Blue bus operates two local routes on Westwood Boulevard, while Metro operates one route (Line 20) on Wilshire Boulevard and Line 4 on Santa Monica Boulevard. LADOT Commuter Express route provides commuter service to Downtown Los Angeles. Residents could use the thirteen on-site bicycle parking spaces and the Class II bike lanes on Westwood Boulevard and Class III bike path on Ohio Avenue.
Policy 4.3.1. Revise the City's General Plan/Community Plans to ensure that new or relocated sensitive receptors are located to minimize significant health risks posed by air pollution sources.	Not Applicable. This policy calls for City updates to its General Plan. The Project would not inhibit the implementation of this policy.
Policy 4.3.2. Revise the City's General Plan/Community Plans to ensure that new or relocated major air pollution sources are located to minimize significant health risks to sensitive receptors.	Not Applicable. This policy calls for City updates to its General Plan. The Project would not inhibit the implementation of this policy.
Policy 5.1.1. Make improvements in Harbor and airport operations and facilities in order to reduce air emissions.	Not Applicable. This policy calls for cleaner operations of the City's water port and airport facilities. The Project would not inhibit the implementation of this policy.
Policy 5.1.2. Effect a reduction in energy consumption and shift to non-polluting sources of energy in its buildings and operations.	Not Applicable. This policy calls for cleaner operations of the City's buildings and operations. The Project would not inhibit the implementation of this policy.
Policy 5.1.3. Have the Department of Water and Power make improvements at its in-basin power plants in order to reduce air emissions.	Not Applicable. This policy calls for cleaner operations of the City's Water and Power energy plants. The Project would not inhibit the implementation of this policy.
Policy 5.1.4. Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling.	Consistent. The Project would be consistent with this policy by complying with Title 24, CALGreen, and other requirements to reduce solid waste and energy consumption. This includes the City's March 2010 ordinance (Council File 09-3029) that requires all mixed construction and demolition waste be taken to City-certified waste processors.
Policy 5.2.1. Reduce emissions from its own vehicles by continuing scheduled maintenance, inspection and vehicle replacement programs; by adhering to the State of California's emissions testing and monitoring programs; by using alternative fuel vehicles wherever feasible, in accordance with regulatory agencies and City Council policies.	Not Applicable. This policy calls for the City to gradually reduce the fleet emissions inventory from its vehicles through use of alternative fuels, improved maintenance practices, and related operational improvements. The Project's support of electric vehicles will continue the State's conversion to zero emission fleets that do not required engine inspections.

Table 5
Project Consistency with City of Los Angeles General Plan Air Quality Element

Strategy	Project Consistency
Policy 5.3.1. Support the development and use of equipment powered by electric or low-emitting fuels.	Consistent. The Project would be designed to meet the applicable requirements of the States Green Building Standards Code and the City of Los Angeles' Green Building Code, both of which promote a shift from natural gas use toward electrification of buildings. The Project would also include one electric vehicle charging station and another space with conduits and supplies for future charging.
Policy 6.1.1. Raise awareness through public-information and education programs of the actions that individuals can take to reduce air emissions.	Not Applicable. This policy calls for the City to promote clean air awareness through its public awareness programs. The Project would not inhibit the implementation of this policy.
Source: DKA Planning, 2023.	

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

Less Than Significant Impact.

Construction

A cumulatively considerable net increase would occur if the project's construction impacts substantially contribute to air quality violations when considering other projects that may undertake construction activities at the same time. Individual projects that generate emissions that do not exceed SCAQMD's significance thresholds would not contribute considerably to any potential cumulative impact. SCAQMD neither recommends quantified analyses of the emissions generated by a set of cumulative development projects nor provides thresholds of significance to assess the impacts associated with these emissions.³⁵

Construction-related emissions were estimated using the SCAQMD's CalEEMod 2022.1.1.17 model and a projected construction schedule of at least 30 months. Table 6 summarizes the estimated construction schedule that was modeled for air quality impacts.

Table 6
Construction Schedule Assumptions

Phase	Duration	Notes
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³⁵ South Coast Air Quality Management District, 2003 White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution: "As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR...Projects that exceed the project-specific significance threshold are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are not considered to be cumulatively significant.

**Table 6
Construction Schedule Assumptions**

Demolition	Month 1	Removal of 2,101 square feet of building floor area and 1,450 square feet of asphalt/concrete parking lot hauled 40 miles to landfill in 10-cubic yard capacity trucks.
Site Preparation	Month 2	Removal of trees, plants, landscaping, weeds, grubbing over 3,500 square-foot area.
Grading	Months 3-4	Approximately 3,200 cubic yards of soil (including 25 percent swell factor) ³⁶ hauled 40 miles to landfill in 10-cubic yard capacity trucks.
Trenching	Months 5-8	Trenching for utilities, including gas, water, electricity, and telecommunications.
Building Construction	Months 6-30	Footings and foundation work, framing, concrete pouring, welding; installing mechanical, electrical, and plumbing. Floor assembly, interior painting, cabinetry and carpentry, elevator installations, low voltage systems, trash management.
Architectural Coatings	Months 25-30	Application of interior and exterior coatings and sealants.
Source: DKA Planning, 2023.		

The Project would be required to comply with the following regulations, as applicable:

- SCAQMD Rule 403, would reduce the amount of particulate matter entrained in ambient air as a result of anthropogenic fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.
- SCAQMD Rule 1113, which limits the VOC content of architectural coatings.
- SCAQMD Rule 402, which states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other materials 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 the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- In accordance with Section 2485 in Title 13 of the California Code of Regulations, the idling of all diesel-fueled commercial vehicles (with gross vehicle weight over 10,000 pounds) during construction would be limited to five minutes at any location.
- In accordance with Section 93115 in Title 17 of the California Code of Regulations, operation of any stationary, diesel-fueled, compression-ignition engines would meet specific fuel and fuel additive requirements and emissions standards.

³⁶ City of Los Angeles, Environmental Assessment Form.

Regional Emissions

Construction activity creates air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers traveling to and from the Project Site. NO_x emissions would primarily result from the use of construction equipment and truck trips.

Fugitive dust emissions would peak during grading activities, where approximately 3,200 cubic yards of soil (including swell factors) would be exported from the Project Site to accommodate a one-level subterranean structure. All construction projects in the Basin must comply with SCAQMD Rule 403 for fugitive dust. Rule 403 control requirements include measures to prevent the generation of visible dust plumes. Measures include, but are not limited to, applying water and/or soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system or other control measures to remove bulk material from tires and vehicle undercarriages before vehicles exit the Project Site, and maintaining effective cover over exposed areas. Compliance with Rule 403 would reduce regional PM_{2.5} and PM₁₀ emissions associated with construction activities by approximately 61 percent.

During the building finishing phase, the application of architectural coatings (e.g., paints) would release VOCs (regulated by SCAQMD Rule 1113). The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

As shown in Table 7, construction of the Project would produce VOC, NO_x, CO, SO_x, PM₁₀ and PM_{2.5} emissions that do not exceed the SCAQMD's regional thresholds. As a result, construction of the Project would not contribute substantially to an existing violation of air quality standards for regional pollutants (e.g., ozone). This impact is considered less than significant.

Localized Emissions

In addition to maximum daily regional emissions, maximum localized (on-site) emissions were quantified for each construction activity. The localized construction air quality analysis was conducted using the methodology promulgated by the SCAQMD. Look-up tables provided by the SCAQMD were used to determine localized construction emissions thresholds for the Project.³⁷ LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are based on the most recent background ambient air quality monitoring data (2019-2021) for the Project area.

Table 7
Daily Construction Emissions

Construction Phase Year	Daily Emissions (Pounds Per Day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2025	1.1	12.5	11.3	<0.1	3.2	1.6
2026	0.5	4.9	7.5	<0.1	0.3	0.2
2027	1.5	5.5	8.7	<0.1	0.3	0.2

³⁷ South Coast Air Quality Management District, LST Methodology Appendix C-Mass Rate LST Look-up Table, revised October 2009.

**Table 7
Daily Construction Emissions**

Maximum Regional Total	1.5	12.5	11.3	<0.1	3.2	1.6
Regional Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Localized Emissions						
Maximum Localized Total	1.5	10.1	10.0	<0.1	2.5	1.4
Localized Threshold	N/A	103	562	N/A	4	3
Exceed Threshold?	N/A	No	No	N/A	No	No
<p><i>The construction dates are used for the modeling of air quality emissions in the CalEEMod software. If construction activities commence later than what is assumed in the environmental analysis, the actual emissions would be lower than analyzed because of the increasing penetration of newer equipment with lower certified emission levels. Assumes implementation of SCAQMD Rule 403 (Fugitive Dust Emissions)</i></p> <p><i>Source: DKA Planning, 2023 based on CalEEMod 2022.1.1.14 model runs. LST analyses based on one-acre site with 25-meter distances to receptors in Northwest Coastal LA County source receptor area. Estimates reflect the peak summer or winter season, whichever is higher. Totals may not add up due to rounding. Modeling sheets included in the Technical Appendix.</i></p>						

Maximum on-site daily construction emissions for NO_x, CO, PM₁₀, and PM_{2.5} were calculated using CalEEMod and compared to the applicable SCAQMD LSTs for the Northwest Coastal LA County SRA based on construction site acreage that is less than or equal to one acre. Potential impacts were evaluated at the closest off-site sensitive receptor, which are the residences to the north and south of the Project Site on Wilkins Avenue and Ohio Avenue. The closest receptor distance on the SCAQMD mass rate LST look-up tables is 25 meters.

As shown in Table 7, above, the Project would produce emissions that do not exceed the SCAQMD's recommended localized standards of significance for NO₂ and CO during the construction phase. Similarly, construction activities would not produce PM₁₀ and PM_{2.5} emissions that exceed localized thresholds recommended by the SCAQMD. These estimates assume the use of Best Available Control Measures (BACMs) that address fugitive dust emissions of PM₁₀ and PM_{2.5} through SCAQMD Rule 403. This would include watering portions of the site that are disturbed during grading activities and minimizing tracking of dirt onto local streets. Therefore, construction impacts on localized air quality are considered less than significant.

Operation

Operational emissions of criteria pollutants would come from area, energy, and mobile sources. Area sources include consumer products such as household cleaners, architectural coatings for routine maintenance, and landscaping equipment. Energy sources include electricity use for space cooling and heating and water heating.³⁸ The CalEEMod program generates estimates of emissions from energy use based on the land use type and size. The Project would also produce long-term air quality impacts to the region primarily from motor vehicles that access the Project Site. The Project could add up to 51 net vehicle trips to the local roadway network on a weekday at the start of operations in 2027.³⁹

³⁸ When electricity is used in buildings or local developments, electricity generation typically takes place offsite at power plants.

³⁹ DKA Planning, 2023, based on CalEEMod 2022.1.1.17 model using ITE Trip Generation rates (10th Edition).

As shown in Table 8, the Project’s emissions would not exceed the SCAQMD’s regional or localized significance thresholds. Therefore, the operational impacts of the Project on regional and localized air quality are considered less than significant.

**Table 7
Daily Operations Emissions**

Emissions Source	Daily Emissions (Pounds Per Day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Sources	0.4	<0.1	0.7	<0.1	<0.1	<0.1
Energy Sources	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mobile Sources	0.2	0.1	1.7	<0.1	0.4	0.1
Regional Total	0.5	0.2	2.4	<0.1	0.4	0.1
Existing Total	-0.1	<-0.1	-0.4	<-0.1	-0.1	<-0.1
Net Regional Total	0.4	0.2	2.0	<0.1	0.3	0.1
Regional Significance Threshold	55	55	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
<hr/>						
Net Localized Total	0.3	<0.1	0.6	<0.1	<0.1	<0.1
Localized Significance Threshold	N/A	103	562	N/A	1	1
Exceed Threshold?	N/A	No	No	N/A	No	No
<i>LST analyses based on one-acre site with 25-meter distances to receptors in Central Los Angeles SRA Source: DKA Planning, 2023 based on CalEEMod 2022.1.1.17 model runs (included in the Technical Appendix). Totals reflect the summer season maximum and may not add up due to rounding.</i>						

c. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. There are several sensitive receptors within 0.25 miles of the Project Site that could be exposed to air pollution from construction and operation of the Project, including, but are not limited to, the following representative sampling:

- Residence, 10758 Wilkins Avenue, five feet west of the Project Site.
- Residences, 10755 Ohio Avenue, five feet west of the Project Site.
- Residences, Wilkins Avenue (north side), as close as 70 feet north of the Project Site.
- St. Paul Catholic Church, 10750 Ohio Avenue; 100 feet south of the Project Site.
- Church of Latter Day Saints, 10740 Ohio Avenue; 270 feet east of the Project Site.
- Ralph Waldo Emerson Middle School, 1650 Selby Avenue; 550 feet south of the Project Site.

Construction

Construction of the Project could expose sensitive receptors to substantial pollutant concentrations if maximum daily emissions of regulated pollutants generated by sources located on and/or near the Project Site exceeded the applicable LST values presented in Table 4, or if construction activities generated significant emissions of TACs that could result in carcinogenic risks or non-carcinogenic hazards exceeding the SCAQMD Air Quality Significance Thresholds of 10 excess cancers per million or non-carcinogenic

Hazard Index greater than 1.0, respectively. As discussed above, the LST values were derived by the SCAQMD for the criteria pollutants NO_x, CO, PM₁₀, and PM_{2.5} to prevent the occurrence of concentrations exceeding the air quality standards at sensitive receptor locations based on proximity and construction site size.

As shown in Table 7, during construction of the Project, maximum daily localized unmitigated emissions of NO₂, CO, PM₁₀, and PM_{2.5} from sources on the Project Site would remain below each of the respective LST values. Unmitigated maximum daily localized emissions would not exceed any of the localized standards for receptors that are within 25 meters of the Project's construction activities. Therefore, based on SCAQMD guidance, localized emissions of criteria pollutants would not have the potential to expose sensitive receptors to substantial concentrations that would present a public health concern.

The primary TAC that would be generated by construction activities is diesel PM, which would be released from the exhaust stacks of construction equipment. The construction emissions modeling conservatively assumed that all equipment present on the Project Site would be operating simultaneously throughout most of the day, while in all likelihood this would rarely be the case. Average daily emissions of diesel PM would be less than one pound per day throughout the course of Project construction. Therefore, the magnitude of daily diesel PM emissions, would not be sufficient to result in substantial pollutant concentrations at off-site locations nearby.

Furthermore, according to SCAQMD methodology, health risks from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 30-year period will contract cancer based on the use of standard risk-assessment methodology. The entire duration of construction activities associated with implementation of the Project is anticipated to be approximately 30 months, and the magnitude of daily diesel PM emissions will vary over this time period. No residual emissions and corresponding individual cancer risk are anticipated after construction. Because there is such a short-term exposure period, construction TAC emissions would result in a less than significant impact. Therefore, construction of the Project would not expose sensitive receptors to substantial diesel PM concentrations, and this impact would be less than significant.

Operation

The Project Site would be redeveloped with multi-family residences, a land use that is not typically associated with TAC emissions. Typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes (e.g., chrome plating, electrical manufacturing, petroleum refinery). The Project would not include these types of potential industrial manufacturing process sources. It is expected that quantities of hazardous TACs generated on-site (e.g., cleaning solvents, paints, landscape pesticides) for the types of proposed land uses would be below thresholds warranting further study under California Accidental Release Program.

When considering potential air quality impacts under CEQA, consideration is given to the location of sensitive receptors within close proximity of land uses that emit TACs. CARB has published and adopted the Air Quality and Land Use Handbook: A Community Health Perspective, which provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities).⁴⁰ The SCAQMD adopted similar recommendations in its Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.⁴¹ Together, the CARB and SCAQMD guidelines recommend siting distances for both the development of sensitive land uses in proximity to TAC sources and the addition of new TAC sources in proximity to existing sensitive land uses.

The primary sources of potential air toxics associated with Project operations include DPM from delivery trucks (e.g., truck traffic on local streets and idling on adjacent streets) and to a lesser extent, facility operations (e.g., natural gas fired boilers). However, these activities, and the land uses associated with the Project, are not considered land uses that generate substantial TAC emissions. It should be noted that the SCAQMD recommends that health risk assessments (HRAs) be conducted for substantial individual sources of DPM (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions.⁴² Based on this guidance, the Project would not include these types of land uses and is not considered to be a substantial source of DPM warranting a refined HRA since daily truck trips to the Project Site would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units. In addition, the CARB-mandated airborne toxic control measures (ATCM) limits diesel-fueled commercial vehicles (delivery trucks) to idle for no more than five minutes at any given time, which would further limit diesel particulate emissions.

As the Project would not contain substantial TAC sources and is consistent with the CARB and SCAQMD guidelines, the Project would not result in the exposure of off-site sensitive receptors to carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0, and potential TAC impacts would be less than significant.

The Project would generate long-term emissions on-site from area and energy sources that would generate negligible pollutant concentrations of CO, NO₂, PM_{2.5}, or PM₁₀ at nearby sensitive receptors. While long-term operations of the Project would add traffic to local roads that produces off-site emissions, these would not result in exceedances of CO air quality standards at roadways in the area due to three key factors. First, CO hotspots are extremely rare and only occur in the presence of unusual atmospheric conditions and extremely cold conditions, neither of which applies to this Project area. Second, auto-related emissions of CO continue to decline because of advances in fuel combustion technology in the vehicle fleet. Finally, the Project would not contribute to the levels of congestion that would be needed to produce emissions concentrations needed to trigger a CO hotspot, as it would add about 51 net vehicle trips to the local roadway network on a weekday at the start of operations in 2027.⁴³

⁴⁰ California Air Resources Board, Air Quality and Land Use Handbook, a Community Health Perspective, April 2005.

⁴¹ South Coast Air Quality Management District, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.

⁴² South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, 2002.

⁴³ DKA Planning, 2023, based on CalEEMod 2022.1.1.17 model using ITE Trip Generation rates (10th Edition).

The majority of vehicle-related impacts at the Project Site would come from up to five vehicles entering and exiting the development during the peak A.M. and P.M. hours.⁴⁴ This would represent 0.2 percent of the 2,470 vehicles currently using Westwood Boulevard at Ohio Avenue in the morning peak hour of traffic.⁴⁵ Assuming peak hour volumes represent ten percent of daily volumes, this intersection would carry 24,700 daily vehicle trips, well below the traffic volumes that would be needed to generate CO exceedances of the ambient air quality standard.⁴⁶

Finally, the Project would not result in any substantial emissions of TACs during the construction or operations phase. During the construction phase, the primary air quality impacts would be associated with the combustion of diesel fuels, which produce exhaust-related particulate matter that is considered a toxic air contaminant by CARB based on chronic exposure to these emissions.⁴⁷ However, construction activities would not produce chronic, long-term exposure to diesel particulate matter. During long-term project operations, the Project does not include typical sources of acutely and chronically hazardous TACs such as industrial manufacturing processes and automotive repair facilities. As a result, the Project would not create substantial concentrations of TACs.

In addition, the SCAQMD recommends that health risk assessments be conducted for substantial sources of diesel particulate emissions (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.⁴⁸ The Project would not generate a substantial number of truck trips. Based on the limited activity of TAC sources, the Project would not warrant the need for a health risk assessment associated with on-site activities. Therefore, the Project's operational impacts on local sensitive receptors would be less than significant.

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

Less Than Significant Impact. The Project would not result in activities that create objectionable odors. The Project is a housing development that would not include any activities typically associated with unpleasant odors and local nuisances (e.g., rendering facilities, dry cleaners). SCAQMD regulations that govern nuisances (i.e., Rule 402, Nuisances) would regulate any occasional odors associated with residences. As a result, any odor impacts from the Project would be considered less than significant.

⁴⁴ DKA Planning, 2023. Hourly trip generation based on Institute of Transportation Engineer's hourly trip generation factors for Multifamily Housing (Mid-Rise) (land use code 221), 11th Edition.

⁴⁵ DKA Planning, 2023, based on City of Los Angeles database of traffic volumes on Westwood Bl at Ohio Avenue, https://navigatela.lacity.org/dot/traffic_data/automatic_counts/WESOH105.pdf, 2005 traffic counts adjusted by one percent growth factor to represent existing conditions.

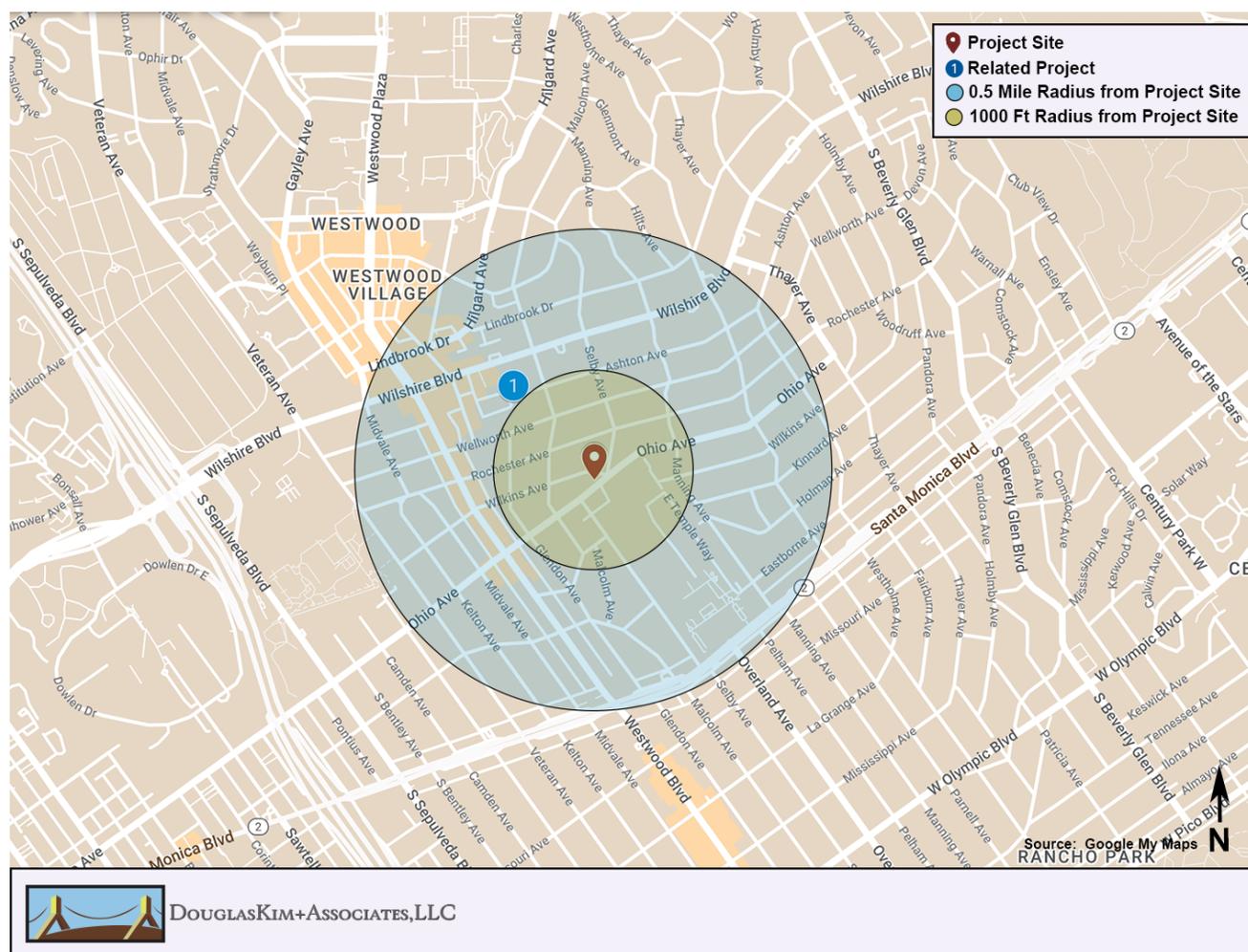
⁴⁶ South Coast Air Quality Management District; 2003 AQMP. As discussed in the 2003 AQMP, the 1992 CO Plan included a CO hotspot analysis at four intersections in the peak A.M. and P.M. time periods, including Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection was Wilshire and Veteran, used by 100,000 vehicles per day. The 2003 AQMP estimated a 4.6 ppm one-hour concentration at this intersection, which meant that an exceedance (20 ppm) would not occur until daily traffic exceeded more than 400,000 vehicles per day.

⁴⁷ California Office of Environmental Health Hazard Assessment. Health Effects of Diesel Exhaust. [www.http://oehha.ca.gov/public_info/facts/dieselfacts.html](http://oehha.ca.gov/public_info/facts/dieselfacts.html)

⁴⁸ South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, December 2002.

Cumulative Impacts

While the Proposed Project would generate short- and long-term emissions during the construction and operations phases, respectively, the presence of any other development projects could produce cumulative impacts. There is one related project identified by the City of Los Angeles within 0.25 miles of the Project Site, a 1,400 square-foot addition to an assisted living center at 10822 Wilshire Boulevard (Figure 1).⁴⁹ However, this location is over 1,000 feet from the Project Site. Beyond 1,000 feet of the Project Site, any sensitive receptors between the Project Site and any related project would be negligibly impacted, as localized pollutants substantially disperse as a function of distance, meteorology, and terrain. The U.S. EPA finds that in the context of roadway pollutants, "...concentrations generally decrease to background levels within 500-600 feet."⁵⁰ CARB also finds that air pollution levels can be significantly higher within 500 feet of freeways or other major sources.⁵¹



**Figure 1
Related Projects**

⁴⁹ City of Los Angeles, Related Projects Summary from Case Logging and Tracking System, August 2023.

⁵⁰ U.S. EPA. Near Roadway Air Pollution and Health: Frequently Asked Questions. August 2014.

⁵¹ South Coast Air Quality Management District. Guidance Document: Air Quality Issues Regarding Land Use.

As such, there are no related projects within 1,000 feet of the Project Site that would contribute to cumulative air quality impacts at local sensitive receptors.

AQMP Consistency

Cumulative development is not expected to result in a significant impact in terms of conflicting with, or obstructing implementation of the 2022 AQMP. As discussed previously, growth considered to be consistent with the AQMP would not interfere with attainment because this growth is included in the projections utilized in the formulation of the AQMP. Consequently, as long as growth in the Basin is within the projections for growth identified in the 2022 RTP/SCS, implementation of the AQMP will not be obstructed by such growth. In addition, as discussed previously, the population growth resulting from the Project would be consistent with the growth projections of the AQMP. Any related project would implement feasible air quality mitigation measures to reduce the criteria air pollutants, if required due to any significant emissions impacts. In addition, each related project would be evaluated for its consistency with the land use policies set forth in the AQMP. Therefore, the Project's contribution to the cumulative impact would not be cumulatively considerable and, therefore, would be less than significant.

Construction

SCAQMD recommends that any construction-related emissions and operational emissions from individual development projects that exceed the project-specific mass daily emissions thresholds identified above also be considered cumulatively considerable.⁵² Individual projects that generate emissions not in excess of SCAQMD's significance thresholds would not contribute considerably to any potential cumulative impact. 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.

As summarized in Table 7, the Proposed Project would not exceed the SCAQMD's mass emissions thresholds and would not contribute to any potential cumulative impact. If any related project was projected to exceed LST thresholds (after mitigation), it could perform dispersion modeling to confirm whether health-based air quality standards would be violated. The SCAQMD's LST thresholds recognize the influence of a receptor's proximity, setting mass emissions thresholds for PM₁₀ and PM_{2.5} that generally double with every doubling of distance.

The Project would comply with regulatory requirements, including the SCAQMD Rule 403 requirements listed above. Based on SCAQMD guidance, individual construction projects that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. As shown above, construction-related daily emissions at the Project Site would not exceed any of the SCAQMD's regional or localized significance thresholds. Therefore, the Project's contribution to cumulative air quality impacts would not be cumulatively considerable and, therefore, would be less than significant.

Similar to the Project, the greatest potential for TAC emissions at each related project would generally involve diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a

⁵² White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions, SCAQMD Board Meeting, September 5, 2003, Agenda No. 29, Appendix D, p. D-3.

person exposed to concentrations of TACs over a 30-year period will contract cancer, based on the use of standard risk-assessment methodology. Construction activities are temporary and short-term events, thus construction activities at each related project would not result in a long-term substantial source of TAC emissions. Additionally, the SCAQMD CEQA guidance does not require a health risk assessment for short-term construction emissions. It is therefore not meaningful to evaluate long-term cancer impacts from construction activities, which occur over relatively short durations. As such, given the short-term nature of these activities, cumulative toxic emission impacts during construction would be less than significant.

Operation

As discussed above, the Project's operational air quality emissions and cumulative impacts would be less than significant. According to the SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. As operational emissions would not exceed any of the SCAQMD's regional or localized significance thresholds, the emissions of non-attainment pollutants and precursors generated by Project operations would not be cumulatively considerable.

With respect to TAC emissions, neither the Project nor any likely related projects (which are largely residential, retail/commercial in nature), would represent a substantial source of TAC emissions, which are typically associated with large-scale industrial, manufacturing, and transportation hub facilities. The Project and related projects would be consistent with the recommended screening level siting distances for TAC sources, as set forth in CARB's Land Use Guidelines, and the Project and related projects would not result in a cumulative impact requiring further evaluation. However, any related projects could generate minimal TAC emissions related to the use of consumer products and landscape maintenance activities, among other things. Pursuant to AB 1807, which directs the CARB to identify substances as TACs and adopt airborne toxic control measures to control such substances, the SCAQMD has adopted numerous rules (primarily in Regulation XIV) that specifically address TAC emissions. These SCAQMD rules have resulted in and will continue to result in substantial Basin-wide TAC emissions reductions. As such, cumulative TAC emissions during long-term operations would be less than significant. Therefore, the Project would not result in any substantial sources of TACs that have been identified by the CARB's Land Use Guidelines, and thus, would not contribute to a cumulative impact.

TECHNICAL APPENDIX



DOUGLASKIM+ASSOCIATES,LLC

EXISTING EMISSIONS

10756 Wilkins Avenue (Existing) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	10756 Wilkins Avenue (Existing)
Operational Year	2023
Lead Agency	City of Los Angeles
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	19.6
Location	10756 Wilkins Ave, Los Angeles, CA 90024, USA
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4312
EDFZ	16
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas
App Version	2022.1.1.17

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	1.00	Dwelling Unit	0.16	2,101	3,500	—	3.00	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	0.04	0.40	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	0.05	0.32	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	0.05	0.36	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02
Annual (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.01	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	0.04	0.03	0.34	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02
Area	0.05	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Energy	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Water	—	—	—	—	—	—	—	—	—	—

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.04	0.03	0.34	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02
Total	0.04	0.03	0.34	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.04	0.03	0.31	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02
Total	0.04	0.03	0.31	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02
Annual	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.01	0.01	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
Total	0.01	0.01	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Total	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Total	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Consumer Products	0.04	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Total	0.05	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Consumer Products	0.04	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—
Total	0.05	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Consumer Products	0.01	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

Total	0.01	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
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4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—

Hearth Type	Unmitigated (number)
Single Family Housing	–
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	1
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
4254.525	1,418	0.00	0.00	–

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

Single Family Housing	6,633	690	0.0489	0.0069	53,260
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5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)		Outdoor Water (gal/year)		
Single Family Housing	37,274	59,994			

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	0.80	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	7.85	annual days of extreme heat
Extreme Precipitation	4.85	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	0	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	0	0	0	N/A
Wildfire	0	0	0	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	57.0
AQ-PM	69.4
AQ-DPM	78.0
Drinking Water	52.7
Lead Risk Housing	41.8
Pesticides	0.00
Toxic Releases	74.2
Traffic	82.8
Effect Indicators	—
Clean Up Sites	29.1
Groundwater	22.1
Haz Waste Facilities/Generators	39.8
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	4.03
Cardio-vascular	25.1
Low Birth Weights	15.4
Socioeconomic Factor Indicators	—
Education	0.15
Housing	62.4
Linguistic	35.3
Poverty	27.9
Unemployment	9.72

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	75.27268061
Employed	98.93494161
Median HI	68.66418581
Education	—
Bachelor's or higher	91.74900552
High school enrollment	100
Preschool enrollment	12.53689208
Transportation	—
Auto Access	36.01950468
Active commuting	82.71525728
Social	—
2-parent households	46.01565508
Voting	41.97356602
Neighborhood	—
Alcohol availability	40.12575388
Park access	5.82574105
Retail density	93.4813294
Supermarket access	38.91954318
Tree canopy	53.3042474
Housing	—
Homeownership	28.66675221
Housing habitability	46.25946362
Low-inc homeowner severe housing cost burden	13.11433338

Low-inc renter severe housing cost burden	56.92287951
Uncrowded housing	91.95431798
Health Outcomes	—
Insured adults	92.23662261
Arthritis	57.9
Asthma ER Admissions	97.9
High Blood Pressure	64.8
Cancer (excluding skin)	15.0
Asthma	83.3
Coronary Heart Disease	66.7
Chronic Obstructive Pulmonary Disease	84.0
Diagnosed Diabetes	91.2
Life Expectancy at Birth	96.8
Cognitively Disabled	38.1
Physically Disabled	42.3
Heart Attack ER Admissions	75.5
Mental Health Not Good	90.0
Chronic Kidney Disease	79.8
Obesity	88.0
Pedestrian Injuries	64.9
Physical Health Not Good	90.6
Stroke	80.6
Health Risk Behaviors	—
Binge Drinking	26.9
Current Smoker	90.9
No Leisure Time for Physical Activity	96.0
Climate Change Exposures	—

Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	75.0
Elderly	19.6
English Speaking	28.3
Foreign-born	58.2
Outdoor Workers	94.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	18.0
Traffic Density	56.1
Traffic Access	87.4
Other Indices	—
Hardship	2.6
Other Decision Support	—
2016 Voting	51.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	17.0
Healthy Places Index Score for Project Location (b)	75.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	City of Los Angeles ZIMAS database
Operations: Hearths	-



DOUGLASKIM+ASSOCIATES,LLC

FUTURE EMISSIONS

10756 WILKINS AVENUE (FUTURE) DETAILED REPORT

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	10756 Wilkins Avenue (Future)
Construction Start Date	1/1/2025
Operational Year	2027
Lead Agency	City of Los Angeles
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	19.6
Location	10756 Wilkins Ave, Los Angeles, CA 90024, USA
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4312
EDFZ	16
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas
App Version	2022.1.1.17

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
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Apartments Mid Rise	11.0	Dwelling Unit	0.16	11,941	1,000	—	27.0	—
Enclosed Parking with Elevator	6.00	Space	0.05	2,400	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-15	Require All-Electric Development

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mt.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	1.50	12.4	11.4	0.03	0.49	2.72	3.21	0.45	1.18	1.63
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	1.14	12.5	11.3	0.03	0.49	2.72	3.21	0.45	1.18	1.63
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.45	4.04	5.32	0.01	0.16	0.40	0.57	0.15	0.16	0.31
Annual (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.74	0.97	< 0.005	0.03	0.07	0.10	0.03	0.03	0.06

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
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Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.14	12.4	11.4	0.03	0.49	2.72	3.21	0.45	1.18	1.63								
2026	0.53	4.89	7.51	0.01	0.19	0.13	0.32	0.17	0.03	0.21								
2027	1.50	5.48	8.69	0.01	0.19	0.15	0.34	0.17	0.04	0.21								
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.14	12.5	11.3	0.03	0.49	2.72	3.21	0.45	1.18	1.63								
2026	0.53	4.90	7.42	0.01	0.19	0.13	0.32	0.17	0.03	0.21								
2027	0.51	4.65	7.38	0.01	0.17	0.13	0.30	0.15	0.03	0.19								
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.42	4.04	4.96	0.01	0.16	0.40	0.57	0.15	0.16	0.31								
2026	0.38	3.50	5.32	0.01	0.14	0.09	0.23	0.12	0.02	0.15								
2027	0.45	2.13	3.36	0.01	0.07	0.06	0.13	0.07	0.01	0.08								
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.08	0.74	0.90	< 0.005	0.03	0.07	0.10	0.03	0.03	0.06								
2026	0.07	0.64	0.97	< 0.005	0.02	0.02	0.04	0.02	< 0.005	0.03								
2027	0.08	0.39	0.61	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01								

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—
2025	1.14	12.4	11.4	0.03	0.49	2.72	3.21	0.45	1.18	1.63
2026	0.53	4.89	7.51	0.01	0.19	0.13	0.32	0.17	0.03	0.21
2027	1.50	5.48	8.69	0.01	0.19	0.15	0.34	0.17	0.04	0.21
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—

2025	1.14	12.5	11.3	0.03	0.49	2.72	3.21	0.45	1.18	1.63
2026	0.53	4.90	7.42	0.01	0.19	0.13	0.32	0.17	0.03	0.21
2027	0.51	4.65	7.38	0.01	0.17	0.13	0.30	0.15	0.03	0.19
Average Daily	—	—	—	—	—	—	—	—	—	—
2025	0.42	4.04	4.96	0.01	0.16	0.40	0.57	0.15	0.16	0.31
2026	0.38	3.50	5.32	0.01	0.14	0.09	0.23	0.12	0.02	0.15
2027	0.45	2.13	3.36	0.01	0.07	0.06	0.13	0.07	0.01	0.08
Annual	—	—	—	—	—	—	—	—	—	—
2025	0.08	0.74	0.90	< 0.005	0.03	0.07	0.10	0.03	0.03	0.06
2026	0.07	0.64	0.97	< 0.005	0.02	0.02	0.04	0.02	< 0.005	0.03
2027	0.08	0.39	0.61	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.54	0.18	2.45	< 0.005	0.01	0.40	0.40	0.01	0.10	0.11
Mit.	0.54	0.15	2.44	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10
% Reduced	< 0.5%	15%	< 0.5%	—	42%	—	1%	44%	—	2%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.47	0.19	1.58	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.11
Mit.	0.47	0.16	1.57	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10
% Reduced	< 0.5%	15%	1%	—	46%	—	1%	48%	—	2%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.51	0.18	2.04	< 0.005	0.01	0.37	0.38	< 0.005	0.09	0.10

Mit.	0.50	0.16	2.03	< 0.005	< 0.005	0.37	0.37	< 0.005	0.09	0.10
% Reduced	< 0.5%	15%	1%	—	44%	—	1%	47%	—	2%
Annual (Max)	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	0.03	0.37	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02
Mit.	0.09	0.03	0.37	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02
% Reduced	< 0.5%	15%	1%	4%	44%	—	1%	47%	—	2%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	0.19	0.14	1.71	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10
Area	0.35	0.01	0.73	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Energy	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Total	0.54	0.18	2.45	< 0.005	0.01	0.40	0.40	0.01	0.10	0.11
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Mobile	0.19	0.16	1.57	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10
Area	0.28	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Energy	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Water	—	—	—	—	—	—	—	—	—	—
Waste	—	—	—	—	—	—	—	—	—	—
Refrig.	—	—	—	—	—	—	—	—	—	—
Total	0.47	0.19	1.58	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.11

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	4.33	5.65	0.01	0.16	—	0.16	0.14	—	0.14
Demolition	—	—	—	—	—	0.07	0.07	—	0.01	0.01
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.27	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01
Demolition	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Demolition	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.05	0.59	0.00	0.00	0.13	0.13	0.00	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.22	0.08	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.2. Demolition (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	4.33	5.65	0.01	0.16	—	0.16	0.14	—	0.14
Demolition	—	—	—	—	—	0.07	0.07	—	0.01	0.01
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.27	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01
Demolition	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Demolition	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.59	0.00	0.00	0.13	0.13	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.22	0.08	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.3. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

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Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20	—	0.20	—	0.20	—	0.20	—	0.20	0.20
Dust From Material Movement	—	—	—	—	—	0.21	0.21	—	—	0.02	—	0.02	—	0.02	—	0.02	—	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.23	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	0.01	—	0.01	—	0.01	—	0.01	0.01
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	—	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	< 0.005
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	—	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	0.00	0.02	0.00	0.02	0.00	0.02	0.02	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.01
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

Vendor	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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.4. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	4.16	5.57	0.01	0.21	—	0.21	0.20	—	0.20
Dust From Material Movement	—	—	—	—	—	0.21	0.21	—	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.23	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

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Off-Road Equipment	1.09	10.1	10.0	0.02	0.46	—	0.46	0.43	—	0.43
Dust From Material Movement	—	—	—	—	—	2.07	2.07	—	1.00	1.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	10.1	10.0	0.02	0.46	—	0.46	0.43	—	0.43
Dust From Material Movement	—	—	—	—	—	2.07	2.07	—	1.00	1.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.19	1.18	< 0.005	0.05	—	0.05	0.05	—	0.05
Dust From Material Movement	—	—	—	—	—	0.24	0.24	—	0.12	0.12
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.22	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.02	2.32	0.83	0.01	0.03	0.55	0.58	0.03	0.15	0.18
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	2.41	0.83	0.01	0.03	0.55	0.58	0.03	0.15	0.18
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.29	0.10	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005

3.6. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.09	10.1	10.0	0.02	0.46	—	0.46	0.43	—	0.43
Dust From Material Movement	—	—	—	—	—	2.07	2.07	—	1.00	1.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—

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Off-Road Equipment	1.09	10.1	10.0	0.02	0.46	—	0.46	0.43	—	0.43
Dust From Material Movement	—	—	—	—	—	2.07	2.07	—	1.00	1.00
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.19	1.18	< 0.005	0.05	—	0.05	0.05	—	0.05
Dust From Material Movement	—	—	—	—	—	0.24	0.24	—	0.12	0.12
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.22	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.02	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	2.32	0.83	0.01	0.03	0.55	0.58	0.03	0.15	0.18
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	2.41	0.83	0.01	0.03	0.55	0.58	0.03	0.15	0.18
Average Daily	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.29	0.10	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	5.14	6.94	0.01	0.22	—	0.22	0.20	—	0.20
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	5.14	6.94	0.01	0.22	—	0.22	0.20	—	0.20
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.85	2.50	< 0.005	0.08	—	0.08	0.07	—	0.07
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.34	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.62	0.00	0.00	0.12	0.12	0.12	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.53	0.00	0.00	0.12	0.12	0.12	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.20	0.00	0.00	0.04	0.04	0.04	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	5.14	6.94	0.01	0.22	—	0.22	0.20	—	0.20

Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	3.43	4.93	0.01	0.13	—	0.13	0.12	—	0.12
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.63	0.90	< 0.005	0.02	—	0.02	0.02	—	0.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.58	0.00	0.00	0.12	0.12	0.00	0.03	0.03

Vendor	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.03	0.37	0.00	0.00	0.08	0.08	0.00	0.02	0.02
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.81	6.91	0.01	0.19	—	0.19	0.17	—	0.17

3.1.1. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	1.89	2.86	< 0.005	0.07	—	0.07	0.06	—	0.06
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.34	0.52	< 0.005	0.01	—	0.01	0.01	—	0.01
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.54	0.00	0.00	0.12	0.12	0.00	0.03	0.03
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.04	0.45	0.00	0.00	0.12	0.12	0.00	0.03	0.03
Vendor	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	4.56	6.90	0.01	0.17	—	0.17	0.15	—	0.15
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	1.89	2.86	< 0.005	0.07	—	0.07	0.06	—	0.06

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.34	0.52	< 0.005	0.01	—	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	—	0.01	0.01
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.54	0.00	0.00	0.12	0.12	0.12	0.12	0.12	0.00	0.03	0.03	0.03	0.03	0.03	0.03
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	0.01	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.45	0.00	0.00	0.12	0.12	0.12	0.12	0.12	0.00	0.03	0.03	0.03	0.03	0.03	0.03
Vendor	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	0.01	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.20	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	0.01	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
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Worker	< 0.005	< 0.005	0.02	0.00	0.01	0.01	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02
Architectural Coatings	0.87	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.20	0.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Architectural Coatings	0.21	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

Architectural Coatings	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.00	0.02	0.00	0.02	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	0.00	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Trenching (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.29	1.45	< 0.005	0.06	—	0.06	0.05	—	0.05
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.29	1.45	< 0.005	0.06	—	0.06	0.05	—	0.05
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.19	0.14	1.71	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.19	0.14	1.71	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.19	0.16	1.57	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.19	0.16	1.57	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.03	0.03	0.28	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.03	0.28	< 0.005	< 0.005	0.07	0.07	0.07	< 0.005	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.19	0.14	1.71	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.19	0.14	1.71	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.19	0.16	1.57	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.19	0.16	1.57	< 0.005	< 0.005	0.40	0.40	< 0.005	0.10	0.10
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.03	0.03	0.28	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.03	0.28	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	< 0.005	0.03	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	< 0.005	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Total	0.06	< 0.005	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00
Consumer Products	0.26	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	0.01	0.73	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005
Total	0.35	0.01	0.73	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00
Consumer Products	0.26	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.28	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00
Consumer Products	0.05	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	< 0.005	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	< 0.005	< 0.005
Total	0.06	< 0.005	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	< 0.005	< 0.005

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

Total	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	-	-	-	-	-	-	-	-	-	-	-	-	-
Apartments Mid Rise	-	-	-	-	-	-	-	-	-	-	-	-	-
Enclosed Parking with Elevator	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	-	-	-	-	-	-	-	-	-	-
Apartments Mid Rise	-	-	-	-	-	-	-	-	-	-
Enclosed Parking with Elevator	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Daily, Winter (Max)	-	-	-	-	-	-	-	-	-	-
Apartments Mid Rise	-	-	-	-	-	-	-	-	-	-
Enclosed Parking with Elevator	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Annual	-	-	-	-	-	-	-	-	-	-
Apartments Mid Rise	-	-	-	-	-	-	-	-	-	-

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—

Total	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Daily, Winter (Max)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Annual	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Daily, Winter (Max)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Annual	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

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Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2025	1/31/2025	5.00	23.0	—
Site Preparation	Site Preparation	2/1/2025	2/28/2025	5.00	20.0	—
Grading	Grading	3/1/2025	4/30/2025	5.00	43.0	—
Building Construction	Building Construction	7/1/2025	7/31/2027	5.00	544	—
Architectural Coating	Architectural Coating	4/1/2027	7/31/2027	5.00	87.0	—
Trenching	Trenching	5/1/2025	6/30/2025	5.00	43.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	1.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	6.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29

Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	1.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	6.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	10.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHD,T,MHDT
Demolition	Hauling	1.35	40.0	HHD,T
Demolition	Onsite truck	—	—	HHD,T
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHD,T,MHDT
Site Preparation	Hauling	0.45	40.0	HHD,T
Site Preparation	Onsite truck	—	—	HHD,T
Grading	—	—	—	—
Grading	Worker	7.50	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHD,T,MHDT
Grading	Hauling	14.9	40.0	HHD,T
Grading	Onsite truck	—	—	HHD,T
Building Construction	—	—	—	—
Building Construction	Worker	8.93	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	1.57	10.2	HHD,T,MHDT
Building Construction	Hauling	0.00	20.0	HHD,T
Building Construction	Onsite truck	—	—	HHD,T
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1.79	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHD,T,MHDT
Architectural Coating	Hauling	0.00	20.0	HHD,T
Architectural Coating	Onsite truck	—	—	HHD,T

Trenching	—	—	—	—	—	—
Trenching	Worker	2.50	18.5	LDA,LDT1,LDT2		
Trenching	Vendor	—	10.2	HHDT,MHDT		
Trenching	Hauling	0.00	20.0	HHDT		
Trenching	Onsite truck	—	—	HHDT		

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	10.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	1.35	40.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.45	40.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	7.50	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	14.9	40.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	8.93	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	1.57	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT

Building Construction	Onsite truck	—	—	—	—	HHDT	
Architectural Coating	—	—	—	—	—	—	
Architectural Coating	Worker	1.79	18.5	18.5	LDA,LDT1,LDT2	HHDT,MHDT	
Architectural Coating	Vendor	—	10.2	10.2	HHDT,MHDT	HHDT	
Architectural Coating	Hauling	0.00	20.0	20.0	HHDT	HHDT	
Architectural Coating	Onsite truck	—	—	—	—	—	
Trenching	—	—	—	—	—	—	
Trenching	Worker	2.50	18.5	18.5	LDA,LDT1,LDT2	HHDT,MHDT	
Trenching	Vendor	—	10.2	10.2	HHDT,MHDT	HHDT	
Trenching	Hauling	0.00	20.0	20.0	HHDT	HHDT	
Trenching	Onsite truck	—	—	—	—	HHDT	

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	24,181	8,060	98.8	11.0	132

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	121	—
Site Preparation	—	65.0	10.0	0.00	—

Grading	—	3,200	32.3	0.00	—
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5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Enclosed Parking with Elevator	0.05	100%

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	690	0.05	0.01
2026	0.00	690	0.05	0.01
2027	0.00	690	0.05	0.01

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	59.8	54.0	45.0	20,763	558	504	419	193,597
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	59.8	54.0	45.0	20,763	558	504	419	193,597
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	11
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0

Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	11
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
24180.524999999998	8,060	98.8	11.0	132

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (KBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (KBTU/yr)
Apartments Mid Rise	36,118	690	0.0489	0.0069	109,179
Enclosed Parking with Elevator	8,859	690	0.0489	0.0069	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (KBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (KBTU/yr)
Apartments Mid Rise	37,559	690	0.0489	0.0069	0.00
Enclosed Parking with Elevator	8,859	690	0.0489	0.0069	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	410,012	17,141
Enclosed Parking with Elevator	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	410,012	17,141
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Land Use		

Apartments Mid Rise	6.75	—
Enclosed Parking with Elevator	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	6.75	—
Enclosed Parking with Elevator	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
----------------	-----------	-------------	----------------	---------------	------------	-------------

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
----------------	-----------	-------------	----------------	---------------	------------	-------------

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
----------------	-----------	----------------	---------------	----------------	------------	-------------

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
----------------	-----------	--------	--------------------------	------------------------------	------------------------------

5.17. User Defined

Equipment Type	Fuel Type
----------------	-----------

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
-----------	--------	------------------------------	------------------------------

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
-----------	--------	------------------------------	------------------------------

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	7.85	annual days of extreme heat
Extreme Precipitation	4.85	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi. Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi. Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft. Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A

Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract			
Exposure Indicators	—			
AQ-Ozone	57.0			
AQ-PM	69.4			
AQ-DPM	78.0			
Drinking Water	52.7			
Lead Risk Housing	41.8			
Pesticides	0.00			
Toxic Releases	74.2			
Traffic	82.8			
Effect Indicators	—			

CleanUp Sites	29.1
Groundwater	22.1
Haz Waste Facilities/Generators	39.8
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	4.03
Cardio-vascular	25.1
Low Birth Weights	15.4
Socioeconomic Factor Indicators	—
Education	0.15
Housing	62.4
Linguistic	35.3
Poverty	27.9
Unemployment	9.72

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	75.27268061
Employed	98.93494161
Median HI	68.66418581
Education	—
Bachelor's or higher	91.74900552
High school enrollment	100
Preschool enrollment	12.53689208

Transportation	—
Auto Access	36.01950468
Active commuting	82.71525728
Social	—
2-parent households	46.01565508
Voting	41.97356602
Neighborhood	—
Alcohol availability	40.12575388
Park access	5.82574105
Retail density	93.4813294
Supermarket access	38.91954318
Tree canopy	53.3042474
Housing	—
Homeownership	28.66675221
Housing habitability	46.25946362
Low-inc homeowner severe housing cost burden	13.11433338
Low-inc renter severe housing cost burden	56.92287951
Uncrowded housing	91.95431798
Health Outcomes	—
Insured adults	92.23662261
Arthritis	57.9
Asthma ER Admissions	97.9
High Blood Pressure	64.8
Cancer (excluding skin)	15.0
Asthma	83.3
Coronary Heart Disease	66.7
Chronic Obstructive Pulmonary Disease	84.0

Diagnosed Diabetes	91.2
Life Expectancy at Birth	96.8
Cognitively Disabled	38.1
Physically Disabled	42.3
Heart Attack ER Admissions	75.5
Mental Health Not Good	90.0
Chronic Kidney Disease	79.8
Obesity	88.0
Pedestrian Injuries	64.9
Physical Health Not Good	90.6
Stroke	80.6
Health Risk Behaviors	—
Binge Drinking	26.9
Current Smoker	90.9
No Leisure Time for Physical Activity	96.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	75.0
Elderly	19.6
English Speaking	28.3
Foreign-born	58.2
Outdoor Workers	94.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	18.0
Traffic Density	56.1
Traffic Access	87.4

Other Indices	—
Hardship	2.6
Other Decision Support	—
2016 Voting	51.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	17.0
Healthy Places Index Score for Project Location (b)	75.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

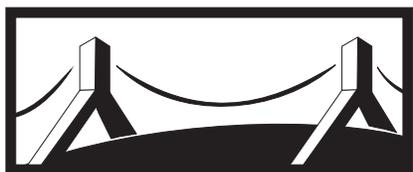
7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Project plans
Construction: Construction Phases	Developer information
Construction: Off-Road Equipment	—

Construction: Trips and VMT	10 CY haul truck capacity; 40-mile distance to landfill
Operations: Hearths	—



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MATES V TOXIC EMISSIONS OVERVIEW

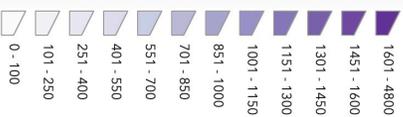
About Air Toxics Cancer Risk

Information about community profile statistics
Information about emission sources
[Download PDF](#)

Residential Air Toxics Cancer Risk at MATES Monitoring Sites

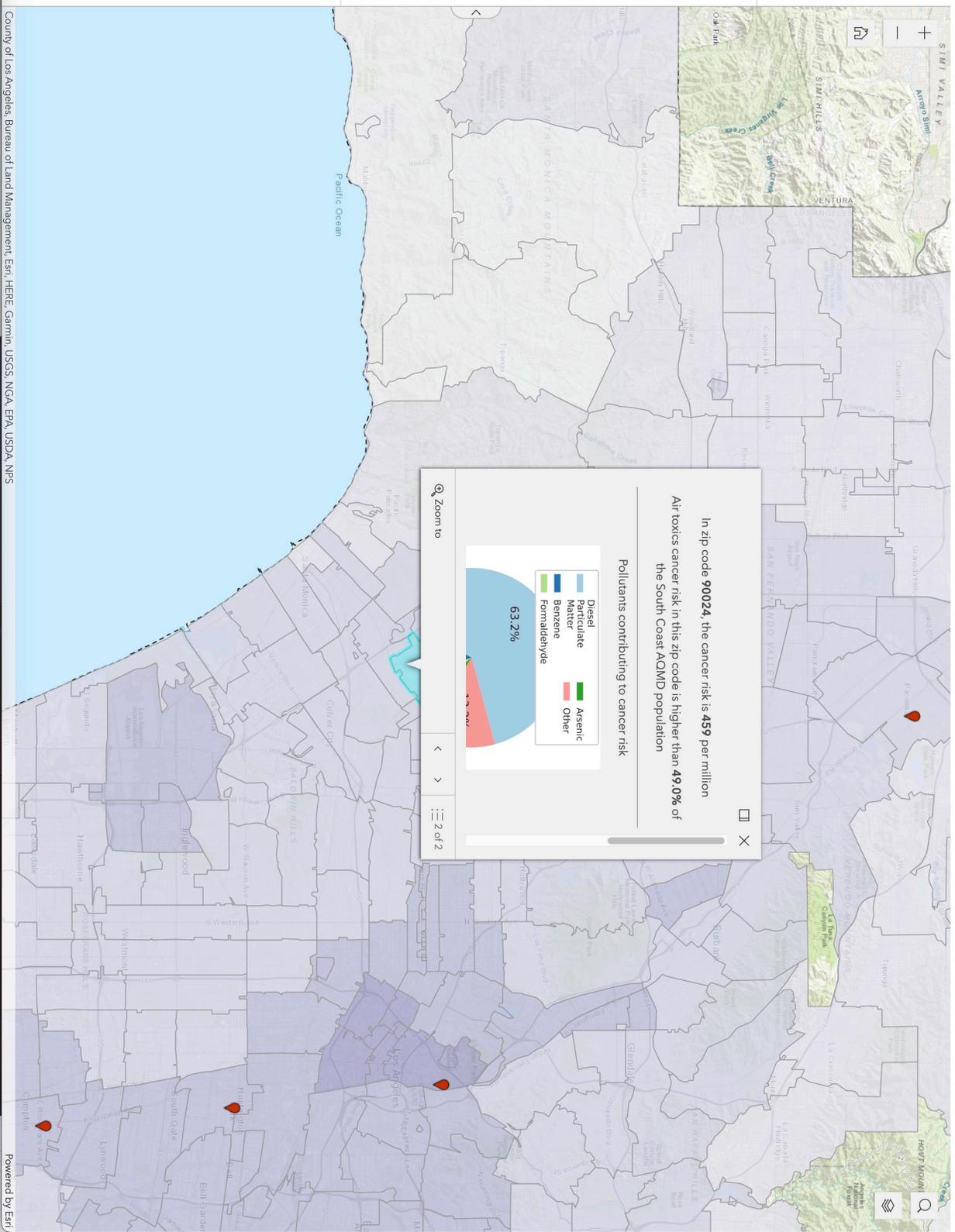
Residential Air Toxics Cancer Risk

Calculated from Model Data



South Coast AQMD Boundary

The air toxics cancer risk data presented in the MATES Data Visualization is calculated using a population-weighted average.





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CALENVIROSCREEN 4.0 OUTPUT

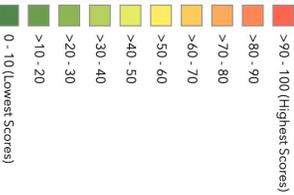
The CalEnviroScreen 4.0 tool shows cumulative impacts in California communities by census tract.

How to use this map

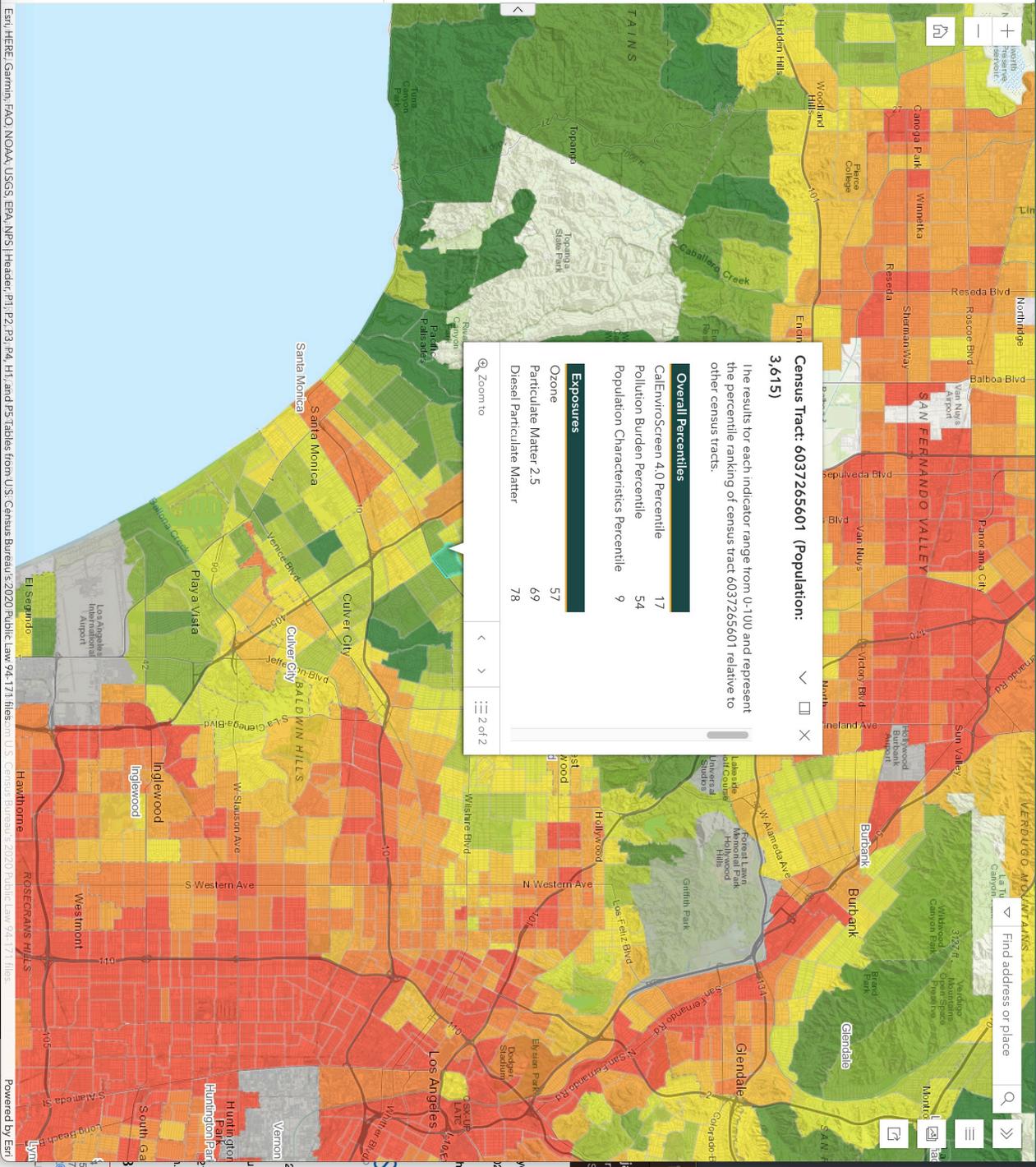
- Use your mouse or touchpad to pan around.
- Zoom in/out with a mouse wheel or the +/- icons.
- Search by location or census tract number with the search icon.
- Click on a census tract to view additional information in the pop-up window.
- Dock the pop-up window to the side of the screen by clicking the dock icon.
- Export a map view that includes the legend and popup using the screenshot widget.
- Learn more about CalEnviroScreen 4.0 and how this map was created here

Overall Percentile

CalEnviroScreen 4.0 Results



CalEnviroScreen 4.0 High Pollution, Low Population

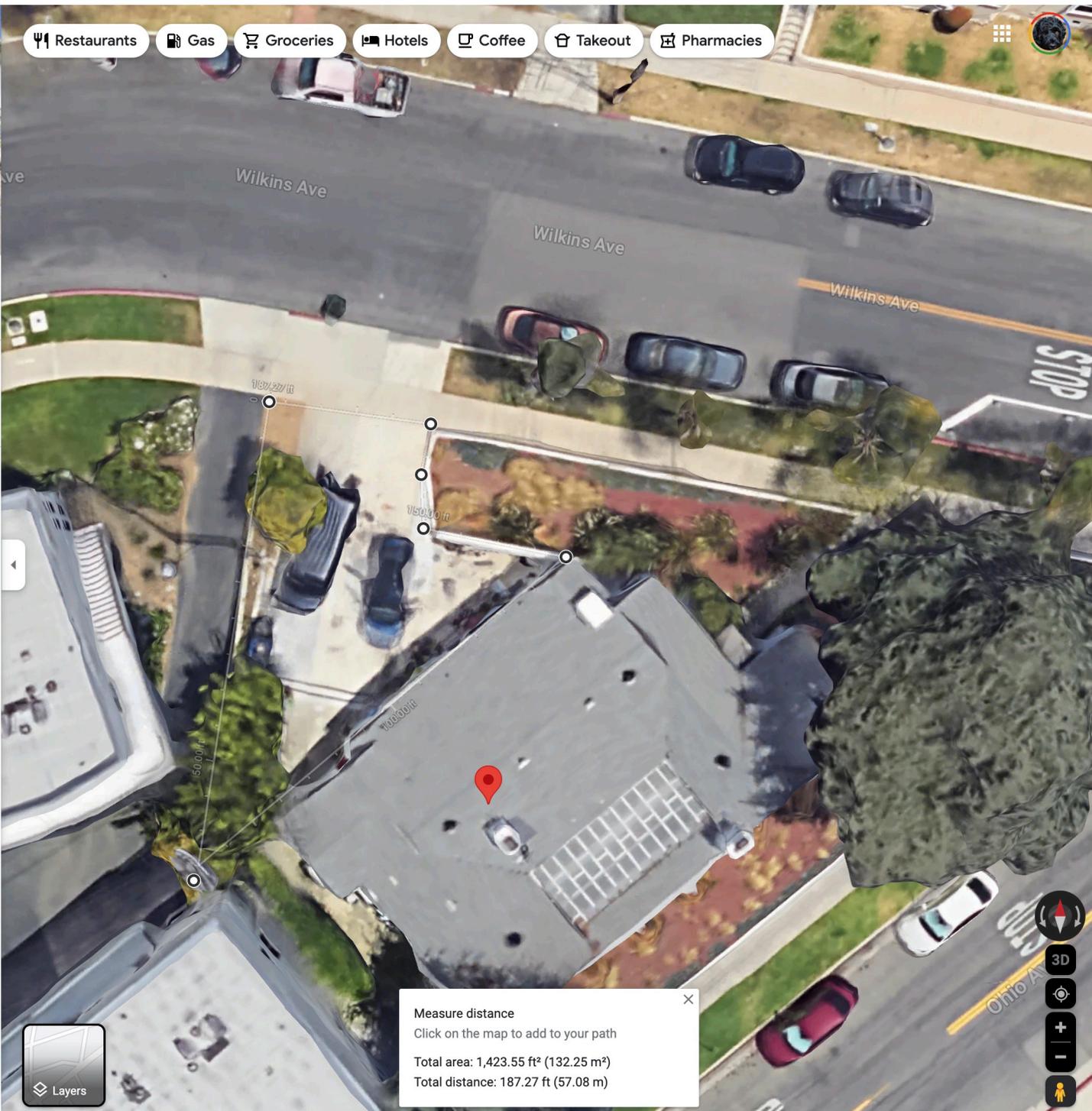




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DEMOLITION ANALYSIS

- Restaurants
- Gas
- Groceries
- Hotels
- Coffee
- Takeout
- Pharmacies



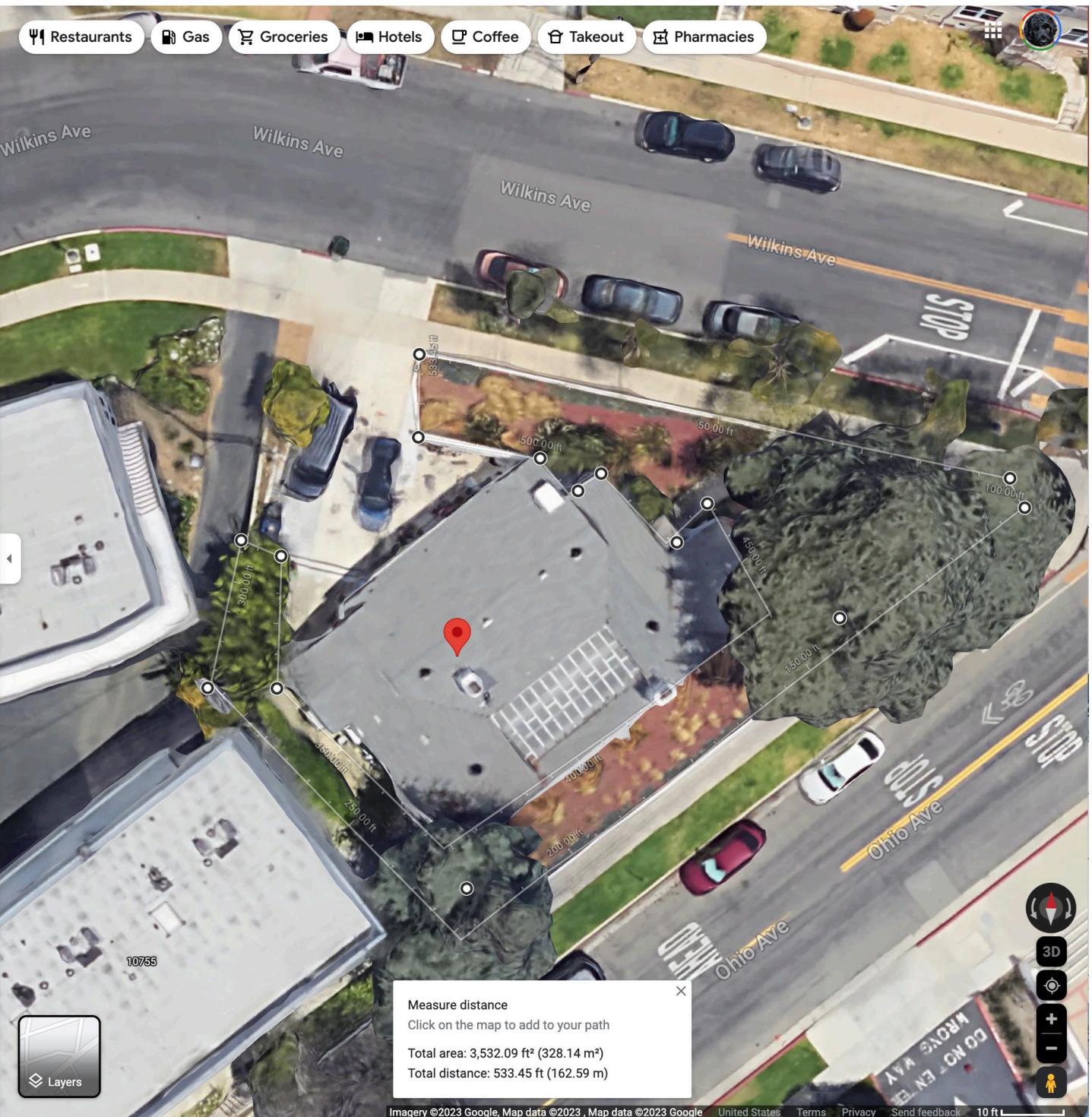
Measure distance ✕

Click on the map to add to your path

Total area: 1,423.55 ft² (132.25 m²)

Total distance: 187.27 ft (57.08 m)

- Restaurants
- Gas
- Groceries
- Hotels
- Coffee
- Takeout
- Pharmacies



Measure distance
 Click on the map to add to your path
 Total area: 3,532.09 ft² (328.14 m²)
 Total distance: 533.45 ft (162.59 m)





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CUMULATIVE PROJECTS

RELATED PROJECTS

Centroid Info:

PROJ ID: 55905
 Address: 10756 W WILKINS AV
 , CA 90024
 Lat/Long: 34.0564, -118.438

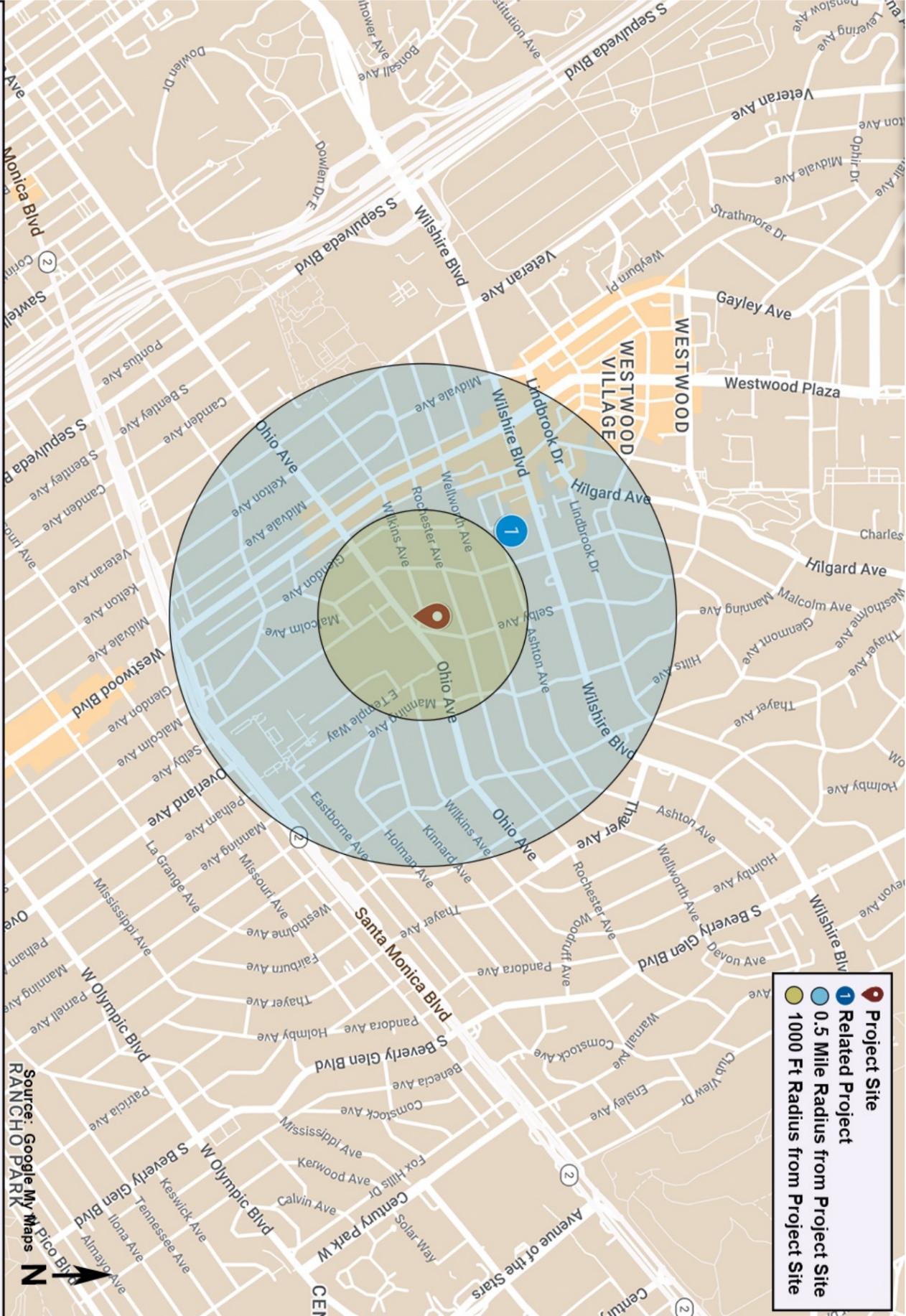
Buffer Radius:

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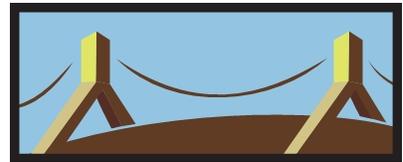
<u>Proj ID</u>	<u>Office</u>	<u>Area</u>	<u>CD</u>	<u>Year</u>	<u>Project Title</u>	<u>Project Desc</u>	<u>Address</u>	<u>First Study Submittal Date</u>	<u>Distance (feet)</u>	<u>Trip Info</u>											
										<u>Land_Use</u>	<u>Unit_ID</u>	<u>size</u>	<u>Net_AM_Trips</u>	<u>Net_PM_Trips</u>	<u>Net_Daily_Trips</u>	<u>NetAMin</u>	<u>NetAMOut</u>	<u>NetPMIn</u>	<u>NetPMOut</u>	<u>Comments</u>	
46851	Westchester	WLA	5	2018	Additions to Existing Church	Addition of a New Assisted Living Bldg and New Day Care Center	10822 W WILSHIRE BLVD	03/21/2019	1400.1	Mixed Use	Other	41	41	49	732	23	18	25	24	Credit Applied	24



- Project Site
- Related Project
- 0.5 Mile Radius from Project Site
- 1000 Ft Radius from Project Site

10756 WEST WILKINS AVENUE PROJECT

Noise Technical Report



Prepared by DKA Planning
20445 Prospect Road, Suite C
San Jose, CA 95129
August 2023

NOISE TECHNICAL REPORT

Introduction

This technical report evaluates noise impacts from construction and operation of a Proposed Project at 10756 West Wilkins Avenue in the City of Los Angeles. The analysis discusses applicable regulations and compares impacts to appropriate thresholds of significance. Noise measurements, calculation worksheets, and a map of noise receptors and measurement locations are included in the Technical Appendix to this analysis.

Fundamentals of Noise

Characteristics of Sound

Sound can be described in terms of its loudness (amplitude) and frequency (pitch). The standard unit of measurement for sound is the decibel (dB). Because the human ear is not equally sensitive to sound at all frequencies, the A-weighted scale (dBA) is used to reflect the normal hearing sensitivity range. On this scale, the range of human hearing extends from 3 to 140 dBA. Table 1 provides examples of A-weighted noise levels from common sources.

**Table 1
A-Weighted Decibel Scale**

Typical A-Weighted Sound Levels	Sound Level (dBA L_{eq})
Near Jet Engine	130
Rock and Roll Band	110
Jet flyover at 1,000 feet	100
Power Motor	90
Food Blender	80
Living Room Music	70
Human Voice at 3 feet	60
Residential Air Conditioner at 50 feet	50
Bird Calls	40
Quiet Living Room	30
Average Whisper	20
Rustling Leaves	10
Source: Cowan, James P., Handbook of Environmental Acoustics, 1993. These noise levels are approximations intended for general reference and informational use.	

Noise Definitions. This noise analysis discusses sound levels in terms of equivalent noise level (L_{eq}), maximum noise level (L_{max}) and the Community Noise Equivalent Level (CNEL).

- **Equivalent Noise Level (L_{eq}):** L_{eq} represents the average noise level on an energy basis for a specific time period. Average noise level is based on the energy content (acoustic energy) of sound. For example, the L_{eq} for one hour is the energy average noise level during that hour. L_{eq} can be thought of as a continuous noise level of a certain period equivalent in energy content to a fluctuating noise level of that same period.

- Maximum Noise Level (L_{max}): L_{max} represents the maximum instantaneous noise level measured during a given time period.
- Community Noise Equivalent Level (CNEL): CNEL is an adjusted noise measurement scale of average sound level during a 24-hour period. Due to increased noise sensitivities during evening and night hours, human reaction to sound between 7:00 P.M. and 10:00 P.M. is as if it were actually 5 dBA higher than had it occurred between 7:00 A.M. and 7:00 P.M. From 10:00 P.M. to 7:00 A.M., humans perceive sound as if it were 10 dBA higher. To account for these sensitivities, CNEL figures are obtained by adding an additional 5 dBA to evening noise levels between 7:00 P.M. and 10:00 P.M. and 10 dBA to nighttime noise levels between 10:00 P.M. and 7:00 A.M. As such, 24-hour CNEL figures are always higher than their corresponding actual 24-hour averages.

Effects of Noise. The degree to which noise can impact an environment ranges from levels that interfere with speech and sleep to levels that can cause adverse health effects. Most human response to noise is subjective. Factors that influence individual responses include the intensity, frequency, and pattern of noise; the amount of background noise present; and the nature of work or human activity exposed to intruding noise. According to the National Institute of Health (NIH), extended or repeated exposure to sounds at or above 85 dB can cause hearing loss. Sounds of 70 dBA or less, even after continuous exposure, are unlikely to cause hearing loss.¹ The World Health Organization (WHO) reports that adults should not be exposed to sudden “impulse” noise events of 140 dB or greater. For children, this limit is 120 dB.²

Exposure to elevated nighttime noise levels can disrupt sleep, leading to increased levels of fatigue and decreased work or school performance. For the preservation of healthy sleeping environments, the WHO recommends that continuous interior noise levels not exceed 30 dBA and that individual noise events of 45 dBA or higher be avoided.³ Assuming a conservative exterior to interior sound reduction of 15 dBA, continuous exterior noise levels should therefore not exceed 45 dBA. Individual exterior events of 60 dBA or higher should also be limited. Some epidemiological studies have shown a weak association between long-term exposure to noise levels of 65 to 70 dBA and cardiovascular effects, including ischemic heart disease and hypertension. However, at this time, the relationship is largely inconclusive.

People with normal hearing sensitivity can recognize small changes in sound levels of approximately 3 dBA. Changes of at least 5 dBA can be readily noticeable while sound level increases of 10 dBA or greater are perceived as a doubling in loudness.⁴ However, during daytime, few people are highly annoyed by noise levels below 55 dBA L_{eq} .⁵

¹ National Institute of Health, National Institute on Deafness and Other Communication, www.nidcd.nih.gov/health/noise-induced-hearing-loss.

² World Health Organization, Guidelines for Community Noise, 1999.

³ Ibid.

⁴ Federal Transit Administration, Transit Noise and Vibration Impact Assessment, 2018.

⁵ World Health Organization, Guidelines for Community Noise, 1999.

Noise Attenuation. Noise levels decrease as the distance from noise sources to receivers increases. For each doubling of distance, noise from stationary sources can decrease by about 6 dBA over hard surfaces (e.g., reflective surfaces such as parking lots) and 7.5 dBA over soft surfaces (e.g., absorptive surfaces such as soft dirt and grass). For example, if a point source produces a noise level of 89 dBA at a reference distance of 50 feet over an asphalt surface, its noise level would be approximately 83 dBA at a distance of 100 feet, 77 dBA at 200 feet, etc. Noises generated by mobile sources such as roadways decrease by about 3 dBA over hard surfaces and 4.5 dBA over soft surfaces for each doubling of distance. It should be noted that because decibels are logarithmic units, they cannot be added or subtracted. For example, two cars each producing 60 dBA of noise would not produce a combined 120 dBA.

Noise is most audible when traveling by direct line of sight, an unobstructed visual path between noise source and receptor. Barriers that break line of sight between sources and receivers, such as walls and buildings, can greatly reduce source noise levels by allowing noise to reach receivers by diffraction only. As a result, sound barriers can generally reduce noise levels by up to 15 dBA.⁶ The effectiveness of barriers can be greatly reduced when they are not high or long enough to completely break line of sight from sources to receivers.

Regulatory Framework

Noise

Federal. No federal noise standards regulate environmental noise associated with short-term construction activities or long-term operations of development projects. As such, temporary and long-term noise impacts produced by the Project would be largely regulated or evaluated by State and City of Los Angeles standards designed to protect public well-being and health.

State. The State's 2017 General Plan Guidelines establish county and city standards for acceptable exterior noise levels based on land use. These standards are incorporated into land use planning processes to prevent or reduce noise and land use incompatibilities. Table 2 illustrates State compatibility considerations between land uses and exterior noise levels.

California Government Code Section 65302 also requires each county and city to prepare and adopt a comprehensive long-range general plan for its physical development. Section 65302(f) requires a noise element to be included in the general plan. This noise element must identify and appraise noise problems in the community, recognize Office of Noise Control guidelines, and analyze and quantify current and projected noise levels.

The State has also established noise insulation standards for new multi-family residential units, hotels, and motels that are subject to relatively high levels of noise from transportation. The noise insulation standards, collectively referred to as the California Noise Insulation Standards (Title 24, California Code of Regulations) set forth an interior standard of 45 dBA CNEL for habitable rooms. The standards require an acoustical analysis which indicates that dwelling units meet this interior

⁶ California Department of Transportation, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.

standard where such units are proposed in areas subject to exterior noise levels greater than 60 dBA CNEL. Local jurisdictions typically enforce the California Noise Insulation Standards through the building permit application process.

Los Angeles County Airport Land Use Commission Comprehensive Land Use Plan. In Los Angeles County, the Regional Planning Commission has the responsibility for acting as the Airport Land Use Commission and for coordinating the airport planning of public agencies within the County. The Airport Land Use Commission coordinates planning for the areas surrounding public use airports. The Comprehensive Land Use Plan provides for the orderly expansion of Los Angeles County's public use airports and the areas surrounding them. It is intended to provide for the adoption of land use measures that will minimize the public's exposure to excessive noise and safety hazards. In formulating the Comprehensive Land Use Plan, the Los Angeles County Airport Land Use Commission has established provisions for safety, noise insulation, and the regulation of building height within areas adjacent to each of the public airports in the County.

City of Los Angeles General Plan Noise Element. The City of Los Angeles General Plan includes a Noise Element that includes policies and standards to guide the control of noise to protect residents, workers, and visitors. Its primary goal is to regulate long-term noise impacts to preserve acceptable noise environments for all types of land uses. It includes programs applicable to construction projects that call for protection of noise sensitive uses and use of best practices to minimize short-term noise impacts.⁷ However, the Noise Element contains no quantitative or other thresholds of significance for evaluating a project's noise impacts. Instead, it adopts the State's guidance on noise and land use compatibility, shown in Table 2, "to help guide determination of appropriate land use and mitigation measures vis-à-vis existing or anticipated ambient noise levels." It also includes a policy and an objective that are relevant for the Proposed Project:

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.

There are also two programs that are applicable to development projects:

Program 11: For a proposed development project that is deemed to have a potentially significant noise impact on noise sensitive uses, as defined by this chapter, require mitigation measures, as appropriate, in accordance with California Environmental Quality Act and city procedures.

⁷ The L.A. CEQA Thresholds Guide defined noise sensitive uses as residences, transient lodgings, schools, libraries, churches, hospitals, nursing homes, auditoriums, concert halls, amphitheatres, playgrounds, and parks.

**Table 2
State of California Noise/Land Use Compatibility Matrix**

Land Use Category	Community Noise Exposure (dB, L _{dn} or CNEL)					
	55	60	65	70	75	80
Residential - Low Density Single-Family, Duplex, Mobile Homes	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Residential - Multi-Family	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Transient Lodging - Motels Hotels	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Schools, Libraries, Churches, Hospitals, Nursing Homes	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Auditoriums, Concert Halls, Amphitheaters	Normally Unacceptable	Normally Unacceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Unacceptable	Normally Unacceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Unacceptable	Normally Unacceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Sports Arena, Outdoor Spectator Sports	Normally Unacceptable	Normally Unacceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Unacceptable	Normally Unacceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Unacceptable	Normally Unacceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Playgrounds, Neighborhood Parks	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Office Buildings, Business Commercial and Professional	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
Industrial, Manufacturing, Utilities, Agriculture	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable
	Normally Acceptable	Normally Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable	Clearly Unacceptable

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

Source: California Office of Planning and Research "General Plan Guidelines, Noise Element Guidelines (Appendix D, Figure 2), 2017.

Program 12: When issuing discretionary permits for a proposed noise-sensitive use (as defined by this chapter) or a subdivision of four or more detached single-family units and which use is determined to be potentially significantly impacted by existing or proposed noise sources, require mitigation measures, as appropriate, in accordance with procedures set forth in the California Environmental Quality Act so as to achieve an interior noise level of a CNEL of 45 dB, or less, in any habitable room, as required by Los Angeles Municipal Code Section 91.

City of Los Angeles Municipal Code. The City of Los Angeles Municipal Code (LAMC) contains regulations that would regulate noise from the Project's temporary construction activities. Section 41.40(a) would prohibit construction activities between 9:00 P.M. and 7:00 A.M., Monday through Friday. Subdivision (c) would further prohibit such activities from occurring before 8:00 A.M. or after 6:00 P.M. on any Saturday or national holiday, or at any time on any Sunday. These restrictions serve to limit specific Project construction activities to Monday through Friday 7:00 A.M. to 9:00 P.M., and 8:00 A.M. to 6:00 P.M. on Saturdays or national holidays.

SEC.41.40. NOISE DUE TO CONSTRUCTION, EXCAVATION WORK—WHEN PROHIBITED.

(a) No person shall, between the hours of 9:00 P.M. and 7:00 A.M. of the following day, perform any construction or repair work of any kind upon, or any excavating for, any building or structure, where any of the foregoing entails the use of any power drive drill, riveting machine excavator or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling, hotel or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited during the hours herein specified. Any person who knowingly and willfully violates the foregoing provision shall be deemed guilty of a misdemeanor punishable as elsewhere provided in this Code.

(c) No person, other than an individual homeowner engaged in the repair or construction of his single-family dwelling shall perform any construction or repair work of any kind upon, or any earth grading for, any building or structure located on land developed with residential buildings under the provisions of Chapter I of this Code, or perform such work within 500 feet of land so occupied, before 8:00 A.M. or after 6:00 P.M. on any Saturday or national holiday nor at any time on any Sunday. In addition, the operation, repair, or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited on Saturdays and on Sundays during the hours herein specific...

Section 112.04 of the LAMC bans the use of gas-powered leaf blowers within 500 feet of a residence between 10:00 P.M. and 7:00 A.M. This also includes lawn mowers, lawn edgers, riding tractors, or other equipment that makes loud sounds.

Section 112.05 of the LAMC establishes noise limits for powered equipment and hand tools operated in a residential zone or within 500 feet of any residential zone. Of particular importance to construction activities is subdivision (a), which institutes a maximum noise limit of 75 dBA as

measured at a distance of 50 feet from the activity for the types of construction vehicles and equipment that would likely be used in the construction of the Project. However, the LAMC notes that these limitations would not necessarily apply if it can be proven that the Project's compliance would be technically infeasible despite the use of noise-reducing means or methods.

SEC. 112.05. MAXIMUM NOISE LEVEL OF POWERED EQUIPMENT OR POWERED HAND TOOLS

Between the hours of 7:00 A.M. and 10:00 P.M., in any residential zone of the City or within 500 feet thereof, no person shall operate or cause to be operated any powered equipment or powered hand tool that produces a maximum noise level exceeding the following noise limits at a distance of 50 feet therefrom:

(a) 75 dBA for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment;

(b) 75 dBA for powered equipment of 20 HP or less intended for infrequent use in residential areas, including chain saws, log chippers and powered hand tools;

(c) 65 dBA for powered equipment intended for repetitive use in residential areas, including lawn mowers, backpack blowers, small lawn and garden tools and riding tractors.

Said noise limitations shall not apply where compliance therewith is technically infeasible. The burden of proving that compliance is technically infeasible shall be upon the person or persons charged with a violation of this section. Technical infeasibility shall 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.

In addition, the LAMC regulates long-term operations of land uses, including but not limited to the following regulations.

Section 111.02 discusses the measurement procedure and criteria regarding the sound level of "offending" noise sources. A noise source causing a 5 dBA increase over the existing average ambient noise levels of an adjacent property is considered to create a noise violation. However, Section 111.02(b) provides a 5 dBA allowance for noise sources lasting more than five but less than 15 minutes in any 1-hour period, and a 10 dBA allowance for noise sources causing noise lasting 5 minutes or less in any 1-hour period. In accordance with these regulations, a noise level increase from certain city-regulated noise sources of five dBA over the existing or presumed ambient noise level at an adjacent property is considered a violation.

Section 112.01 of the LAMC would prohibit any amplified noises, especially those from outdoor sources (e.g., outdoor speakers, stereo systems) from exceeding the ambient noise levels of adjacent properties by more than 5 dBA. Any amplified noises would also be prohibited from being

audible at any distance greater than 150 feet from the Project's property line, as the Project is located within 500 feet of residential zones.

SEC.112.01. RADIOS, TELEVISION SETS, AND SIMILAR DEVICES

(a) *It shall be unlawful for any person within any zone of the City to use or operate any radio, musical instrument, phonograph, television receiver, or other machine or device for the producing, reproducing or amplification of the human voice, music, or any other sound, in such a manner, as to disturb the peace, quiet, and comfort of neighbor occupants or any reasonable person residing or working in the area.*

(b) *Any noise level caused by such use or operation which is audible to the human ear at a distance in excess of 150 feet from the property line of the noise source, within any residential zone of the City or within 500 feet thereof, shall be a violation of the provisions of this section.*

(c) *Any noise level caused by such use or operation which exceeds the ambient noise level on the premises of any other occupied property, or if a condominium, apartment house, duplex, or attached business, within any adjoining unit, by more than five (5) decibels shall be a violation of the provisions of this section.*

Section 112.02 would prevent Project heating, ventilation, and air conditioning (HVAC) systems and other mechanical equipment from elevating ambient noise levels by more than 5 dBA.

SEC.112.02. AIR CONDITIONING, REFRIGERATION, HEATING, PLUMBING, FILTERING EQUIPMENT

(a) *It shall be unlawful for any person, within any zone of the city, to operate any air conditioning, refrigeration or heating equipment for any residence or other structure or to operate any pumping, filtering or heating equipment for any pool or reservoir in such manner as to create any noise which would cause the noise level on the premises of any other occupied property ... to exceed the ambient noise level by more than five decibels.*

The LAMC also provides regulations regarding vehicle-related noise, including Sections 114.02, 114.03, and 114.06. Section 114.02 prohibits the operation of any motor driven vehicles upon any property within the City in a manner that would cause the noise level on the premises of any occupied residential property to exceed the ambient noise level by more than 5 dBA. Section 114.03 prohibits loading and unloading causing any impulsive sound, raucous or unnecessary noise within 200 feet of any residential building between the hours of 10:00 P.M. and 7:00 A.M. Section 114.06 requires vehicle theft alarm systems to be silenced within five minutes.

Existing Conditions

Noise Sensitive Receptors

The Project Site is located in a residential area within the Westwood neighborhood. Sensitive receptors within 1,000 feet of the Project Site include, but are not limited to, the following representative sampling:

- Residence, 10758 Wilkins Avenue, five feet west of the Project Site.
- Residences, 10755 Ohio Avenue, five feet west of the Project Site.
- Residences, Wilkins Avenue (north side), as close as 70 feet north of the Project Site.
- St. Paul Catholic Church, 10750 Ohio Avenue; 100 feet south of the Project Site.
- Church of Latter Day Saints, 10740 Ohio Avenue; 270 feet east of the Project Site.
- Ralph Waldo Emerson Middle School, 1650 Selby Avenue; 550 feet south of the Project Site.

Existing Ambient Noise Levels

The Project Site is improved with a 2,101 square-foot single-family residence.⁸ There are no notable sources of mechanical noise at the Project Site. There is also intermittent noise from cars that park on the surface-level driveway off Wilkins Avenue. This includes tire friction as vehicles navigate to and from parking spaces, minor engine acceleration, doors slamming, and occasional car alarms. Most of these sources are instantaneous (e.g., car alarm chirp, door slam) while others may last a few seconds. There is also infrequent noise from occasional solid waste management and collection activities that are of short duration.

Traffic is the primary source of noise near the Project Site, largely from the operation of vehicles with internal combustion engines and frictional contact with the ground and air.⁹ This includes traffic on Westwood Boulevard, which carries about 2,470 vehicles at Ohio Avenue in the A.M. peak hour.¹⁰ Existing development contributes about nine daily vehicle trips to and from the Project Site along local roads.¹¹

In August 2023, DKA Planning took short-term noise measurements near the Project site to determine the ambient noise conditions of the neighborhood near sensitive receptors.¹² As shown

⁸ City of Los Angeles, ZIMAS database, accessed August 16, 2023.

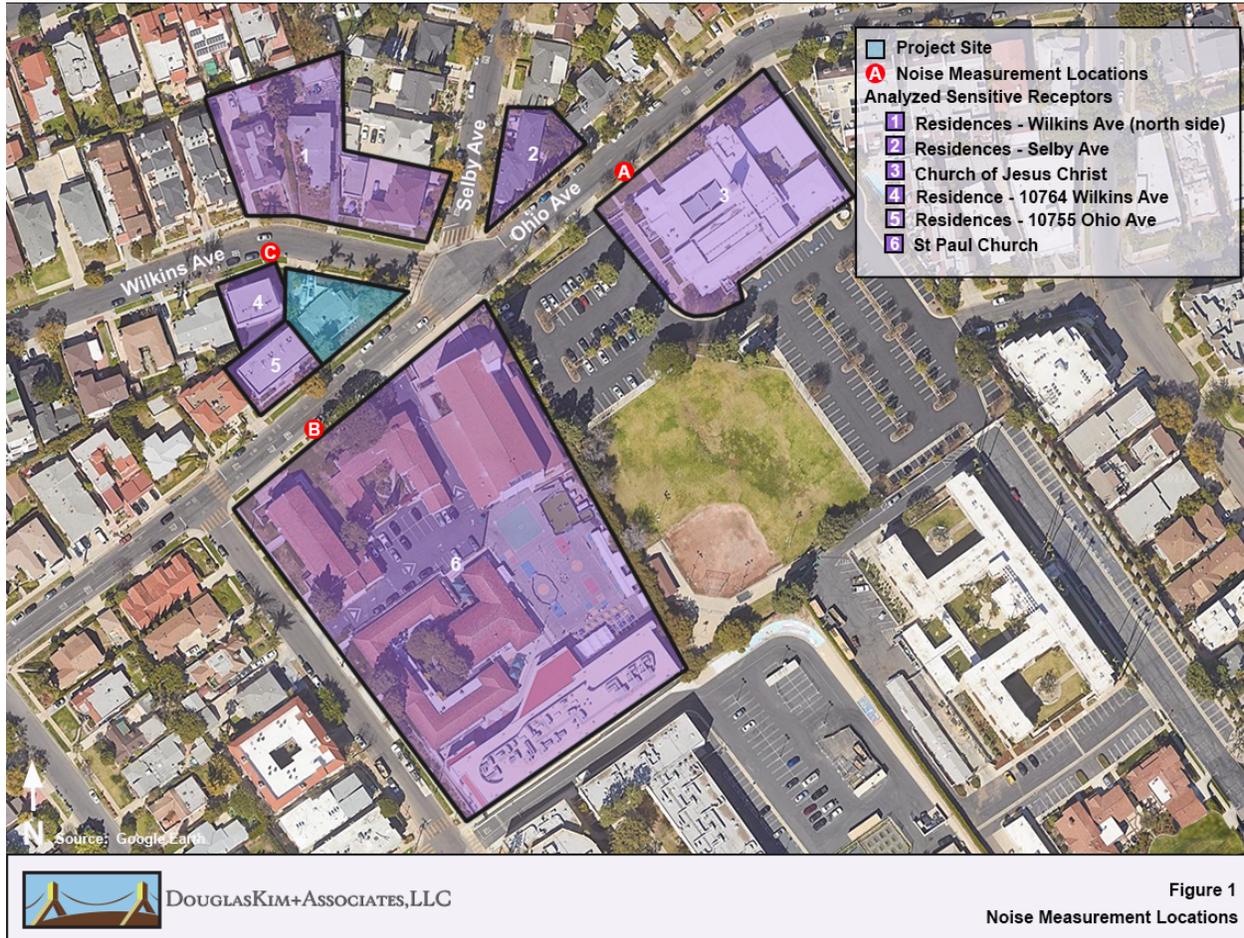
⁹ World Health Organization, <https://www.who.int/docstore/peh/noise/Comnoise-2.pdf> accessed March 18, 2021.

¹⁰ DKA Planning, 2023, based on City of Los Angeles database of traffic volumes on Westwood BI at Ohio Avenue, https://navigatela.lacity.org/dot/traffic_data/automatic_counts/WESOH105.pdf, 2005 traffic counts adjusted by one percent growth factor to represent existing conditions.

¹¹ Institute of Transportation Engineers, Trip Generation Rates, 11th Edition. Trip rates for Single-Family Detached Housing (category 210).

¹² Noise measurements were taken using a Quest Technologies Sound Examiner SE-400 Meter. The Sound Examiner meter complies with the American National Standards Institute (ANSI) and International Electrotechnical Commission (IEC) for general environmental measurement instrumentation. The meter was equipped with an omni-directional microphone, calibrated before the day's measurements, and set at approximately five feet above the ground.

in Table 3, noise levels along roadways near the Project Site ranged from 57.3 to 61.0 dBA L_{eq} , which was generally consistent with the traffic volumes on the local streets near the Project Site. Figure 1 illustrates where ambient noise levels were measured near the Project Site to establish the noise environment and their relationship to the applicable sensitive receptor(s). 24-hour CNEL noise levels are generally considered “Normally Acceptable” for the types of land uses near the Project Site.



**Table 3
Existing Noise Levels**

Noise Measurement Locations	Primary Noise Source	Sound Levels		Nearest Sensitive Receptor(s)	Noise/Land Use Compatibility ^b
		dBA (L_{eq})	dBA (CNEL) ^a		
A. Church of Jesus Christ of Latter Day Saints	Traffic on Ohio Ave.	61.0	59.0	Church of Jesus Christ, Residences – Selby Ave.	Normally Acceptable
B. St. Paul Church	Traffic on Ohio Ave.	58.5	56.5	St. Paul Church, Residences-10755 Ohio Ave.	Normally Acceptable

C. 10764 Wilkins Ave.	Traffic on Wilkins Ave.	57.3	55.3	Residence – 10764 Wilkins Ave.; Residences – Wilkins Ave (north side)	Normally Acceptable
<p>^a Estimated based on short-term (15-minute) noise measurement using Federal Transit Administration procedures from 2018 Transit Noise and Vibration Impact Assessment Manual, Appendix E, Option 4.</p> <p>^b Pursuant to California Office of Planning and Research “General Plan Guidelines, Noise Element Guidelines, 2017. When noise measurements apply to two or more land use categories, the more noise-sensitive land use category is used. See Table 2 above for definition of compatibility designations.</p> <p>Source: DKA Planning, 2023</p>					

Project Impacts

Methodology

On-Site Construction Activities. Construction noise levels at off-site sensitive receptors were modeled employing the ISO 9613-2 sound attenuation methodologies using the SoundPLAN Essential model (version 5.1). This software package considers reference equipment noise levels, noise management techniques, distance to receptors, and any attenuating features to predict noise levels from sources like construction equipment. Construction noise sources were modeled as area sources to reflect the mobile nature of construction equipment. These vehicles would not operate directly where the Project’s property line abuts adjacent structures, as they would retain some setback to preserve maneuverability. This equipment would also occasionally operate at reduced power and intensity to maintain precision at these locations.

Off-Site Construction Noise Activities. The Project’s off-site construction noise impact from haul trucks, vendor deliveries, worker commutes, and other vehicles accessing the Project Site was analyzed by considering the Project’s anticipated vehicle trip generation with existing traffic and roadway noise levels along local roadways, particularly those likely to be part of any haul route. Because it takes a doubling of traffic volumes on a roadway to generate the increased sound energy it takes to elevate ambient noise levels by 3 dBA,¹³ the analysis focused on whether truck and auto traffic would double traffic volumes on key roadways to be used for hauling soils to and/or from the Project Site during construction activities.¹⁴ Because haul trucks generate more noise than traditional passenger vehicles, a 19.1 passenger car equivalency (PCE) was used to convert haul truck trips to a reference level conversion to an equivalent number of passenger vehicles.¹⁵ For vendor deliveries, a 9.55 PCE was used to reflect a blend of medium- and heavy-duty vehicles. It should be noted that because an approved haul route may not be approved as of the preparation of this analysis, assumptions were made about logical routes that would

¹³ Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

¹⁴ A tripling of traffic volumes (i.e., 3.15x) is needed to elevate traffic noise levels by 5 dBA.

¹⁵ Caltrans, Technical Noise Supplement Table 3-3, 2013.

minimize haul truck traffic on local streets in favor of major arterials that can access regional-serving freeways.

On-Site Operational Noise Activities. The Project's potential to result in significant noise impacts from on-site operational noise sources was evaluated by identifying sources of on-site noise sources and considering the impact that they could produce given the nature of the source (i.e., loudness and whether noise would be produced during daytime or more-sensitive nighttime hours), distances to nearby sensitive receptors, ambient noise levels near the Project Site, the presence of similar noise sources in the vicinity, and maximum noise levels permitted by the LAMC.

Off-Site Operational Noise Activities. The Project's off-site noise impact from Project-related traffic was evaluated based its potential to increase traffic volumes on local roadways that serve the Project site. Because it takes a doubling of traffic volumes on a roadway to generate the increased sound energy it takes to elevate ambient noise levels by 3 dBA, the analysis focused on whether auto trips generated by the Proposed Project would double traffic volumes on key roadways that access the Project Site.

Thresholds of Significance

Construction Noise Thresholds. Based on guidelines from the City of Los Angeles City Department of Planning, the on-site construction noise impact would be considered significant if:

- Construction activities lasting more than one day would exceed existing ambient exterior sound levels by 10 dBA (hourly L_{eq}) or more at a noise-sensitive use;
- Construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA (hourly L_{eq}) or more at a noise-sensitive use; or
- Construction activities of any duration would exceed the ambient noise level by 5 dBA (hourly L_{eq}) at a noise-sensitive use between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday, before 8:00 A.M. or after 6:00 P.M. on Saturday, or at any time on Sunday.

Operational Noise Thresholds. In addition to applicable City standards and guidelines that would regulate or otherwise moderate the Project's operational noise impacts, the following criteria are adopted to assess the impact of the Project's operational noise sources:

- Project operations would cause ambient noise levels at off-site locations to increase by 3 dBA CNEL or more to or within "normally unacceptable" or "clearly unacceptable" noise/land use compatibility categories, as defined by the State's 2017 General Plan Guidelines.

- Project operations would cause any 5 dBA CNEL or greater noise increase.¹⁶

Analysis of Project Impacts

- 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.

Construction

On-Site Construction Activities

Construction would generate noise during the construction process that would span 30 months of demolition, site preparation, grading, utilities trenching, building construction, and application of architectural coatings, as shown in Table 4. During all construction phases, noise-generating activities could occur at the Project Site between 7:00 A.M. and 9:00 P.M. Monday through Friday, in accordance with LAMC Section 41.40(a). On Saturdays, construction would be permitted to occur between 8:00 A.M. and 6:00 P.M.

**Table 4
Construction Schedule Assumptions**

Phase	Duration	Notes
Demolition	Month 1	Removal of 2,101 square feet of building floor area and 1,450 square feet of asphalt/concrete parking lot hauled 40 miles to landfill in 10-cubic yard capacity trucks.
Site Preparation	Month 2	Removal of trees, plants, landscaping, weeds, grubbing over 3,500 square-foot area.
Grading	Months 3-4	Approximately 3,200 cubic yards of soil (including 25 percent swell factor) ¹⁷ hauled 40 miles to landfill in 10-cubic yard capacity trucks.
Trenching	Months 5-8	Trenching for utilities, including gas, water, electricity, and telecommunications.

¹⁶ As a 3 dBA increase represents a slightly noticeable change in noise level, this threshold considers any increase in ambient noise levels to or within a land use’s “normally unacceptable” or “clearly unacceptable” noise/land use compatibility categories to be significant so long as the noise level increase can be considered barely perceptible. In instances where the noise level increase would not necessarily result in “normally unacceptable” or “clearly unacceptable” noise/land use compatibility, a 5 dBA increase is still considered to be significant. Increases less than 3 dBA are unlikely to result in noticeably louder ambient noise conditions and would therefore be considered less than significant.

¹⁷ City of Los Angeles, Environmental Assessment Form.

Table 4
Construction Schedule Assumptions

Building Construction	Months 6-30	Footings and foundation work, framing, concrete pouring, welding; installing mechanical, electrical, and plumbing. Floor assembly, interior painting, cabinetry and carpentry, elevator installations, low voltage systems, trash management.
Architectural Coatings	Months 25-30	Application of interior and exterior coatings and sealants.
Source: DKA Planning, 2023.		

Noise levels would generally peak during the demolition and grading phases, when diesel-fueled heavy-duty equipment like excavators and dozers are used to move large amounts of debris and dirt, respectively. This equipment is mobile in nature and does not always operate at in a steady-state mode full load, but rather powers up and down depending on the duty cycle needed to conduct work. As such, equipment is occasionally idle during which time no noise is generated.

During other phases of construction (e.g., site preparation, trenching, building construction, architectural coatings), noise impacts are generally lesser because they are less reliant on using heavy equipment with internal combustion engines. Smaller equipment such as forklifts, generators, and various powered hand tools and pneumatic equipment would often be utilized. Off-site secondary noises would be generated by construction worker vehicles, vendor deliveries, and haul trucks. Figure 2 illustrates construction noise levels at sensitive receptors during the demolition and grading phases.



Figure 2
Construction Noise Levels at Sensitive Receptors

Because the Project’s construction phase would occur for more than three months, the applicable City threshold of significance for the Project’s construction noise impacts is an increase of 5 dBA over existing ambient noise levels. As shown in Table 5, when considering ambient noise levels, the use of multiple pieces of powered equipment simultaneously would increase ambient noise negligibly. This assumes the use of best practices techniques required by the City’s Building and Safety code, such as temporary sound barriers. These construction noise levels would not exceed the City’s significance threshold of 5 dBA. Therefore, the Project’s on-site construction noise impact would be less than significant.

Table 5
Construction Noise Impacts at Off-Site Sensitive Receptors

Receptor	Maximum Construction Noise Level (dBA Leq)	Existing Ambient Noise Level (dBA Leq)	New Ambient Noise Level (dBA Leq)	Increase (dBA Leq)	Potentially Significant?
1. Residences – Wilkins Ave (north side)	55.5	57.3	59.5	2.2	No
2. Residences – 1447 Selby Ave.	58.5	57.3	61.0	3.7	No
3. Residences – 1436 Selby Ave.	56.8	61.0	62.4	1.4	No

4. Church of Jesus Christ of Latter Day Saints	52.3	61.0	61.5	0.5	No
5. Residences – 10758 Wilkins Ave.	60.4	57.3	62.1	4.8	No
6. Residences – 10755 Ohio Ave.	53.5	58.5	59.7	1.2	No
7. St. Paul Catholic Church	57.0	58.5	60.8	2.3	No
Source: DKA Planning, 2023.					

Off-Site Construction Activities

The Project would also generate noise at off-site locations from haul trucks moving debris and soil from the Project Site during demolition and grading activities, respectively; vendor trips; and worker commute trips. These activities would generate up to an estimated 48 peak hourly PCE vehicle trips, as summarized in Table 6, during the grading phase.¹⁸ This would represent about 1.9 percent of traffic volumes on Westwood Boulevard, which carries about 2,470 vehicles at Ohio Avenue in the morning peak hour of traffic.¹⁹ Because workers and vendors will likely use more than one route to travel to and from the Project Site, this conservative assessment of traffic volumes overstates the likely traffic volumes from construction activities at this intersection.

Westwood Boulevard would likely serve as part of the haul route for any soil exported from the Project Site given its connection to Wilshire Boulevard and ultimate access to the Santa Monica Freeway. Because the Project's construction-related trips would not cause a doubling in traffic volumes (i.e., 100 percent increase) on Westwood Boulevard, the Project's construction-related traffic would not increase existing noise levels by 3 dBA or more, which is less than the 5 dBA threshold of significance for off-site construction noise activities. Therefore, the Project's noise impacts from construction-related traffic would be less than significant.

**Table 6
Construction Vehicle Trips (Maximum Hourly)**

Construction Phase	Worker Trips ^a	Vendor Trips	Haul Trips	Total Trips	Percent of Peak A.M. Hour Trips on Westwood Blvd. ^e
Demolition	10	0	6 ^b	16	0.6
Site Preparation	5	0	2 ^c	7	0.3
Grading	8	0	41 ^d	48	1.9
Trenching	3	0	0	3	0.1
Building Construction	9	4 ^d	0	13	0.5

¹⁸ This is a conservative, worst-case scenario, as it assumes all workers travel to the worksite at the same time and that vendor and haul trips are made in the same early hour, using the same route as haul trucks to travel to and from the Project Site.

¹⁹ DKA Planning, 2023, based on City of Los Angeles database of traffic volumes on Westwood Bl at Ohio Avenue, https://navigatela.lacity.org/dot/traffic_data/automatic_counts/WESOH105.pdf, 2005 traffic counts adjusted by one percent growth factor to represent existing conditions.

Architectural Coating	2	0	0	2	0.1
<p>^a Assumes all worker trips occur in the peak hour of construction activity.</p> <p>^b The project would generate 49 haul trips over a 23-day period with seven-hour work days. Because haul trucks emit more noise than passenger vehicles, a 19.1 passenger car equivalency (PCE) was used to convert haul truck trips to a passenger car equivalent</p> <p>^c The project would generate 13 haul trips over a 20-day period with seven-hour work days. Assumes a 19.1 PCE.</p> <p>^d The project would generate 640 haul trips over a 43-day period with seven-hour work days. Assumes a 19.1 PCE.</p> <p>^e This phase would generate about 1.6 vendor truck trips daily over a seven-hour work day. Assumes a blend of vehicle types and a 9.55 PCE.</p> <p>^e Percent of existing traffic volumes on Westwood Boulevard at Ohio Avenue.</p> <p>Source: DKA Planning, 2023</p>					

Operation

On-Site Operational Noise

During long-term operations, the Project would produce noise from on-site sources such as mechanical equipment associated with the structures themselves or from activity in outdoor spaces.

Mechanical Equipment

The Project would operate mechanical equipment on the roof 51 feet above grade that would generate incremental long-term noise impacts. The Project would likely use typical HVAC equipment, such as heat pumps for multi-family residences (e.g., 2.5-ton Carrier 24ABC630A003 Carrier 25HBC5), with each unit distributed across the roof as needed to serve each residence. Noise from heat pumps and air conditioners is a function of the model, airflow, and pressure flow generated by fans and compressors. Most modern heat pumps are relatively quiet, with a sound power of up to 76 dBA. However, as the location on the roof would help shield the noise path to nearby sensitive receptors, blocking the line of sight to a noise source generally results in a 5 decibel reduction, each rooftop unit would generate about 50.3 dBA at ten feet of distance.²⁰

However, noise impacts from rooftop mechanical equipment on nearby sensitive receptors would be negligible for several reasons. First, there would be no line-of-sight from these rooftop units to the sensitive receptors. Because the residences adjacent to the Project Site are one- to two-stories in height, there would be no sound path from the HVAC equipment to residences that would be up to 30 to 40 feet lower than the roof of the Proposed Project. Second, the presence of the Project's roof edge creates an effective noise barrier that further reduces noise levels from rooftop HVAC units by 8 dBA or more.²¹ A 4'6" parapet would further shield sensitive receptors near the Project Site. These design elements would be helpful in managing noise, as equipment often operates continuously throughout the day and occasionally during the day, evenings, and

²⁰ Washington State Department of Transportation, Noise Walls and Barriers. <https://wsdot.wa.gov/construction-planning/protecting-environment/noise-walls-barriers>. Assumes the Carrier's rated sound power of 76 dB.

²¹ Ibid.

weekends. As a result, noise from HVAC units would negligibly elevate ambient noise levels, far less than the 5 dBA CNEL threshold of significance for operational impacts. Compliance with LAMC Section 112.02 would further limit the impact of HVAC equipment on noise levels at adjacent properties.

Pad-mounted oil transformers that lower high voltage to standard household voltage used to power electronics, appliances and lighting would be located on the ground level in an unobstructed location. These transformers are housed in a steel cabinet and generally do not involve pumps, though fans may be needed on some units. Switchgear responsible for distributing power through the development could be located externally, though no mechanical processes that generate noise would be necessary.

Otherwise, all other mechanical equipment would be fully enclosed within the structure. This could include mechanical, electrical, and plumbing rooms, a utility fan room, as well as elevator equipment (including hydraulic pump, switches, and controllers) in the subterranean basement. All these activities would generally occur within the envelope of the development, operational noise would be shielded from off-site noise-sensitive receptors.

Auto-Related Activities

The majority of vehicle-related noise impacts at the Project Site would come from vehicles entering and exiting the residential development from a driveway off the rear alley. During the peak P.M. hour, up to five vehicles would generate noise in and out of the garage, with up to five net vehicles using the garage in the peak A.M. hour.²²

A church across Ohio Avenue would have a direct line of sight to the driveway, approximately 100 feet away. As shown in Table 7, the average vehicle use of the garage during daytime hours (average of four vehicles per hour between 8:00 A.M. and 7:00 P.M.) and nighttime hours (an average of two vehicles hourly from 7:00 P.M. to 8:00 A.M.) would elevate ambient noise levels by less than 0.1 dBA CNEL, well below the 5 dBA threshold of significance for operational sources of noise.

**Table 7
Parking Garage-Related Impacts at Off-Site Sensitive Receptors**

Receptor	Maximum Noise Level (dBA CNEL)	Existing Ambient Noise Level (dBA CNEL)	New Ambient Noise Level (dBA CNEL)	Increase (dBA CNEL)	Significant?
St. Paul Catholic Church	25.9	56.5	56.5	<0.1	No

Source: DKA Planning, 2023, using FTA Noise Impact Assessment Spreadsheet.

²² DKA Planning, 2023, based on CalEEMod 2022.1.1.17 model using ITE Trip Generation rates (10th Edition). Hourly trip generation based on Institute of Transportation Engineer’s hourly trip generation factors (11th Edition) for Multifamily Housing (Mid-Rise) (land use code 221).

Parking garage-related noise impacts for other receptors would also be negligible given their more remote locations and/or the lack of a line of sight from the garage. Parking garage noise would include tire friction as vehicles navigate to and from parking spaces, doors slamming, car alarms, and minor engine acceleration. Most of these sources are instantaneous (e.g., car alarm chirp, door slam) while others may last a few seconds. As such, the Project's parking garage activities would not have a significant impact on the surrounding noise environment.

Outdoor Uses

While most operations would be conducted inside the development, outdoor activities could generate noise that could impact local sensitive receptors. This would include human conversation, trash collection, and landscape maintenance. These are discussed below:

- Human conversation. While noise associated with everyday residential activities would largely occur internally within the development, there could include passive activities such as human conversation, socializing, and passive recreation in outdoor spaces, which could include:
 - Private balconies. These would be private spaces for residents used for socializing or passive recreation (e.g., reading), with intermittent use largely during day or evening hours. No powered speakers are proposed that would amplify either speech or music.
 - Roof deck (3rd floor) on the northern portion of the roof facing Wilkins Avenue on the third floor. This would be a shared space for residents used for socializing or passive recreation (e.g., reading), with intermittent use largely during day or evening hours. No powered speakers are proposed that would amplify either speech or music. The landscaped setback of the deck would shield any noise from sensitive receptors near the Project Site.
 - Roof deck (5th floor) on the northern portion of the roof facing Wilkins Avenue on the fifth floor. This would be a shared space for residents used for socializing or passive recreation (e.g., reading), with intermittent use largely during day or evening hours. No powered speakers are proposed that would amplify either speech or music. The landscaped setback of the deck would shield any noise from sensitive receptors near the Project Site.
 - Roof decks along the southern portion of the roof facing Ohio Avenue and Wilkins Avenue. These would be shared use spaces for socializing or passive recreation (e.g., reading, walking), with intermittent use largely during day or evening hours. There would be no direct line-of-sight from any roof deck noise to adjacent sensitive receptors, which would be 30 to 40 feet lower in height than the roof deck. Blocking the line of sight to a noise source generally results in a 5 decibel reduction.²³ The presence of the roof edge, parapet, and landscaped setback of decks from the roof's

²³ Washington State Department of Transportation, Noise Walls and Barriers. <https://wsdot.wa.gov/construction-planning/protecting-environment/noise-walls-barriers>.

edge would shield any rooftop noise from the sensitive receptors near the Project Site. No powered speakers are proposed that would amplify either speech or music.

The primary use of these spaces would be for human conversation, which would produce negligible noise impacts, based on the Lombard effect. This phenomenon recognizes that voice noise levels in face-to-face conversations generally increase proportionally to background ambient noise levels. Specifically, vocal intensity increases about 0.38 dB for every 1.0 dB increase in noise levels above 55 dB.²⁴ For example, the sound of a human voice at 60 dB would produce a noise level of 39 dB at ten feet, which would not elevate ambient noise levels at any of the analyzed sensitive receptors by more than 0.2 dBA L_{eq} . Moreover, noise levels from human speech would attenuate rapidly with greater distance, resulting in a 33 dB noise level at twenty feet, and 27 dB at 40 feet. Further, the infrequent nature of outdoor use of these spaces and any acoustic noise (e.g., speech) makes it impossible to individually or collectively elevate 24-hour noise levels by 5 dBA CNEL or more at any nearby noise-sensitive receptors.

- Trash collection. On-site trash and recyclable materials for the residents would be managed from the waste collection area in the basement level of the parking garage. Dumpsters would be moved to the street manually or with container handler trucks that use hydraulic-powered lifts that use beeping alerts during operation. Haul trucks would access solid waste from Wilkins Avenue, where solid waste activities would include use of trash compactors and hydraulics associated with the refuse trucks themselves. Noise levels of approximately 71 dBA L_{eq} and 66 dBA L_{eq} could be generated by collection trucks and trash compactors, respectively, at 50 feet of distance.²⁵ These noise levels would be comparable to those from trash collection for the existing residence. As such, the Proposed Project would not significantly increase noise from intermittent trash collection.
- Landscape maintenance. Noise from gas-powered leaf blowers, lawnmowers, and other landscape equipment can generate substantial bursts of noise during regular maintenance. For example, two gas powered leaf blowers with two-stroke engines and a hose vacuum can generate an average of 85.5 dBA L_{eq} and cause nuisance or potential noise impacts for nearby receptors.²⁶ The landscape plan focuses on a modest palette of accent trees and raised planters that will minimize the need for powered landscaping equipment, as some of this can be managed by hand. These noise levels would be comparable to those from landscape maintenance for the existing residence. As such, the Proposed Project would not significantly increase noise from intermittent landscape maintenance.

As discussed above, the Project would not result in an exposure of persons to or a generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The Project would also not increase surrounding noise levels by more than 5 dBA CNEL, the minimum threshold of significance based on the noise/land

²⁴ Acoustical Society of America, Volume 134; Evidence that the Lombard effect is frequency-specific in humans, Stowe and Golob, July 2013.

²⁵ RK Engineering Group, Inc. Wal-Mart/Sam's Club reference noise level, 2003.

²⁶ Erica Walker et al, Harvard School of Public Health; Characteristics of Lawn and Garden Equipment Sound; 2017. These equipment generated a range of 74.0-88.5 dBA L_{eq} at 50 feet.

use category of sensitive receptors near the Project Site. As a result, the Project’s on-site operational noise impacts would be considered less than significant,

Off-Site Operational Noise

The majority of the Project’s operational noise impacts would be off-site from vehicles traveling to and from the development. The Project could add up to 69 net vehicle trips to the local roadway network on a peak weekday at the start of operations in 2027. During the peak P.M. hour, up to five vehicles would generate noise in and out of the garage via the driveway off Ohio Avenue, with up to five vehicles using the garage in the peak A.M. hour.²⁷ This would represent about 0.2 percent of traffic volumes on Westwood Boulevard, which carries about 2,470 vehicles at Ohio Avenue in the morning peak hour of traffic.²⁸

Because it takes a doubling of traffic volumes (i.e., 100 percent) to increase ambient noise levels by 3 dBA L_{eq} , the Project’s traffic would neither increase ambient noise levels 3 dBA or more into “normally unacceptable” or “clearly unacceptable” noise/land use compatibility categories, nor increase ambient noise levels 5 dBA or more. Twenty-four hour CNEL impacts would similarly be minimal, far below criterion for significant operational noise impacts, which begin at 3 dBA. As such, this impact would be considered less than significant.

Consistency with City General Plan Noise Element

While the City’s Noise Element focuses on a number of measures for Citywide implementation by municipal government, there are some objectives, policies, and programs that are applicable to development projects. Table 8 summarizes the Proposed Project’s consistency with these.

Table 7
Project Consistency with City of Los Angeles General Plan Noise Element

Objective/Policy/Program	Project Consistency
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.	Consistent. The Project would comply with City, state, and other applicable noise regulations to ensure that noise impacts are considered less than significant.
Objective 3 (Land Use Development): Reduce or eliminate noise impacts associated with proposed development of land and changes in land use.	Consistent. The project is being evaluated under CEQA and would result in less-than-significant impacts on noise.
Program 11. For a proposed development project that is deemed to have a potentially significant noise impact on noise sensitive uses,	Consistent. The Project would not have a significant noise impact on noise-sensitive uses and as such, would not require mitigation under CEQA.

²⁷ Institute of Transportation Engineers, Trip Generation Rates; 11th Edition, using Land Use Code 221 (Multi-Family (Mid-Rise)).

²⁸ DKA Planning, 2023, based on City of Los Angeles database of traffic volumes on Westwood Bl at Ohio Avenue, https://navigatela.lacity.org/dot/traffic_data/automatic_counts/WESOH105.pdf, 2005 traffic counts adjusted by one percent growth factor to represent existing conditions.

**Table 7
Project Consistency with City of Los Angeles General Plan Noise Element**

Objective/Policy/Program	Project Consistency
as defined by this chapter, require mitigation measures, as appropriate, in accordance with California Environmental Quality Act and city procedures.	
Program 12. When issuing discretionary permits for a proposed noise-sensitive use (as defined by this chapter) or a subdivision of four or more detached single-family units and which use is determined to be potentially significantly impacted by existing or proposed noise sources, require mitigation measures, as appropriate, in accordance with procedures set forth in the California Environmental Quality Act so as to achieve an interior noise level of a CNEL of 45 dB, or less, in any habitable room, as required by Los Angeles Municipal Code Section 91.	Consistent. The noise-sensitive project is being evaluated under CEQA and would before being entitled would comply with Building Code and Title 24 noise insulation requirements to achieve an interior noise level of 45 dB.
Source: DKA Planning, 2023.	

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

Less Than Significant Impact.

The Project Site is located about 2.4 miles north of the Santa Monica Airport and 7.2 miles north of Los Angeles International Airport. Because the Proposed Project would not be located within the vicinity of a private airstrip or within two miles of a public airport, the Project would not expose local workers or residents in the area to excessive noise levels. This would be considered a less than significant impact.

Cumulative Impacts

Construction

On-Site Construction Noise

During construction of the proposed Project, there could be other construction activity in the area that contributes to cumulative noise impacts at sensitive receptors. Construction-related noise levels from any related project would be intermittent and temporary. As with the Project, any related projects would comply with the LAMC’s restrictions, including restrictions on construction hours and noise from powered equipment. Noise associated with cumulative construction

activities would be reduced to the degree reasonably and technically feasible through proposed mitigation measures for each individual related project and compliance with the noise ordinance.

Noise from construction of development projects is localized and can affect noise-sensitive uses within 500 feet, based on the City’s screening criteria. As such, noise from two construction sites within 1,000 feet of each other can contribute to cumulative noise impacts for receptors located between. There is one related project identified by the City of Los Angeles within 0.25 miles of the Project Site, a 1,400 square-foot addition to an assisted living center at 10822 Wilshire Boulevard (Figure 3).²⁹ However, this location is over 1,000 feet from the Project Site.

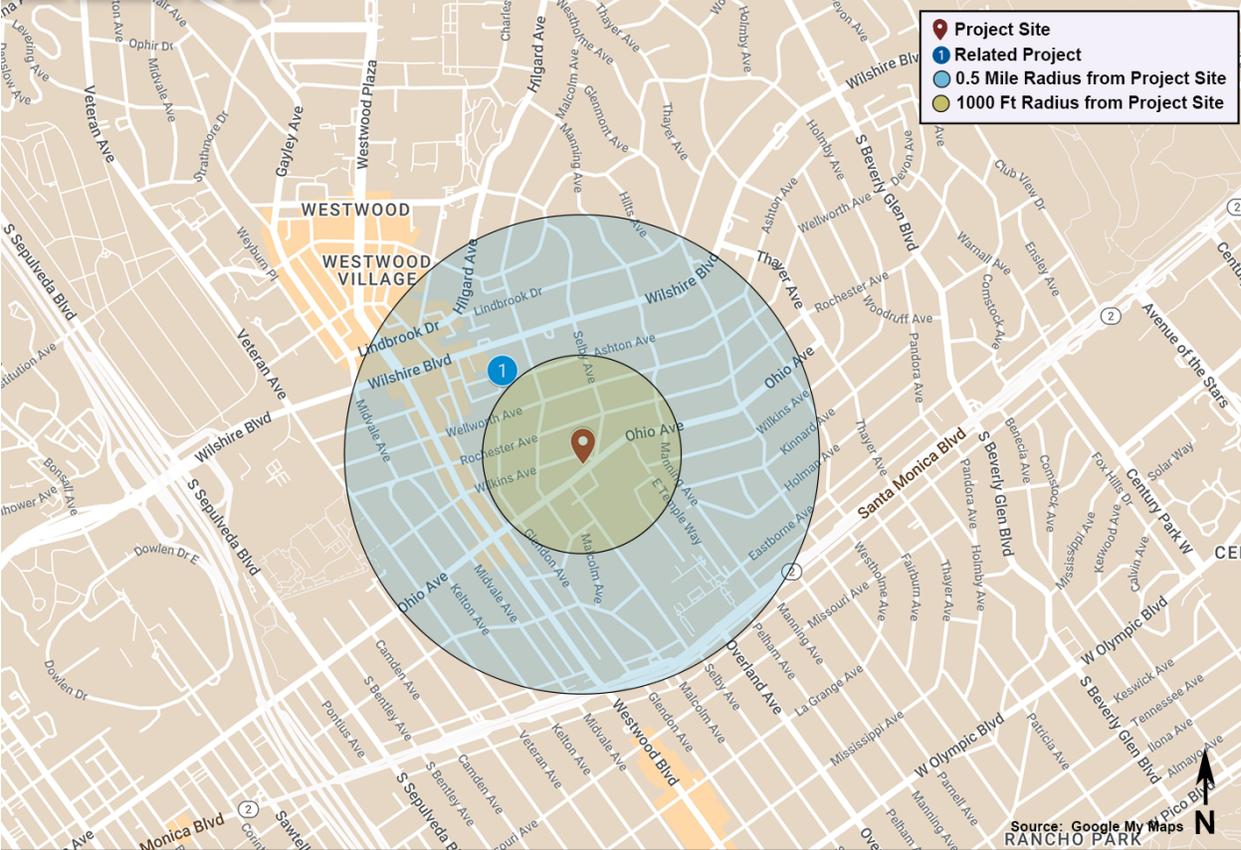


Figure 3
Location of Related Projects

As a result, there are no reasonably foreseeable related projects that could contribute to cumulative noise impacts at the analyzed sensitive receptors. Based on this, there would not be cumulative noise impacts at any nearby sensitive uses located near the Project Site and related projects in the event of concurrent construction activities.

²⁹ City of Los Angeles, Related Projects Summary from Case Logging and Tracking System, August 2023.

Off-Site Construction Noise

Other concurrent construction activities from related projects can contribute to cumulative off-site impacts if haul trucks, vendor trucks, or worker trips for any related project(s) were to utilize the same roadways. Distributing trips to and from each related project construction site substantially reduces the potential that cumulative development could more than double traffic volumes on existing streets, which would be necessary to increase ambient noise levels by 3 dBA. The Proposed Project would generate an estimated 48 peak hourly PCE vehicle trips during the grading phase.³⁰ This would represent about 1.9 percent of traffic volumes on Westwood Boulevard, which carries about 2,470 vehicles at Ohio Avenue in the morning peak hour of traffic.³¹ Any related projects would have to add 2,432 peak hour vehicle trips to double volumes on Westwood Boulevard that could elevate traffic noise by 3 dBA.

However, as discussed earlier, there are no related projects within 1,000 feet of the Project Site that would contribute to cumulative construction noise impacts. As such, cumulative noise due to construction truck traffic from the Project and related projects do not have the potential to double traffic volumes on any roadway necessary to elevate traffic noise levels by 3 dBA, let alone the 5 dBA threshold of significance for traffic impacts. As such, cumulative noise impacts from off-site construction would be less than significant.

Operation

The Project Site and Westwood neighborhood has been developed with residential and commercial land uses that have previously generated, and will continue to generate, noise from a number of operational noise sources, including mechanical equipment (e.g., HVAC systems), outdoor activity areas, and vehicle travel. Any related projects could contribute to cumulative long-term noise impacts on the local neighborhood.

On-Site Stationary Noise Sources

Noise from on-site mechanical equipment (e.g., HVAC units) and any other human activities from related projects would not be typically associated with excessive noise generation that could result in increases of 5 dBA or more in ambient noise levels at sensitive receptors when combined with operational noise from the Proposed Project. However, as discussed earlier, there are no related projects within 1,000 feet of the Project Site that would contribute to cumulative on-site stationary source noise impacts. As such, cumulative noise due to stationary sources from the Project and related projects do not have the potential to elevate ambient noise levels by the 5 dBA threshold of significance. As such, cumulative noise impacts from on-site stationary sources would be less than significant.

³⁰ This is a conservative, worst-case scenario, as it assumes all workers travel to the worksite at the same time and that vendor and haul trips are made in the same early hour, using the same route as haul trucks to travel to and from the Project Site.

³¹ DKA Planning, 2023, based on City of Los Angeles database of traffic volumes on Westwood Bl at Ohio Avenue, https://navigatela.lacity.org/dot/traffic_data/automatic_counts/WESOH105.pdf, 2005 traffic counts adjusted by one percent growth factor to represent existing conditions.

Therefore, cumulative stationary source noise impacts associated with operation of the Project and related projects would be less than significant.

Off-Site Mobile Noise Sources

The Project would add up to 69 vehicle trips to the local roadway network on a peak weekday at the start of operations in 2027, including up to five maximum hourly vehicle trips. Related projects would have to generate 2,465 additional vehicle trips onto Westwood Boulevard in the peak A.M. hour to elevate noise by 3 dBA.

However, as discussed earlier, there are no related projects within 1,000 feet of the Project Site that would contribute to cumulative traffic noise impacts. As such, cumulative noise due to traffic from the Project and related projects do not have the potential to elevate ambient noise levels by the 5 dBA threshold of significance. As such, cumulative noise impacts from traffic would be less than significant.

Therefore, cumulative noise impacts due to off-site traffic would not increase ambient noise levels by 3 dBA to or within their respective “Normally Unacceptable” or “Clearly Unacceptable” noise categories, or by 5 dBA or greater overall. Additionally, the Project would not result in an exposure of persons to or a generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

TECHNICAL APPENDIX



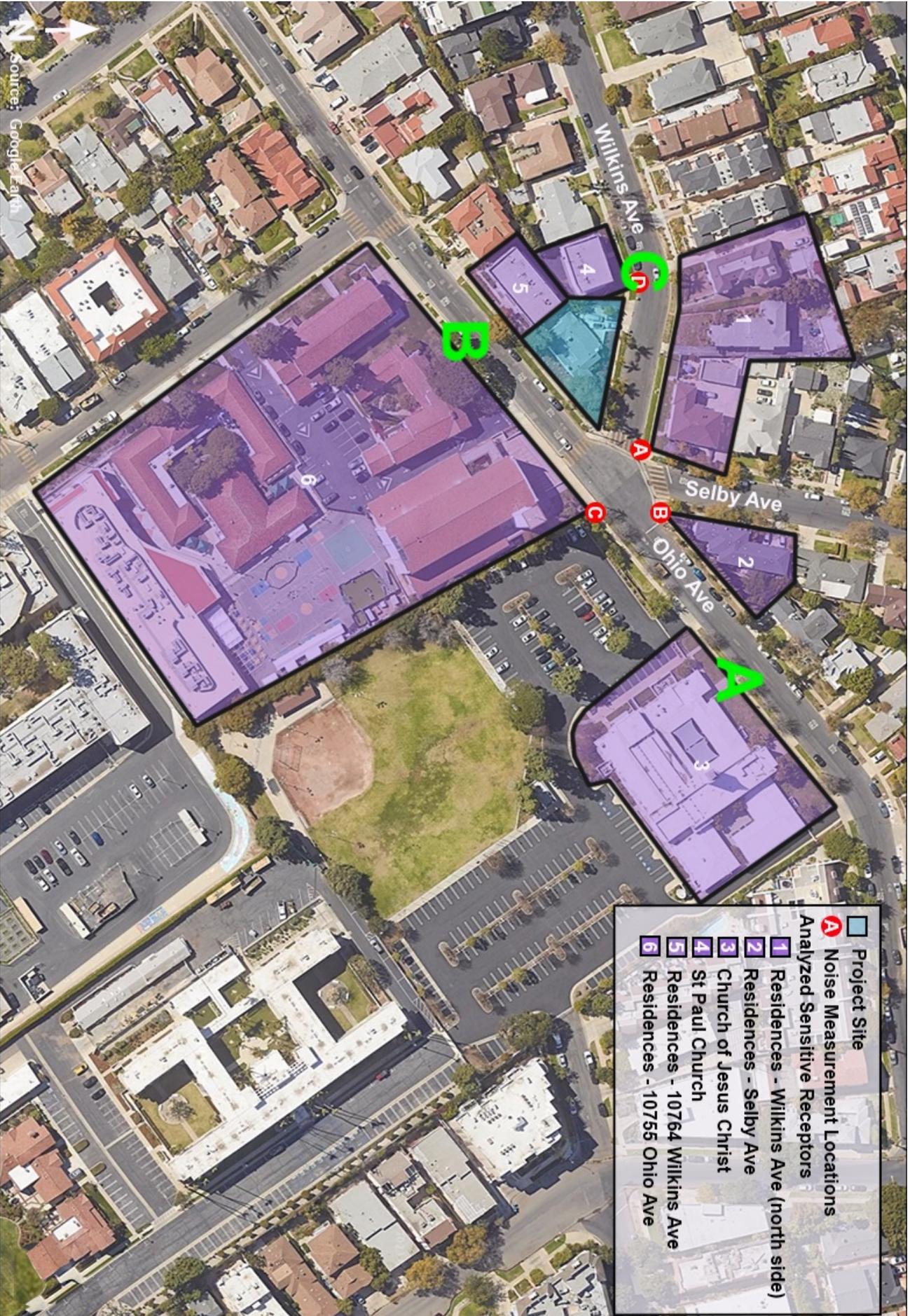
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AMBIENT NOISE MEASUREMENTS



DOUGLASKIM+ASSOCIATES, LLC

Source: Google Earth



	Project Site
	Noise Measurement Locations
	Analyzed Sensitive Receptors
1	Residences - Wilkins Ave (north side)
2	Residences - Selby Ave
3	Church of Jesus Christ
4	St Paul Church
5	Residences - 10764 Wilkins Ave
6	Residences - 10755 Ohio Ave

Figure 1
Noise Measurement Locations

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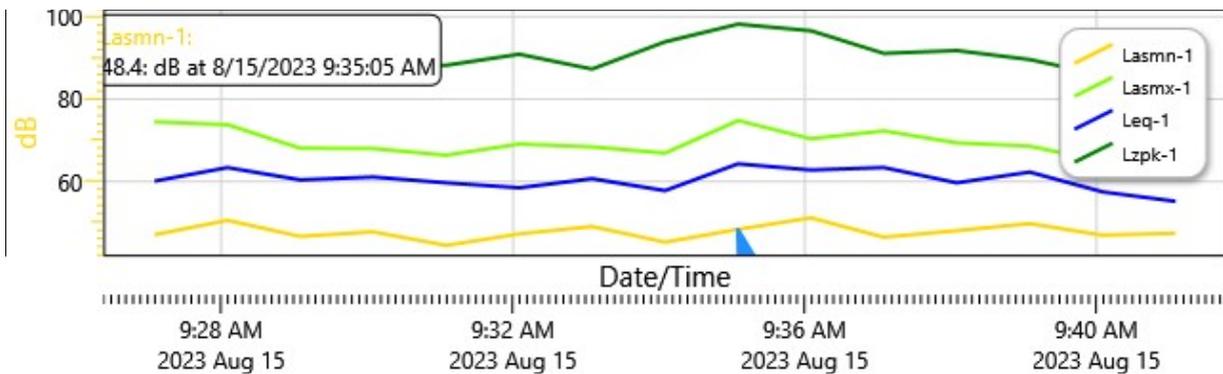
Name Church of Jesus Christ of Latter Day Saints
Comments
Start Time 8/15/2023 9:26:05 AM
Stop Time 8/15/2023 9:41:07 AM
Run Time 00:15:02
Serial Number SE40213991
Device Name SE40213991
Model Type Sound Examiner
Device Firmware Rev R.11C
Company Name
Description
Location
User Name

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	61 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF

Logged Data Chart

Church of Jesus Christ of Latter Day Saints: Logged Data Chart



Logged Data Table

Date/Time	Lzpk-1	Lasmn-1	Lasmx-1	Leq-1
8/15/2023 9:27:05 AM	99.2	47.1	74.5	60.1
9:28:05 AM	95.1	50.6	73.8	63.4
9:29:05 AM	87.1	46.7	68.1	60.4
9:30:05 AM	88.2	47.8	68	61.1
9:31:05 AM	88.2	44.5	66.4	59.7
9:32:05 AM	90.9	47.3	69.1	58.5
9:33:05 AM	87.3	49.1	68.4	60.7
9:34:05 AM	93.9	45.3	66.9	57.8
9:35:05 AM	98.2	48.4	74.8	64.3
9:36:05 AM	96.6	51.2	70.4	62.8
9:37:05 AM	91.1	46.5	72.3	63.4
9:38:05 AM	91.8	48.1	69.4	59.7
9:39:05 AM	89.6	49.8	68.6	62.3
9:40:05 AM	85.8	47	64.9	57.5
9:41:05 AM	87.1	47.5	63.7	55.2

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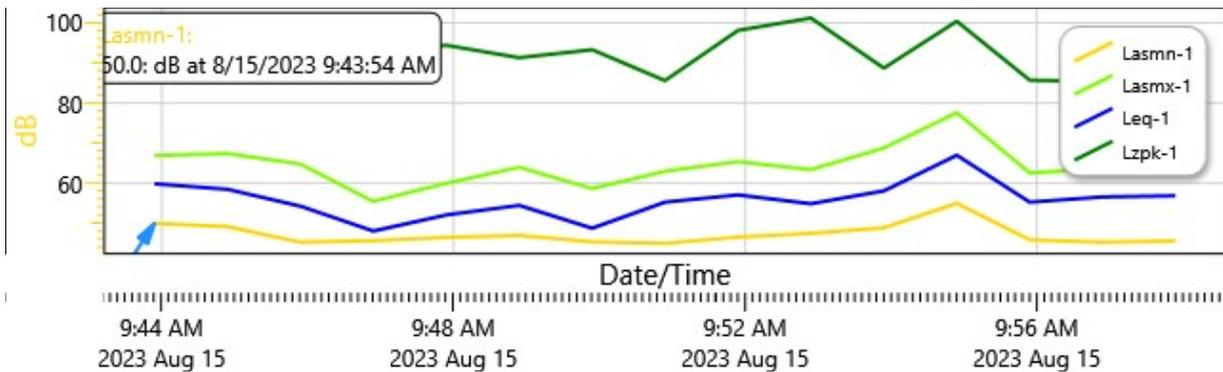
Name St. Paul Catholic Church
Comments
Start Time 8/15/2023 9:42:54 AM
Stop Time 8/15/2023 9:57:57 AM
Run Time 00:15:03
Serial Number SE40213991
Device Name SE40213991
Model Type Sound Examiner
Device Firmware Rev R.11C
Company Name
Description
Location
User Name

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	58.5 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF

Logged Data Chart

St. Paul Catholic Church: Logged Data Chart



Logged Data Table

Date/Time	Lzpk-1	Lasmn-1	Lasmx-1	Leq-1
8/15/2023 9:43:54 AM	94.3	50	66.9	59.9
9:44:54 AM	89.5	49.2	67.4	58.5
9:45:54 AM	89.9	45.3	64.8	54.3
9:46:54 AM	92.8	45.7	55.5	48.1
9:47:54 AM	94.4	46.5	60	52.1
9:48:54 AM	91.3	47	64	54.5
9:49:54 AM	93.3	45.4	58.7	48.8
9:50:54 AM	85.6	45	63	55.3
9:51:54 AM	98.1	46.6	65.4	57.1
9:52:54 AM	101.2	47.5	63.4	54.9
9:53:54 AM	88.7	48.9	68.8	58.1
9:54:54 AM	100.4	55	77.6	67
9:55:54 AM	85.7	45.9	62.6	55.3
9:56:54 AM	85.4	45.3	63.7	56.6
9:57:54 AM	93.2	45.6	64.2	56.9

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Information Panel

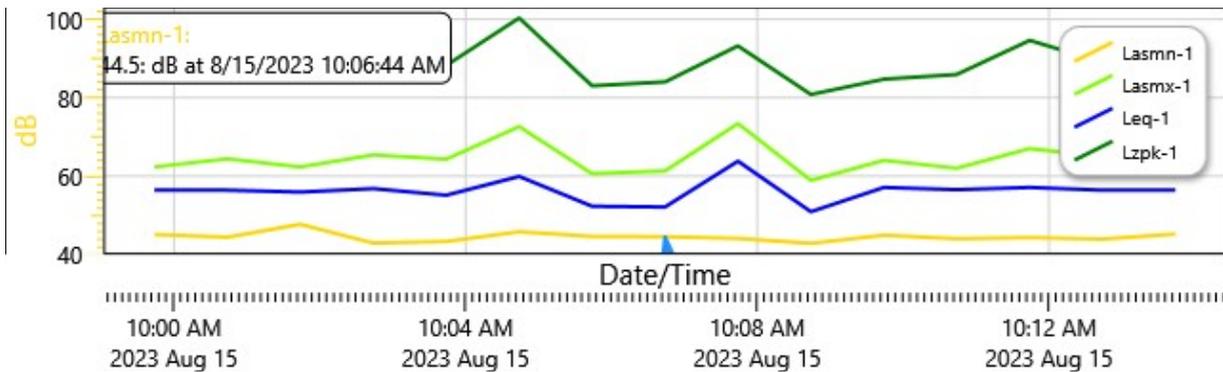
Name 10764 Wilkins Avenue
Comments
Start Time 8/15/2023 9:58:44 AM
Stop Time 8/15/2023 10:13:46 AM
Run Time 00:15:02
Serial Number SE40213991
Device Name SE40213991
Model Type Sound Examiner
Device Firmware Rev R.11C
Company Name
Description
Location
User Name

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	57.3 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF

Logged Data Chart

10764 Wilkins Avenue: Logged Data Chart



Logged Data Table

Date/Time	Lzpk-1	Lasmn-1	Lasmx-1	Leq-1
8/15/2023 9:59:44 AM	88.2	45.1	62.3	56.4
10:00:44 AM	87.8	44.4	64.4	56.4
10:01:44 AM	92.2	47.7	62.3	55.9
10:02:44 AM	93.6	42.9	65.4	56.8
10:03:44 AM	88.2	43.3	64.3	55.1
10:04:44 AM	100.3	45.8	72.6	59.9
10:05:44 AM	83	44.6	60.6	52.3
10:06:44 AM	84	44.5	61.3	52.1
10:07:44 AM	93.2	44.1	73.4	63.8
10:08:44 AM	80.8	42.8	58.9	50.9
10:09:44 AM	84.7	44.9	64	57.1
10:10:44 AM	85.9	44	62	56.5
10:11:44 AM	94.6	44.3	67	57.1
10:12:44 AM	89	43.9	64.9	56.4
10:13:44 AM	94.3	45.2	65.2	56.4



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CONSTRUCTION NOISE CALCULATIONS

Noise emissions of industry sources

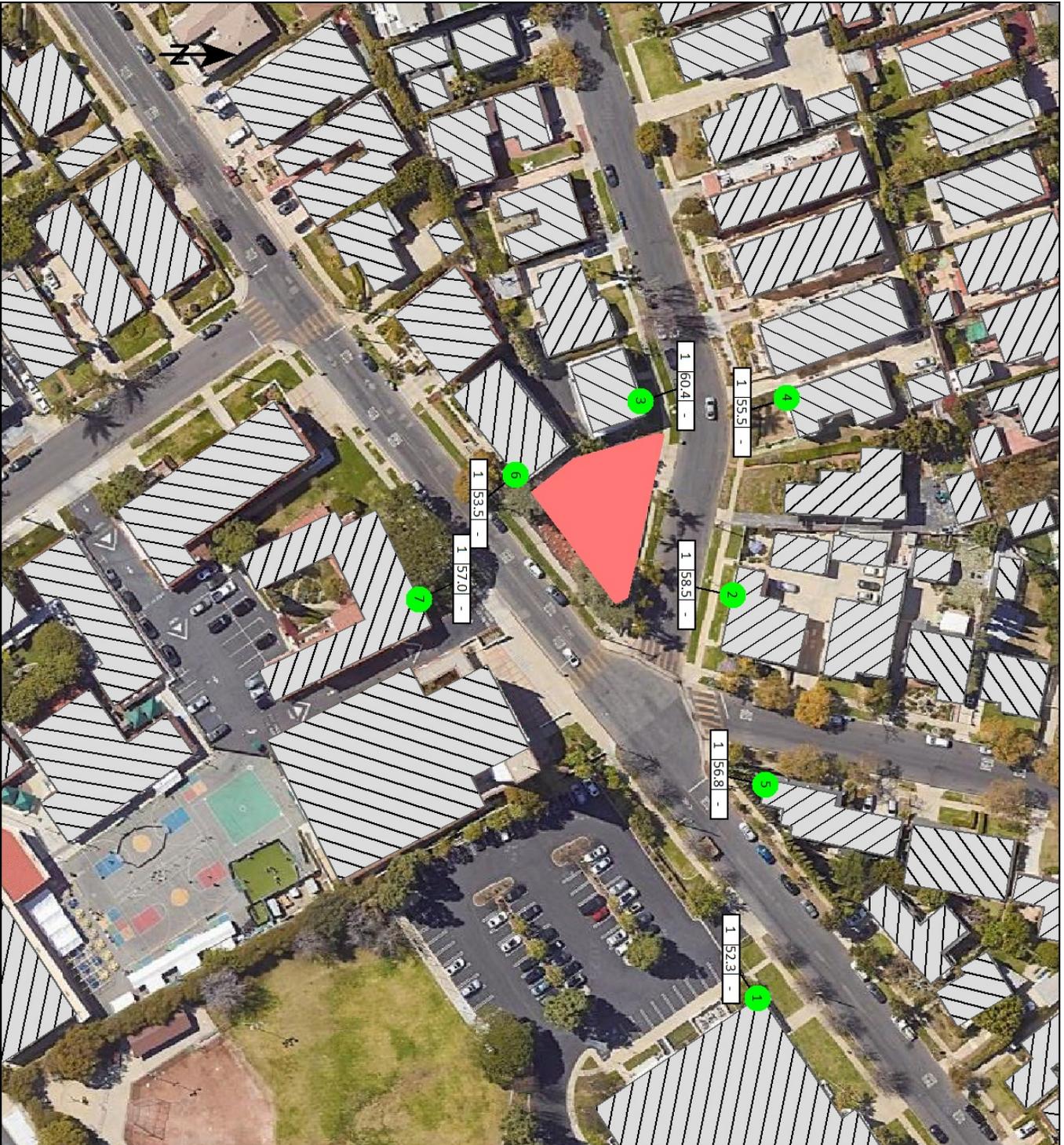
Source name	Size m/m ²	Reference	Level		Corrections		
			Day dB(A)	Night dB(A)	Cwall dB	CI dB	CT dB
Consrtruction Site	539 m ²	Lw/unit	109.7	-	-	-	-

Receiver list

No.	Receiver name	Coordinates		Building side	Floor	Height abv.grd. m	Limit		Level		Conflict	
		X	Y				Day	Night	Day	Night	Day	Night
		in meter				dB(A)		dB(A)		dB		
1	Church of Latter Day Saints	11367422.0	3769356.16	South we	GF	94.81	-	-	52.3	0.0	-	-
2	Residence - 1447 Selby Ave.	11367336.6	3769350.99	South	GF	92.30	-	-	58.5	0.0	-	-
3	Residence - 10758 Wilkins Av	11367295.5	3769331.52	North	GF	92.95	-	-	60.4	0.0	-	-
4	Residence - Wilkins Ave (north	11367294.8	3769362.40	South	GF	93.69	-	-	55.5	0.0	-	-
5	Residences - 1436 Selby Ave	11367376.7	3769357.87	South	GF	93.22	-	-	56.8	0.0	-	-
6	Residences - 10755 Ohio Ave	11367311.2	3769305.10	South ea	GF	91.49	-	-	53.5	0.0	-	-
7	St. Paul Catholic Church	11367337.6	3769284.66	North we	GF	89.65	-	-	57.0	0.0	-	-

Contribution levels of the receivers

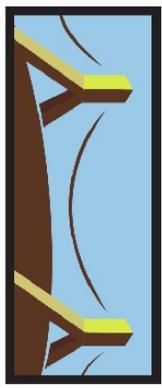
Source name	Traffic lane	Level	
		Day	Night
		dB(A)	
Church of Latter Day Saints	GF	52.3	0.0
Construaction Site	-	52.3	-
Residence - 1447 Selby Ave.	GF	58.5	0.0
Construaction Site	-	58.5	-
Residence - 10758 Wilkins Ave.	GF	60.4	0.0
Construaction Site	-	60.4	-
Residence - Wilkins Ave (north side)	GF	55.5	0.0
Construaction Site	-	55.5	-
Residences - 1436 Selby Ave.	GF	56.8	0.0
Construaction Site	-	56.8	-
Residences - 10755 Ohio Ave.	GF	53.5	0.0
Construaction Site	-	53.5	-
St. Paul Catholic Church	GF	57.0	0.0
Construaction Site	-	57.0	-



10756 West Wilkins Avenue

Signs and symbols

-  Building
-  Analyzed Sensitive Receptor
-  Construction Site



Douglass Kim + Associates, LLC

Construction Noise Impacts



DOUGLASKIM+ASSOCIATES

Reference	15.24	meter
Sound Pressure Level (Lp)	75.0	dBA

Receptor	Existing Leq	Noise	New Leq	Difference Leq	Significant?
Residences - Wilkins Ave (north side)	57.3	55.5	59.5	2.2	No
Residences - 1447 Selby Ave.	57.3	58.5	61.0	3.7	No
Residences - 1436 Selby Ave	61.0	56.8	62.4	1.4	No
Church of Jesus Christ of Latter Day Saints	61.0	52.3	61.5	0.5	No
Residence - 10758 Wilkins Ave	57.3	60.4	62.1	4.8	No
Residences - 10755 Ohio Ave	58.5	53.5	59.7	1.2	No

OFF-SITE CONSTRUCTION-RELATED TRAVEL VOLUMES



Construction Phase	Worker Trips	Vendor Trips	Haul Trips	Total	% of Traffic Volumes
Demolition	10	0	5.8	16	0.6%
Site Preparation	5	0	1.8	7	0.3%
Grading	7.5	0	40.6	48	1.9%
Trenching	2.5	0	0	3	0.1%
Building Construction	8.9	4.3	0	13	0.5%
Architectural Coatings	1.78	0	0	1.78	0.1%

Haul trips represent heavy-duty truck trips with a 19.1 Passenger Car Equivalent applied; Vendor trips are a blend of vehicle types with a 9.5

2,470 Traffic Volumes on Westwood Boulevard at Ohio Avenue in the peak A.M. hour



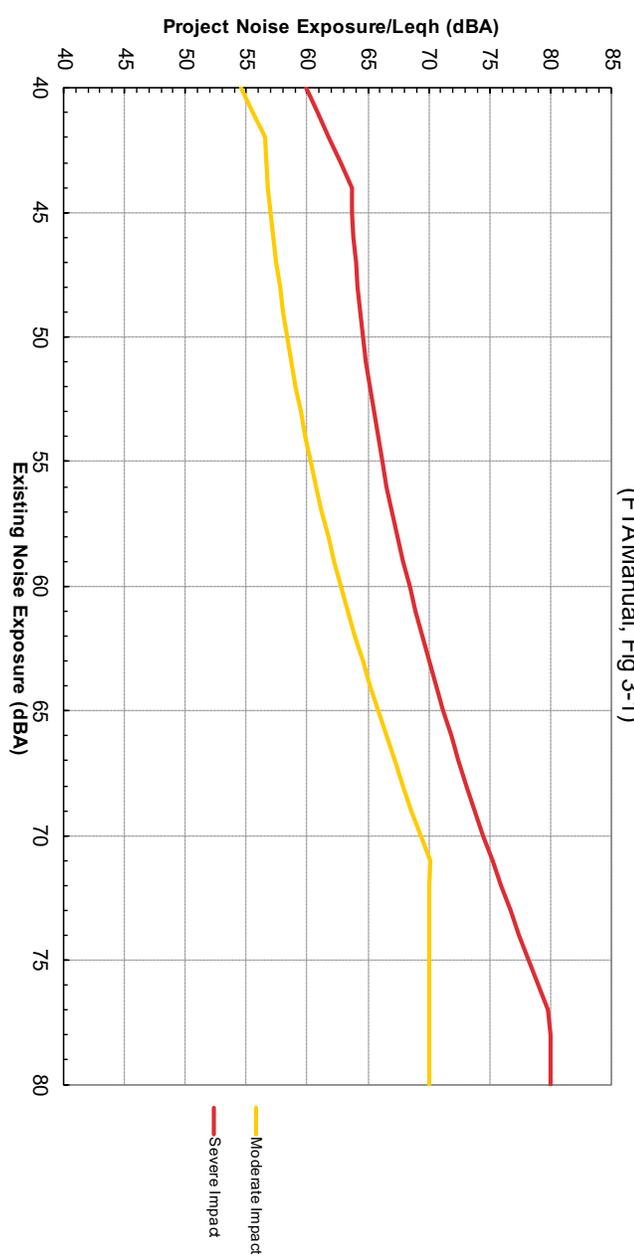
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OPERATIONS NOISE CALCULATIONS

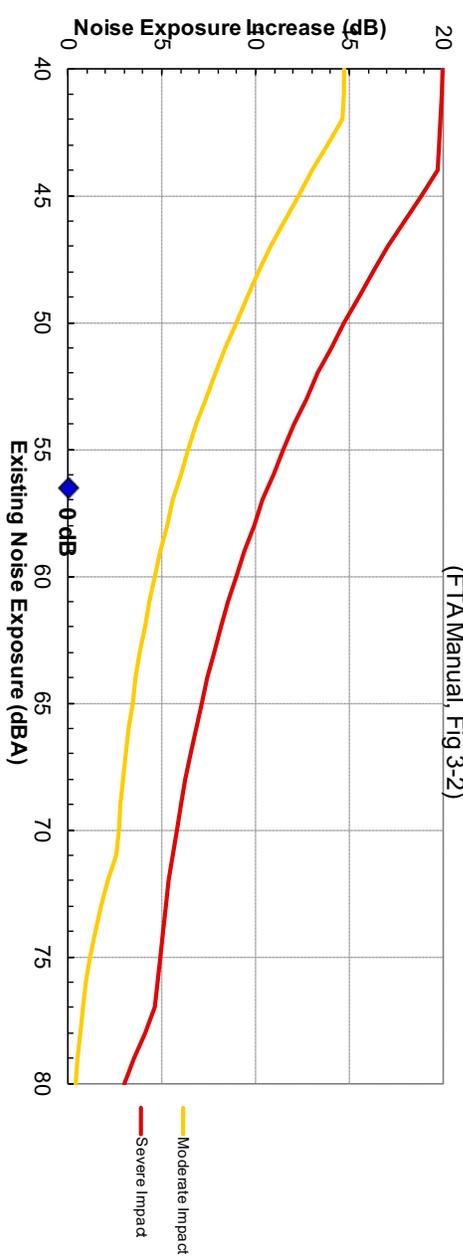
Project: 10756 Wilkins Avenue
Receiver: St. Paul Catholic Church

Source	Distance	Project Leq ^h	Existing Leq ^h	Noise Criteria			Impact?
				Mod. Impact	Sev. Impact		
1 Parking Garage	100 ft	25.9 dBA	57 dBA	61 dBA	67 dBA	None	
2 --	50 ft		57 dBA	61 dBA	67 dBA		
3 --	50 ft		57 dBA	61 dBA	67 dBA		
4 --	70 ft		57 dBA	61 dBA	67 dBA		
5 --	ft		57 dBA	61 dBA	67 dBA		
6 --	ft	0.0 dBA	57 dBA	61 dBA	67 dBA	None	
Combined Sources		26 dBA	57 dBA	61 dBA	67 dBA	None	

Noise Impact Criteria
(FTA Manual, Fig 3-1)



Increase in Cumulative Noise Levels Allowed
(FTA Manual, Fig 3-2)





DOUGLASKIM+ASSOCIATES,LLC

TRAFFIC NOISE CALCULATIONS

24 Hours Traffic Volume

City of Los Angeles Department of Transportation

BETA FILE \$TMS0010.JDF

COUNTER ARM/HUGO

DATE 01/12/2005

START TIME 12 AM

DATE PREPARED 14-Jan-2005

SENSOR LAYOUT '11'

SENSOR SPACING '160'

LOCATION **WESTWOOD BL AT OHIO AVE**
 INTERSECTION **N/S STREET**
 DESCRIPTION **8E+09**

DAY OF WEEK **WEDNESDAY**
 DOT DISTRICT **WESTERN**
 WEATHER **CLEAR**

NORTH / WEST BOUND

SOUTH / EAST BOUND

TIME	1ST	2ND	3RD	4TH	HOUR TOTAL	1ST	2ND	3RD	4TH	HOUR TOTAL	TOTAL
	QTR	QTR	QTR	QTR		QTR	QTR	QTR	QTR		
12 AM	46	40	28	26	140	59	62	24	37	182	322
1 AM	17	22	12	14	65	32	28	23	15	98	163
2 AM	9	12	12	8	41	26	20	16	13	75	116
3 AM	4	4	9	6	23	9	5	3	7	24	47
4 AM	8	4	6	16	34	8	7	3	7	25	59
5 AM	12	28	30	60	130	7	6	20	15	48	178
6 AM	66	66	82	132	346	33	36	33	48	150	496
7 AM	148	172	216	332	868	57	77	118	156	408	1276
8 AM	286	298	292	316	1192	154	154	132	156	596	1788
9 AM	292	265	272	239	1068	154	164	185	170	673	1741
10 AM	239	214	196	202	851	170	188	192	206	756	1607
11 AM	207	213	204	244	868	207	212	216	238	873	1741
12 NN	224	214	218	212	868	243	258	291	236	1028	1896
1 PM	251	253	244	240	988	260	288	280	274	1102	2090
2 PM	276	256	254	248	1034	276	320	281	306	1183	2217
3 PM	260	278	287	254	1079	312	303	246	226	1087	2166
4 PM	274	259	264	294	1091	222	314	297	287	1120	2211
5 PM	276	284	286	300	1146	318	300	246	184	1048	2194
6 PM	315	345	346	312	1318	215	276	203	224	918	2236
7 PM	323	342	298	286	1249	238	268	269	297	1072	2321
8 PM	274	277	252	224	1027	312	294	291	244	1141	2168
9 PM	127	210	220	166	723	206	202	244	237	889	1612
10 PM	128	102	100	100	430	238	212	156	116	722	1152
11 PM	84	84	58	68	294	100	102	79	86	367	661

FIRST 12-HOURS PEAK QUARTER COUNT

LAST 12-HOURS PEAK QUARTER COUNT

24 HOUR VEHICLES TOTAL

TOTAL VEHICLES STANDARD DEVIATION (STD)

332 7 AM 4TH
346 6 PM 3RD
 16873
 [+,-] 442.83

238 11 AM 4TH
320 2 PM 2ND
 15585 32458
 [+,-] 418.69 834.70

PEAK HOURS VOLUME

NORTH / WEST BOUND

SOUTH / EAST BOUND

BOTH DIRECTIONS

	PEAK HOUR	VOLUME VEHICLES	PEAK HOUR	VOLUME VEHICLES	PEAK HOUR	VOLUME VEHICLES
FIRST 12H PEAK	8 AM	1192	11 AM	873	1192	2065
LAST 12H PEAK	6 PM	1318	2 PM	1183	1318	2501
FIRST 12H PEAK STD		[+,-] 11.22		[+,-] 11.84		23.07
LAST 12H PEAK STD		[+,-] 16.04		[+,-] 18.03		34.07

TRAFFIC VOLUME ADJUSTMENTS

North/South Westwood Boulevard
 East/West Ohio Avenue
 Year 2005
 Hour 8:00-9:00 A.M.
 Source https://navigatela.lacity.org/dot/traffic_data/automatic_counts/WESOHI05.pdf



DOUGLASKIM+ASSOCIATES,LLC

	NB Approach	SB Approach	EB Approach	WB Approach		
LT						
TH						
RT						
Total	1192	873				1.07%

2005	1,192	873	2,065	-		
2006	1,204	882	2,086	-	2,086	
2007	1,216	891	2,107	-	2,107	
2008	1,228	899	2,128	-	2,128	
2009	1,240	908	2,149	-	2,149	
2010	1,253	918	2,170	-	2,170	
2011	1,265	927	2,192	-	2,192	
2012	1,278	936	2,214	-	2,214	
2013	1,291	945	2,236	-	2,236	
2014	1,304	955	2,258	-	2,258	
2015	1,317	964	2,281	-	2,281	
2016	1,330	974	2,304	-	2,304	
2017	1,343	984	2,327	-	2,327	
2018	1,357	994	2,350	-	2,350	
2019	1,370	1,003	2,374	-	2,374	
2020	1,384	1,014	2,397	-	2,397	
2021	1,398	1,024	2,421	-	2,421	
2022	1,412	1,034	2,446	-	2,446	
2023	1,426	1,044	2,470	-	2,470	

	NB Approach	SB Approach	EB Approach	WB Approach		
Auto	1,033	757	1,790	-	6,048,810	82.5%
MDT	161	118	278	-	940,092	12.8%
HDT	4	3	8	-	25,348	0.3%
Buses	2	1	3	-	9,386	0.1%
MCY	29	21	50	-	167,287	2.3%
Aux	24	18	42	-	142,856	1.9%
Total	1,253	918	2,170	-	7,333,779	100.0%



DOUGLASKIM+ASSOCIATES,LLC

CUMULATIVE PROJECTS

RELATED PROJECTS

Centroid Info:

PROJ ID: 55905

Address: 10756 W WILKINS AV
 , CA 90024

Lat/Long: 34.0564, -118.438

Buffer Radius:

[Column](#)

Record Count: 1 | Record Per Page: **All Records** ▼

Results generated since: (8/7/2023 10:43:09 AM)

<u>Proj ID</u>	<u>Office</u>	<u>Area</u>	<u>CD</u>	<u>Year</u>	<u>Project Title</u>	<u>Project Desc</u>	<u>Address</u>	<u>First Study Submittal Date</u>	<u>Distance (feet)</u>	<u>Trip Info</u>											
										<u>Land_Use</u>	<u>Unit_ID</u>	<u>size</u>	<u>Net_AM_Trips</u>	<u>Net_PM_Trips</u>	<u>Net_Daily_Trips</u>	<u>NetAMIn</u>	<u>NetAMOut</u>	<u>NetPMIn</u>	<u>NetPMOut</u>	<u>Comments</u>	
46851	Westchester	WLA	5	2018	Additions to Existing Church	Addition of a New Assisted Living Bldg and New Day Care Center	10822 W WILSHIRE BLVD	03/21/2019	1400.1	Mixed Use	Other	41	41	49	732	23	18	25	24	25	Credit Applied

